Meso-level primary health care: factors influencing the extent to which planning decisions are evidence-informed and equity-oriented

By

Alice Windle

Thesis
Submitted to Flinders University
for the degree of

Doctor of Philosophy

College of Medicine and Public Health
24 June 2021

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Declaration

I certify that this thesis:

1. does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and
2. to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.

Signed

Alice Windle

Alice Windle
1 April 2021

Publications and editing

One publication has thus far arisen from this thesis:

Windle A, Javanparast S, Freeman T, Baum F. (2021) Assessing organisational capacity for evidence-informed health policy and planning: an adaptation of the ORACLe tool for Australian primary health care organizations. *Health Research Policy and Systems*;19(1):1-11.

No professional editing service has been utilised in the development of this thesis.

Summary

Regional primary health care organisations (PHCOs) are well placed to strengthen primary health care (PHC) and improve population health and health equity through evidence-informed planning that addresses identified local priority population health needs. Comprehensive PHC is underpinned by principles of health equity including equitable access to local primary care services, and preventive action on the social determinants of health, in partnership with local communities and other sectors. In Australia, Primary Health Networks (PHNs) are responsible for planning and commissioning PHC interventions based on local needs. Such health planning decisions should be informed by evidence to ensure effective, efficient and equitable interventions. This study, as part of a larger national study of PHCOs, aimed to examine PHNs' use of evidence, and factors that influence evidence-informed, equity-oriented regional PHC planning in Australia. A complex range of internal and external factors and influences were explored, including values and culture, actors, interests, planning processes and organisational capacity.

This research employed a mixed methods approach. Key PHN planning documents (needs assessments, activity work plans and annual reports) from 31 PHNs were analysed to examine the use of evidence and equity considerations. Case studies were conducted with a purposive sample of 5 PHNs, drawing on 29 stakeholder interviews, secondary analysis of 36 interviews from an earlier study, and document analysis of internal policy and procedure documents regarding planning and decision-making. The ORACLe tool was employed to examine organisational capacity. Data were analysed with NVivo software, using a framework adapted from a WHO conceptual framework for evidence-informed health policy-making, and employing an institutional theory lens.

This study found that PHNs created and used a great deal of evidence to identify population health needs and service gaps, but very little to inform the development of strategies. Evidence was largely about illness prevalence and service use, and less about social determinants of health. PHNs generally demonstrated strong capacity overall for evidence-informed planning, but their planning processes were unclear and were somewhat lacking in good governance mechanisms. Their capacity to evaluate programs and generate relevant intervention evidence was limited. While most PHNs expressed good intentions about addressing health inequity, they were tightly regulated by their federal government funders to focus on clinical services and individual behaviour change approaches, with very little upstream intersectoral health promotion. Time, resource and scope constraints hinder rigorous evidence-informed, equity-oriented planning.

PHNs have good capacity and are well placed to identify and address local population health needs through evidence-informed and equity oriented comprehensive PHC approaches, however their potential to do so is undermined by the federal government constraining their scope to selective, individualistic approaches. Adequate resourcing, time and scope, and greater attention

to planning process mechanisms, evaluation and equity, would improve PHNs’ ability to improve the health of their communities equitably, through evidence-informed strategies that strengthen PHC.

Acknowledgements

I would like to start by thanking my supervisors Dr Sara Javanparast, Professor Fran Baum and Dr Toby Freeman. I am extremely grateful for the enormous commitment you have made in supporting me to undertake this PhD. Thankyou for guiding, encouraging and challenging me and helping me to ‘see the wood for the trees’! I feel incredibly privileged to have benefitted from your wisdom and expertise.

Thanks to my family - my husband Marcus and daughters Sophie and Emma, for your patience, love, support and encouragement as I have undertaken this PhD. Sophie and Emma – you have shown such maturity, independence and responsibility beyond your years, that has enabled me to undertake this PhD challenge, and I am bursting with pride at the compassionate, thoughtful, intelligent and strong young women you are becoming. Thanks also to my parents, John and Sue, for their pride and belief in me, and for instilling me with a strong commitment to social justice.

Thanks also to my friends, colleagues and fellow PhD candidates (current and former) in the Southgate Institute, particularly Anna, Emma, Kathryn, Katy, Kingsley, Matt, Miriam, Tamara and Toni – a fantastic bunch of people doing great work to make the world a healthier, fairer place. Special thanks to those who provided excellent administrative support, particularly when I was skipping all over the country doing interviews – Monique, Paula, Sue, Cat and Helen H. Thanks also to Julie and Sara for assistance in the mammoth task of coding hundreds of pages of PHN documents.

Thankyou to my sister Louisa, and all my wonderful family and friends for your encouragement, and for helping me to retain some semblance of a healthy social life throughout this PhD. Special thanks to Katherine for our many in-depth, cathartic discussions about this research and the ‘lived experience’ that inspired it.

I am extremely grateful to the interview participants who so generously gave their time and shared their insights, without whom this research could not have taken place. I hope this research is beneficial to the important work you do to strengthen primary health care.

My PhD was made possible initially by a Privately Funded Scholarship within the Southgate Institute, and later through a Flinders University Research Scholarship. I am very grateful to the individuals and organisational systems that enabled such financial support, without which undertaking this PhD would not have been feasible.

Finally, I would like to acknowledge the traditional owners of the land on which I live and work – the Peramangk and Kaurna people. I pay my respect to the elders past, and present, and recognise the continuing connection Aboriginal and Torres Strait Islander people have to their land.

List of Acronyms

ACCHO	Aboriginal community controlled health organisation
AIHW	Australian Institute of Health and Welfare
AMA	Australian Medical Association
AMS	Aboriginal medical service
AOD	Alcohol and other drugs
CALD	Culturally and linguistically diverse
CCG	Clinical Commissioning Group
CEO	Chief Executive Officer
GP	General practitioner
LGBTIQ	Lesbian, gay, bi-sexual, transgender, intersex, queer
LHN	Local Health Network
MBS	Medicare Benefits Schedule
ML	Medicare Local
NGO	Non-government organisation
NHMRC	National Health and Medical Research Council
PHC	Primary health care
PHCO	Primary health care organisation
PHN	Primary Health Network
RACGP	The Royal Australian College of General Practitioners
RPHCO	Regional primary health care organisation (research project)
SEIFA	Socio-economic index for areas, the Australian Bureau of Statistics’ ranking system for relative socio-economic advantage and disadvantage
WHO	World Health Organization

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CHAPTER 1 INTRODUCTION

1.1 Research focus and context

This research aims to understand primary health care (PHC) planning and decision-making at the local level, focussing on consideration of evidence and equity. It examines PHC planning in regional, or ‘meso-level’ primary health care organisations (PHCOs), focussing on Australian Primary Health Networks (PHNs). This PhD research extends on a Southgate Institute for Health, Society and Equity NHMRC funded project entitled ‘Regional Primary Health Care Organisations: population health planning, participation, equity and the extent to which initiatives are comprehensive’ (hereafter “the RPHCO project” for brevity). In the methods chapter (3) I will provide further detail about the specific contribution of this research in relation to the broader project.

I came to this research following a twelve-year career in PHCOs, where since 2004 I performed a variety of roles first implementing, and then researching, planning and commissioning PHC programs in rural and metropolitan organisations. I worked on conducting robust, defensible population health needs assessments, in the belief that this evidence was fundamental to identifying health inequities and developing strategies to address them. At times I wondered how certain decisions had been made, and why things were being done the way they were. I experienced first-hand the disruption, uncertainty and wastage of money, knowledge and talent associated with reorganising these entities. But throughout the ups and downs, the successes and frustrations, I was driven by the underlying belief that what we were doing mattered to the health of our local community, and to those in the community who were in need. This PhD is born out of the experience and belief that the activities of PHCOs can, in small or large part, make a difference to the health of communities, through evidence-informed, equity-oriented PHC planning.

Before introducing PHNs, the focus of this research, I will clarify some key terms. While the terms ‘primary health care’ and ‘primary care’ are sometimes used interchangeably, there are important differences. ‘Primary health care’ is a broad concept, a vision for a system of health and social organisation drawn from a social concept of health. It is underpinned by principles of equity, social justice and community participation. Strong, comprehensive PHC systems are those which incorporate universally accessible, holistic frontline clinical treatment, as well as health promotion, disease prevention, and action on the social determinants of health (World Health Organization, 1978). Primary care is an important part of that broader system, concerned with health care services, and is underpinned by biomedical ideas of health (Muldoon et al., 2006, Keleher, 2001). Primary care is a critical element of health care systems, and countries with strong primary care systems achieve better population health, health equity and economic outcomes (Starfield et al., 2005). These distinctions and key debates in the literature will be reviewed in greater detail in the

Background Literature Review in Chapter 2.

To optimise the effectiveness, efficiency and equity of PHC, it is important that the planning and development of both clinical services and population health interventions is informed by sound evidence. Evidence is among a complex range of factors that influence health policy and planning decisions but where evidence is inadequately or inappropriately used, planned interventions risk being unduly influenced by ideology or vested interests, resulting in ineffective, inappropriate, inequitable, wasteful and potentially harmful outcomes.

Regional Primary Health Care Organisations (PHCOs) conduct PHC planning which involves making decisions on development of strategies to improve population health for a defined geographic region. Being locally based organisations engaged with their communities, they are well-placed to strengthen comprehensive PHC through primary care and population health interventions.

In Australia, PHNs are funded by the Australian Government as regional, meso-level PHCOs responsible for assessing local population health needs, engaging with local communities and health system stakeholders, and planning PHC strategies to address identified issues. Rather than delivering health services and programs themselves, PHNs commission service provider organisations to deliver services and population health interventions. Thirty-one PHNs were established in 2015 to replace Medicare Locals, the former model of PHCOs in Australia. PHNs were established with the key objectives of:

- increasing the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes; and
- improving coordination of care to ensure patients receive the right care in the right place at the right time. (Department of Health, 2016b)

We expect micro level primary care clinical interventions to be evidence-based – safe and effective, and we similarly expect macro-level health (and health impacting) policy to be informed by evidence. Likewise, meso-level PHC planning is more likely to be effective, efficient and equitable when it is informed by evidence. While evidence-informed policy literature has typically focussed on national policy-making rather than regional planning, there is scope to apply lessons from evidence-informed policy-making literature to examine evidence-informed PHC planning at the regional level, and identify opportunities for improvement.

1.2 Research significance and rationale

Meso-level PHCOs are well placed to strengthen PHC and improve population health through planning and development of comprehensive PHC interventions, responsive to the needs of their local communities. This thesis examines PHNs as a contemporary example of meso-level PHCOs.

While several studies have examined evidence-informed decision-making in Australian local government (Stoneham and Dodds, 2014, Armstrong et al., 2014, Browne et al., 2017), no such examination of PHNs (or their predecessors) has taken place. As relatively new organisations with some autonomy to identify and respond to local population health needs and responsibility for allocating considerable public funds, the PHN meso-level of PHC decision-making warrants deeper understanding and critical analysis as to how well decisions are informed by evidence and oriented to health equity goals. By examining meso-level, regional PHC planning, this research will identify levers and inform strategies for enhancing evidence-informed, equity-oriented planning in PHNs, to develop effective, efficient, equity-enhancing PHC initiatives that strengthen PHC and improve population health.

1.3 Aim and research questions

The aim of this research is to understand planning in regional PHCOs, and the factors that influence evidence-informed, equity-oriented planning to strengthen PHC for improved population health and health equity.

The key research questions to be addressed in this study are:

1. What does the PHN planning environment look like in terms of context, influences and actors?
2. How do PHNs undertake the process of PHC planning and decision-making?
3. What types of evidence do PHNs use, for what purposes in the planning process?
4. Do PHNs have strong organisational capacity for evidence-informed planning?
5. Do PHN activities have an equity focus consistent with comprehensive PHC, and what influences the equity-orientation of planned activities?

1.4 Research approach

This research sought to understand how PHNs plan for PHC, and the factors that influence the use of evidence and consideration of equity. To understand the underlying forces that drive (or hinder) evidence use and equity-orientation in PHC planning I employed an institutional theory lens (Scott, 2013). In order to analyse the complex, dynamic range of factors I drew on the WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007), underpinned by systems thinking. For further exploration of PHNs’ capacity for evidence-informed planning I employed the ORACLe tool (Makkar et al., 2016b) and the ‘good governance’ framework (Hawkins and Parkhurst, 2016). Analysis of PHNs’ equity actions was informed by the framework for assessing regional PHCOs’ actions on health equity (Freeman et al., 2018).

A comparative case study design was used, with a purposive sample of five PHNs from metropolitan and rural/remote regions, to understand the planning environment, process, capacity and influences. Case studies analysis drew on 29 interviews, secondary analysis of 36 interviews and PHN internal document analysis. Analysis of all PHNs' public planning documents (needs assessments, activity work plans and annual reports) was conducted to examine how evidence was used to inform PHC planning.

1.5 Thesis structure

The next chapter (2) will explore the literature on PHC, health equity, and PHCOs' contribution to strengthening PHC, then review the literature on evidence-informed policy-making to inform the examination of evidence-informed meso-level PHC planning.

Chapter 3 will outline the theoretical frameworks employed in this research and describe the methods employed for collecting and analysing data to address the research questions.

Chapter 4 draws on literature to describe the broader Australian health system and policy settings, in order to understand the context in which PHNs were created and operate. It details the history of PHCOs in Australia, and the establishment of PHNs as the latest iteration. This chapter also provides a description of the structure and commissioning functions of PHNs.

The next four chapters present empirical findings derived from the data collected in this research. Chapter 5 examines the actors, contextual factors and influences that comprise the planning 'environment' of PHNs.

Chapter 6 draws largely on document analysis to examine evidence use by PHNs.

Chapter 7 focusses on PHNs' organisational capacity for evidence-informed planning, using the ORACLe tool to examine seven domains of capacity, as well as the governance of the planning process.

Chapter 8 explores PHNs' intentions and strategies to address health inequity and considers the factors that hinder or enable equity considerations in PHC planning.

Chapter 9 discusses the findings of this research in relation to existing literature and employs theory to explain the findings. Limitations of the research are also outlined.

Chapter 10 provides a summary of the conclusions of the research, as well as recommendations for policy and practice.

CHAPTER 2 BACKGROUND LITERATURE REVIEW

This chapter will review literature on primary health care, health equity and evidence-informed health planning and policy-making. It will begin by providing some definitions and recount key developments and debates in PHC. It will then set out a broad international context in which to situate this research, and outline the importance of PHC to pursuing equitable population health.

The second part of this chapter will focus on evidence-informed policy-making and planning, and will begin by defining health planning. The many factors that influence the use of evidence in policy and planning decisions will be examined, as well as conceptual models that facilitate understanding of complex policy systems. This will be followed by critical arguments for analysis that embrace the complexity of this field. Differing conceptions and ideas of evidence will then be examined, followed by key concepts and arguments for the importance of evidence-informed decisions. Key barriers to evidence-informed decision-making will then be outlined, followed by a more focussed examination of capacity factors that influence evidence-informed decision-making. The chapter will conclude by highlighting how this research addresses criticisms and shortcomings in the literature.

2.1 Literature review protocol

An initial literature search was conducted in March 2017 using Scopus and ProQuest databases ‘Health and Medicine’ and ‘Social Sciences’. Several searches were run using combinations and derivations of the following terms:

- evidence, evidence-based, evidence-informed
- policy, health policy
- policy making, planning, health planning
- knowledge/research, translation/utilization/ transfer/exchange
- primary care, primary health care
- Primary Health Network, PHN, Medicare Local, meso-level
- population health
- local, regional

Dozens of combinations of terms and Boolean operators were explored. Those that yielded the most relevant results and were included in the final search are listed below:

- (Evidence-based OR evidence-informed) AND (policy OR “policy making” OR planning) AND ((knowledge OR research) AND (translat* OR utili* OR transfer OR exchange)) AND (primary AND (“health care” OR care OR healthcare))
- “knowledge translation” AND “population health”
- (evidence NEAR/3 (Health* NEAR/2 (policy or planning)) OR (“research utili*ation” or “knowledge translation”)) AND (“population health” or “primary* care”)

- (“Population health” OR “primary *care”) AND (health NEAR/2 (planning OR policy)) AND (evidence or “knowledge translation”) AND (local or regional)
- (Evidence OR “knowledge translation”) NEAR/4 (“health policy” OR “health planning”)

The search yielded 1181 references, from which 181 duplicates were removed. Titles and abstracts were then scanned for relevance, with the key inclusion criteria being relevance to health, and population level policy/planning rather than clinical treatment. Papers were excluded if they focussed on a specific policy initiative and the use of evidence to inform it, or the trial of a specific intervention that discusses its implications for, and translation to policy. This resulted in 278 relevant references. Reference lists of articles were scanned to identify further relevant literature. The search strategy was repeated in July 2020 to update the literature review with recently published papers, and to explore literature related to emerging themes. This search was conducted using the following Proquest databases: social science, public health, political science, nursing & allied health, health & medical collection. Seventy relevant references were retrieved after filtering for duplicates. Literature on the Australian health care system is discussed in Chapter 4, juxtaposed with findings regarding PHNs’ planning environment and context.

The literature review includes multiple systematic reviews on the factors that influence the use of evidence in policy-making (Oliver et al., 2014a, Innvaer et al., 2002, Orton et al., 2011a, Masood et al., 2020, Jakobsen et al., 2019). The primary purpose of this component of the review was to understand the theoretical underpinnings and current status of research in the field of evidence-informed policy and planning, as well as identify research and knowledge gaps.

A further background literature review was conducted in July 2020 with a broader consideration of PHC history and developments, and international PHCO models and their contribution to PHC strengthening. These searches were also conducted in Proquest ‘health and medical’, ‘public health’ and ‘nursing and allied health’ databases, using combinations and derivations of the following terms.

PHC literature:

- “primary health care” AND
- concept
- contest
- debate
- movement
- comprehensive
- selective
- Alma Ata
- Astana

PHCO literature:

- Primary health care organisation

- Primary health network, PHN (Au)
- Clinical commissioning group, CCG (UK)
- Primary health organisation (NZ)
- Local authorities and Integrated joint boards (Scot)

The PHCO literature search syntax was: noft("primary health care organi*ation") OR noft(PHN) OR noft("clinical commissioning group") OR noft("primary health organi*ation") OR noft("integrated joint board") AND noft("primary care" OR "primary health care"). As it was a narrative review, strict search terms were not recorded for the broader PHC literature search.

Forty-two relevant articles on PHC were selected, and ten on PHCOs. The aim of the PHCO literature search was to identify key characteristics and functions of these organisations in different countries, and how they contribute to strengthening primary care and or PHC. Much of the PHCO literature was about specific initiatives implemented by PHCOs, rather than being about PHCOs themselves, and as such were excluded as outside the scope of this research.

2.2 Primary health care and primary care – definitions and debates

In the Introduction, I briefly outlined the distinction between PHC and primary care. In the following sections I will further explain the definitions, debates and ideas around PHC and primary care.

2.2.1 Primary health care

Primary health care is a contested term, with varying interpretations, ideas, and definitions, which need to be discussed in order to situate the current research. Different definitions of PHC have different implications for what evidence is relevant, and the extent to which equity is prioritised.

Primary Health Care was defined and envisioned in the 1978 Alma Ata Declaration as “the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process” (World Health Organization, 1978, p 2). Underpinned by principles of equity and social justice, it is “essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community” (World Health Organization, 1978, p 1) – good PHC is based on technical and social evidence. As well as delivery of clinical health care services, PHC is concerned with promoting health and preventing disease (World Health Organization, 1978). Primary health care is a comprehensive approach that strives towards the goal of equitable health for all, through health promotion, community development, and intersectoral action on the underlying social determinants of health, as well as universally accessible clinical treatment when it is needed. Comprehensive PHC involves and promotes the participation of communities, and reflects the economic and sociocultural conditions of the community (World Health Organization, 1978). Galea and Kruk (2019) frame PHC as improving population health in two ways: preventative and curative health care services (primary care) *and* promoting the conditions that make people healthy. The former is a clinical, technical function, while the latter is a political function (Galea and Kruk, 2019). This duality of PHC, spanning the fields of clinical care and public health policy, has implications when it comes to evidence-informed interventions and decision-making – issues at the core of this research. With the different functions of PHC come differing ideas of what constitutes 'good' evidence and the ways in which evidence is used for clinical or social 'problems', as well as variations in the availability and transferability of evidence. These issues will be further explored later in this chapter.

The ambitious vision of health systems reoriented towards comprehensive PHC, as set out in the Alma Ata Declaration has largely not been realised in its entirety in the forty years hence. This is attributed mainly to the rise of neoliberalism amid economic downturn in the 1980s, greater emphasis on selective PHC characterised by a focus on disease-specific initiatives in the 1990s and 2000s, unregulated private health care, and over-investment in specialised curative care, reflecting the strength of biomedical interests and ideas (Chokshi and Cohen, 2018, Labonté et al., 2014, Ghebreyesus et al., 2018, Baum et al., 2016). The Alma Ata vision of PHC was from the outset challenged by competing discourses and contested ideas of health. The view that PHC ought to address social and political determinants of health vied with a more powerful, short-term biomedical view where the clinical, technical aspect prevailed to drive a selective, disease-focussed version of PHC (Baum et al., 2016, Labonté et al., 2014).

Nonetheless, some of the key principles of Alma Ata that we now largely take for granted, certainly in high-income countries, have prevailed, such as the idea that health is a fundamental human right, and is "a state of complete physical, mental and social wellbeing" (World Health Organization, 1978) that is more than simply the absence of disease. There have been some positive developments towards PHC in certain aspects of some health systems, such as community participation and community health workers (Labonté et al., 2014).

The emergence and then decline of comprehensive PHC ideas were exemplified in the Australian health context. Prior to Alma Ata, from the early 1970s, numerous examples of comprehensive PHC models emerged, such as Aboriginal Community Controlled Health Organisations (ACCHOs), and in the community health and women's health sectors. Just as comprehensive PHC more broadly, these models, other than the Aboriginal community controlled sector, have considerably declined since, although some remain, generally at the margins of mainstream health care. A detailed discussion of the Australian health care system is provided in Chapter 4.

The 40th anniversary of the Alma Ata Declaration raised great hope for a reinvigoration of the vision and renewed efforts for comprehensive PHC (Ghebreyesus et al., 2018), however, the resulting Declaration of Astana in 2018 was widely met with disappointment in that it does not explicitly make the link between PHC and population health (Galea and Kruk, 2019) and is focussed on universal health coverage, which is only one element of comprehensive PHC (Sanders et al., 2019). Universal health coverage features among the United Nations Sustainable Development Goals (Target 3.8) (United Nations, 2015) and is a priority objective of the World Health Organization (2021). However this emphasis on universal health coverage risks neglecting the broader health promoting, PHC ideas of social determinants of health and community participation, and risks further medicalisation and commercialisation of health, heading further towards selective PHC and away from the comprehensive conception of PHC (Sanders et al., 2019). The Astana Declaration avoids the more political aspects of PHC: advocacy of the health care sector; and intersectoral action to mitigate health and social inequity (Sanders et al., 2019). Others are similarly critical that the Astana Declaration does not put PHC at the centre of the health system, and its lack of actionable initiatives and concrete measures mean that health inequalities will persist (Walraven, 2019, Beran et al., 2019).

Thus, PHC remains a contested concept, with key debates on whether it should:

- function as a comprehensive approach to overall health system development, or focus on selective interventions;
- incorporate action on the social determinants of health, or remain focussed on biomedical conditions and individual risk factors; and
- be regarded as the first contact point with the formal health system for people who are ill, or as the locus where health care systems engage with communities and other sectors on broad, socially determined health issues (Labonté et al., 2014).

Primary health care as a vision of societal reform to create ‘health for all’ continues to be challenged by shifting interpretations, agendas, debates and efforts, and a dearth of the necessary political will for social and health system change towards comprehensive PHC systems and health equity. While debated at the international level, these challenges filter through to affect national and local ideas and decisions for health interventions at the individual and/or population level. The next section will introduce primary care, the element of PHC concerned with treating individuals.

2.2.2 Primary care is part of primary health care

Primary care is the element of PHC that refers to frontline clinical health care services. According to the Australian Government Department of Health, “Primary care is generally the first point of contact people have with the health system. It relates to the treatment of non-admitted patients in the community” and “can include general practice, allied health services, community health and community pharmacy” (Australian Government Departmert of Health, 2020). Primary care *includes* general practice, as well as other frontline health care services that people use.

Primary health care and primary care can be mutually reinforcing – PHC is a prerequisite for strong primary care as it facilitates equitable and intersectoral approaches to health, community-oriented services and community participation in governance and planning. Likewise, primary care can promote PHC – health care service providers can identify and draw attention to local issues, can advocate for health issues, and facilitate intersectoral action (Hone et al., 2018), as well as screen for detrimental social determinants of health (Browne-Yung et al., 2018). There are four main features to primary care: first-contact access; long-term, person-focussed care (not-disease focussed); comprehensive care for most needs; and coordinated care (Starfield et al., 2005). While the systems and practices of primary care are not necessarily aligned with comprehensive PHC ideas and population health equity goals (Keleher, 2001), these elements help make for strong primary care. Strong primary care, in concert with the broader PHC system elements of equity-oriented, health promoting, intersectoral action on the social determinants of health and community participation, makes for a strong comprehensive PHC system.

2.2.3 Primary health care - why it is important

Countries with health systems grounded in PHC principles, and incorporating strong, integrated primary care, do better in terms of population health status and outcomes, and health expenditure (Starfield and Shi, 2002). Primary health care oriented health systems are characterised by a balance of curative clinical services and prevention strategies that address the social determinants of health equity, appropriate to the local context (Marmot et al., 2008). Compared to specialist medical care, primary medical care is more effective in prevention of illness and death, and is associated with more favourable health equity across populations (Starfield et al., 2005).

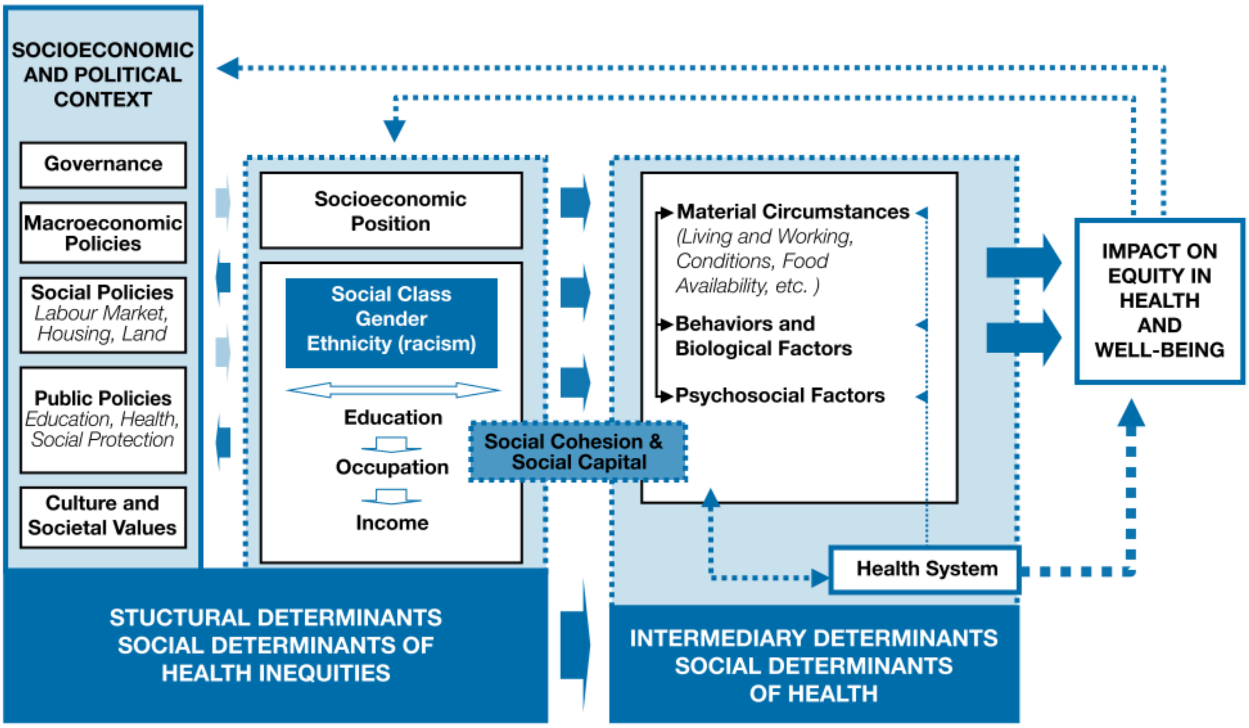
An important distinction is the population approach of comprehensive PHC, as opposed to the ‘selective’ PHC focus on individuals. While providing clinical services that treat ill-health, and targeted strategies to prevent ill-health in those at high risk is important and ethically obligatory, improving the wider health status of populations is better achieved by addressing the causes of disease incidence in a population – the comprehensive ‘population’ approach, versus the selective ‘high risk’ approach. The ‘high risk’ approach to prevention or treatment does not address the underlying cause of the problem, but instead aims to reduce the risk of those most susceptible, or treat those already unwell. This approach has limited potential benefit to overall population health, given that a small number of people at high risk may produce fewer cases than a large number of people at low risk (Rose, 1985). As well as incorporating individually targeted ‘high risk’ preventive and treatment strategies through primary care services, PHC is a population preventive strategy. Well planned, evidence-informed PHC that is oriented to reducing risk factors in the wider population, as well as in individual patients, achieves better population health (more economically) and greater health equity. In section 2.4.3 I will go into further detail about the role PHCOs can play in advancing population health approaches, but first the next section will discuss what health inequity is, why it is undesirable and how PHC mitigates it.

2.3 Health equity and the social determinants of health

This thesis investigates evidence use for equity-oriented population health planning, and thus is underpinned by a commitment to health equity. Health equity is a concept grounded in ethical principles of justice and human rights. Health inequity is unfair and unjust. While it cannot be directly measured, equity in health is defined in operational terms as “the absence of disparities in health (and in its key social determinants) that are systematically associated with social advantage/disadvantage” (Braveman and Gruskin, 2003).

Within and between countries, there exists a social gradient in health. Poorer people experience higher levels of illness and premature mortality, and wealthier people experience less illness and longer lives. The lower the socioeconomic level, the poorer the health status and outcomes. Where health inequity can be avoided by reasonable action, the sustained existence of this inequity is unfair, and there is an ethical obligation to reduce it (Marmot et al., 2008). Health inequity is a consequence of “a combination of poor social policies and programmes, unfair economic arrangements, and bad politics” which lead to the “unequal distribution of power, income, goods, and services” (Marmot et al., 2008, p1661). These factors shape the conditions of daily life in which people “are born, grow, live, work and age” – the social determinants of health (Marmot et al., 2008, p1661). The social determinants of health and health equity include education, employment, income, gender, race and racism, plus more. They are affected by the broader socioeconomic and political context and interact with individual factors (intermediary determinants) and the health care system itself, to influence the distribution of health in populations. These factors and interrelationships are represented in Figure 2.1.

Figure 2.1: Commission on Social Determinants of Health Conceptual Framework. (Solar and Irwin, 2010)[1]



Strengthening health equity means looking beyond the immediate causes of disease, and considering the underlying “causes of the causes” – the social determinants of health (Marmot and Commission on Social Determinants of Health, 2007). As such, the analysis of health equity considerations in this research will include examination of the social determinants of health.

While many of the underlying social determinants of health and causes of health inequity sit outside its direct responsibility, the health care sector can take important actions to address health inequity (World Health Organization, 2008). The health care system is in itself an intermediary social determinant of health (Marmot et al., 2008). While health care has the potential and responsibility to respond to underlying health inequities, inequitable access to health care services can serve to further exacerbate health inequity, particularly in settings where access to health care incurs a financial cost to the individual (World Health Organization, 2008). Primary health care can mitigate health inequity in two ways: through equitable delivery of health care services (its technical, clinical function), and through action on the social determinants of health (its political function) (World Health Organization, 1978).

A helpful analogy commonly applied in public health is that of ‘a stream’, which is well summarised in a health equity guide produced by the Public Health Agency of Canada (2015) drawing on the work of Whitehead (1991), Braveman and Gruskin (2003) and Solar and Irwin (2010). ‘Upstream’ interventions are those that act on the factors on the left hand side of the conceptual framework of

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[1] Reprinted with the permission of the World Health Organization from *Social Determinants of Health Discussion Paper 2 (Policy and Practice)*, Solar, O. & Irwin, A., A conceptual framework for action on the social determinants of health., Page 6, Copyright 2010. Available at [https://www.who.int/sdhconference/resources/ConceptualframeworkforactiononSDH_eng.pdf], accessed 29 June 2021.

social determinants of health (Figure 2.1), the macro-level policies and norms that determine the social and political context. Midstream interventions act on those factors in the middle of the framework, to create supportive environments in which people live, earn, work and play that facilitate health. Downstream interventions focus on the individual factors on the right-hand side of the framework, seeking to improve individual behaviour, knowledge, skills and resilience, or providing services. As well as acting on the downstream factors by treating those with poor health, PHC also employs interventions at the midstream and upstream levels to address local and macro-level factors that are the underlying 'causes of the causes' of health inequity.

Equity is a core principle of comprehensive PHC (World Health Organization, 1978), yet this is an area where achievements have been less widespread, and where there remains significant opportunity and potential benefit from effective reforms (World Health Organization, 2008). As recent commentary and debate on PHC associated with the 40th anniversary for the Alma Ata Declaration has highlighted (as discussed in section 2.2.1 above), there remains much scope for reorientating health systems toward preventative and health promoting comprehensive PHC, which recognizes and acts on the social determinants of health, with health equity as a goal. The primary care (service) sector is by no means excluded from this broader function of comprehensive PHC. While they obviously are key to strong primary care services acting on health equity downstream, health care service providers can act locally and nationally, to play an important stewardship and leadership role, advocating and facilitating mid- and upstream action, and driving reform towards a comprehensive PHC oriented system within the health care sector and through integration with and between other sectors (Baum et al., 2009).

In summary, PHC is a comprehensive system wide approach to population health and health equity. It includes front line, accessible primary care clinical services, as well a broader intersectoral action to address the social determinants of health, thus promoting population health and wellbeing, and preventing illness. The fundamental goal of PHC is, or at least should be, health equity, and comprehensive PHC is better than selective, clinically focussed health care services at achieving equitable population health outcomes. Comprehensive PHC includes action at the downstream, midstream and upstream levels to address the individual, local environmental and broader contextual and structural determinants of health. While there have been improvements in primary care and population health outcomes in recent decades, health equity goals have not been widely realised. Evidence-based, scientifically and socially sound strategies to strengthen PHC, including strong primary care services, and intersectoral action on the social determinants of health are needed to advance population health equity.

Now that I have painted the 'big picture' of PHC, primary care and health equity, I will now situate the role of PHCOs (the focus of this research), within this big picture, and outline their role in and potential to strengthen PHC by using evidence-based interventions.

2.4 Regional, meso-level primary health care organisations

This research is about regional, meso-level primary health care organisations' (PHCOs) evidence-informed planning for health equity, focussing on Australia's Primary Health Networks (PHNs). This section will draw on the somewhat limited volume of academic literature on PHCOs that my search identified, and selected international experience to argue that there is great scope (if somewhat limited formal evidence) for regional PHCOs to employ wide-ranging strategies to strengthen primary care service delivery, to facilitate health care service integration, and to foster integration between primary medical care and public health, to strengthen the PHC orientation of countries' health systems, for improved equity, efficiency and population health outcomes. PHNs provide Australia with this opportunity, but questions remain about their scope and capacity to plan effective strategies to achieve these goals.

2.4.1 PHCOs' contribution to primary care and primary health care

As discussed in the previous section, high performing, efficient health systems are those which are based on comprehensive PHC – intersectoral action on the upstream determinants of health, and strong primary care. PHCOs can play a role in strengthening local PHC systems.

Local relevance, and community participation are important aspects of PHC, as envisioned in the Alma Ata Declaration (World Health Organization, 1978). Such local connection and community empowerment can be enabled through decentralised health systems. Decentralised health systems take many different forms, with varying degrees of independence, and are based on the idea that smaller, regionally based organisations can be more flexible, locally operated and locally accountable (Saltman et al., 2007). Positive outcomes of decentralisation include greater capacity to innovate, a more patient-oriented system, greater efficiency, greater local authority and accountability, and strategy implementation more closely aligned with need, however, inequity is a frequent concern (Saltman et al., 2007).

While they come in many forms with varying functions (which I will go into shortly) PHCOs are a decentralised regional/local level of planning and decision-making for PHC. In line with the local relevance and control principle of PHC, it is important that to a certain extent, PHC decision-making is decentralised to a regional level, with local oversight, contextual knowledge and strong relationships, to enable locally appropriate allocation and integration of resources (Checkland et al., 2018, Bywood and Erny-Albrecht, 2016). In health policy-making and planning, context matters (Saltman et al., 2007, Bacchi, 2009). This is where PHCOs fit – regional/local level PHC planning appropriate to the local context, involving the local community, devolved from national (macro-level) government.

Regional PHCOs are well placed to perform various functions to strengthen primary care services as well as broader PHC encompassing the social determinants of health and health equity (NHS

Clinical Commissioners, 2016). PHCOs can implement primary care interventions either at the level of individual health care professionals (or indeed patients), at the organisational level of health care practices, or at the local system (meso) level to improve coordination and integration between services. This local system integration is argued to be a key role of PHNs – as the local 'systems manager' for primary care (Duckett et al., 2017). Meso-level integration of services can be horizontal (between primary care service providers) or vertical (between different levels of the health system). Such changes rely on relationships between organisations, which can be difficult to implement, however with good planning, leadership, resources and flexibility, meso-level strategies can improve integration and contribute to strengthening PHC (Oliver-Baxter et al., 2013).

Endeavours to strengthen the comprehensiveness of PHC are the main interest of this research, rather than improvements to the clinical and technical functions of selective primary care. PHCOs can facilitate integration at the juncture of primary care and public/population health to strengthen PHC for the population. Many have recognized this need and called for action to integrate and better coordinate primary care and public health (Koo et al., 2012, Scutchfield et al., 2012, Checkland et al., 2013). Such integration has been shown to have many benefits: improved chronic disease management; communicable disease control; maternal and child health; better access to, and quality of care; greater efficiency; enhanced patient satisfaction; and better coordination and continuity of care (Martin-Misener et al., 2012). It occurs mostly at the local level, but does rely on numerous enabling factors at the systemic, organisational and individual level (Martin-Misener et al., 2012, Valaitis et al., 2018, Wong et al., 2017).

To foster integration between primary care and public health and promote comprehensive PHC, PHCOs can act to strengthen aspects of the social, physical and work environments, and food and transport systems. They can support the primary care sector to reinforce public health activities by raising awareness and advocating for health: GPs are involved with their community and engage with the local population, and can use their expertise to advocate on patients' interests and social inequalities (Levesque et al., 2013). PHCOs can also employ public health methods in identifying population health needs and gaps, and evaluating interventions, taking a population health approach to reinforce primary care. Various organisational models that promote interaction between public health and primary care have been identified – including PHNs' predecessors, Medicare Locals, which were seen by Levesque et al. (2013), as supporting the integration of primary care in the broader health care system, both vertically and horizontally, and with other sectors, and identifying and addressing service access gaps. Many of these functions are now performed by PHNs, indicating they are well placed to also provide an integrative function, not only with the rest of the health system, but also with public health functions of other government and non-government agencies.

The potential actions of PHCOs to adopt a comprehensive PHC approach and act on health equity are outlined in a framework (Freeman et al., 2018) which is employed in this research and described in greater detail in Chapter 3, and is summarised here.

- Organisational aspects (state health equity as a goal, collect information on health equity differentials, assess equity impact of initiatives, and facilitate community participation).
- Strategies to improve the equity orientation of local primary care services (access to, and quality of primary care and other health and social services).
- Strategies to address determinants of health inequity (equity sensitive behavioural health promotion, intersectoral collaboration to address living and working conditions, and advocacy on the broader determinants of health) (Freeman et al., 2018).

This section has outlined some of what PHCOs can do to strengthen primary care services and systems, and promote a comprehensive PHC approach for population health outcomes and equity. The next section will give an overview of international examples of PHCOs.

2.4.2 PHCOs internationally

Many high-income countries are trying to improve their PHC systems in the face of burgeoning chronic disease and related hospital admissions, growing health care costs, and primary care inefficiency and inequity (Duckett et al., 2017, Cumming, 2016). Many have introduced meso-level PHCOs as components of multifaceted reforms to strengthen primary care, including Australia, England and the Netherlands (Willcox et al., 2011).

While there is some published academic literature on interventions implemented by PHCOs, there is relatively little about PHCOs themselves. A 2013 review (Oliver-Baxter et al., 2013) identified that there had been little evaluation of the impact of PHCOs as interventions themselves within health systems, either in terms of primary care integration, or population health outcomes. An updated literature search using ProQuest and Google Scholar did not identify any subsequent evidence of the impact of such organisations within health systems. The limited academic literature was supplemented with information from PHCO websites.

There is considerable variation between meso-level PHCOs in different countries, in terms of their origins, policy settings, ownership, size, governance, funding arrangements, scope and functions. Some have a more selective focus on primary care services, whereas others have a broader remit, more reflective of comprehensive PHC ideas. They commonly have goals of reducing avoidable hospitalisations, improving access, increasing patient satisfaction, promoting evidence-based practice, driving local health care system integration and reducing health inequities (Mossialos et al., 2016, Oliver-Baxter et al., 2013, Schneider et al., 2017). Table 2.1 provides a summary of regional PHCOs in high income countries. Decentralised, regional health organisations also feature in low and middle-income countries, although they are generally different in scope and structure to those of high income countries (Javanparast et al., 2020).

Table 2.1: Summary of regional PHCOs in high income countries (current and former)

Country	PHCO name	Summary	Reference
Canada (Ontario)	Local Health Integration Networks	Plan, integrate and fund public health care services, to improve access and patient experience. Replaced by 1 Ontario Agency Health Board in 2019	https://www.ontario.ca/page/ontario-health-agency
Canada (Alberta)	Primary Care Networks	Identify and set priorities based on local needs. Collaborate with Family Health Teams and Community Health Centres	https://www.albertahealthservices.ca/info/Page15625.aspx
Canada (Quebec)	Integrated Health and Social Services Centres	Provide integrated services appropriate to population health needs	https://www.msss.gouv.qc.ca/en/reseau/systeme-de-sante-et-de-services-sociaux-en-bref/reseaux-territoriaux-et-locaux-de-services/
Canada (British Columbia)	Divisions of Family Practice, Primary Care Networks	Collaborate within and beyond the health care sector to address local health care priorities	https://www.divisionsbc.ca/provincial/about-us
United States of America	Various Health Maintenance Organisations	Similar to private health insurers - responsible for the health of members (usually linked to employment benefits) rather than geographically defined populations	(Oliver-Baxter et al., 2013)
New Zealand	Independent Practitioner Associations	GP owned collectives, to improve quality of primary care. Since early 1990s.	(Thorlby et al., 2012)
New Zealand	Primary Care Organisations	Community owned. Primarily focussed on providing care to disadvantaged communities	(Thorlby et al., 2012)
New Zealand	Primary Health Organisations	Since 2002. Improving health in enrolled populations, reducing health inequalities and improving care coordination, providing care directly or through contracted providers	https://www.health.govt.nz/our-work/primary-health-care/about-primary-health-organisations
Scotland	Integrated Joint Boards (with Local Authorities and Health Boards)	Plan and deliver collaborative community health and social care services, employ preventive approaches and reduce inequality	https://hscscotland.scot/integration/ (Baylis and Trimble, 2018)
England	Primary Care Trusts	In operation from 2002 – 2013. Responsible for commissioning primary, community and secondary health services. Replaced by Clinical Commissioning Groups.	(Oliver-Baxter et al., 2013)
England	Clinical Commissioning Groups (CCGs)	Clinically-led statutory NHS bodies responsible for planning and commissioning health care services for the local area, support general practice quality improvement	(NHS Clinical Commissioners) (Naylor et al., 2013)

PHNs share similarities with various international PHCOs, but they are probably most similar to

English CCGs, in terms of being responsible for purchasing services for a geographically defined population, although PHNs commission a narrower range of services than CCGs.

2.4.3 PHNs’ potential to strengthen PHC

From the outset, key commentators anticipated the potential for PHNs to facilitate integration between primary care and public health in a comprehensive PHC approach. They are well placed to drive local level system change for more integrated care (Swerissen and Duckett, 2016) and represent a strong opportunity to act at both the individual and population levels to integrate PHC with public health (Booth et al., 2016), particularly to foster links and partnerships with organisations delivering preventive interventions, and commission new preventive programs (Harris, 2016). Their regional, community-connected locations enable improving primary care and public health collaboration at the local level. PHCOs with a local focus and genuine community participation and ownership are well placed to drive innovation that achieves locally appropriate care, oriented to the principles of broader PHC of the community, not just clinical approaches to treatment of disease (Sturmberg, 2011).

However, there are many factors that impact PHCOs’ scope of influence, and commentators have flagged important concerns. Lessons from other countries have indicated that becoming commissioning organisations is challenging, and requires development of capacity and capability (Booth and Boxall, 2016). There are also concerns that PHNs may lack capacity in terms of funding, skills and tools, as well as authority to influence system change (Duckett et al., 2017). The risk of PHNs focussing too narrowly on integrating and strengthening primary care services, rather than more ambitiously acting further upstream through PHC, was identified early amidst governments’ rhetoric emphasising GPs, frontline services, individual *patients* and clinical *medical* services, while de-funding population health agencies and initiatives (Booth et al., 2016).

PHNs operate in a highly political context and understanding the broader environment in which they operate is important in examining their planning and decision-making. The broader RPHCO research project that the present study extends upon has provided important findings regarding the broader context and drivers within which planning decisions are made. Research on PHNs’ predecessors, Medicare Locals, showed they were strongly influenced by the regulatory institutional forces and biomedically focussed ideas of health of their government funders, which conflicted with the values and normative forces within the organisations and constrained their upstream health promotion actions (Javanparast et al., 2018b). The interests and power of the medical sector driving selective PHC ideas, as well as neoliberal ideas of economic imperatives and market models have also been recognised as underlying factors that have hindered the pursuit of comprehensive PHC in Australian PHCOs (Baum et al., 2020). Research from the earliest days of PHNs highlighted concerns that the commissioning model and contextual factors may be detrimental to equity, particularly in relation to Aboriginal and Torres Strait Islander people, and communities with limited access to health care services (Henderson et al., 2017). Limited collaboration with local government has also been identified as a shortcoming for Australian PHCOs' intersectoral action on upstream health determinants, due to factors of the overarching policy environment, governance and leadership, and organisational capacity and resources (Javanparast et al., 2018a).

This research seeks to build on this earlier research, to examine various aspects of PHNs and understand the factors that influence the use of evidence to inform important decisions on local strategies to strengthen PHC and promote health equity. The next part of this chapter examines literature on evidence-informed policy-making and planning, which has informed the analysis of PHNs' PHC planning and use of evidence.

2.5 Defining health planning, policy-making and evidence

The World Health Organization defines health planning as "the orderly process of defining health problems, identifying unmet needs and surveying the resources to meet them, establishing priority goals that are realistic and feasible, and projecting administrative action, concerned not only with the adequacy, efficacy and efficiency of health services but also with those factors of ecology and of social and individual behaviour that affect the health of the individual and the community"; (World Health Organization, 2017). Echoing the principles of PHC, Eagar et al. (2001) argues that health planning should be underpinned by principles of equity, accessibility, efficiency, quality and effectiveness.

Policy is defined as "the expressed intent of government to allocate resources and capacities to resolve an expressly identified issue within a certain timeframe" (de Leeuw et al., 2014). While it is distinct from health planning, there are important parallels that can be drawn in terms of the use of public resources, and the potential impact of decisions on health or other outcomes for the population.

There is a vast body of literature on the use of evidence in health policy-making and clinical practice. The meso-level of regional health planning conducted by PHNs sits in between these realms of broad population-based approaches implemented by governments and individual services delivered by health care professionals. While the extensive evidence-based policy literature often acknowledges 'lower', sub-national, regional or devolved levels of policy-making or planning, there is a paucity of research literature exploring the use of evidence at this level of decision-making (Innvaer et al., 2002). However, there are many lessons from policy theory that are helpful in understanding PHNs' planning and decision-making processes, their role in implementing broader PHC policy, as well as the wide range of influences and variables that impact on the development and intended outcomes of planned interventions. A number of key authors refer to policy-making and planning together (Makkar et al., 2016b, Mitton et al., 2007, Moore et al., 2011, Parkhurst and Abeysinghe, 2016), and argue that both health policy and planning can similarly be supported by approaches, concepts and theories from a range of disciplines (Huckel Schneider and Blyth, 2017).

With the objective of improving health by improving health service delivery or system performance, health planning is similarly complex and dynamic to health policy-making, involving a range of stakeholders with various interests and agendas to juggle (Baum, 2008). Decisions based on evaluation and research evidence can guide the selection of strategies and development of programs (Eagar et al., 2001), and are as important for health planning as they are for health policy and clinical health care decisions (Strategic Policy Directorate: Population and Public Health Branch, 2001).

2.6 The complexity of factors influencing policy and planning

Health planning and policy-making is highly complex – it is “fuzzy, political and conflictual” (Head, 2010, p83). There is a wealth of literature discussing and recognising the dynamic interplay of many factors in a policy ‘system’ influencing the priorities and conclusions of decision makers, and the importance of timing and context on how evidence interfaces with policy-making (Green and Bennett, 2007, Andermann et al., 2016b, Black, 2001, Hawkins and Parkhurst, 2016, Kingdon, 1984). Policy-making is inherently political and policy-makers factor in various competing issues and values, from a range of ‘actors’ or stakeholders with varying degrees of power and influence (Bowen and Zwi, 2005, Hawkins and Parkhurst, 2016).

Bacchi (2009) maintains that any policy or planning decision is a representation of a population level ‘problem’, underpinned by ideas of what the root cause of that problem is, and therefore what will be a suitable approach to addressing it. The causes of population health problems are rarely direct or certain; the interventions employed are complex, highly context dependent and feasibility focussed (Black, 2001, Dobrow et al., 2004, Boyko, 2015, Liverani et al., 2013, Macintyre, 2012, Cairney and Oliver, 2017). Health professionals tend to perceive ‘need’ or problems in terms of the clinical solutions they can offer (Baum, 2008). Health planning is similarly challenged by a complex, dynamic interplay of competing issues and actors, and underlying conceptions of what the ‘problem’ is that the planning seeks to address. Understanding the ‘system’ in which health planning occurs, the influences and forces at play, and being mindful of the different ideas of the underlying problem in health planning is important to understanding evidence use (or lack thereof).

Policy theory explains the ‘bounded rationality’ of policy-makers, in that a range of influences constrain their ability to make decisions based purely on evidence. The power of decision-makers is shared with many other actors in complex policy-making systems (Cairney and Oliver, 2017). Because of these ‘realities’ of complex policy-making, shortcuts are employed in ‘rationally’ pursuing clear goals and prioritising sources of information/evidence, and ‘irrationally’ drawing on emotion, beliefs and experience to make quick decisions (Cairney and Oliver, 2017). Appreciating these complex realities of policy-making and planning is essential in ensuring a comprehensive understanding of the influences and processes of planning in PHNs.

Many influences on decision-making have been identified in the literature, at both organisational, and individual levels. Table 2.2 outlines some of the key influences.

Table 2.2: Influences on policy/planning

Influence	Explanation	References	Relevance to this study
Ideology & 'deeply held beliefs'	Underlying beliefs influence how a problem is conceived and resolved. Deeply held beliefs and philosophies tend to be largely fixed, and not particularly susceptible to influence by evidence. Evidence will only be accepted and used if it aligns with prevailing ideology of actors. Values considerations can include social justice, health equity, human rights and social acceptability. The 'value orientation' of evidence must align with that of the planner/ policy maker or those in positions of power to be influential. Evidence alone cannot settle a debate between competing values.	(Bacchi, 2009) (Liverani et al., 2013) Prinja, 2010) (Murphy et al., 2012) (Parkhurst and Abeysinghe, 2016), (Davis and Howden-Chapman, 1996, Prinja, 2010) (Hawkins and Parkhurst, 2016)	Equity is an ideological position, which if not held by the organisation or key individuals may limit its consideration in decision-making. This study explores actors' attitudes to equity and organisational mechanisms to consider equity. Actors' ideas of health – whether that be an individualist biomedical conception or a social view – are also important ideological underpinnings that this research explores.
Capacity	The capacity of individuals and organisations can influence evidence use.	(Green and Bennett, 2007, Jakobsen et al., 2019, Makkar et al., 2016b)	The capacity of PHNs and their mechanisms for evidence-informed planning are a focus of this study
External context	Context can influence what constitutes evidence, and how evidence is perceived and used. Central/regional decision-making context is an important factor. External context is the wider environment in which a policy decision is applied, and is relatively fixed.	(Liverani et al., 2013) (Dobrow et al., 2004) (Alston et al., 2019) (Jakobsen et al., 2019)	Understanding the context of the PHNs' regional decision-making is important in examining the factors that promote or hinder use of evidence.

Influence	Explanation	References	Relevance to this study
Internal context, organisational factors	The culture in an organisation influences if, how and what evidence is used. Internal context is the environment in which decisions are made and can potentially be controlled and manipulated. Organisational structure can influence evidence use. For example, the division of policy organisations into units, or 'silos' of operation can limit use of multi-disciplinary evidence and contribute to institutional 'path dependency'. A further internal context example is high turnover of decision-makers and personnel - the lack of 'institutional memory' means that old, but seemingly innovative ideas are re-implemented.	(Marston and Watts, 2003, Jakobsen et al., 2019) (Dobrow et al., 2004) (Liverani et al., 2013)	This research examines the influence of internal, organisational factors on planning and the use of evidence
	The organisational culture may allow for powerful actors within a policy system to advocate for evidence use, which improves the quality of decision-making.	(Field et al., 2012)	
	Concentration of power and level of democratisation in an organisation will influence decision-making and use of evidence.	(Liverani et al., 2013)	
	Organisational mechanisms and processes can shape the use of evidence	(Liverani et al., 2013)	
Political, factors, vested interests	Powerful interests can outweigh the influence of evidence, e.g. funding limitations, financial interests of external stakeholders, or dominance of certain structural interests such as medical professionals. Selective use of evidence that aligns with political agendas, and disregard of that which does not.	(Hunter, 2009, Liverani et al., 2013) (Sax, 1984) (Parkhurst, 2016)	The research includes examination of the influence of various actors' interests on PHN planning decisions

Influence	Explanation	References	Relevance to this study
Institutional forces	Various internal and external contextual factors, and actor behaviours can be explained by underlying institutional forces. Institutional forces can be regulative (rules and obligations of how things must be), normative (norms, assumptions and expectations about how things ought to be) and/or cultural cognitive (conceptions of reality - of how things are - that are taken for granted).	(Scott, 2013) (Javanparast et al., 2018b)	Institutional theory is a key analytic lens in this research, which is described further in Chapter 3.

Jakobsen et al. (2019) conducted a comprehensive review of the literature to identify 64 specific organisational factors that enable evidence use, which fit into five broad domains (and 18 sub-categories): individual factors; management of research integration; organisational systems and infrastructure for research use; institutional structures and rules for policy-making; and organisational characteristics. This analysis was published after the design and data collection of this PhD research, however it reinforced the importance of examining organisational factors as critical enablers in evidence-informed decision-making, and illustrates the breadth and complexity of this field of study.

Understanding the wide range of factors (and potential levers) that influence evidence-informed planning and policy-making can be aided by conceptual models, which will be discussed next.

2.6.1 Ideas and concepts of policy-making and policy systems

There are many approaches to understanding evidence use in decision-making either in policy-making, or health planning. A seminal paper by Weiss (1979) set out seven models of research utilisation. Until recently, much of the discourse has been based on somewhat simple, rational, linear or cyclical ideas of policy-making based on evidence (Davis and Howden-Chapman, 1996, Colebatch, 2006, Bowen and Zwi, 2005). An early, popular model of the policy process was the ‘stages heuristic’ which divided the policy process into discrete stages (Sabatier, 1999), where policy-making and use of evidence was framed as an ‘event’ (Bowen and Zwi, 2005, Black, 2001, Cairney and Oliver, 2017, Head, 2008, Lavis et al., 2002, Nutbeam, 2004). The linear/rational model is arguably related to the origins of evidence-based policy-making in a positivist model of medical science, and dominance of health care professionals in health policy (Black, 2001).

Many contemporary discussions better recognise the complex, dynamic, interactive, non-linear nature of policy-making and planning (Andermann et al., 2016b, Fafard, 2015, Head, 2010, Macintyre, 2012, Marston and Watts, 2003, Cairney, 2014), and view it as an iterative, continuous process of incremental change in which evidence influences thinking over time (Bowen and Zwi, 2005, Nutbeam, 2004). Head (2008) likens the craft of policy development to ‘weaving’ strands of information and values according to the perspectives of varied stakeholders. There has been increasing acknowledgement of Weiss’s (1979) ‘enlightenment’ model of evidence use in policy-making, whereby knowledge from research gradually filters and ‘percolates’ through society to indirectly influence decision-makers (Orton et al., 2011a, Oliver et al., 2014b). Numerous authors argue that there still needs to be more nuanced, sophisticated understanding of the political nature of policy systems and policy-making processes (Oliver et al., 2014b, Fafard, 2015, Cairney and Oliver, 2017, Hawkins and Parkhurst, 2016). Fafard (2015) advocates drawing on political science to explain gaps between evidence and policy. Huckel Schneider and Blyth (2017) argue that planning and policy-making and its analysis require an interdisciplinary approach drawing on theory and methodology from four disciplines: information processing and behavioural science; political sciences; critical theory and political philosophy; and intervention research and implementation science. Cairney and Oliver (2017) advocate for theories that are based around a broader ‘policy environment’, with interacting factors: policy actors, ideas, institutions, networks and socioeconomic context.

Before examining evidence use in policy and planning, the next section will discuss differing conceptions of evidence, and establish how evidence is defined in this research.

2.7 Ideas of evidence

It is important to acknowledge the different conceptions and ideas of what constitutes evidence and what evidence is valued in health policy-making and planning. Much of the literature on evidence-informed decision-making focusses on research evidence generated by academics and published in peer-reviewed journals, yet it is frequently recognised that decision-makers’ conceptions of evidence will differ from those of academic researchers (Oliver et al., 2014b). A wide variety of information sources inform policy-making and planning from both academic and non-academic sources (Syed et al., 2010, Cairney and Oliver, 2017, Prinja, 2010), including public health surveillance data, needs assessments, health impact assessments and geographic information systems (Oliver et al., 2014b). To capture this, broad conceptions of evidence have been adopted in contemporary reviews of organisational factors that facilitate evidence-informed decision-making (Jakobsen et al., 2019). This research similarly adopts a broad conception of evidence, that includes academic research alongside non-academic analysis, grey literature and stakeholder knowledge.

The types of information used in health planning fall into six broad categories: demographic, epidemiologic, health services activity, health economic, qualitative data from stakeholders and evidence of the efficacy of interventions (Eagar et al., 2001). Different types of evidence from a range of disciplines is used for different purposes in the policy-making or planning process (Parkhurst and Abeysinghe, 2016). Table 2.3 summarises points made in the literature about what elements or stages of planning and policy-making draw on evidence from which disciplines.

Table 2.3: Evidence types and planning aspects

Aspect of planning/policy-making	Discipline from which evidence is drawn
Identifying/understanding a problem (Lavis et al., 2009c), identifying the need for action (Bowen and Zwi, 2005)	Epidemiology (Niessen et al., 2000) Social science, lay knowledge (Popay and Williams, 1996)
Shortlisting intervention options (Lavis et al., 2009b), showing effectiveness of an intervention (Bowen and Zwi, 2005)	Intervention research and evaluation (Hawe et al., 2012)
Assessing cost-effectiveness (Bowen and Zwi, 2005)	Health economics (Niessen et al., 2000)
Planning implementation strategies (Fretheim et al., 2009)	Implementation science (Nilsen et al., 2013)

Several reviews have identified that public health policy decision-makers use evidence from academic research sources less commonly than other forms of evidence (Orton et al., 2011a, Masood et al., 2020). Analysis performed by bureaucrats is claimed to be more influential than academic research (Head, 2010), and locally generated evidence has been shown to be more influential than evidence that did not have local provenance in local-level decision-making (Kneale et al., 2019). Analysis of evidence use in English CCGs found that local information (including evaluations) trumped national evidence, academic research, or information from other regions (Wye et al., 2015). This is pertinent to this research on PHNs, as these organisations generate evidence themselves, such as population health needs assessments, stakeholder engagement and evaluation, and may favour ‘in-house’ or local sources rather than evidence produced by academics.

The ‘hierarchy of evidence’ that ranks the strength of evidence based on methodological rigour in medicine and epidemiology is generally not suitable for public health policy, which is challenged by nonlinear, uncertain cause-effect relationships and multiple unpredictable social variables (Bell et al., 2011a, Hawkins and Parkhurst, 2016, Parkhurst and Abeysinghe, 2016, Cairney and Oliver, 2017). Pluralistic forms of knowledge that draw on various theories and perspectives, including qualitative studies, are relevant to policy-making and analysis, with the key question being the degree of trust that can be placed in evidence (Head, 2010). A lens of ‘appropriateness’ of evidence to the situation is recommended as a valuable approach to assessing evidence for policy-making and planning (Parkhurst and Abeysinghe, 2016, Hawkins and Parkhurst, 2016).

The next section will introduce evidence-informed decision-making and outline the importance of appropriate evidence use.

2.8 Evidence-informed health decision-making – what is it and why is it important?

While the health planning decision-making of PHNs is not policy-making per se, policy theory and literature offers a helpful way to understand the complexity and factors influencing decisions around developing PHC programs and services, and allocating public resources.

The concept of evidence-based health policy evolved from the evidence-based medicine movement at the end of the 20th century (Oliver et al., 2014b, Boyko, 2015), adapted to focus on the justification of policy decisions (Dobrow et al., 2004). Evidence-based policy-making is "an approach to policy decisions that aims to ensure that decision-making is well-informed by the best available research evidence", that is characterised by "systematic and transparent use of evidence" (Oxman et al., 2009a). A key premise is that policy and planning initiatives are developed based on evidence of their effectiveness i.e. 'what works'. This approach has an inherent logical appeal, yet is only one of many questions to consider (Ghaffar et al., 2017). Some argue that the emergence of evidence-based health policy reflects a trend over recent decades towards 'managerialist approaches that focus on efficiency and effectiveness (Head, 2008, Marston and Watts, 2003) - goals which are echoed in the objectives of PHNs. Germov (2005) identified key risks with managerialism in health care, including that it can marginalise equity and quality concerns, and cause undesirable consequences such as premature release of hospital patients to minimise costs. Baum et al. (2016) found that neo-liberal, managerialist approaches drove a focus on measuring short-term throughputs, rather than longer term social and health objectives. Baum et al. (2020) argue that emphasis on economic efficiency through cost cutting, inherent in commissioning-based models of health care distribution, is not compatible with comprehensive PHC models that include action on the social determinants of health. Other perspectives on the emergence of evidence-informed health policy-making and planning argue that greater political advocacy for health issues has boosted demand for decision-makers to explicitly and transparently justify their decisions (Dobrow et al., 2004, Niessen et al., 2000). This research, in adopting a broad conception of evidence, is underpinned by the premise that while evidence of effectiveness and efficiency are important considerations, there are various other important types of evidence to inform decision-making purposes.

Without appropriate use of evidence, decisions can be disproportionately influenced by ideology, political expediency, economic or other vested interests (Liverani et al., 2013), potentially compromising the achievement of health outcomes (Bell et al., 2011b, Davis and Howden-Chapman, 1996). The Australian health system is rife with vested interests (Baum et al., 2020, Sax, 1984), and this is an important contextual factor that I will explore in further detail in Chapter 4. These factors will always influence decision-making to a certain extent, however influential scholars in the field of evidence-informed policy-making argue that enhancing the use of evidence leads to more effective, transparent decision-making, greater health gains and financial efficiency

(Oxman et al., 2009a, Hawkins and Parkhurst, 2016, Lavis et al., 2009a). While Oliver et al. (2014b) note that the assumption that the use of evidence makes for better policy is relatively untested by empirical analysis, the extensive literature in the field of evidence-informed policy-making is underpinned by an inherent logic that without being sufficiently informed by evidence, initiatives risk being ineffective and inefficient, resulting in financial wastage and opportunity costs (Oxman et al., 2009a). Health policies and plans which are not well informed by evidence also risk increasing health inequities. Inequitable access to health care may be exacerbated by inefficient health systems (Oxman et al., 2009a). Certain approaches may have differential, potentially negative effects on different groups within the population, and such risks should be identified through appropriate consultation of evidence. The incorporation of health equity considerations in decision-making is a key component of this research.

The limited use of evidence in policy-making has been frequently observed in the literature (Huckel Schneider and Blyth, 2017, Davis and Howden-Chapman, 1996, Oxman et al., 2009a). A 2004 UK study found that programs were largely based on “informed guesswork and expert hunches, and driven by political and other imperatives” (Coote et al., 2004, p 47). In a somewhat more positive perspective, Hunter (2009) argues that in many cases, organisations are using evidence to inform policy and practice, but the ad hoc, piecemeal nature of research evidence consideration is of concern.

The growth of the evidence-based policy movement, particularly in high-income western democracies, generated hopes of significant improvement in the effectiveness of policy interventions due to greater influence of evidence, however there has been limited achievement of this goal (Head, 2010). According to a review by Head (2010), the literature indicates a ‘realism’ in the field, in that evidence can inform policy, but not serve as the primary rational basis for decisions. As such, the literature has seen a shift from referring to decisions as ‘evidence-based’ to ‘evidence-informed’ (Hawkins and Parkhurst, 2016, Oxman et al., 2009a). While recognising that research evidence is one of numerous considerations when making policy or planning decisions, the systematic use of appropriate evidence helps to ensure that strategies are effective, efficient and locally relevant – important objectives for PHNs.

The literature frequently focusses on ‘barriers’ to evidence-informed decision-making, which will be discussed in the next section

2.8.1 Barriers to evidence-informed decision-making

A considerable focus of the published literature has been on the ‘barriers’ to research evidence utilisation in decision-making. Oliver et al. (2014b) argue that analysis of evidence-informed policy-making has overly focussed on superficial perceptions of ‘barriers and facilitators’ to evidence use, rather than theoretically informed analyses of the policy environment, as discussed above.

Nonetheless, it is important to understand what barriers have been identified.

While there are many ways of categorising the challenges and barriers to evidence use, several authors have identified two broad overarching aspects.

- Problems related to evidence: the limitations of evidence itself and decision makers not accessing (appropriate) evidence.
- The complexity of policy and planning decision-making and the other influences that must be balanced, evidence being ignored (or manipulated) for political or ideological reasons (Bell et al., 2011b, Oliver et al., 2014b, Orton et al., 2011a, Hawkins and Parkhurst, 2016).

Systematic reviews of this literature have categorised the key barriers more specifically as:

- social factors - disconnect, lack of trust and lack of personal contact between researchers and policy-makers (Innvaer et al., 2002, Orton et al., 2011a, Masood et al., 2020);
- practical constraints (timeframe alignment, access to relevant/appropriate research, dissemination format, interpretation) (Orton et al., 2011a, Innvaer et al., 2002, Oliver et al., 2014a, Masood et al., 2020);
- individual factors such as policy-makers' knowledge, attitudes and skills in relation to research evidence (Orton et al., 2011a, Oliver et al., 2014a, Masood et al., 2020);
- organisational factors such as culture, structure, technical infrastructure, tools and guidelines, internal prompts, and type of organisation (Masood et al., 2020);
- aspects of the political environment (Masood et al., 2020);
- economic, budget (Oliver et al., 2014a, Innvaer et al., 2002, Masood et al., 2020).

The complexity of policy-making and planning and its implications for evidence-informed decision-making has been discussed in section 2.6 above. The next section will address the other main 'barrier' to evidence-informed decision-making: problems associated with evidence and access to it.

2.8.1.1 Appropriateness of evidence and problems with accessing it

As outlined above, one of the main types of barriers to evidence-informed health decision-making is problems with the evidence and access to it, which I will expand on. Limited availability of relevant evidence and knowledge 'gaps' in evidence are frequently identified as barriers to evidence use, and perhaps the most immediately logical. The lack of specific contextual evidence can be a barrier to evidence-informed decision-making, particularly in the highly dynamic fields of PHC or community services (Bell et al., 2011a). For example, with regard to intervention evidence, initiatives that are demonstrated to work well in one setting may not be readily generalisable to other settings (Parkhurst and Abeysinghe, 2016).

The mismatch between the information needs of policy-makers, and the timing and forms of evidence generated by researchers is often cited as a barrier to evidence use, with claims that researchers don't appreciate the 'game' of politics or policy-makers' need for well targeted and clearly communicated research findings with clear policy implications (Head, 2010, Macintyre, 2012, Murphy et al., 2012). Kingdon's 'policy windows' theory argues that opportunities for influence are missed if appropriate evidence is not available when required, when a 'window' of opportunity arises through convergence of the problem, the politics and the policy solution (Kingdon, 1984).

Multiple authors identify a lack of communication, relationships and mutual understanding between researchers and policy-makers (Innvaer et al., 2002, Oliver et al., 2014a, Orton et al., 2011a, Head, 2008, Masood et al., 2020). The 'two communities' theory (Caplan, 1979) is frequently cited, arguing that policy-makers and researchers exist in different 'worlds', with different values, incentives and languages. This theory may be helpful in identifying and understanding some of the factors that hinder or enable PHNs' use of evidence to inform planning, but it is only part of the picture.

The political nature of competing influences in policy and planning decision-making (particularly ideology and values), have been widely identified as hindering evidence use (Orton et al., 2011a, Innvaer et al., 2002, Oliver et al., 2014a, Black, 2001, Eagar et al., 2001, Parkhurst, 2016). Political 'savvy' may be required to mitigate the influence of vested interests, which can include selective use of supporting evidence (Head, 2010), or 'intentional subverting' of evidence (Andermann et al., 2016b).

A large body of research and practice, underpinned by the 'two communities' theory (Caplan, 1979), has developed around the concept of 'knowledge translation'. Knowledge translation is one of many related terms describing approaches to facilitate the use of research evidence in practice and policy (Mitton et al., 2007). Knowledge translation is based on the rationale that improved access to more/better evidence will lead to better policy (Oliver et al., 2014b).

There are however various concerns with the 'two communities' theory and knowledge translation approaches that it underpins. Hawkins and Parkhurst (2016) and Oliver et al. (2014b) criticise the theory and related approaches as oversimplified. According to Oliver et al. (2014b) 'two communities' based ideas about the barriers to use of research are equated with barriers to *direct* use of research, when much evidence use in policy-making and planning is indirect. Numerous authors are critical that knowledge translation approaches address only one of the two main categories of barriers to evidence use (limited access to evidence) and fail to recognise the complex range of competing influences and considerations in policy-making (Hawkins and Parkhurst, 2016, Oliver et al., 2014b, Head, 2010, Fafard and Hoffman, 2020). Mitton et al. (2007) question whether knowledge translation has been inappropriately transferred from evidence-based medicine to public health. Cairney and Oliver (2017) are similarly critical of analyses based on practitioner perspectives, underpinned by evidence-based medicine ideas, rather than policy theory or knowledge of the policy process. As such, the proposed ‘solutions’ to the barriers tend to focus on improving research dissemination or translation. Hawkins and Parkhurst (2016) also argue that much of the knowledge translation literature and rhetoric of policy actors is based on a narrow, rationalist, transactional conception held by advocates of evidence-based policy-making from a clinical health care or epidemiology background, without taking sufficient account of the political nature of policy-making. Oliver et al. (2014b) suggest that continued focus on closing the ‘research-policy gap’ through knowledge translation is likely to perpetuate and possibly create gaps between researchers and policy-makers. Fafard and Hoffman (2020) call for knowledge translation approaches that are more appropriately tailored to the context, stakeholders and policy instrument concerned.

This section has outlined the barriers to evidence-informed planning, and particularly those relating to the disconnect between researchers and policy-makers. The next section will focus more specifically on capacity factors that influence evidence-informed decision-making.

2.8.2 Capacity for evidence-informed decision-making

As indicated in section 2.6 above, capacity factors are among the many influences on evidence-informed decision-making. Following recognition by Bowen and Zwi (2005) of this neglected area of policy analysis, and calls by Green and Bennett (2007) for greater focus on capacity to use evidence in decision-making this aspect of policy environments has attracted increasing attention in recent years (Hawkes et al., 2016, Makkar et al., 2018, Makkar et al., 2016b, Oronje et al., 2019, Redman et al., 2015, Huckel Schneider et al., 2014). The WHO has called for sustainable intra and inter-organisational systems for better use of research evidence, as well as individual capacity building (WHO Regional Office for the Eastern Mediterranean, 2017).

Capacity for evidence use in policy and planning organisations can be considered at various levels. Capacity and other aspects of individuals can influence evidence-informed decision-making. A review by Jakobsen et al. (2019) identified that individuals’ knowledge and skills in a particular policy area, research experience, or in seeking and appraising evidence were important individual capacity factors, as was relationships with researchers. Organisational capacity in terms of leadership, systems, resources, relationships and policies have been identified as influencing evidence use (Redman et al., 2015). The WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007) includes organisational capacity elements as significant factors that influence evidence-informed policy-making: leadership and governance, resources, and communication and networks. Green and Bennett (2007) advocate a ‘systems approach’ to capacity development, that attends to organisational processes and the enabling environment, not only individual skills. This framework is employed in this study and is described in greater detail in the methods chapter, section 3.3.1.1. Makkar et al. (2016b) have developed a tool for assessing seven domains of organisational capacity. This tool is employed in this research and is described in detail in section 3.5.4.2.

Hawkes et al. (2016) distinguish a further ‘institutional’ level of capacity which refers to the norms and rules which govern decision-making. Their study of low- middle income countries’ policy agencies identified that actions to improve individual capacity are frequent (as they are more feasible and achievable), but less common for organisational capacity, and rare for institutional capacity. They argue that strengthening the capacity of individuals and organisations is important, but insufficient. Sustainable improvement in evidence-informed decision-making requires developing institutional capacity and shifting the culture, norms and incentives for evidence use, particularly as policy-making is inherently fraught with political challenges and influences. Examples of strategies to enhance institutional capacity include strengthening regulatory mechanisms or enhancing governance and accountability systems around evidence-informed decision-making. They also recognised that such ‘high level’ capacity building is more challenging and requires resources, legitimacy and regulatory support (Hawkes et al., 2016). Potter and Brough (2004) have described a four-tiered hierarchy of capacity: tools; skills; staff and infrastructure; and systems, structures and roles. They argue that addressing capacity at the systemic level is more important, although recognise that it is more complex, time-consuming, abstract and socio-culturally based than the simpler, more technical development of individual skills and tools. As such, examinations of capacity can tend to drift away from holistic analysis of a system, towards a simpler focus on individuals (Potter and Brough, 2004).

Recent research by Williamson et al. (2019) demonstrated the value of addressing organisational capacity, finding that a multifaceted intervention to increase organisational systems and tools for evidence-informed planning led to increased accessing of research and tactical use of evidence by staff in policy agencies (Williamson et al., 2019).

Among the capacity factors outlined above, and in the wider literature, several key commentators have identified and argued for governance principles to improve evidence-informed health planning and policy-making. Dobrow et al. (2004) discuss how evidence-based decision-making is in itself a response to demand for “explicitly justified decisions” (pp207) and highlight the importance of explicitly describing the internal decision-making context and acknowledging the role of other influential factors. Evidence gaps can make health policy and planning more difficult, and decisions may need to be made despite uncertainty, but actors can make evidence gaps explicit to aid transparency (Andermann et al., 2016b).

Oxman et al. (2009a) offer a range of evidence-based approaches to support policy makers in using evidence. They acknowledge that while policy-making is highly dynamic and rarely a clear sequence, it can nonetheless benefit from a systematic and transparent process. They also argue for systematic and explicit judgements about applying evidence to a policy issue (Oxman et al., 2009a). Field et al. (2012) advocate organisational ‘meta policy’ - written or unwritten ‘rules’ around policy-making - that foster transparent and systematic consideration of evidence from various sources. Liverani et al. (2013, p.6) also argue for the establishment of “institutional processes and procedures” to improve the use of evidence. The review by Jakobsen et al. (2019) also identified that systematic procedures and systems are vital enablers of evidence-informed decision-making. Policy issues, and the multiple values-based considerations influencing them, can be identified up-front, to enhance transparent decision-making and enable assessment of appropriate evidence to inform decision-making (Parkhurst and Abeysinghe, 2016).

Governance is an important element of an organisation’s capacity for evidence-informed health policy-making (Green and Bennett, 2007). Drawing on governance literature, Hawkins and Parkhurst (2016) have developed a novel framework for analysing the ‘good governance’ of evidence-informed policy-making process: appropriateness, accountability, transparency and contestability. This framework will be employed in this research and is discussed in further detail in section 3.3.1.2.

Little Australian literature has examined capacity for evidence use in PHCOs. Keleher and Wong (2014) have questioned the capacity for population health planning in Australian PHCOs, (for Medicare Locals, the predecessors of PHNs), particularly technical analysis skills to support evidence-informed decision-making. Their analysis also showed that ‘knowledge translation’ was not identified as capacity development priority, which they suggest may either indicate PHCO actors’ confidence in accessing evidence, or a lack of recognition of the importance of this to evidence-informed PHC planning. Duckett et al. (2017) have raised concerns about PHNs’ broader capacity to achieve their objectives and positive health and health economic outcomes, and fulfil their potential to coordinate local systems and strengthen PHC. As a contributing factor to these goals, this thesis will make a novel contribution to knowledge on PHNs’ capacity for evidence-informed planning.

2.9 Addressing gaps in the literature

This review has identified a number of gaps in, and criticisms of the academic literature on evidence-informed health policy-making and planning, which this research address by:

- examining evidence-informed decision-making in the meso-level PHC planning context. While several studies have examined evidence-informed decision-making in Australian local government (Stoneham and Dodds, 2014, Armstrong et al., 2014, Browne et al., 2017), no such examination of PHNs (or their predecessors) has taken place. Orton et al. (2011a) have emphasised the importance of building and sharing knowledge on strategies to improve evidence-informed health planning and policy-making in different contexts;
- investigating the use of evidence to inform public health decision-making that addresses

health inequity, which Orton et al. (2011a) argue is an urgent need. Health equity is a key principle of PHC and is implied in PHNs' objectives;

- drawing on policy theory (from a range of disciplines) to examine the complex range of factors that influence decision-making. Numerous key authors are critical that too few studies of evidence-informed policy-making/planning are underpinned by policy theory. Liverani et al. (2013) argue that exploring the complexity of the links between research and policy-making requires engagement with theories and approaches beyond the then current remit of public health and knowledge utilisation studies. Oliver et al. (2014b) are critical that much of the literature in this field is "theoretically naïve" (p1). Cairney and Oliver (2017) are similarly critical that very few studies draw on policy theory and are instead underpinned by assumptions drawn for the field of evidence-based medicine. In a literature review of factors that influence research use in public health policy-making, Jakobsen et al. (2019) found that most of the studies were explorative rather than being guided by theory;
- recognising that planning, policy, evidence use and the political environment in which decisions are made, are influenced by values, ideology and institutional forces and so determining the relevance of this perspective to PHN planning. Cairney and Oliver (2017) argue that too few studies recognise the role of values in politics. Prinja (2010) argues for the importance of understanding how evidence is generated and interpreted in light of prevailing social and political ideology, as evidence - whatever its methodological quality - will only be accepted and used if it fits with the underlying ideology of actors and decision makers;
- empirically investigating the political and institutional drivers that influence evidence use, studies of which Liverani et al. (2013) found to be scarce in the literature;
- generating comparative, empirical evidence of the organisational capacity factors and 'institutional mechanisms' that influence use of evidence in health planning by examining the PHC planning process. Liverani et al. (2013) found the literature and understanding of 'institutional mechanisms' to be "patchy and inconclusive" (p6). Oliver et al. (2014b) found there was little empirical research on the processes of evidence use in policy-making and argued for research focussing on understanding the processes and influences on policy, rather than how to increase the amount of evidence used, and repeating studies of the perceptions of actors as to what are the barriers and enablers to evidence-informed health policy-making and planning. Oliver et al. (2014a) concluded that research into managerial and organisational barriers to evidence-informed policy-making may be more useful than attention to individual-level factors. Huckel Schneider and Blyth (2017) similarly noted the dearth of studies seeking to understand policy processes and Head (2010) noted there was surprisingly little research about "how policy staff actually do their jobs" (p6);
- serving as a 'needs assessment' of PHNs' planning process and capacity in order to identify which elements to focus on to improve the use of evidence to inform planning, as

recommended by (Orton et al., 2011b). There has been no examination of PHNs' planning process and capacity for evidence-informed PHC planning and these factors are critical to their ability to be effective and efficient in improving population health and health equity;

- performing a critical analysis of the process of decision-making (and the governance thereof), not just assessing the outputs or outcomes of policy or planning decisions. This approach to policy analysis is recommended by Hawkins and Parkhurst (2016);
- examining the extent of evidence use as recommended by Masood et al. (2020) and conducting empirical, document-based analysis of the nature and extent of evidence use, in addition to understanding perceptions from the perspectives of policy-makers, as recommended by Oliver et al. (2014b). A systematic review showed that only 14 of 145 studies used document review methods (Oliver et al., 2014a);
- adopting a broader conception of evidence in seeking to identify evidence use in planning. Oliver et al. (2014b) argue that much of the literature focusses on uptake of research evidence rather than evidence defined more broadly.

The next chapter will outline the theoretical approaches and methods employed in this research to address these gaps and answer my research questions.

CHAPTER 3 METHODS

This chapter begins by situating this research in the context of a broader research project. It sets out the stance that is taken in approaching the research, and the theoretical frameworks that have guided the analysis and interpretation. The following sections explain the methods that were employed to address the research questions.

3.1 Study context

This PhD research was part of a large NHMRC funded research project entitled: Regional Primary Health Care Organisations: population health planning, participation, equity and the extent to which initiatives are comprehensive (RPHCO project), undertaken between 2014 and 2018 (APP#1064194). The supervisors of this PhD were chief investigators on the research project. The research commenced with Medicare Locals in 2014, and later involved PHNs.

The aims of the RPHCO project were to assess the extent to which regional PHC organisations in Australia have the capacity to:

- develop population health plans based on a collaborative approach and an understanding of population health principles;
- consider and act to reduce health inequities;
- address social determinants of health; and
- engage with PHC stakeholders in the region to ensure collaborative approach in population health planning and program implementation.

The RPHCO project did not examine the issue of use of evidence and capacity to use evidence and was only able to describe in a general way the processes for decision-making in Medicare Locals and PHNs. These issues are critical to successful functioning of PHNs, and the contribution my thesis makes to the broader research project is to investigate these issues in depth. I began my PhD in 2017, towards the end of the RPHCO project. Except for the data collection for the secondary analysis, and where multiple coders are noted in the data analysis, all conceptualisation, design, data collection, analysis and write up is my own intellectual work, under the guidance of supervisors. The PhD research has partly drawn on existing data and documents, and leveraged on established partnerships with case study PHNs.

3.2 Theoretical frameworks

This research employs four frameworks. Below I describe these frameworks and outline the role they play in the research.

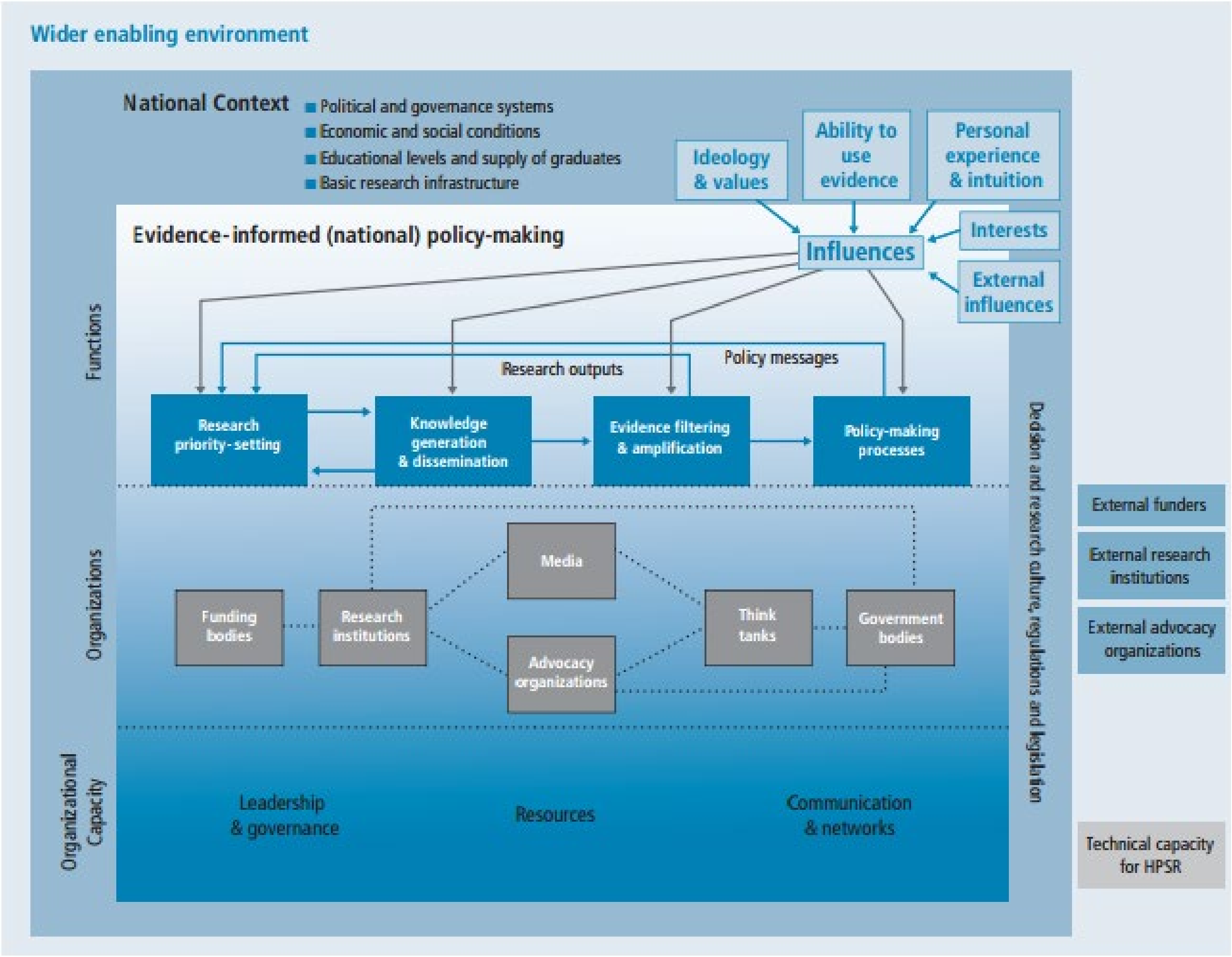
3.2.1 The WHO Conceptual Framework of Evidence-Informed Health Policy-Making

This research uses the World Health Organization's (WHO) 'Conceptual Framework of Evidence-Informed Health Policy-Making' (Green and Bennett, 2007), which is a model that employs a systems thinking approach to represent the wide range of factors in a policy environment (hereafter referred to as the 'WHO framework' for brevity).

Systems thinking approaches are well suited to analysis of complex, multifactorial issues in public health, and enable a better understanding of the wider political, economic, institutional and cultural context in which decision-making occurs (Knai et al., 2018). A systems thinking approach, underpinned by theory and empirical evidence, fosters examination (and potentially leverage) of the tangible elements (e.g. actors, evidence resources, capacity, process), interconnections (e.g. influences, forces, drivers) and functions/purposes (e.g. policy-making, plus others) (Meadows, 2008). A visualisation of a complex system, such as that represented in the WHO framework (Figure 3.3 below), can help to unpack these individual components (Knai et al., 2018). The WHO framework sets out the contextual factors and influences, the functions, the organisations and organisational capacity factors that are part of the policy environment. Another important strength of the WHO framework is that it reflects the widely accepted complex, non-linear, iterative nature of health policy-making and planning.

While this model is intended to represent policy environments at the national level, it is employed in this study as a 'systems thinking' approach to facilitate unpacking the complex environment of meso-level PHC planning in PHNs.

Figure 3.1: WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007)[2]



This framework will be supplemented by using the ORACLe tool (Makkar et al., 2016b) (further described in section 3.4.4.2) to further examine PHNs' organisational capacity for evidence-informed PHC planning.

3.2.2 Good governance framework

This research also draws on Hawkins and Parkhurst's (2016) 'good governance' framework to critically examine this particular aspect of PHNs' organisational capacity for evidence-informed PHC planning. The framework is based on four key principles of governance theory:

- Appropriateness – the relevance of a piece of evidence to the particular issue should be judged by how appropriate it is, rather than how it ranks on a methodological hierarchy.
- Accountability – policy-makers must be accountable to the community members and other stakeholders who are affected by the policy decision.

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[2] Reprinted with permission of the World Health Organization, from *Sound choices: enhancing capacity for evidence-informed health policy*, Green, A. & Bennett, S, Page 51, Copyright 2007. Available at [https://apps.who.int/iris/bitstream/handle/10665/43744/9789241595902_eng.pdf?sequence=1], accessed 29 June 2021.

- Transparency – policy-makers must be explicit about how evidence is considered and used (or not) in the policy-making process. They must also be explicit about the wider factors that influence decision-making.
- Contestable – transparency enables decisions and interpretation of evidence to be contested by policy actors and community members (Hawkins and Parkhurst, 2016).

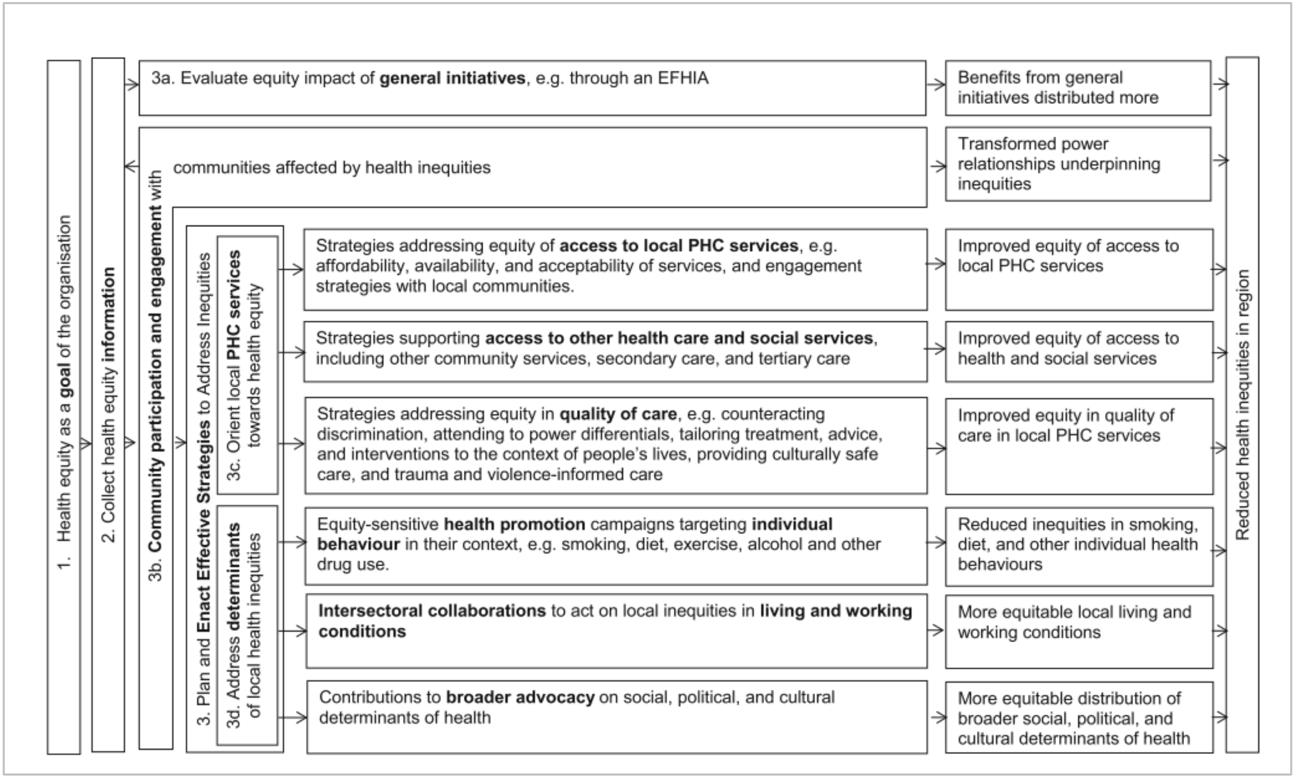
No other such frameworks were identified in the literature, and I considered this to be appropriate for interrogating the governance aspect of organisational capacity.

This framework enables critical examination of the governance capacity element in particular, of the complex 'policy environment' that the WHO framework depicts. Combining these frameworks enables me to unpack the governance capacity element in much more detail than if I had just used the WHO framework alone.

3.2.3 PHCO equity actions framework

This research uses a framework developed by Freeman et al. (2018) (Figure 3.2) to critically examine the actions taken (or not taken) by PHNs to address health inequities. This is the only such framework of its type, developed based on theory and literature, and has been used to assess the equity actions of PHNs' predecessors, Medicare Locals (Freeman et al., 2018). The framework will be used to explore the equity orientation of PHNs' governance and planning, as the WHO framework and good governance framework do not specifically consider equity as a goal.

Figure 3.2: Framework for assessing regional primary health-care organisations' actions on health equity (Freeman et al., 2018)



3.2.4 Institutional theory

An institutional theory lens is employed to facilitate understanding of the underlying role of actors, ideas and institutional forces on PHNs' evidence-informed, equity-oriented PHC planning. Institutional theory recognises that social behaviour is anchored in rule systems and cultural schema (Scott, 2005). Institutions are defined as social structures that have attained a high degree of resilience, and are composed of normative, regulative and cultural-cognitive elements that provide stability and meaning to social life (Scott, 2013). Regulative institutional forces relate to policies, rules and legal obligations that *require* organisations to act in a certain way. Normative forces relate to values and norms that create expectations and assumptions about the way things *should* be. Cultural-cognitive forces relate to conceptions of the nature of (socially constructed) reality and the frames or 'worldview' through which meaning is made. These forces often act in combination on organisational behaviour (Scott, 2005). Actors can either be individuals or organisations (or groups thereof) in the policy/planning organisation 'environment' and can have varying degrees of influence on the organisation's behaviour. Actors and institutions are intertwined and mutually interdependent on each other - actors are both 'rule makers' and 'rule takers' (Jackson, 2010). 'Ideas' are what actors know or believe about what is or what ought to be, and are closely linked with the normative pillar of institutional theory. Throughout the analysis, the emerging findings were examined through an institutional theory lens, to examine the actors, ideas and institutional forces at play.

While systems thinking facilitates a deconstruction of a complex system to analyse its various components, institutional theory facilitates an understanding of why a system (or a component within that system) is the way it is – because of the institutional forces, ideas, and actors that shape it.

By combining the WHO framework and its systems thinking approach, the critical approach of the 'good governance framework', the 'PHCO equity actions framework', and institutional theory, this research provides an examination of what factors and influences exist within the PHC planning 'policy environment' as well as consideration of what are the underlying drivers of those factors (or the absence thereof). Table 3.1 shows which frameworks were used to address which research questions.

3.3 Research design and methodology overview

To achieve the research aims of providing a rich understanding of PHNs' planning environment, influences and processes, a mixed methods approach was used, to combine methods and data sources specific to particular research questions. Use of multiple sources of data in a case study can help increase the research validity where there are converging findings (Yin, 2013).

This research project comprised four elements:

1) analysis of all 31 PHNs' public planning documents, and
2) case studies of five PHNs, comprising:
    a. secondary analysis of existing (2016) interview and survey data from the RPHCO project;
    b. key stakeholder interviews (2018), incorporating the ORACLe tool for measuring organisational capacity for evidence-informed policy/planning (Makkar et al., 2016b); and
    c. analysis of PHN internal planning process documents.

Table 3.1 shows which research methods address which research questions and theoretical frameworks underpinning this study.

Table 3.1: Research questions, theoretical/conceptual frameworks and methods

Aim: to understand planning in regional PHC organisations, and the factors that influence evidence-informed, equity-oriented planning to strengthen PHC for improved population health and health equity.					
Key Research Questions	**Theoretical /Conceptual Framework**	**Research Methods**			
		Part 1	Part 2a	Part 2b	Part 2c
		Planning output document Analysis	Secondary analysis of existing data	Interviews	Internal process document Analysis
What does the PHN planning environment look like in terms of context, influences and actors?	WHO Conceptual Framework of Evidence-Informed Health Policy-Making, institutional theory	X	X	X	
How do PHNs undertake the process of PHC planning and decision-making?	Institutional theory		X	X	X
What types of evidence do PHNs use, for what purposes in the planning process?	Institutional theory	X		X	
Do PHNs have strong organisational capacity for evidence-informed planning?	Good governance framework, ORACLe tool, institutional theory			X	X
Do PHN activities have an equity focus consistent with comprehensive PHC, and what influences the equity-orientation of planned activities?	PHCO equity actions framework, institutional theory	X	X	X	X

The first component of the research involved a document analysis of 31 PHNs' needs assessments, activity work plans and annual reports, in order to examine evidence utilisation, and identify equity considerations in planning.

This component of the research provides broad coverage of the sector, complementing the other components which gathered greater detail on a small number of case study organisations. This document analysis addressed the question of 'what' evidence informs planning, to 'what' extent, and the subsequent components delve deeper into 'how' PHNs go about planning, and 'why' evidence is or isn't used.

Document analysis has the benefit of readily accessible data, particularly in this project using publicly available documents, and it enables assessment of evidence utilisation and equity consideration empirically, rather than relying on the perceptions of stakeholders. Documents are stable and non-reactive in that they are not affected by the research process, as a person being interviewed or observed might be (Bowen, 2009). Document analysis also enables corroboration or triangulation with data from other sources, particularly as part of case studies (Yin, 2013). A key limitation with document analysis however is that documents are prepared for purposes other than the research project, and the data are 'fixed', in that there is little opportunity to probe further. By triangulating with interview analysis in a mixed methods approach, this research maximises the benefit from the various methods and mitigates their respective limitations.

A second component of this research involved case studies of five PHNs to examine the PHC planning environment and process, with particular focus on organisational capacity for evidence-informed planning.

Case studies are an excellent method to understand contemporary, complex social phenomena and activities such as organisational processes (Yin, 2013), and allow the researcher to tease out a complex array of factors and relationships (Easton, 2010). Case studies are well suited to research on settings and events over which the investigator has little control (Yin, 2013). With many variables of interest, multiples sources of evidence and a theoretical framework to guide the collection and analysis of data, this research included many conditions for which a case study approach is recommended (Yin, 2013). Furthermore, a systematic literature review by Liverani et al. (2013) has identified a need for research that generates a deep understanding of the complex evidence-informed health policy-making environment and process, and has recommended comparative case studies for this purpose.

The case study approach in this research employed secondary analysis of previous (2016) interviews from the RPHCO project, primary interviews in 2018 and analysis of PHN internal planning policy/guidance documents. All of these data collection methods are explained in further detail in the coming sections.

3.4 Data collection

3.4.1 PHN public planning documents

Key documents, comprising needs assessments, activity work plans and annual reports were collected from the 31 PHNs. (Hereafter collectively referred to as ‘public planning documents’, in order to distinguish from the internal process/guidance documents subsequently analysed). PHNs are required by the Australian Government Department of Health to publish these documents online, once they have been approved by the Department. PHN websites were searched and documents downloaded. PHNs each produce four activity plans: core operational funding and after hours (“core”); mental health; alcohol and other drugs, and Integrated Team Care. For this research the core operational and after hours plan was included, as this relates to the ‘flexible funding’ with which PHNs have the greatest potential scope and flexibility to develop and commission PHC strategies. The mental health and alcohol and other drugs plans largely relate to allocation of funding for clinical services, and the Integrated Team Care plan similarly has a relatively narrowly prescribed purpose and scope in terms of services for Aboriginal and Torres Strait Islander people. The activity work plans had originally been published in 2016, however each PHN was required to prepare and publish a 2017 update, and it was this version that was used.

A number of PHNs had produced ‘user friendly’ needs assessment reports, also known by other titles such as ‘community profile’, however for the purposes of this research, the official needs assessment on the template provided by the Department of Health (and required to be published on each PHN’s website) was collected and analysed. The needs assessment documents had undergone several updates since the commencement of PHNs. The version of needs assessment varied slightly between PHNs, partly due to the timing of when documents were published on PHN websites. The majority were from March or November 2016, four were from November 2017, and there were four that did not indicate a specific date. While there may have been some updated data analysed and presented in the more recent versions of the needs assessments, inspection suggested that they were not greatly different from the previous version, so this variation is not expected to affect the findings of the research. Annual reports were collected for the 2016-17 financial year, as this was the most current annual report at the time document collection and analysis commenced in early 2018. One PHN did not publish an annual report online, and did not respond to an email request, so their strategic plan was used instead. This was felt to be a suitably comparable substitute, as it provided an indication of the goals, objectives, strategies and values of the PHN, which were similarly outlined in most annual reports. The list of PHN public documents analysed is at Appendix A.

Once collected, documents were uploaded into QSR NVivo 12 qualitative analysis software to assist the analysis.

3.4.2 Case studies - case selection and recruitment

Case study analysis was conducted on a purposive sample of five PHNs across Australia. In recruiting PHNs to participate, consideration was given to including a mix of rural and metropolitan PHNs, from several states/territories. In the first instance, the six PHNs who had participated as cases in the earlier stages of the RPHCO research were invited to continue their participation. These PHNs were the first priority as they provided a variety in terms of different states/territories, and rural and metro PHNs represented. There were existing interview data upon which to build, and established relationships. A preliminary email invitation, including a summary of the proposed PhD research project was sent to the PHN Chief Executive Officers (CEOs) by chief investigator and principal supervisor Sara Javanparast. Two PHNs declined, with one citing lack of capacity for staff to participate in research, and the other had concerns about a conflict of interest given that I was a former employee. However, four agreed to continue. A purposive strategy was employed to identify and invite PHNs with a similar profile to those who had declined, factoring in the considerations discussed above, and also indications of an interest or willingness to participate in a research project. Of the two PHNs identified, one accepted and one declined, giving a total of five PHNs, all from different states/territories. Two were metropolitan, one rural and two cover both metropolitan and rural/remote areas. To ensure participants remain anonymous, case study PHNs were code-named Metro North, Metro South, Rural North, Rural South, and Remote.

3.4.3 Secondary analysis of existing 2016 interview and survey data

A key component of the main RPHCO project involved individual interviews with senior executives and staff, board members and members of clinical councils and community advisory committees from the case study PHNs between July 2016 and Jan 2017, and a survey was conducted across all PHNs (July-October 2016).

While the objectives and focus of this PhD research are different, the potential for valuable and pertinent pieces of information from the RPHCO project indicated the value of conducting secondary analysis of RPHCO PHN data. It was also important to draw on existing data to avoid duplicating questions in the 2018 interviews.

This component of the research project employed established secondary qualitative data analysis methods (Szabo and Strang, 1997), to re-analyse data obtained earlier in the RPHCO study to examine PHNs' planning environment with regard to evidence-informed, equity-oriented PHC planning. This stage was also useful in familiarisation with the case study PHNs before engaging with them and conducting the interviews. One of the case study PHNs in the PhD research project had not been a case in the earlier RPHCO research, and as such, no previous interview data were available for this PHN (Rural North).

Transcripts of all interviews conducted with key stakeholders in the case study PHNs in 2016 were retrieved from the relevant folder on the Flinders University server and uploaded into an NVivo file. These interview files were cross-checked against a list of interview participants to ensure that all interview data had been captured. Only interviews from the continuing four PHNs were included in the secondary analysis. A total of 38 interviews were used for secondary analysis, and Table 3.2 shows the number of interviews from each PHN.

Table 3.2: Number of 2016 interviews for secondary analysis

PHN (codename)	Number of 2016 interviews
Metro North	10
Metro South	7
Rural South	11
Remote	10

3.4.4 2018 interviews

Interviews are a key element of data collection for case studies (Yin, 2013). They offer the benefit of a more flexible approach to gathering information and allow the interviewer/researcher to probe for further information in a conversational manner, enabling rich, detailed understanding of the phenomenon in question (Yin 2013). They can also be prepared specifically for the purpose of the research project, as opposed to document review and historical analysis, where documents are invariably produced for some other purpose. Interviews can also be conducted at a lower cost and require less time than methods such as direct or participant observation, however the potential for bias must be mitigated by careful development of questions and interpretation of responses (Yin, 2013).

I considered whether to conduct interviews or focus groups. Interviews were preferable based on pragmatic reasons of being simpler to coordinate with busy participants and having the back-up option of a telephone interview if face-to-face was not feasible. Participant confidentiality and data quality were also key considerations, in that the individual, honest responses of participants are more likely to be elicited in an interview and more detailed probing is possible. A focus group also carries risks of 'group-think', dominance by some participants, or participants withholding views that might be considered unfavourable or critical.

I also considered whether to conduct telephone or face-to-face interviews. While telephone interviews are simpler to schedule and do not involve travel costs, face-to-face interviews offer many benefits in terms of better interaction and rapport between participants, being able to take advantage of non-verbal social cues, and more spontaneous response by interviewees (Opdenakker, 2006). Advantages of site visits include the opportunity to observe the context in terms of the organisation site and its environs (Patton, 2015), and for minor interactions (such as unrecorded 'doorway or elevator conversations'). A further advantage particular to this research was that a site visit facilitated access to other documents for subsequent analysis.

3.4.4.1 Participant recruitment

Following the preliminary communications to recruit PHNs as cases, a subsequent email was sent to each of the participating CEOs, outlining in further detail the proposed interview methods, and asking them to provide a list of nominated interview participants, and contact details. Participation was requested from six participants from each PHN – the CEO, a senior manager responsible for planning, a staff member in the planning team, and representatives (preferably chairs) from the board, clinical council and community advisory committee. This range of participants from each PHN were recruited to enable a broad collection and analysis of data from a range of perspectives, recognising that even within an organisation, different people bring different experiences and perceptions based on their role and background knowledge. The participant information sheet and consent form were sent to CEOs with these emails for further information.

Each PHN provided a list and had sought preliminary consent with each of their nominated participants to provide their contact details to the research project. Each nominated participant was then formally invited via email (Appendix B) and sent a copy of the participant information sheet (Appendix C) and consent form (Appendix D), in order to ensure that informed consent was obtained. Follow-up emails and phone calls were made periodically until invitees had either consented or declined to participate. Consent was provided either by completing and returning the consent form, or in the text of a return email. Once consent had been obtained, I liaised with a nominated administrative assistant at the respective PHN, to arrange interview times, aiming to conduct as many face-to-face interviews as possible during a visit to the PHN. A two-day window was identified for each PHN, with priority given to the PHN staff members whose calendars were visible to the administration support staff member. Board and council/committee members were then contacted to arrange their interviews, preferably during the visit to the PHN, but by telephone at another time if a face-to-face interview was not feasible within the two days. PHN visits were carried out in 2018, in May (2 PHN visits), June (1 PHN visit) and August (2 PHN visits). Confirmation of appointments was made with all interviewees in the days prior to scheduled interviews.

3.4.4.2 Interview schedule and ORACLe tool

A semi-structured interview schedule was developed to address the research questions, employing the theoretical framework. In developing the interview questions, Yin's (2013) hierarchy of research questions was used to link the research questions with the interview questions (Appendix E), where level four are the questions asked of an entire study, level three are questions asked of the pattern of findings across multiple cases, level two are questions asked of the individual case by the investigator, and level one are questions asked of the interviewees (Yin, 2013). The interview schedule comprised 51 questions, grouped into general topic areas, and included the 23 question ORACLe tool (Makkar et al., 2016b). The ORACLe tool was developed by the Sax Institute and is a comprehensive, objective and theory-informed tool to assess and score organisations' capacity to engage with, and use research in policy-making.

The ORACLe tool enables quantitative assessment of capacity, as well as qualitative understanding of capacity strengths and limitations. The tool addresses seven domains of organisational capacity, each weighted for their relative importance:

1. Documented processes to develop policy that encourage or mandate the use of research (11.88%)
2. Tools and programs to assist leaders of the organisation to actively support the use of research in policy and program development (19.48%)
3. Availability of programs to provide staff with training in using evidence from research in policy and in maintaining these skills (20.53%)
4. Availability of support and tools to help staff access and apply research findings (17.57%)
5. Presence of systems/methods to generate new research evidence to inform the organisation's work (8.74%)
6. Clear methods to allow adequate, evidence-informed evaluations of the organisations' policies and programs (10.96%)
7. Mechanisms that help strengthen staff relationships with researchers (10.84%) (Makkar et al., 2016).

The ORACLe tool has been applied to health policy agencies in Australia (Makkar et al., 2018). A theoretical critique of the ORACLe tool was undertaken as part of the process of deciding whether to use it in this research, which identified some issues to consider. A benefit of ORACLe is that it was developed in Australia, and thus reflects the Australian policy-making environment, however it was developed for use in relation to government policy-making, while in this study it is used in relation to meso-level PHC planning. This may affect the weightings applied to each domain of enquiry, which are interpreted with caution anyway, given the misgivings outlined above. The adaptation and use of ORACLe in this research tests its transferability to the regionalised, meso-level of planning, and offers an original contribution by this research. The original purpose of the tool was considered in interpreting results.

Only minor modifications were made to the ORACLe questions, in terms of wording changes to make it relevant to the meso-level PHC planning context of PHNs, and one change to the order of questions. Additional interview questions were added to ensure sufficient collection of information to comprehensively understand PHNs' planning environment and process, drawing on elements of the WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007) and 'good governance' principles for evidence-informed health policy-making (Hawkins and

Parkhurst, 2016), and to address the research questions regarding equity considerations in planning.

The ORACLe tool is only intended to be used with one person from an organisation – the CEO, whereas I have used the tool with three staff members from each PHN – the CEO, a senior manager of planning, and a relevant staff member. As recognised in the open peer review of the ORACLe paper (Oliver, 2015), and by others (Kothari et al., 2009), perceptions can differ between individuals within the same organisation, so this research drew on 2-3 interviewees from each organisation. This offers the benefit of being able to cross-check answers and generate a more accurate response for the organisation, and reduces the risk of a gap in data.

One of my concerns with ORACLe was the weightings applied to the capacity domains, in that those domains assigned a higher importance weighting tend to be those orientated more towards capacity of individuals, rather than systematic or mechanistic approaches to organisational (social) structures and systems, which are argued to be more important considerations (Green and Bennett, 2007, Potter and Brough, 2004). As such, the overall weighted scores that each organisation achieves through ORACLe should be interpreted with caution. However, the fact that scoring of each domain is possible enabled valuable comparison between organisations at the domain level, and between domains within an organisation.

With these various issues taken into consideration, I concluded that use of the ORACLe tool in this research was appropriate.

The interview schedule was piloted with two current PHN representatives whose PHN was not one of the cases in this research (a staff member and board member, who were recruited based on existing relationships). Pilot interviews were digitally recorded and transcribed, and then analysed with a methodological lens, rather than focusing on the content of the responses. The pilot interviews were conducted for the purpose of testing the interview schedule in terms of the timing required, the logical flow and order of questions, and whether the questions were clear and relevant. The pilot interviews also provided the opportunity to test the ORACLe tool with respect to both its appropriateness to this context, and the ‘scoring’ of the responses. Refinements were made to the interview schedule following each of the pilot interviews, to the order of questions, the prompts for further probing questions in order to elicit appropriate detail (particularly to enable scoring the ORACLe responses) and the wording and clarity of questions. While the pilot interviews were both conducted including the ORACLe questions, it was concluded from the pilot board member interview that the inclusion of ORACLe questions was not suitable for the board, clinical council and community advisory committee interviewees. This version of the interview schedule was subsequently further modified to remove the majority of the ORACLe questions, while still retaining those that were relevant to the respective interviewees. It was felt that the

ORACLe questions required knowledge of operational detail which was not reasonable to expect from members of the PHNs' governance structures.

The main topics of discussion in the interview schedule were:

- the PHN's planning process, stakeholders and influences
- consideration of equity in planning
- use of evidence to inform planning
- organisational capacity for evidence-informed planning (using the ORACLe tool for relevant participants), and
- 'good governance' of planning.

The preamble and questions were slightly modified for the PHN that had not participated as a case in the 2016 interviews for the RPHCO study, to better introduce the research. The two versions of the interview schedule are attached as Appendices F and G.

3.4.4.3 Interview data collection

Prior to each PHN visit, the secondary analysis of the previous interviews conducted in 2016 was commenced, in terms of coding the interview data. These data, and the most recent annual report, were used to provide background information on the PHN, such as the characteristics of the region and population, the composition and structure of the corporate governance and membership bodies, key personnel at the PHN, the priority issues, and to give an indication of the PHNs' culture, activities and capacity in regard to evidence-informed, equity-oriented PHC planning. For the four PHNs that had participated in previous interviews, relevant information from these interviews was used to help frame certain questions, particularly in regard to equity approaches, and to identify any changes that had occurred in the two years since the initial interviews.

For each of the PHNs, prior to interviews, a 1-2 page summary of key information was written, based on information from the PHN's documents and 2016 interviews. These summaries highlighted important background information relating to the structure and history of the PHN, as well as themes relating to equity and planning processes. It also served as a tool for me to enable probing and reflection in the interviews.

Interviews were conducted face-to-face, or via telephone where face-to-face interviews were not feasible. Table 3.3 shows the number and mode of interviews for each PHN.

Table 3.3: PHN Interviews summary

Case study PHN	Face to face interviews	Telephone interviews	Total
Metro North	5	1	6
Metro South	4	2	6
Rural North	2	3	5
Rural South	5	1	6
Remote	4	2	6

Rural North PHN elected to only nominate 5 interview participants, with the rationale that they had a small team, so didn't put forward a planning staff member, only a planning manager.

All interviews were digitally recorded. Field notes were made during and immediately after each interview, to capture thoughts and reflections on what was being said, and the non-verbal cues that were evident in the face-to-face interviews. Notes also recorded details of the environment in which the interview took place, and of the PHN premises in general, as well as any important points that were made outside of the recording, such as the informal conversations that take place on the way into and out of the interview room. Notes were made according to a prompt sheet, developed based on recommendations by Phillippi and Lauderdale (2018), and advice from supervisors.

At the conclusion of each interview, the participant was offered the opportunity to review the transcript before the data were analysed. Interviews were professionally transcribed, except for one which I transcribed because it had poor sound quality. Thirteen interviewees took up the option of reviewing their transcript and these were only included for analysis once approval was granted.

3.4.5 PHN internal documents

Another source of data for the case studies was internal planning related documents. The inclusion of document analysis enabled validation (or not) of the responses provided by participants in relation to the planning process and governance mechanisms supporting that process. Internal documents potentially indicate the meta-policy, or the policy that governs planning within the PHN, and as such are an important source of evidence to address the related research questions. However, just because an internal policy/procedure document exists, does not mean that it necessarily provides an accurate reflection of how things work in practice in an organisation.

As part of each interview with PHN employees (it was not relevant to the role of board/council members) questions were asked about the existence and detail of documents relating to the policy, process, procedure and /or principles for the PHN's PHC planning. Participants were asked to provide copies of relevant documents (which were identified in the course of the interviews) at the end of the interview, and most opted to provide electronic copies subsequently, or in the case of senior executives, nominated a staff member participant to follow up with. Follow-up emails were sent to the respective participant to request the documents that had been discussed, plus any other documents of relevance. Assurances were given (verbally and in the emails) that the document data would be treated with the same confidentiality as the interview data. Access to documents was facilitated by conducting interviews face-to-face at the PHN.

Twenty-six documents were provided by four of the PHNs. Rural South PHN did not provide any internal documents for this component of the analysis, despite repeated requests and giving initial indications of willingness. Four documents were sourced from their website, which were similar to those provided by other PHNs, or were the completed/populated versions of templates, and gave some indication of documented expectations regarding the planning process.

3.5 Coding framework and process

3.5.1 Public document analysis

A preliminary coding framework was developed in discussion with supervisors, building on the two core themes of evidence use and equity consideration. Evidence nodes were based on different types and categorisations of evidence identified in the literature, including those outlined in Table 2.3. The four main evidence nodes or typologies used in this research were:

- Evidence purpose
- Type of data or information (for quantitative data mainly)
- Evidence level (data, information, knowledge, wisdom)
- Evidence source

In understanding what and how much evidence is used to inform planning and policy-making, it is important to recognise that different types of evidence are used to answer different types of questions, or for different purposes. Knowing ‘what works’ is not the only question in evidence-informed policy-making, it is also important to understand how, why, when and for whom things work (Ghaffar et al, 2017). There was no defined ‘evidence purpose’ typology identified in the literature. I developed the typology for this node based on: the aspects of planning/policy-making identified in the literature, as outlined in Table 2.3; the considerations for evidence-informed health policy-making outlined in the ‘SUPPORT tools for evidence-informed health policy-making’ (Lavis et al., 2009a); the elements outlined in the PHN Needs Assessment Guide (Department of Health 2015a); the considerations set out in the PHN planning in a Commissioning Environment Guide (Department of health, 2016a); and from a preliminary scan of PHN documents.

The ‘type of data or information’ node (demographic, epidemiology, service utilisation, service capacity mapping) was developed based on population health planning principles and guidance provided to PHNs (Department of Health, 2015a) and their predecessor Medicare Locals (Australian Government Department of Health and Ageing, 2013).

The ‘evidence level’ node was drawn from Ackoff’s (1989) ‘data, information, knowledge, wisdom’ hierarchy or typology. This hierarchy or typology is discussed further in section 6.6. This typology was included in the analysis, to give an indication of the degree of analysis and interpretation that has been conducted on the evidence used by PHNs.

The ‘evidence source’ node was developed based on discussion in the wider literature as to the sources of evidence used (or not used) to inform health policy and planning (Prinja, 2010, Oliver et al., 2014b, Bowen and Zwi, 2005, Head, 2010, Lavis et al., 2009a), in combination with the sources observed in the preliminary scan of documents, ensuring a broad conception of evidence was adopted and carried through. This typology was included to indicate which sources of evidence are available to, and favoured most by PHNs, as well as what sources are less available or favoured.

A node was also created specifically for Activity Work Plans, in order to categorise the types of activities or strategies that PHNs were planning:

- Clinical
- Population health/ systemic/ action on the social determinants of health
- Individualistic/ behavioural
- Other

This initial activity typology was later expanded to include and enable more detailed analysis of the equity actions outline in the framework by Freeman et al. (2018), illustrated at Figure 3.2.

Nodes relating to equity framing were developed in line with those from the RPHCO project coding framework. This initial coding framework was tested with one of each type of document and some minor modifications and rearrangements of nodes made. Several additional nodes were added based on themes/ types of evidence observed in the documents, and some nodes were refined in response to emerging literature (e.g. the Freeman et al. (2018) framework for PHCO equity actions).

To ensure that the coding framework served to address the research questions, a table was developed outlining the nodes and sub-nodes, examples of data that would be coded to that node, what the purpose (and hypothesis) of that node was, which research question that node aligned with, and intentions for further classifying and analysing the data at that node. This table outlining the final list of nodes and sub-nodes, and their rationales are outlined in Appendix H.

Within NVivo, ‘cases’ were created for each PHN, and documents were coded to their respective ‘case’. Source classifications were also created, and documents were classified as needs assessment, activity work plan or annual report. The classifications enabled comparison between documents in subsequent stages of analysis.

For each PHN, documents were coded in the order: needs assessment, activity work plan and then annual report, as this is the order in which they are produced, and the logical order in which they are (theoretically at least) used, with the needs assessment informing the plan, and the report reporting on the implementation, outputs and outcomes of the planned activities. Each document was read in detail, with relevant text coded to the respective nodes. Indications of evidence use were coded within the four different classifications of evidence: purpose, type, level and source, as outlined above.

3.5.2 Coding team

Assistance with coding document data was provided by a supervisor (SJ), and a member of the broader RPHCO research team, and a detailed coding guide was developed to assist in ensuring the consistency of approach to coding. The coding guide outlined which nodes to use for which types of text/data in which documents. The first consideration in allocating PHNs/documents for coding was that the case study PHN documents should be analysed by myself, given that I would be conducting and analysing interviews with people from those PHNs. It was also decided to try to group PHNs by state, so that any one coder would do most if not all PHNs in a particular state, and also that all documents from any one PHN be coded by the one coder. There was only one exception to this, where the 3 documents from one PHN were coded by 2 different coders, in order to complete the coding. The final distribution of coding was:

- Myself (AW) – 52 documents from 17 PHNs
- Supervisor (SJ) – 18 documents from 8 PHNs (WA PHNs have one joint annual report)
- Researcher (JH) – 18 documents from 6 PHNs

Blinded inter-coder reliability checks were carried out on a sample of 7 randomly selected documents – approximately 8% of the sample. Checks were carried out for 3 of each type of document, and between all coders, to assess the agreement in codes applied to the text. Double-coded documents were then checked to examine the nature and extent of agreement and disagreement between coders, with the findings, potential implications, and possible mitigation strategies outlined in a spreadsheet. As a further check on coding validity, examples of coding were discussed in a supervision meeting.

In some cases, re-coding was required. An assessment was made of each node, as to the nature and extent of the coding variation, and options were considered, factoring in the implications for rigour, validity of findings, and for workload and time involved.

Within the ‘evidence’ node group, the ‘data - information - knowledge - wisdom’ sub-nodes indicated some variation, in particular where one coder had consistently coded items to ‘data’ where they probably better fit the description of ‘information’. A query was run to identify all the coding done by the two assisting coders in this node group. The results of this query were then re-analysed, node by node, and re-coded as required.

After running some preliminary queries on coding of documents, it became apparent that there were considerable differences in the approach to coding, as indicated by the variation in the volumes of text coded by each coder. This was most apparent in needs assessments, so the decision was made to re-code these documents. In two cases, it appeared that a version of the needs assessment had been used that was not on the Department of Health template, so a correct version was sourced from the PHN website, however, it was a more recent version than those collected from other PHNs (submitted Nov 2018 rather than 2017). In other documents, the coding discrepancies tended to centre on certain nodes, so rather then re-coding the whole document, the coding was reviewed, and additional coding carried out where indicated.

As re-analysis was occurring, some data were also coded to other nodes, where it was appropriate to do so.

3.5.3 Document summaries

Part of the document analysis involved writing summary notes on documents analysed. This was conducted on a template designed to capture impressions of evidence use, equity focus and problem framing, absences/silences, surprises, as well as give a summary rating (low, moderate, high) of impressions of the extent of evidence use, and the culture for evidence and/or equity. Summary sheets were completed for 58 of the 91 documents analysed (one member of the coding team did not complete summaries). Upon completion of coding and analysis of coded data, summaries were examined to triangulate captured impressions against findings based on coded data.

3.5.4 Case study coding framework

A preliminary coding framework was developed based on the research questions and the theoretical framework for the research, principally drawing on the WHO ‘Conceptual Framework of Evidence-Informed Health Policy-Making’ (Green and Bennett, 2007). The coding framework also incorporated the ‘good governance’ framework (Hawkins and Parkhurst, 2016) and questions from the ORACLe tool for measuring organisational capacity for evidence-informed health policy-making (Makkar et al., 2016b) introduced in section 3.4.4.2. The respective articles were referred to in developing the nodes, in order to clarify and distinguish the purpose of each node. The coding framework originally used in the RPHCO study was also consulted. The coding framework for public document analysis (Part 1 of this research, described above) was merged in with the case study coding framework to enable triangulation across data sources. Two interviews from different PHNs - one metropolitan, one rural - underwent a preliminary ‘familiarisation’ analysis using this draft coding framework (Spencer and Ritchie, 2002), and several additional nodes were added to the framework, based on themes that emerged in the preliminary analysis. The coding framework was discussed and refined with supervisors across several meetings.

Additional sub-nodes were added to the coding framework after several interviews had already been coded, for example to distinguish further detail regarding aspects of the ORACLe questions. For those interviews that had already been coded, data coded to the relevant parent nodes were re-coded to the revised sub-nodes. As the additional nodes were sub-nodes, it was not considered necessary to re-code the entire interviews. Some minor modifications to the coding framework were made during the first few interviews, mainly in terms of slightly rearranging nodes, and adding some general nodes such as 'memorable quotes'.

All the remaining interviews (35 of the 38 2016 interviews, and all 29 2018 interviews) were coded using the full final coding framework. The final coding framework is included in Appendix I, incorporated into a table that provides a rationale, examples and linkage to the research questions for each node (including nodes for both document and interview analysis). Appendix J shows the coding framework as it appears in NVivo, indicating the structure and hierarchy of nodes.

3.5.5 2016 Interview secondary analysis coding

Before coding data, all transcripts were coded to their respective PHN 'case'. Each interview transcript was initially read through in full, and was then coded to nodes, one PHN at a time, in the order of the intended site visits for the 2018 PHN visits and interviews. This order was chosen to ensure that previous data and information had been obtained prior to the 2018 interviews. Priority was given to the interviews of more senior roles such as the CEO, board chair and relevant managers, with other interviews coded subsequently. Once coded, 2016 interview data were thematically analysed in concert with that of 2018 interviews, which is described below in section 3.6.3.2.

3.5.6 2018 Interview data coding

For each interview, the sound file was listened to in full, and the transcript was checked. Any transcription errors were corrected. 'Clean' transcripts were then imported into the NVivo file for analysis. Transcripts were coded to relevant PHN 'cases', and to the appropriate source classification, in order to be able to distinguish between 2016 and 2018 interview data in subsequent analysis. Each transcript was read through in detail, with text coded to relevant nodes in the framework described above (section 3.5.4). Once the transcripts for a PHN had been coded, a 'sensemaking summary' (Paull et al., 2013) of key impressions and points was drafted.

3.5.6.1 Intercoder reliability testing

Part way through the coding process, a sample of three interviews were selected for each of the supervisors to code, for the purpose of inter-coder reliability testing. Supervisor coding was compared against mine, and detailed notes made of the comparison. There was generally strong agreement with all secondary coders. There were a few nodes where there were minor discrepancies, and these tended to be variation between very similar nodes, with overlapping concepts. For example, text coded as external context> scope, rather than external context> Commonwealth Department of Health. Another example of overlapping concepts was in relation to the 'good governance' nodes of accountability, appropriateness, transparency and contestability. There were other similar examples, and these highlighted where the next level of synthesising needed to be done in such a way that text from multiple nodes needed to be considered in concert. Some supervisor coding tended to capture more on the underlying institutional forces at play, whereas I had coded more to the explicitly observed influence, for example, a supervisor coded text to 'institutional forces> regulative' which I had coded to 'external context> Commonwealth Dept of health'. Neither is wrong, and the text could probably have been coded to both. The underlying institutional forces were considered in the next stage of analysis when considering the various influences at play. In all cases, I had coded more that the secondary coders, which gave a sense of confidence that themes were being picked up, and not overlooked. This high level of coding, and in particular 'double-coding' pieces of text to two or more nodes, runs the risk of double, or triple handling of data, however it does allow for subsequent rich analysis of complex, interrelated themes and issues.

While the inter-coder reliability testing highlighted some minor issues for attention in the subsequent stages of analysis, overall the strong level of agreement indicated that my coding was accurate and appropriate.

3.6 Analysis

3.6.1 Public document data analysis

Once coded according to the abovementioned framework, data were then analysed. Groups of nodes regarding classifications of evidence (purpose, type, level, source) equity (intent, type), and 'type of approach' (within activity work plans) were analysed using matrix coding queries in NVivo, to examine the volumes and relative proportions of segments of text within each node group, both by document type (source classification), and by PHN (case classification). Other nodes of data were thematically analysed to address the relevant research questions.

3.6.1.1 'Values' text frequency analysis

Part of the analysis of PHNs' culture and values included a text frequency analysis of all 31 PHNs' stated organisational values. Values were identified in PHNs' public documents, usually in the annual report, but if not listed there, were sourced from their website. Terms were recorded in a table, by PHN (Table 5.3). In some cases, data were 'cleaned' in order to group like terms, for example, while many PHNs used the term 'innovation', two used the term 'innovative' which was changed to 'innovation' for the purpose of this analysis. The 'clean' data were imported into NVivo, and a ‘word frequency’ query was run, with the results displayed in a word cloud (Figure 5.1).

3.6.2 Survey data secondary analysis

The RPHCO project conducted a survey in 2016, to examine various aspects of PHNs’ structure, activities, governance, engagement and capacity. A spreadsheet of survey responses was retrieved and uploaded into the NVivo file. The responses from each of the case study PHNs were initially read through and coded to the respective NVivo ‘case’. The open-ended, free-text survey responses were then coded to respective nodes in the coding framework, where they included information relevant to the research questions. Data from PHNs that were not cases in the present PhD research were disregarded.

3.6.3 Interview data analysis

3.6.3.1 ORACLe tool scoring and analysis

The 2018 interview schedule for PHN employees included the ORACLe tool, to examine organisational capacity for evidence-informed planning. Responses to ORACLe interview questions were coded to distinct (numbered) nodes in NVivo. Once all interviews had been coded, a table was created and the responses for each interviewee, by PHN, were copied over from NVivo, and aligned with their respective questions (and numbers). The coding guide for the respective question was read through (Makkar et al., 2016b), and then the responses were initially read through (familiarisation). Upon a second reading for each PHN, a preliminary score was allocated to each individual’s response.

Once each individual response had a preliminary score, the responses were then read through again, to check if there was agreement or conflict within the PHN. A corresponding ‘consensus score’ for the question, for the PHN was assigned. Where scores were consistent, this became the consensus score, and where there were inconsistent responses between interviewees, judgment on the most valid response was made, based on being more detailed, or a more relevant perspective. For example, the planning manager was deemed to be best placed to know whether their position description covered expertise in use of research in planning (Question 4). Throughout this process, there was comparison and checks made between PHNs, to ensure consistency. The rationale for assigning the consensus score was noted in the table.

In some cases there were no data coded for a particular question from some respondents, in which case, the transcripts were re-checked (using text search for relevant key words) to ensure that data had not been missed or erroneously coded elsewhere. In some cases, a response could be inferred or deduced from an earlier response.

The developers of the ORACLe tool had recommended that the scoring be conducted by an independent person, who had not been involved in the interviews to collect the data (Makkar et al., 2016b), however this approach was not practical in the current PhD research project. A scoring validity check on responses from one PHN was conducted by a supervisor (TF), which indicated a satisfactory degree of consistency. Differences were discussed until agreement was reached.

Once scores had been assigned to all questions and domains, score data were analysed to compare total scores, and average scores by domain. Within in each domain, scores from each PHN were compared. The average and range of scores were also compared between domains, to indicate the domains in which PHNs had stronger or weaker capacity.

3.6.3.2 Thematic analysis

Data from both 2016 and 2018 interviews were thematically analysed. Thematic analysis is a method for identifying, analysing and reporting patterns or themes within data (Braun and Clarke, 2006). According to Braun and Clarke (2006), a theme captures something important about the data in relation to the research question, which represents some degree of patterned response or meaning within the data set. Node by node, raw interview transcript text was read through in depth, with pages of notes made of key point/issues, broken down by PHN, and by interview year. Emerging issues and themes within each node were noted, as well as divergent views when they occurred. As Braun and Clarke (2006) note, the ‘key-ness’ of a theme does not necessarily depend on its prevalence or frequency in the data, but whether it captures something important in relation to the research question. Consideration was given to identifying commonalities and differences between PHNs, and between the 2016 and 2018 interviews where there were relevant data from both time periods.

The ORACLe data were also analysed to examine qualitative themes from each PHN, to provide further detail and greater understanding about factors contributing to strengths or limitations in certain areas of capacity. Thematic analysis was conducted from the NVivo node (rather than the scoring table), as some further data (from non-ORACLe interviews) were also included where relevant.

While the focussed thematic analysis was conducted deductively according to the pre-determined, theoretically informed coding framework, there were iterative, inductive elements to the analysis process as well. Richness emerged in some themes, which required creation of further sub-nodes to facilitate deeper examination of the issues. For example, the theme/node regarding evaluation capacity. Where unanticipated themes or silences became apparent, further text searches were occasionally conducted, for example in relation to ‘program logic’, a tool/approach for program planning and evaluation, which was mentioned by some interviewees.

3.6.4 PHN internal planning document analysis

The thirty PHN internal documents were analysed with a focus on the following key themes:

- documented process for planning, that encourages or requires evidence use
- indications of the 'good governance' principles for evidence-informed planning (appropriateness, transparency, accountability, contestability)
- mechanisms that foster health equity consideration in planning.

A table was used to record or comment on any indications or quotes from the documents that provided evidence of these themes. Within the table, each theme was then analysed to examine the extent to which it was evident in the documents, and the ways in which the various types of documents incorporated the theme in question.

3.7 Research quality

Quality in qualitative research is framed in terms of 'credibility', 'transferability', 'dependability' and 'confirmability' (Lincoln and Guba, 1985), which can be facilitated through elements of the research design, analysis and reporting.

Credibility refers to the rigour of research methods as well as the skills of the researcher and underlying assumptions of the study (Patton, 1990). This study employed several means of triangulation to ensure the credibility of the findings – triangulation of a considerable volume of rich data from a variety of sources, triangulation of methods by using a mixed methods approach, triangulation of researchers through ongoing involvement of three experienced supervisors, and triangulation of theory by drawing on a wealth of literature and four main theoretical frameworks. Seeking out and making explicit 'negative cases' or rival interpretations that did not fit the pattern of other cases, or with the underlying theory also helped to build the credibility of findings (Yin, 2013). My considerable experience in PHCOs over more than ten years helped to enhance the credibility of the research in terms of researcher capacity. A good understanding of the issues being discussed enabled analytic judgements and some interpretation to be made in the course of collecting data, as well as knowing when to seek clarification or further detail (Yin, 2013). My direct experience in the sector also helped in establishing rapport with interviewees, which facilitated rich data collection.

The credibility of this research was further aided by having a comprehensive audit trail (Wolf, 2003), which included a methodology journal, a theory journal, notes on interpretation of data and observed patterns, as well as the raw data, field notes and synthesized findings.

The use of case study method, and the purposive recruitment of a diverse sample of PHNs helped to ensure the representativeness of research participants, and the validity of findings. As with any such research, there may be an element of participation bias (Bennett, 2004), in that those PHNs that agreed to participate may have better capacity and performance than PHNs generally. PHNs experiencing workload (and capacity) challenges would be less likely to participate in research, as cited by one PHN that declined the invitation to take part. The PHNs that had interest and ability to participate in this research project may also be more likely to have a culture that promotes use of research evidence, and higher degree of research literacy and associated capacity, than non-participating PHNs. Furthermore, a PHN that does not consider itself to have strong use of evidence, may be less willing to undergo critical examination in this regard. Due to the self-selection of all cases, the PHNs in this study potentially represent ‘best case’ PHNs. This was however partly mitigated by analysing public documents from all PHNs.

This research focussed specifically on meso-level PHC planning in the Australian health system, and so is only likely to be transferrable to similar meso-level contexts within Australia and internationally. The detail in the background, methods and results of this thesis is intended to aid the transferability of the research, such that readers can make informed judgements on whether the findings could be reasonably transferred to other settings. Underpinning this research with a strong theoretical basis and employing an institutional theory lens aids in generalising the findings to different contexts, nationally and internationally.

The dependability of findings was aided by having a sample of interviews and documents double coded, and ORACLe responses scored by experienced supervisors, as well as regular analysis discussions. Inter-coder reliability testing was conducted to identify variations in document coding, and problematic documents and nodes were re-coded by the principal coder (AW) to minimise variation and improve the reliability of results from document analysis.

Confirmability of the research findings was facilitated by inviting interview participants to review the transcript of their interview, to ensure that the content had been accurately captured. Furthermore, interviewer technique in checking interpretation and understanding throughout the course of interviews helped to ensure that interviewees’ meaning was correctly interpreted. Participants were also invited to attend an online presentation and discussion of preliminary research findings, but none did, as the presentation occurred in March 2020 (as required to meet university ‘milestone’ requirements), when PHNs were inundated with work related to the Covid 19 pandemic.

3.8 Ethical considerations

The main ethical consideration in the conduct of this research was the need to protect the anonymity of participants and confidentiality of responses. Respect for the privacy and confidentiality of participants, and minimising the risk of harm from research participation are key ethical principles of human research (The National Health and Medical Research Council and Universities Australia, 2007 (updated 2018)). Great care has been taken to ensure that the participating PHNs or individual participants have not been named in any published materials, and that potentially identifying information has been removed. For example, the names of partner organisations described in interviews, and any specific geographic references have been removed.

As interviews were conducted with people in specific roles within each of the PHNs, it was important to de-identify the PHNs, so that the participants may also be anonymous. The anonymity and confidentiality of participants is important to minimise the risk of any adverse consequences that may result from expressing certain views. Ensuring confidentiality also benefits the research in that participants are potentially more likely to be open and forthcoming with information and opinions, particularly those that may be critical.

Participants each provided informed consent to participate in the research, as described above in section 3.4.4.1. Consent documentation was stored securely for each participant. Copies of the invitation text, information sheet, consent form are at Appendices B, C and D.

All interview and document data, and related notes, were de-identified and stored in a password-protected part of the Flinders University server, accessible only to those with direct or administrative involvement in the research.

Ethics approval was granted by the Flinders University Social and Behavioural Research Ethics Committee, as a modification to the original RPHCO project ethics application (Project Number 6376).

CHAPTER 4 PHNS WITHIN THE AUSTRALIAN HEALTH SYSTEM

Understanding the wider Australian health system within which PHNs are situated provides an appreciation of the factors influencing their planning. This chapter will outline how the Australian health system has evolved through large and small policy measures, and other forces, adjusting to changes in health care and society more broadly. It will then introduce PHNs, describing the evolution of PHCOs in Australia that led to their creation, and outlining their role and structure.

4.1 The Australian health system and primary health care

4.1.1 Evolution of primary health care in Australia

The health system in which PHNs operate has a long history as a contested space, involving powerful interests and diverse agendas. The landscape of health care in Australia has its origins in the history of the medical profession in the country. Until relatively late in the 20th century, medical practice was a cottage industry, largely unregulated, where patients paid to see a doctor when they needed to (if they could afford to), and there was very little involvement of the state, in either the practices or payments of medical practitioners (Duckett and Willcox, 2015). This made for a culture of a highly autonomous medical profession, with a great deal of control and power in their professional services, and the fees they could charge for those services. Various attempts over the decades to regulate the quality or affordability of those services have been met with organised resistance (Sax, 1984).

General practitioners are key actors in providing and influencing primary care services. Services provided by general (medical) practitioners (GPs) in community settings are the basis for PHC in Australia and around 87% of Australians see a GP each year (Britt et al., 2016b). In the main, private GPs provide services to patients on a fee-for-service basis, which has only since the 1970s been (partly) covered by a government rebate. The vast majority of ‘mainstream’ general practice based primary care services in Australia are private businesses, controlled by GP owners, or increasingly, corporations (Erny-Albrecht and Bywood, 2016). Practices receive very little, if any, block public funding, and workforce shortages mean that demand for GP services generally outstrips supply. There is very little regulation over where, when, what and how much GPs can deliver services. Market forces influence the nature and location of service delivery, such that general practice is more viable and profitable where patients can afford to pay a co-payment. There is considerable maldistribution of general practice and broader health workforce across Australia, with many outer metropolitan, rural and remote areas in particular experiencing health workforce shortage (Department of Health, 2019). The composition of the GP workforce has also changed in recent years, with greater average age, a higher proportion of female GPs, GPs working less hours, a higher proportion of overseas-trained GPs, less GPs working in solo practice, more in larger practices, and the emergence of large corporate practices (Britt et al., 2016a).

In 1973 the Whitlam Labor federal Government introduced the Community Health Policy, which saw the introduction of federally funded Community Health Centres. While this policy was short-lived, being discontinued by the Fraser Liberal government in 1976, it established the framework that led to the expansion of community health during the 1970s and 1980s (Baum, 2013). Community Health Centres offered a varied range of services and programs, enabled by a highly flexible funding model and strong community engagement and control, and delivering multidisciplinary care, health promotion and community development, consistent with the vision of comprehensive PHC (Baum, 2013). Some Community Health Services remain in various forms, particularly in Victoria. However, due to withdrawal of federal funding and lack of state/territory government investment and support in an era of increasing managerialism and economic rationalism, this comprehensive model of PHC has eroded considerably since the 1990s (Baum, 2013).

Aboriginal Community Controlled Health Organisations (ACCHOs) are an important part of the PHC landscape in Australia. From their beginnings as Aboriginal Medical Services in Redfern, Sydney in 1971, there are now over 140 ACCHOs across Australia, operating in urban, regional and remote locations (National Aboriginal Community Controlled Health Organisation, 2020). These services are funded by the Australian Government and state/territory governments, as are 44 government-run organisations and 20 non-government organisations providing Indigenous-specific health services (Duckett and Willcox, 2015). Like Community Health Centres, these services are underpinned by a comprehensive conception of PHC and a holistic definition of Aboriginal health that refers to the social, emotional and cultural wellbeing of the whole community (National Aboriginal Community Controlled Health Organisation, 2020).

Other health professionals also feature in the PHC landscape in Australia – in recent years, nurses have increasingly cemented their role, forming a professional association in 2001 (The Australian Practice Nurses Association Inc, 2011). Various allied health professionals, Aboriginal Health Workers and pharmacists also are an important part of PHC.

4.1.2 Health care funding and the rocky path to universal health cover

Alongside the fee-for-service basis at the core of the Australian primary care system is ‘Medicare’, the universally available, tax-financed health insurance scheme, whereby all Australians are eligible to claim a rebate for a range of community-based health care services, as outlined in the Medicare Benefits Schedule (MBS). Medicare does not cover services provided to hospital inpatients, but public hospitals are fee free for most Australians. Health care providers may also charge patients a co-payment, or ‘gap’. According to the latest Australian Government statistics for 2017-18, 85% of GP services were ‘bulk billed’, meaning no gap was charged, but bulk-billing rates vary between states/territories (Department of Health, 2018a).

The precursor of Medicare was the Whitlam Labor government's 'Medibank', introduced in July 1975 (National Museum of Australia), following on from decades of precursor schemes and considerable debate. Resistance to universal public health insurance was largely ideological, centred on ideas of freedom and rejection of compulsion, and individual versus communal responsibility for health care. Resistance also came from the medical profession in relation to protecting their professional status and autonomy, and maintaining their control over their income (Sax, 1984). Private health insurers, who stood to lose customers under taxation funded universal health insurance, were also opposed. Medibank was contested to the extent that it was essentially axed in 1981 by the subsequent Fraser Liberal government amidst concerns of rising health costs and resistance from medical interest groups. The then health minister Neal Blewett stated in 1983 that "No area of Australian social policy has been more considered, debated and fought over in the last decade than health insurance" (Sax, 1984, p 174). Following their sweeping election victory in March 1983, the incoming Hawke Labor government re-established Medicare in February 1984, and it has remained a core feature of the Australian health landscape. Because of its early grounding as an insurance-based, fee-for-service system, it has essentially remained so, with various 'layers' of policy development occurring over subsequent years (Kay, 2007). Community support for Medicare remains strong (Boxall, 2019).

Medicare originally covered just medical services. Since 1999, a range of initiatives and MBS Items have been introduced to fund other health professionals providing multidisciplinary care in collaboration with GPs, such as: practice nurses, pharmacists, psychologists, Aboriginal health workers, physiotherapists, dietitians, exercise physiologists and more (Department of Health, 2014). Such services are tightly restricted within MBS items requiring referral by GPs. The vast majority of health care services covered by Medicare are still provided by doctors, and doctors maintain a gatekeeping role in controlling access to Medicare rebate eligible health services provided by other professionals. This illustrates the prominence of medical practitioners as actors in the health system, reinforced by regulatory and financial settings.

When Medicare was designed in the 1970s the main causes of illness were childbirth, poor nutrition and communicable disease. Health care was characterised by episodic illness and acute hospital-based care, rather than long term management of complex chronic disease and multi-morbidity, which is more prevalent today (Boxall, 2019). Medicare does cover certain individual preventive health services within a medical framework (e.g. cancer screening, immunisation), and some attempts have been made to introduce alternative funding models through Practice and Service Incentive Programs, and the current Health Care Homes trial of a capitation-based funding model (The Department of Health, 2020). However, Medicare was designed for, and drives a fee-for-service system of transactional health care interactions between providers and patients, within a narrow, service-based conception of health. Medicare funds services for individuals, rather than encompassing population health as a product of the social determinants experienced by individuals and communities. Medicare allows for, if not encourages, short, episodic, reactive interactions with health care providers which are ill suited to management of chronic disease (Harris and Zwar, 2007). The nature of this funding system does not well facilitate longer, repeated, planned programs of multidisciplinary care, addressing social determinants of health.

Medicare and the fee-for-service system represent and perpetuate powerful institutional forces in PHC and are the policy ground upon which PHNs and their planned initiatives are situated. PHNs have no control or influence on Medicare, and it is a fixed contextual factor influencing attempts to achieve system change.

4.1.3 Federalism and the divided health system

The Australian health care environment is also complicated by the differing roles of national and state/territory governments in funding different types of health services and programs. As described above, the Australian (federal) Government largely funds primary care via Medicare reimbursement for services provided on a fee-for-service basis. State and territory governments own and fund hospitals, and play varying smaller roles in funding and planning PHC services and prevention programs, some to a considerable extent, some very little (Freeman et al., 2021). Hospitals are partly funded by the federal government, and state and territory governments cover the remaining costs (Mossialos et al., 2017). The split health system situation originates from the early European colonisation of Australia, as a group of distinct colonies, each with their own hospital infrastructure.

Australia's divided responsibility for health care funding and administration makes for complexity and tension among payers and providers, and confusion among patients. Hospital funding is essentially 'capped' as a limited 'pool' of funds, whereas federal Medicare funding is uncapped – a Medicare claim will always be paid. These differences can impact on provider behaviour. One of the challenges that this split presents is the potential for cost-shifting. For example a low acuity patient treated in a public hospital emergency department will be funded by the state/territory government (with no patient co-payment), whereas the same patient treated by a general practitioner would be funded by the federal government via Medicare rebate (and potentially face a co-payment), so there is an incentive for states to drive low acuity patients to non-hospital care, and incentives for patients to use hospital-based care. It also contributes to challenges in continuity and coordination of care, particularly at the interface between hospital and community-based health services, which is a recognised shortcoming of the Australian health system (Schneider et al., 2017).

A further aspect of the federal-state split is in relation to the broader aspects of comprehensive

PHC: prevention and public health. Funding of preventive health agencies and programs has waxed and waned between state/territory and federal governments. The current climate is one where public health appears to be undervalued, and there is little investment in public health from either level of government. The proportion of health expenditure on prevention is 1.34% (July 2018) having fallen from 1.74% in 2000 (Shiell and Jackson, 2018). The federal government abolished the Australian National Preventive Health Agency in 2014, and similarly, South Australian and Queensland governments also heavily cut health promotion and public health funding a few years earlier (Duckett and Willcox, 2015). Ironically, it could be argued that both levels of government stand to benefit from greater investment in ‘upstream’ preventive health measures, through reduced need for, and spending in curative and rehabilitative health services, yet it seems that instead of both investing, neither do. Instead there is a tendency to place responsibility for prevention on individuals’ choices and behaviours, consistent with the prevailing neoliberal economic structure and ideology (Baum and Fisher, 2014). In this environment that is fragmented and fraught with tension, and where there is little attention to upstream determinants of health, PHNs are challenged with improving access to, and coordination of care, and reducing preventable hospitalisations (Australian Government Department of Health, 2018).

4.1.4 Australian health system – strengths and weaknesses

The Australian health care system ranks very highly in international comparisons of performance, largely attributable to its basis in primary care, and the universality of Medicare funding (Schneider et al., 2017). However, it continues to face considerable challenges in adapting to socio-political and technical shifts that influence the utilisation, provision and expectations around health care services and health more broadly (Duckett and Willcox, 2015). The prominence of independent medical service providers and fee-for-service funding arrangements drive a more selective model of PHC, with a greater focus on curative and rehabilitative, episodic medical care of individuals. The policy settings discourage comprehensive PHC.

Australian primary care has been criticized as ‘failing’ to manage and prevent chronic disease effectively, and there is poor integration of care between health care disciplines or levels (Swerissen and Duckett, 2016). This is reflected in Australia’s relatively poor standing with regard to the coordination aspect of ‘care process’, in terms of communication between GPs, medical specialists, emergency departments and community/social service providers (Schneider et al., 2017). According to Baum et al. (2020), attempts to introduce initiatives that foster coordinated, multidisciplinary care, whether by PHNs or others, are challenged by the powerful institutional forces of a system historically and financially based on medical treatment provided by independent medical practitioners.

The Australian health care system also performs poorly with regard to health equity, which is partly attributable to access barriers to health care services (Schneider et al., 2017). Access to primary care varies, with barriers including availability of services, cultural appropriateness, cost, transport/mobility, plus others (Bywood et al., 2011). Groups that experience poorer access include: people experiencing socio-economic disadvantage; Aboriginal and Torres Strait Islander people; people who are homeless; and people living in rural and remote areas, plus many more (Bywood et al., 2011).

While ‘mainstream’ health care largely reflects a selective model of PHC, Aboriginal Community Controlled Health Organisations (ACCHOs) provide many shining examples of comprehensive PHC, characterised by multidisciplinary care, preventive approaches, cultural appropriateness, community participation, and advocacy and inter-sectoral collaboration on social determinants of health. Critical factors that enable a comprehensive approach are: sufficient public funding; local community-based governance (i.e. ‘community control’) to enable advocacy; and policy support for a comprehensive PHC approach (Freeman et al., 2016). These factors are largely absent in mainstream primary care, but nonetheless, there is potential for PHCOs to foster elements of comprehensive PHC to improve population health and health equity. The next section will explore Australian PHCOs’ situation in the health system, and their somewhat contested, turbulent history.

4.2 PHNs, their history and place in the health care landscape

This section will start with a description of the history of PHNs and their predecessors, Medicare Locals and Divisions of General Practice, and the ideas, actors and institutional forces that have shaped them. It will then outline the structure of PHNs.

4.2.1 A brief history of Australian PHCOs

As briefly mentioned previously, PHNs are the latest iteration of PHCOs in Australia, and to fully understand the broad contextual influences, and underlying institutional forces on them, it is helpful to explore their history and origins. The original PHCOs, Divisions of General Practice, were established in the early 1990s as local networks of GPs. The federal government funded divisions as part of the GP Reform Strategy, to improve general practice coordination with other aspects of the health system, meet identified local health needs and implement other aspects of the GP Reform Strategy, such as professional development, practice guidelines and accreditation (Russell, 2013). By 1995, 116 divisions had been established across Australia (Russell, 2013). Initially governance and membership was almost exclusively limited to GPs (Sibthorpe and Smith, 2007), and was only later extended to others such as allied health professionals and community members (Russell, 2013). Until 2002, divisions operated relatively autonomously within the broad parameters set by the federal government, and largely determined their own local priorities and strategies for general practice support. A 2003 review criticised the considerable diversity between divisions’ activities and recommended that “The entire divisions network should play a stronger and more consistent role in primary health care” (Phillips 2003). In response, the federal government articulated core roles for divisions, which encouraged comprehensive PHC principles such as prevention, integration and multidisciplinary care, improved access and consumer focus, yet the primary objective remained focussed on GPs: ‘Support GPs and practices within a changing primary care environment’ (Russell, 2013). Across the course of their existence, the role and purpose of divisions fluctuated somewhat, progressively tightening with respect to their shrinking autonomy in planning programs, yet their focus on supporting GPs remained central.

In 2011 the next iteration of PHCOs were introduced. Sixty-one ‘Medicare Locals’ (MLs), formed largely from divisions, were established by the Labor government in response to the National Health and Hospitals Reform Commission, and became the delivery mechanism for the National Primary Health Care Strategy, which had four key priority areas:

- Improving access and reducing inequity
- Better management of chronic conditions
- Increasing the focus on prevention
- Improving quality, safety, performance and accountability (Department of Health and Ageing, 2010).

Medicare Locals’ aims included making primary care services more responsive to the needs of patients and communities; and improving the effectiveness of the primary care system as part of the wider health system (Department of Health and Ageing, cited in Russell, 2013).

Medicare Locals represented a shift towards comprehensive PHC: population-based approaches that encompassed a broad range of health services and integrating health care with public health and prevention. Their potential to tackle the social determinants of health and integrate public health with primary care to strengthen PHC was recognised (Russell, 2013). At the outset, MLs were established with objectives for regional coordination of PHC systems and had some responsibility for commissioning services, and a relatively high degree of autonomy to plan local strategies based on evidence gathered through regional needs assessments. This aspect of the shift from divisions was resisted by many GPs, and MLs’ regional PHC planning was seen as an unnecessary additional layer of bureaucracy (Thompson, 2015), and a use of funds on administration that could otherwise support clinical service delivery (Rollins, 2014). Medicare Locals were health service providers, pitting them in competition with existing service providers and adding to the resistance about their place in the health care system (Rollins, 2014). Medicare Locals were also strenuously resisted by medical interests, because the power and influence of GPs in their governance and operations were perceived to be diminished from the Divisions of General Practice (Rollins, 2014).

The incoming Abbott Liberal government, lobbied by the Australian Medical Association, abolished MLs in 2014 (Thompson, 2015). The reasons for axing MLs were provided in a damning government instigated review and report (Horvath, 2014) which was criticised by a senate committee for the lack of transparency as to its process, methodology and sampling (Thompson, 2015). Medicare Locals' axing is generally regarded to have been politically motivated (Thompson, 2015).

Thirty-one PHNs replaced MLs in 2015 amidst politically appetising rhetoric such as "frontline services, not backroom bureaucracy" (Ley, 2015), "general practice as the cornerstone of primary care" (Dutton, cited in Booth et al., 2016, Horvath, 2014), and 'GP-led' clinical councils (Department of Health, 2016b). While the focus on supporting general practice is more prominent in PHNs, much like MLs, they are tasked with understanding health care needs and addressing gaps – and as such PHNs were perceived by some as a "smaller number of similar bodies [to MLs] doing the same job" (Dunlevy, 2014). Like MLs, PHNs must undertake health needs assessments of their populations, and plan and commission strategies to address the identified priorities (Department of Health, 2015a). A key distinction is that MLs in many cases were directly providing services/programs, whereas PHNs are required to strategically commission services/programs from contracted providers, unless there is "demonstrable market failure" (Horvath, 2014).

It is the language and ideas relating to the role of PHNs that differ from MLs - their activities have a basis in health care services for patients, with no mention of prevention or health promotion (Department of Health, 2016b), which is underpinned by, and reinforces ideas of health centred on medical treatment of individuals. It is through the clinically focussed objectives of PHNs that the regulative institutional forces constrain their approaches, aligned with the dominant clinical discourse, and relative silence on any upstream, social approaches to population health improvement. While the functions and objectives of PHNs are broadly similar to those of MLs, the re-creation of PHCOs by a sympathetic government, at considerable expense to the taxpayer (Thompson, 2015) illustrates the power of medical actors in PHC policy, resulting in organisations that emphasise clinical treatment and de-emphasise social influences on health.

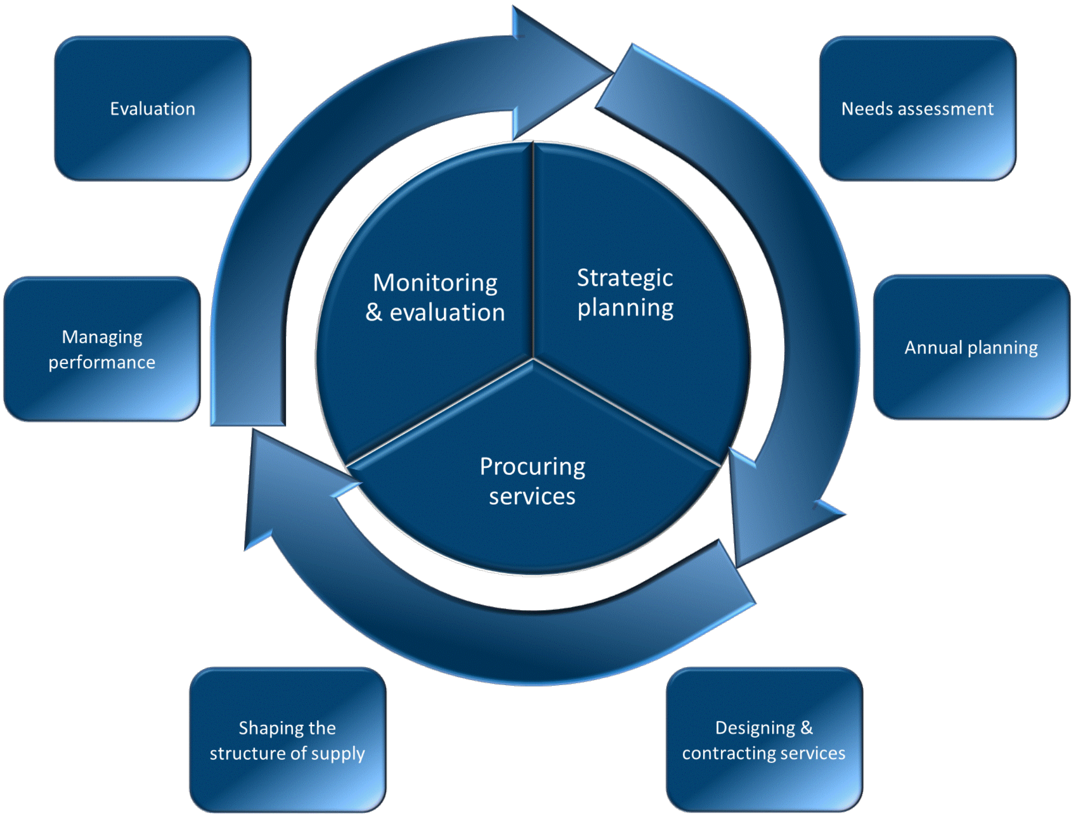
4.2.2 PHNs – what are they and what do they do?

PHNs are funded by the federal government, with the objectives of:

- "increasing the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes; and
- improving coordination of care to ensure patients receive the right care in the right place at the right time." (Department of Health, 2016b)

Rather than delivering health services and programs themselves, PHNs are required to operate a commissioning cycle model, to plan and procure services and programmes from contracted providers, as depicted in Figure 4.1. Throughout the commissioning cycle, there are numerous opportunities to factor in equity considerations, and use evidence to inform decisions. For example, identifying inequity is inherently part of needs assessment, as a major component of the needs assessment involves the analysis of data and evidence to examine population health and service needs within the region (Department of Health, 2015a). The ‘designing and contracting services’ component of the commissioning cycle can also be informed by evidence (for example the effectiveness of certain interventions, and whether benefits would improve or exacerbate health inequities in the population). In this thesis, the term ‘planning’ broadly refers to both the annual planning, that results in the preparation of the activity work plan, as well as the more specific, detailed design and development of activities contained within the activity work plan. ‘Commissioning’ broadly incorporates all the functions from needs assessment, through planning, program development, procurement/contracting, and monitoring and evaluation, although the term ‘commissioning’ is sometimes used elsewhere meaning solely the ‘procurement’ aspect of the broader cycle.

Figure 4.1: The PHN Commissioning Framework (Department of Health, 2016a)[3]



The federal government invests considerable public funds in PHNs, with operational and flexible funding of approximately $900 million over their first three years (Department of Health, 2016b), plus $1billion for mental health programmes and services (Turnbull and Ley, 2015, Ley, 2015). In the 2015-16 financial year, the federal government spent $70.2 billion on health, and state and

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[3] © Commonwealth of Australia (Department of Health) 2016. This figure has not been changed and has been used with the permission of the Commonwealth Department of Health. The opinions expressed in this paper are those of the author(s) and do not reflect those of the Australian Government or Department of Health.

territory governments spent $44.4 billion (Australian Institute of Health and Welfare, 2018). While the volume of funding PHNs are responsible for sounds considerable, it is a small proportion of government health spending (approximately 1% of federal government health spending). PHNs use and allocate these public funds to develop and implement programs and purchase services to implement broader federal government PHC policy objectives. As such, they act as ‘agents’ to implement policies developed by the federal government as the ‘principal’ policy-maker (Howlett et al., 2003). They can exercise a certain degree of discretion and autonomy in selecting and developing initiatives and services to commission, which can have significant impact on the implementation of intended policy, and as such their position is analogous to ‘street level bureaucrats’ (Lipsky, 2010). While they have some discretion in regard to allocation of flexible funding pools, much of their work is implementing larger government programs, with specified objectives, activities and boundaries.

To a certain extent the health equity goals that underpin PHC are inherent for PHNs. Their role involves identifying and addressing health access and equity gaps in their respective populations, and their key objectives acknowledge the importance of “those at risk of poor health outcomes” (Department of Health, 2016b). The Australian Government has set out six priority areas for PHNs: Aboriginal health, aged care, e-health, mental health, population health and health workforce. Three of these priority areas represent population groups experiencing social and health disadvantage (Aboriginal and Torres Strait Islander people, older people and people experiencing mental ill-health); e-health and health workforce represent some of the mechanisms for achieving positive health outcomes; and ‘population health’, which although not clearly defined by the department, suggests an opportunity for PHNs to pursue a broad vision of PHC. PHNs have committed to working with ACCHOs to improve access to health services and health outcomes for Aboriginal and Torres Strait Islander people (Department of Health, 2015b), recognising the significant health inequities between Aboriginal and Torres Strait Islander peoples, and non-Indigenous Australians.

4.2.2.1 PHN structure and governance

PHNs are private, not-for-profit companies, governed by a skills-based board of directors. Boards also have subcommittees for the various aspects of PHN operations, such as finance, governance and risk, commissioning, and more.

PHNs are small to medium sized organisations of between 30 and 100 staff, headed by a CEO, and sometimes a deputy CEO, with one or two levels of management (executive, and ‘portfolio’). Operational staff are organised in teams of various combinations, based on the functions within the organisation, and in some cases across 2-3 office sites.

As part of their structure, PHNs are required by the Department of Health to have a clinical council and community advisory committee – some have more than one, largely depending on their geography. Generally, they will have a member of the board on each council or committee, often as chair, but not necessarily. Some PHNs also have additional advisory groups within the organisation, effectively sitting between the board and councils/committee, that provide advice and ‘sign off’ on plans and key documents. Table 4.1 summarises the organisational structures of the case study PHNs.

Table 4.1: Organisational structures of case study PHNs

PHN	Clinical Councils	Community Advisory Committees	Additional advisory bodies
Metro North	1	1	
Metro South	1	1	
Rural North	4	1	1
Remote	2	1	1
Rural South	1	1	

In the course of analysing all PHNs’ public documents, a further two non-case-study PHNs were identified that similarly have additional advisory or steering groups.

The turbulent history of PHCOs in Australia, leading to the present PHNs, reflects the influences of powerful actors, contested ideas and strong institutional forces in a complex, contested, dynamic health system. It is in this contextual environment that PHNs are challenged with planning evidence-informed strategies to equitably improve the health of their communities. The next chapter will draw on interview data to understand the contextual factors and influences on PHNs, starting with an examination of the reorganisation of MLs to PHNs.

CHAPTER 5 FINDINGS: PHNS' PLANNING ENVIRONMENT

The previous chapter drew on literature to set out the broad context of the Australian health system, and the history of PHCOs, showing aspects of the contested political terrain of ideas and influences in which PHNs were created and operate. This chapter presents findings from my PhD study drawing on interview data to develop a detailed understanding of the more proximal contextual factors and influences on PHNs and their planning. Unless otherwise indicated, all quotes are from 2018 PHN interviews.

5.1 Transition from Medicare Local to PHN

This section focusses on a specific aspect of the PHN planning environment – their relatively recent history of transition from MLs. It will describe the different transition experiences and outline the largely negative impact of transition on establishing organisational processes and capacities for evidence-informed, equity oriented PHC planning.

PHNs commenced operation on July 1, 2015. Their first 12 months of operation was intended as a 'transition period' in which the focus was on maintaining continuity of care in transferring service delivery away from MLs/PHNs to purchasing from service provider organisations. It was not intended that PHNs would operate a full competitive commissioning process for the 2015-16 financial year, but would use this period to establish the organisational structures and processes, and conduct a baseline needs assessment, ready for commissioned services to commence (or continue) in July 2016 (Department of Health, 2016b). Initial interviews for the RPHCO research project were conducted between May and August 2016, when the transition was very recent, if not still in progress. The very acute change that people were experiencing is reflected in their comments. From the outset, the federal government employed the term 'transition' for the cessation of MLs, the competitive tendering process for PHN contracts, and commencement of PHNs. This term implies a smooth, somewhat seamless process of change, however the evidence from this research indicates that in many cases it was not.

Case study PHNs had different experiences of transitioning from MLs, with some remaining relatively stable and others experiencing significant disruption. PHNs' experience of transition and its impact on planning and commissioning capacity is an important contextual factor to understand in examining their planning environment. Figure 5.1 below summarises the major changes experienced by PHNs in their transition from ML(s). (Rural North was not part of 2016 interviews, so there are some gaps in the data for this PHN.)

Table 5.1: Summary of ML to PHN transition impact

PHN	Geographic region	Merge of multiple organisations	Board	Senior management	Staff loss	ML experienced in commissioning	Need to transition service delivery to other providers	Interviewees' perceived transition experience
Metro North	same	No	Same	Same	Minimal (<10)	Yes	No	Smooth, easy
Metro South	Larger, previous MLs' regions combined	Yes, multiple MLs	Some remained from each previous ML, some new. Interim chair subsequently replaced	Interim CEO appointed; then different permanent appointment made	Some (<50), mainly clinical service delivery staff	Some	Some	Difficult, acrimonious
Rural North	Larger, added parts of two other MLs	No, 1 ML won contract for larger region	unknown	CEO has changed twice since PHN commenced. Cut executive team from 4 to 2.	Yes, significant	No	Yes	Some GP disengagement
Remote	Same	No	Same	Some restructure, CEO had only commenced 8 months prior to transition	Minimal (<10)	Yes	Some	Relatively easy, smooth, straightforward
Rural South	Same	No	Same	Same	Yes, significant. Clinical service delivery and major program ceased	Some	Yes	Difficult, disruptive, but perceived to be less so than for other PHNs

5.1.1 Disruptive transition – implications for planning and commissioning capacity

There were many negative comments about the disruption and uncertainty associated with transitioning from MLs to PHNs, particularly from those whose transition had been challenging, but also from those who had experienced a relatively smooth transition. Many saw it as a wasted year (or longer) to re-establish the organisations, with impacts on capacity and culture.

> *"[Reorganisation is] unsettling because it takes your mind off the game of what you're trying to achieve." (Board, Rural South)*

> *"The whole of the thing [transition] is a total waste of money, counterproductive, an exercise for political reasons ... it was really just about saving money. It hasn't been driven by a health agenda" (Board, Metro South, 2016)*

However, some felt that it had created an opportunity to streamline and improve their understanding of commissioning, and others that it allowed for some reflection and a "*fresh start"* (Board, Metro South, 2016)*,* and an opportunity to restructure.

Aside from the "*turmoil*" (Staff, Rural South, 2016) of many staff being made redundant, and transferring the employment of service delivery staff to service delivery organisations, the prolonged uncertainty and job-insecurity among staff across all PHNs made for a very difficult period, with implications for attracting and retaining staff. Aside from the sometimes "*devastating*" (Staff, Rural South, 2016) impacts on individuals and organisational morale, there have been financial costs associated with the job losses and human resources aspect of transition, with PHNs having to "*buy in expertise in human resource legal and contract management legal*" (Board, Rural South, 2016). The move to become solely commissioning organisations also required recruitment of additional skill sets and capacities in many cases, which had taken considerable time.

Metro South experienced a particularly difficult transition that resulted in multiple MLs combining, merging staff, from what were reportedly very different organisational cultures and philosophical stances. The commencement as a PHN was ultimately delayed by several months.

The implications of this difficult transition for developing planning and commissioning systems and capacity were clearly articulated:

> *"trying to build new processes has been quite challenging." (Manager, Metro South)*

> *"We were starting pretty much from scratch in terms of setting up policies, procedures, systems, all that kind of thing" (Board, Metro South)*

Other PHNs found it difficult to 'juggle' the transition and continuity of service delivery functions of the ML, while establishing the new organisation ready for commissioning.

PHNs who were already commissioning organisations conversely noted their benefit from having established capacity and processes:

> *"[The PHN had] gone from a commissioning agency to continue being a commissioning agency. And I guess one of the positive things there is that meant they had a lot of processes already well established" (Community Advisory Committee, Remote, 2016)*

> *"I think we've had a very stable organisation and I think capacity and experience was maintained" (Manager, Metro North 2016)*

Transition was simpler for those PHNs who had already been commissioning, and didn't involve merging multiple MLs or changing geographic boundaries, as indicated in Table 5.1.As outlined in the WHO framework (Green and Bennett, 2007) capacity and organisational culture are important factors that influence evidence-informed policy-making and planning. The disruptions associated with transition impacted these factors for some PHNs and is an important aspect of their organisational context.

5.1.2 Federal government support for transition

The challenges of transition were not aided by the federal Department of Health, who were reported as having provided little leadership, clarity or guidance:

> *"I don't think there's a clarity of purpose for the PHN at the national level. No, no. I don't think there's a clarity of purpose. It hasn't been clearly painted a picture where they're [the Department] trying to get us to work towards. It's extremely high-level and vague. How we try and transform the system - I mean, what's it going to look like in 10 years' time? Where are we trying to get it to? (Clinical Council, Metro South, 2016)*

The department was frequently very late in providing information about contracts and funding. This made for considerable uncertainty and compounded PHNs' difficulties with regard to staff and service provider contracts. There was a strong sense that the Department of Health were improvising and had no clearly defined strategy.

> *"I don't think that there was really much help coming from them [the Department of Health]. In fact, I think they're all scrambling desperately to work out how to do it all themselves." (Board, Metro South, 2016)*

Many felt that the timeframes set by the department for the various stages of transition were very challenging, particularly those whose transitions involved more complicated mergers. Several interviewees from Metro North, whose transition had been relatively simple, felt that the transition timeframes had been manageable. The workloads associated with transition, in terms of first applying to become a PHN, then managing the human resources aspects, and communicating with stakeholders, were very demanding in the short timeframes, and this hindered PHNs from developing their commissioning capacity.

The lack of clear guidance and imposition of challenging timeframes by the department represent an unsupportive regulatory institutional force with negative implications for PHNs in their important establishment period. During their establishment period, PHNs were challenged by short timeframes, limited guidance and the somewhat urgent priority of maintaining continuity of patient care while transitioning service provider contracts, as well as the turmoil of staff loss and some challenging mergers and takeovers. These conditions were not conducive to establishing organisational systems, processes and cultural norms to facilitate robust evidence-informed, equity-oriented PHC planning. A more coordinated and better supported transition may have better enabled development of planning processes and systems from the outset.

5.1.3 Impact of transition on stakeholder engagement

The interviews showed that transitions from MLs to PHNs had varying impacts on relationships with stakeholders, with different actors responding in varying ways. Stakeholder networks and relationships are an important element of organisational capacity for evidence-informed planning (Green and Bennett, 2007) and community participation is an underlying principle of comprehensive PHC (World Health Organization, 1978). Those PHNs which had relatively stable transitions - retaining the same regions, board and senior staffing - benefitted from being able to maintain relationships with existing stakeholders, and in some cases, used transition as an opportunity to strengthen relationships through discussions of PHN purpose and strategy. Where MLs merged, there was perceived benefit from external stakeholders in dealing with one organisation rather than several, however the PHN itself felt they had to "*start over*" (Community Advisory Committee, Metro South) with building community engagement. The negative impact of transition on community and stakeholder engagement was also noted in Remote and Rural South PHNs whose transition had been comparatively simple:

> *"we've been through so much change and so many iterations as organisations that I think it's taking a little while for people to understand, okay, this is what you do now. We also needed to rebuild credibility in terms of 'how long are you going to be here for'." (Manager, Rural South)*

Staff in several PHNs (Metro South, Remote) believed that transition was also damaging to relationships with Aboriginal and Torres Strait Islander people and service providers, particularly due to staff turnover and disruption to continuity of relationships and clinical care, and that "*damage control*" (Staff, Metro South, 2016) had been required since.

A prominent theme from interviewees, particularly in 2016, was that of GP disengagement through the transition period. Some interviewees attributed this to inadequate communication on the part of the ML/PHN. Others reported that GPs perceived they were 'losing out' from what had previously been organisations that provided them with local connection and tangible services and benefits, particularly from divisions and to a lesser extent from MLs.

> *“general practice is bemoaning the loss of supports that they’ve historically had” (Staff, Rural South, 2016)*

Others reported a sense of ‘change fatigue’ in that GPs lost interest because of frequent PHCO reorganisations:

> *“a lot of the GPs in [subregion] want nothing to do with the PHN whatever, so we have very poor engagement ... with all the ‘older school’ GPs, they've had enough of this [PHN] nonsense, want nothing to do with it. They've been burnt twice before, and that's it for them.” (Clinical Council, Rural North)*

A very strong theme was that of uncertainty about what commissioning was, the role and purpose of PHNs, how they would operate and what it meant for people, both within MLs/PHNs and also their external stakeholders.

> *“I think it took a little while for people to work out what it [the PHN] was going to be doing.” (Community Advisory Committee, Rural South, 2016)*
>
> *“I’m still unclear from a GP’s perspective, how they’re [the PHN] going to interact with the GP on the ground” (Clinical Council, Remote 2016)*

As well as developing their own capacity for coordinating commissioning, PHNs needed to build understanding and capacity among service providers for operating in a commissioning model, and in some cases, encountered resistance, particularly from GPs with regard to accountability requirements.

> *“it's educating the service system around what commissioning means and what our role is, that’s a greater challenge than having skilled staff able to do it ... we’re asking them [GPs] to “give us some information why we should commission you, this is our reporting requirements”. And they go “no, no just give us the money, we've always just had the money to open, you don’t need to ask us these questions”. Well no we do… we’re now responsible and these are our new requirements, which some of them don’t like.” (Manager, Metro South, 2016)*

There had also been considerable uncertainty regarding the purpose and role of clinical councils and community advisory committees, which had occupied much of the first two years of the PHNs’ existence.

The uncertain, complicated transition from ML to PHN experienced by some PHNs had important, predominantly negative, implications for relationships with key actors, particularly those at the ‘grass roots’: community members and general practice. Stakeholder and particularly community engagement is a key enabler of evidence-informed, equity-oriented PHC planning, so the negative impact of transition on engagement would also have had negative implications for planning.

5.1.4 Legacy and ‘baggage’

Historical involvement in particular projects and the focus areas of predecessor organisations were recognised as being likely to influence the capacity and culture of the PHN, and the expectations of the community and service provider sector. Such organisational and community norms represent a normative institutional force on PHNs’ decision-making, evidence use and equity orientation. For example, where the ML had previously had a strong focus on addressing the social determinants of health there was evidence that this ethos and social ‘idea’ of health had been retained in the PHN to a certain extent. Organisational culture influencing evidence and equity is discussed further in sections 5.2.3.2 and 8.4.4 respectively.

There was also an example of a PHN having ‘inherited’ or being given the funding responsibility for services with problematic ‘baggage’ that needed to be addressed, such as tightening accountability with regard to monitoring deliverables and achievement of service targets, and needing to decommission services for which there was insufficient evidence of need. This provides an example of where evidence clashes with a competing interest.

> *“This was a program that had been running for 15 years previously directly under funding from the federal government with absolutely no monitoring, management, direction being set. So we had services in some cases that had been operating for 15 years and they were delivering things that were just not evidenced in the data as being required by certain communities ... So commissioning is a really difficult process to undertake when it’s being brought in as a mechanism to solve pre-existing problems. Unfortunately, the bulk of things that we have responsibility for are dealing with existing service systems or existing funding programs.” (Senior Executive, Rural South)*

The transition from MLs to PHNs that took place in 2014 and 2015, while experienced differently by different organisations, was highly disruptive to some PHNs, in terms of their capacity for planning, commissioning and stakeholder engagement, and is an important contextual factor when considering PHNs’ planning processes and evidence use. The transition, itself an instrument of regulatory force by the Department of Health, was for many PHNs a turbulent time complicated by the tension of bringing together existing, diverse organisational norms and establishing new norms, with regulatory forces acting in an unsupportive, if not deleterious way. The next section will further explore the external and internal contextual factors and influences on PHN planning.

5.2 Context and Influences

In Chapter 2 I set out how health policy-making and planning occurs in a complex, dynamic environment, involving many stakeholders or ‘actors’, and various contextual factors and influences on what and how decisions are made. This section will outline the multitude of actors in PHNs’ planning environment and explore the external and internal context in which PHNs make planning decisions, and the influences that act alongside considerations of evidence and equity.

5.2.1 Actors

PHNs' 'policy environment' involves a huge range of actors, with varying degrees of connection and influence. There are expectations set by the Department of Health as to who PHNs should connect with as well as the requirement to have clinical councils and community advisory committees, as stated in the PHN guidelines:

> *"PHNs are required to have GP-led Clinical Councils and representative Community Advisory Committees to report to the Board on locally relevant clinical and consumer issues. PHNs must have broad engagement across their region including with Local Hospital Networks (LHNs) (or equivalent), public and private hospitals, Aboriginal Medical Services, nurses, allied health providers, health training coordinators, state and territory government health services, aged care providers and private health insurers." (Department of Health, 2016b)*

Some types of actors are more influential in some PHNs than others, depending on other contextual factors. For example, the peak body for Aboriginal Health Services was highly influential in Remote and Metro North, but there was no evidence for such influence in Rural North or Metro South. Metro South had strong engagement with local government, and Rural South indicated further development was required to build such linkage with a large number of councils in their region. State/territory government hospitals/health services, Local Health Networks (LHNs) and state/territory health departments were frequently described as key stakeholders, and the LHN were a particularly important stakeholder in Metro North. Evidence from three PHNs indicated that general practitioner engagement was relatively weak, and had declined since the time of Divisions of General Practice, however PHNs were working to strengthen those relationships. There were generally good relationships with non-government organisations, and connections with the mental health sector were relatively strong in all PHNs, partly due to networks developed through the collaborative Partners in Recovery program by MLs. Most PHNs reported informal discussions with private health insurers, and only one had a semi-formalised, regular connection with them. The existence of positive relationships did not necessarily mean that those actors had much influence on PHN planning however.

Table 5.2 lists individuals and organisations from different sectors who have involvement and relationships with PHNs, as identified from interviewees. This does not include PHN employees but does include members of boards and councils/committees. The degree of influence is indicated, with a high number of stars (*) indicating strong influence, (as perceived by interviewees) and no stars indicating there was no evidence of significant influence on planning. Unpublished findings from the PHN survey conducted in 2016 indicate that the extent to which community members are involved in decision-making was lower in PHNs compared with MLs.

Table 5.2: Actors in the PHN planning environment

Sector	Organisations	Individuals
Government	• Federal government*** • State/territory government** • Local Health Networks** • Local councils/government*	• Politicians**, including Ministers* • Bureaucrats • Policy-makers, planners
Health service providers	• General practices** (Private, corporate) • Hospitals – public* • Hospitals – private • Emergency departments • Ambulance • Pharmacy • Allied health providers* • ACCHOs/ AMSs** • Women's health • Family violence • Community health services* • Charities, NGOs • Telehealth providers • Mental health service providers* (adult/ youth/ child, public/ private) • Alcohol and other drug treatment	• General practitioners* • Public health physicians • Medical specialists • Geriatricians • Practise nurses • Midwives • Practice managers and admin staff • Psychologist • Physiotherapist • Podiatrists • Occupational therapists • Aboriginal Health Workers/ practitioners
Provider peak bodies, professional groups	• RACGP • AMA • Aboriginal Medical Service/ ACCHO peak bodies** • Rural health workforce agencies • GP training providers • Pharmacy Guild • GP groups (from former divisions) • Aged & Community Services Australia (aged care peak body)	
Other service providers/ government departments	• Police • Housing/homelessness • Community services • Legal advisory service • Transport • Interpreters • Aged care* • Domiciliary care • Relationships Australia	• Social workers • Lawyers
Non-government organisations, charities	• Cancer Council • Australian Council of Social Services (branches) • Asthma Australia • Diabetes Australia (branches) • Kidney Health Australia • Heart Foundation • Stroke Foundation • CanTeen • Mental Health Australia • Council on the Ageing (COTA) • Neighbourhood Houses	
Community, consumers	• Health consumers' advocacy groups e.g. Consumers Health Forum • Ethnic Communities Council • Aboriginal elders/ community groups • Refugee advocacy groups	• Community members • Carers • Refugees • Aboriginal and Torres Strait Islander people • People from CALD communities

Sector	Organisations	Individuals
	• Carers Australia (branches) • Other community groups • Community advisory groups (associated with LHNs)	• Older people • LGBTIQ people • People with disabilities
Other	• Universities • Private health insurers • Australian Health Promotion Association • Australian Healthcare and Hospitals Association • Primary Care Partnerships • Other PHNs	• Academics/researchers • Accountants • Lawyers • Consultants

5.2.1.1 Engagement mechanisms

Engagement with actors took various forms. Clinical councils and community advisory committees, mandated components of PHNs' governance structure, were recognised as playing an important role in fostering collaboration and engagement with key stakeholders:

> *"there is an understanding that part of our mandate as council members is that we are there because we have those networks and links beyond our agency."*
> *(Community Advisory Committee, Rural South)*

Interviewees frequently spoke further of PHNs' robust mechanisms and strong strategic and operational collaborative relationships with key stakeholders. Metro North provided the best example of a formalised, multi-layered, long term, collaborative relationship with their local LHN. A comprehensive range of activities and mechanisms underpinned the relationship including: a joint strategic governance group with rotating chairs and secretariat support; jointly funded projects supported by working groups and reference groups; regular executive meetings; and a jointly funded senior staff member for the explicit purpose of identifying opportunities and fostering collaboration between the two organisations.

Examples of collaboration and relationships from other case study PHNs included:

- Periodic joint board meetings
- Regular network meetings involving various stakeholders
- Specific PHN steering committees or working groups that include external stakeholders e.g. after hours, mental health, system integration, Aboriginal health
- PHN participation in external networks/committees e.g. Aboriginal health groups, family violence network, refugee health network, community health/hospital advisory groups
- Operational level interactions e.g. hospital liaison, Aboriginal community connections
- Formalised structures/committees for joint planning/strategy
- Formalised agreements for collaboration (memoranda of understanding)
- External stakeholders represented on PHN boards or as PHN members.

There were mixed views as to the value of formalising relationships, with one interviewee expressing the view that personal relationships and mutual understanding are more important than a memorandum of understanding that "*generally sits on a dusty shelf somewhere*" (Manager, Metro South, 2016), while others highlighted the importance of their documented agreements.

The valuable and relatively unique role of the PHN as a neutral party or "*honest broker*" in facilitating connection between a range of stakeholders was also discussed by several interviewees and highlights one of PHNs' key strengths in the health system.

> *"we can be an honest broker and sit there and say 'this is how it works and this is why it works and here it is' ... So we're probably good collaborators because we are not the enemy in anybody's eyes, we're actually a good honest broker." (Board, Rural South)*

5.2.1.2 Collaboration with other PHNs

Despite the loss of a national coordinating body when MLs were replaced by PHNs, PHNs have self-organised into networks, largely for CEOs to meet periodically. Networks have formed in the more populated eastern states, and in some cases also include PHNs from smaller neighbouring states/territories, such that most PHNs across Australia have a regular opportunity to connect with each other. The dissolution of the national Australian Medicare Local Alliance, and decision not to create a similar body for PHNs was seen as the federal government trying to "*divide and conquer*" (Clinical Council, Rural South), and while networks have formed, there was a common perception that the coordination and breadth of collaboration between PHNs could be improved:

> *"certainly could get stronger at that in terms of learning from other PHNs and their experiences." (Manager, Metro North)*

> *"I think there's a whole bunch of national infrastructure that we need that we don't have. And that's particularly around knowledge exchange and sharing good practice amongst each other." (Senior Executive, Metro North, 2016)*

Interviewees mentioned a sub-group of PHNs with a special interest in social disadvantage and vulnerable populations, who come together with a focus on commissioning for health equity. There were also examples of PHNs collaborating with neighbouring PHNs on regional planning, specific projects, or in working with particular populations of special need such as refugees.

PHNs' relationships with university and research actors, and the implications for evidence-informed planning capacity are discussed in section 7.7.

5.2.2 External context and influences

The previous chapter described the broad health system environment and health policy settings in which PHNs operate. This section will look at some of the more proximal external contextual factors and influences on PHNs' planning as identified by interviewees.

5.2.2.1 Federal government

A prominent theme from interviewees was that PHNs are tightly regulated by the federal Department of Health, which limits their scope of activity planning, and the funding and timeframes for planning and implementing initiatives.

Scope

Overwhelmingly, the major external factor that influences PHNs is the constraints of their funding contracts from the federal Department of Health. PHNs' activities are highly regulated by the department, with the majority of their funding tied to specific services and programs, such that they have very limited flexibility.

> *"the fact is that the funding streams, by and large, are tied very closely to specific objectives of the government." (Clinical Council, Metro South)*

> *"We are still however in a fairly authoritarian environment where a lot of it is pre-set for us." (Senior Executive, Rural South)*

Some felt that PHNs had less autonomy than their predecessor divisions and MLs, and that this limited their ability to achieve positive outcomes:

> *"it's becoming more and more micro-managed…I think it's lost its ability to make as big a difference as it could, because of the lack of choice of how to spend the money and what to do" (Clinical Council, Rural South)*

Numerous interviewees identified the tension between PHNs' requirement to conduct comprehensive assessment of local needs, but their very limited scope to address identified priorities.

> *"the PHN has a mandate to do a comprehensive health care needs assessment. Great. They go and do that, but if the funding conditions that are set out by the Commonwealth [federal government] don't support meeting those needs, it puts them in a really awkward position … They know what the issues are but actually they then don't have the flexibility to use the funds in a way that will enable meeting what those community needs and priorities are." (Community Advisory Committee, Remote, 2016)*

> *"it's a bit silly in fact because we do this whole [needs assessment] process and only end up with a couple of million dollars to actually then commission, that is actually flexible." (Senior Executive, Metro North, 2016)*

PHNs lacked power to challenge the government. Particular government program funding might not necessarily align with a local need, however PHNs did not have the autonomy to 'pick and choose' which funding they accept or decline, and they generally could not use or seek funding for alternative priorities.

> *"So there's always things that can be driven centrally from Canberra that land in our*

> *laps and need to be dealt with, but they're not always aligned with what our stakeholders are saying are the key priorities, so there's always that tension." (Board, Remote)*

> *"I just think there's a fear that if they [PHNs] do speak up about anything, that it's going to have repercussions" (Staff, Metro South, 2016)*

Federal government influence was also seen to potentially outweigh evidence in decision-making:

> *"as much as we might like to think we're totally objective in our decision-making and priority setting, often we are forced to go down a path that is less attractive or less logical or less evidenced, simply because the political risks of not doing so in an environment where government wields a very heavy influence over the outcomes and activities of PHNs" (Senior Executive, Rural South)*

> *"subject matter experts will make suggestions and they clash up against what we're allowed to do by the department." (Manager, Metro North)*

An example was given of a PHN identifying that methamphetamine/ice, while driven by the federal government as a priority issue, was not a particular concern in that region, however they nonetheless were required to implement strategies to address this 'problem'.

Only one interviewee felt that there was not much disconnect between federal government and local priorities:

> *"I think the things that are plaguing and killing Australians are not dissimilar across the country. They might just have different focus and different levels of acuity in different bits of Australia, but on the whole, I don't think it's poles apart." (Staff, Rural South, 2016)*

Under the tight constraints of Department of Health contracts, PHNs' remit is limited to a relatively selective conception of 'primary care', with a strong emphasis on medical services. This was recognised as reflecting the federal government policy direction, political appetite and ideas of 'health' aligned more towards service delivery than system reform or prevention.

> *"one of the things I think that frustrates us is a drive by the department for service delivery compared with system reform… we probably believe it's wiser for us to invest a small amount of resources in system reform, which will then hopefully change a system that will have a long-lasting impact rather than just putting our finger in the dyke by just funding gaps in the service delivery landscape year by year." (Manager, Metro North)*

> *"ministers like cutting ribbons to services… in a highly urbanised context like this, a lot of what we could do is make a difference around systems and processes and referral pathways; but ministers don't like that as much. They like 'here's the service' with the doctor standing there with their stethoscope." (Senior Executive, Metro North)*

It was also recognised that PHNs are vulnerable to federal government policy shift, cabinet reshuffles and political whims:

> *"every four years you get a different policy context and a different policy environment" (Manager, Remote)*
>
> *"There are a couple of those sorts of instances, which sort of sound like policy on the run or it's somebody's good idea and 'we're going to do this'. And then the minister changes so 'it's not my idea anymore so we'll just let that one flounder' and move onto the next thing. So political processes sometimes I think compromise our ability to be as effective as we could be in our planning." (Board, Rural South)*

The latter quote also supports the notion that the need to respond to these changing "*goal posts*" (Community Advisory Committee, Remote, 2016) can compromise PHNs' planning processes, capacity, performance and outcomes. There were also fears about the implications of a possible change in government following the 2016 federal election (which did not eventuate) but reflect the perceived vulnerability of PHNs to political whim, and concerns about longevity following the highly political demise of MLs: "*the concern I've got is how many iterations [of commissioning cycles] are we going to get?"* (Board, Metro South).

It was recognised that national health professionals' lobby groups have a strong influence on the federal government in terms of policy directions that impact on PHNs, but that these agendas were not necessarily aligned with those of local service providers:

> *"the voice of the AMA and the RACGP tend to be very loud in the ears of policymakers in Canberra with very little reflection of what it is that the grassroots membership on the ground need. The AMA, it's specialist driven, RACGP, what's said at national level by the college tends not to be reflected by local members on the ground. There's a big mismatch there." (Senior Executive, Rural South)*

The extent of the department's control and influence over PHNs is further indicated by their administrative requirements. The Department of Health has mandated templates that PHNs must use for the needs assessment and activity work plan. Once completed, those documents (and the proposed activities within) must be approved by the department and then made public on the PHN's website. Even the 'flexible funding' allocation required departmental approval.

At a broader level, the Department of Health has determined the boundaries and regions of PHNs. It provides access and directs PHNs to large national data sets via a PHN web portal, as the basis for their needs assessments, thus influencing which evidence informs planning. The department also sets the key performance indicators for PHNs.

As mentioned previously, with the disestablishment of MLs, also came the axing of their national peak body, the Australian Medicare Local Alliance. The federal government assumed the role of supporting the new PHNs. While a few interviewees were content, in addition to criticisms of the ML/PHN transition discussed earlier in this chapter, many reported the lack of sufficient guidance or support from the department for PHNs' nascent capacity for planning and commissioning.

> *"I don't feel as though there's all that much support in the department, no." (Staff, Metro South, 2016)*

> *"the stuff we get at the moment is very basic, it's very low-level - the sort of support that I think we need is much more around how we actually move providers and markets from one frame of operation to another. We're still talking about basic processes of procurement ... having a big four accounting firm spewing out a few bits of paper doesn't cut the mustard, as far as I'm concerned, in terms of the types of support that governments should be investing in PHNs if they are serious about PHNs becoming the corner stone commissioners of everything outside hospital care into the future ... So I just don't see the government investing properly in making sure this process is done well." (Senior Executive, Rural South, 2016)*

It was recognised that PHNs' have greater scope for decision-making discretion in allocating or distributing funding for Department of Health priority programs (such as youth suicide, and methamphetamine), rather than planning for their own identified priorities. One interviewee noted the department's partial devolvement of decision-making responsibility to PHNs shifted risk but not power:

> *"it's very easy for a government to put in an intermediate body and say PHN, District Health Council, whatever it is, they're making all the decisions and so if there's hard decisions being made, it's not us in government, they're doing it over there. But on the other hand, to actually give up the governance, to give up all of the funding, to give all the decision-making to those organisations is very difficult for a government. I think there's few governments that have the strength and willpower to devolve that and to say, okay fine, we're going to blame you for everything that goes wrong but we're also going to give you the resources on the chance that it will go right." (Community Advisory Committee, Metro South)*

Money

Many interviewees also expressed strong concerns about PHNs' constrained funding from the federal government, particularly inadequate 'flexible funding':

> *"we would love to have more flexible funding, and I'm sure that if you talk to every PHN, they would all say the same" (Clinical Council, Metro North)*

Many respondents noted the underfunding of PHNs in terms of their core operating budget, and the impact this has on their capacity for fundamental functions that constitute robust, evidence-informed planning and commissioning such as: stakeholder and community consultation and engagement; partnerships; needs assessment and planning (and the evidence resources to inform that); contract management; and research and evaluation.

> *"We operate within the environment where we're given around 8% to operate on, 8% of a new program … It's tiny, it is absolutely tiny… it's not only lean, it's gossamer thin and it's inappropriate, and I'll quite happily go on record as saying you can expect leanness but there is a point that you go past where you say,*

> *"These organisations cannot possibly do the things that you want them to do in the way in which they should be done with that sort of amount of money to spend."" (Senior Executive, Rural South)*

> *"We're barely resourced to manage our contracts let alone any other form of engagement" (Staff, Remote, 2016)*

The fact that funding is not 'quarantined' for operational functions of commissioning was highlighted as an issue. There was a perception that funding some operational functions such as research and evaluation, although important contributors to the rigour of evidence-informed planning, would be at the expense of (commissioned) service delivery:

> *"they're [PHNs] funded as commissioning [organisations] and funded to the bone for that. So where's the money? It just means there'll be less for contracting if you're going to invest in research." (Community Advisory Committee, Metro South)*

Several PHNs reported significant budget cuts, some in the transition from ML and some more recently in 2018, although there was one early perception that PHNs, as larger entities, had more money than their predecessor MLs, and so had greater "*power of the purse*" (Board, Metro South, 2016). Others were concerned that the high expectations and broad remit of PHNs were not met with commensurate funding, and that they have limited leverage and impact within the health system:

> *"I think the expectations [of PHNs] are extremely high, the resourcing relative to the system as a whole, is extremely small" (Board, Metro South)*

Time

PHNs are subject to timeframes that are largely dictated by the Department of Health. Many expressed serious concerns about the "*absurd*", "*irrational*" (Community Advisory Committee, Remote), "*ridiculous*" (Board, Metro South), "*stupid*" (Clinical Council, Rural South) and "*unrealistic*" (Senior Executive, Rural South) timeframes for PHNs to conduct their core functions of needs assessment, planning and commissioning. Short timeframes were seen to hinder evidence-informed planning in a number of ways. The rush to undertake needs assessment was felt to compromise its depth and rigour, and detrimental to its value as evidence to inform decision-making:

> *"having sufficient depth in the needs analysis process to direct strategic decision-making has been difficult at this stage because again we had to rush the needs analysis and the mental health needs analysis in an unrealistic timeframe to do it really well." (Board, Remote, 2016)*

PHNs also do not have the flexibility to spend time investigating a certain population health issue and developing a suitable strategy – they must submit their plan by the deadline, even if it is not well developed.

> *"so government says 'oh quick, you've got to get your population health plan in' and so much as you'd like to spend a bit more time actually finding out what the evidence says about various things, you can't do that." (Community Advisory Committee, Metro South)*

This perception of poorly developed activity plans was supported by my analysis of the PHNs' activity work plans, where I frequently found program descriptions were under-developed.

The pressure of time constraints was also seen to hinder development of internal capacity and processes to drive robust, evidence-informed planning and commissioning, and the tension between time constraints and PHN performance was highlighted:

> *"if you [Department of Health] want us to do this role, we need the time to be able to do it in a rigorous way to get the best outcome" (Manager, Rural South)*

There were also clear indications that at the establishment of PHNs, meeting deliverables took priority over establishing robust processes for the longer term:

> *"I think that we're getting better, and I think that's probably because when we first were set up, it was sort of a mad rush, you know, and we got set up in June, have a health needs assessment in November and your activity plans in by April. And I think we've got better at developing it and planning." (Manager, Metro North)*

It was clear that the federal government have strong regulatory influence over PHNs, in terms of their scope, resourcing and time constraints. The next sections will outline other external context factors that have influence.

5.2.2.2 Service context

There were considerable differences between PHNs with regard to the service provider sector in the local context. The service provider sector was frequently referred to using the commissioning-related term 'market'. For example, Remote has more ACCHOs, but a much smaller private provider sector in its catchment area than other PHNs. Rural South noted their small provider market and workforce shortages. The Metro North environment was described as "*service rich*" (Staff, Metro North). The maldistribution of services within regions was also noted. The availability of health workforce influenced the types of service models that could be planned.

> *"it's very hard to make some of the rural areas really viable. So I think in-reach continues to be one of the only ways to provide services." (Staff, Rural South, 2016)*

The employment conditions of the health workforce were also identified as being a factor in planning and implementing PHC interventions. Some felt that salaried health service providers were easier to engage (in needs assessment) than private fee-for-service providers who needed to "*see what's in it for them*" (Board, Remote, 2016). A comment was also made regarding the high proportion of International Medical Graduates in areas of workforce shortage, and the interviewee's perception that they are less likely to engage in PHN initiatives. The emergence of large corporate general practices, particularly in city areas was also noted in terms of the changing nature of health service delivery. The capacity (or lack thereof) of health service providers to ensure cultural safety for Aboriginal and Torres Strait Islander peoples was also identified as important, particularly in Remote PHN.

Factors relating to other health organisations within the PHN region were commonly identified. Some PHNs have numerous LHNs to interact with, making for greater complexity. Two PHNs (Rural South and Remote) commented on discord between stakeholders within a sector in their region. This added further difficulty for PHNs in engaging and fostering integration.

> *"as with any partnership arrangement there's always lots of politics involved in terms of which organisation or representatives will play nicely with who." (Community Advisory Committee, Remote, 2016)*

The capacity of state or territory government agencies to partner with PHNs (in the context of their own limited funding), and provide health or other services, was also recognised as an important contextual factor.

> *"The [state/territory government] is broke so that's a major factor in terms of our ability to do anything and our ability to partner with government and to deliver key essential services or commission services." (Board, Remote)*

The overarching context of PHNs operating in a commissioning model was also an important theme, particularly in relation to the lack of capacity and 'naivety' of service providers in responding to tenders. They often didn't have in place adequate capacity such as clinical governance and accountability mechanisms. Several interviewees identified the tensions that were created between PHNs' cooperation with and between service providers to develop and co-design strategies, and then competition between service providers for contracts.

5.2.2.3 Interests, power and local politics

It is well recognised that policy-making and planning is highly political and has been likened to 'a strife of interests masquerading as a contest of principles' (Sax, 1984). The WHO framework includes 'interests' among the factors that influence policy-making (Green and Bennett, 2007). Hawkins and Parkhurst (2016) argue that the nature of policy-making is fundamentally political. There was clear evidence that the broad range of actors bring various interests and agendas to the PHC planning environment. Some interviewees were quite explicit that their motive for becoming involved with the PHN was to advocate for their particular interest, such as allied health, community services or general practice. Interests were generally underpinned by altruistic motives for the greater community good, and there was also some discussion of the risk of involvement with private health insurers, in that they are highly profit-driven. It was frequently recognised that members of PHN boards or advisory groups almost inevitably will bring particular interests, and in some cases can represent a potential conflict of interest, which must be managed carefully. For example, many PHN board directors also serve as directors or CEOs of health service provider organisations who potentially stand to gain commercial advantage through information obtained through PHN discussions, in which case, they leave the meeting for that part of the discussion.

Vested interests and local political pressures are particularly challenging when it comes to PHNs redistributing or decommissioning services, and a challenge to more objective, evidence-informed decision-making. Such decisions were identified as being met with "angst" from affected service providers and their patients, even if there is evidence of greater need elsewhere. PHNs are reluctant to upset GPs and other clinicians. Local politics and adverse perceptions were identified as a particular risk by Rural South, in the face of opposition to decommissioning services:

> *"sometimes it's highly, and incredibly politically sensitive, especially in [region] because anything's a headline. And if it's got anything to do with funding or somebody potentially missing out, well you know you're all over the front page." (Staff, Rural South)*

> *"it doesn't make the role of a PHN as a commissioner easier when you've got this self-interested influence coming in at multiple levels that threatens to separate you from the objectivity of your planning and data analysis process that's evidencing where you need to invest" (Senior Executive, Rural South)*

The fact that the PHN can't always address local problems despite strong evidence, because of "*political roundabouts*" was also acknowledged by the community advisory committee interviewee at Rural North PHN.

The adage that 'the squeaky wheel gets the grease' was invoked:

> *"certainly it's [planning] influenced by squeaky wheels and politicians getting involved" (Manager, Rural North)*

There was also recognition of the potential for needs-based planning to mitigate such political influence:

> *"the people who understand the system also understand how to put political pressure on … Where the people who need the services the most are the ones who usually don't agitate as much. So we're doing a lot of work around identifying where those areas of needs are" (Manager, Metro South, 2016)*

As well as financial interest, it was recognised that some actors' motives are more about politics, publicity or power: "*There's always people out to create little empires"* (Staff, Metro South). However, there was consistent evidence to indicate the perception that medical actors did not have greater direct influence than others at PHN decision-making forums:

> *"there's no sense of a power imbalance there at all" (Senior Executive, Rural South)*

Political interference ‘from above’ was also identified as a challenge to PHNs. This chapter has already documented the government regulatory influence on PHNs, and some respondents noted direct influence by politicians. One PHN gave an example of a senior federal politician making a factually incorrect statement about the PHN that then required significant ‘damage control’ with stakeholders, none of which was allowed to be put in writing. Politicians’ preferences for certain types of services, or interest in particular issues was seen to impact on PHN planning. The involvement of local lobby groups exerting influence via politicians and circumventing PHN planning processes was another challenge.

5.2.2.4 Other health policy

The previous chapter outlined the broad health policy context in which PHNs operate, and the influence of this context was noted by several interviewees. The federalised dual funding of health care by state/territory and federal governments, as well as the fee-for-service (and co-payment) nature of the Medicare funding model were both recognised as immutable contextual challenges to health care and population health.

> *“The difficulty of there being two different funding bodies, with the state and the federal government, for health care, just means that if we weren't working with them [the LHN] I think it would be to the detriment of our community” (Manager, Metro North, 2016)*

> *“I don’t think fee-for-service really encourages the primary care then to take the time that is necessary for these [chronic disease] patients, and the most developed countries have gone for a hybrid model away from fee-for-service.” (Clinical Council, Remote, 2016)*

More specific recent health policies were also noted as difficult contextual factors influencing PHN initiatives. Of note was the ‘freeze’ on GP Medicare (MBS) rebates in recent years, meaning there was no increase in government payments for GP services:

> *“because of the intensity of the issues such as the MBS freeze … it is difficult for GPs to be able to step up above their current challenges to their practices and to their profession and really to take that population health approach.” (Clinical Council, Rural South 2016)*

Significant changes in other related sectors such as disability and aged care were also noted as contributing to a dynamic environment in which PHNs attempt to influence health:

> *“I do think that there has been so much reform and so much change, and it’s happening across sectors, like NDIS [National Disability Insurance Scheme], aged care, within health, within general practice, that it’s about how you get your voice heard within such a dynamic environment. I think that’s also challenging.” (Manager, Rural South)*

The recent de-funding of PHC research institutions such as the Primary Health Care Research and

Information Service and the Australian Primary Health Care Research Institute and lack of a coordinated national PHC research agenda was also recognised as having negative implications for PHNs' evidence-informed planning.

5.2.2.5 Geography and social context

The geographic and social setting of PHN regions are also important contextual factors that influence PHNs' strategies and planning processes. Vast distances in rural and remote regions were reported to hamper stakeholder relationships, and added cost and time pressures for PHNs' essential governance and stakeholder engagement functions:

> *"it's a considerable expense because of the geographical dispersion of the members ... that involves bringing multiple people on flights, might even mean charters in some instances. They've got all of those costs plus your accommodation costs" (Community Advisory Committee, Remote, 2016)*

Large geographic areas also mean that PHNs have several offices distributed across their jurisdiction, which often threatens organisational cohesion and efficiency.

Geography and infrastructure factors also have an impact on population health equity, in terms of access to health care and other essential services in rural and remote regions. Access to services is an important consideration in local health planning.

> *"lots of reasonably isolated communities. Infrastructure's very poor, transport's very poor. Access on the whole is very poor outside of [regional centres]." (Staff, Rural South, 2016)*

The greater cost of health service delivery in rural and remote areas was also identified as problematic:

> *"[remoteness is] a major cost impediment to delivery of health care... [funding is] based on urban delivery of care… so we have major structural inequities in what we're able to do in terms of funding and logistics." (Board, Remote)*

The environmental conditions of different geographies, such as desert or tropical regions were also identified as impacting population health needs.

The social and demographic profile within different PHN regions was also discussed. For example, some PHNs had small populations widely dispersed over large regions, others large populations in relatively densely populated urban areas. Some had higher proportions of Aboriginal and Torres Strait Islander people, refugees or migrants, all of which had implications for regional health priorities and stakeholder engagement, recognising differences in health needs, culture, and appropriate models of care.

Some felt that in a smaller jurisdiction there are more connections between people - everybody knows everybody - which is positive in terms of goodwill and relationships. Conversely, others felt that in small jurisdictions, the ‘silos’ are smaller, ‘patches’ are more fiercely protected, and collaboration can be seen as a threat to stability and independence. Some felt that the expanded regions of PHNs (compared to MLs) made stakeholder relationships difficult to establish and maintain. However, the larger regions also made population health inequities more evident:

> *“previously I had four inner urban local government areas and there were small inequities across those four LGAs, now when I look at the broader region the inequities are a lot starker.” (Manager, Metro South, 2016)*

Some noted the broader challenges facing society and health, in terms of ageing populations, and the rising prevalence of chronic and complex health problems. Several interviewees lamented the persistent, endemic social disadvantage and poor health status of their regional and remote populations and doubts that PHN activities would make much difference within 10 years:

> *“where you put the dollar is difficult in [region] because there’s such a need, it’s all high priority, it’s all high need” (Manager, Remote).*

Private health insurance coverage varies in different regions, with greater coverage in metropolitan areas, lower coverage in rural/remote and areas and lower coverage among people who experience social disadvantage (Australian Bureau of Statistics, 2020). This was recognised as having implications for access to hospital and allied health services.

As discussed above, there are health workforce shortages in less populated regions, and there are similar implications for PHN staffing, in that the candidate pool is limited, particularly for those with commissioning experience.

The differing health service, political, geography and social context factors were seen to present varying challenges or assistance to PHNs’ planning and decision-making and made for different equity issues and evidence needs in the different regions.

The capacity within PHNs for evidence-informed planning will be the focus of Chapter 7, but first, the following sections will explore the internal, organisational context of PHNs, before leading into an examination of the planning processes.

5.2.3 Internal context and influences

The previous section examined the wide range of external factors that contribute to the broader ‘environment’ in which PHNs operate, as well as some of the external forces applied by certain actors. Having earlier described PHNs’ structure and commissioning cycle model, this section will outline the broader functions of PHNs and delve further into their culture and internal organisational factors and influences. Internal context factors are potentially modifiable by the organisation, in contrast to external factors which are largely fixed (Dobrow et al., 2004).

5.2.3.1 Functions

The WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007) notes four main functions performed in a policy system or environment: i) research priority-setting; ii) knowledge generation and dissemination; iii) evidence filtering and amplification; and iv) policy-making (planning) processes. Contemporary analysis of evidence-informed policy-making and planning recognises that these functions are not performed in isolation, by distinct organisations, rather, organisations perform a number of these functions, to greater or lesser extents (Kitson et al., 2017, Green and Bennett, 2007), which is true of PHNs.

From the functions outlined in the framework, the primary function of PHNs is planning, and section 5.3 examines PHNs' planning and decision-making processes in detail. PHNs are busy, dynamic organisations. Consequently, it is important to understand that while PHNs' key function is planning (as part of commissioning), it is not their sole function, and they need to juggle this with other operational tasks and priorities. Analysis of interviews and key documents shows that PHNs are also involved in the other three functions as well.

It was evident that PHNs expend considerable energy and resources on 'knowledge generation', in particular through the research involved in the needs assessment aspect of planning. Generating evidence to inform decisions is recognised as an important component of organisational capacity for evidence-informed planning (Makkar et al., 2016b), and this function will be explored further in chapter 7. It was recognised that PHNs don't have much influence on broader research agendas and priority setting, although several interviewees indicated PHNs attempting to have such influence through their relationships with universities. While there was very little explicit discussion of PHNs performing an evidence filtering and amplification role in the policy/planning 'environment' more broadly, there were many examples of their staff analysing and synthesising data and evidence, largely for their own planning purposes, but also for their wider stakeholder networks. For example, Rural North produced a range of population health profile documents for the Local Government Areas within their region, as well as a 'user-friendly' summary document, in addition to the mandatory needs assessment on the Department of Health template.

Looking beyond the WHO framework, PHNs also perform a range of functions in support of, and subsequent to planning. The commissioning or procurement of planned services and programs, and subsequent monitoring thereof is a substantial component of PHNs' operations. They also do a small amount of service delivery. Engagement with various stakeholders or actors also involves considerable time and resources and is an important part of knowledge generation, planning and commissioning. It is also important to acknowledge the distinction between PHNs designing and developing an intervention, that they then 'procure' from the service provider market through a detailed 'request for tender', versus PHNs broadly identifying a 'problem' that they then approach the market for proposals on interventions to address the problem. In these two scenarios, the onus on using evidence to inform development of the intervention will differ – in the former one would expect the PHN to use evidence in developing the intervention, in the latter, the proposer. This research however did not specifically examine these differing scenarios in terms of evidence use and mechanisms to drive it. Based on examination of activity work plans, I estimate that approximately 20-30% of planned activities involved a less specific ‘request for proposal’, but a more detailed analysis would be required to determine this empirically as well as calculate the proportion of PHN flexible funding such planning/commissioning approaches accounted for.

5.2.3.2 Culture, values and ideology influences on evidence-informed planning

Culture, ideology and values are important influences on evidence-informed planning (Green and Bennett, 2007, Liverani et al., 2013, Prinja, 2010). This section examines these aspects and the cultural-cognitive institutional forces they represent within the PHN planning environment.

At one level, there are documented values by which an organisation states what is important to them, and how they expect staff to behave. Analysis of the stated values of 29 PHNs (the 3 Western Australia PHNs come under the same organisation) indicates that respect (n=18), collaboration (n=18), innovation (n=16), integrity (n= 12) and accountability (n=11) are the most common values stated by the PHNs. Equity was less common (n=6), alongside the related concept of fairness (n=3). ‘Evidence’ (n=3) was rare, as were the capacity related concepts of leadership (n=4) and transparency (governance) (n=4). This indicates that relational considerations such as respect and collaboration are claimed to be highly valued in some PHNs. It also suggests that innovation is more frequently valued than evidence, and that equity and fairness are stated as values in some PHNs more than others. (The influence of culture and values with regard to equity orientation are discussed in detail in section 8.4.4). A word cloud depicts the frequency of values in Figure 5.1 and each PHN’s values are listed in Appendix K.

Figure 5.1: PHN values (frequency WordCloud)

Interview discussions about organisational culture presented a positive picture in all five case study PHNs, indicating favourable morale among PHN staff and a sense of motivation, purpose and optimism about their work, despite some anxiety, redundancies and challenging workloads through the period of transition from MLs.

There were clear indications from all case study PHNs of organisational culture that values evidence-informed decision-making. Several interviewees spoke of the role of leaders, including managers and board/council members, in asking for evidence, setting expectations and creating an enabling environment for evidence use:

> *"[CEO] is very big on evidence base so if there's no evidence there's no project" (Staff, Metro South)*

> *"we're trying to create an enabling environment within our teams that has access to evidence that informs thinking and enables us to try and be as innovative as possible within the constraints we're working in." (Manager, Rural South)*

The contest between good intentions and time constraints in the use of evidence was well recognised:

> *"I think the culture supports the use of evidence, but people feel 'oh my god it's so hard and we don't have the time and we've got to get this contract out the door' " (Community Advisory Committee, Metro South)*

5.2.3.3 Personal and professional experience

The wide range of actors who contribute to strategic and planning decision-making at PHNs bring a wealth of experiences. The experience of actors is recognised as an influence in the policy/planning environment (Green and Bennett, 2007). Past experience can directly influence a policy/planning decision, and experiences, particularly professional background, can also shape the underlying values, norms, priorities and perspectives that people bring (Miller and Banaszak-Holl, 2005).

Many spoke of the diverse experience base of PHNs' skills-based boards, including medical, allied health, health policy, legal, business and academic, plus more. The clinical councils were reported to provide a mechanism to draw from "*on the ground*" (a phrase used by 5 interviewees) experience of local service providers, and the community advisory committees enabled input from local health service consumers and community members.

Several interviewees spoke of direct experience of international health systems as being beneficial to PHN planning. Many PHN staff reported previously working at MLs and Divisions of General Practice, and brought considerable PHCO experience with them, while also drawing on diverse professional experience. Some population health experience was evident, yet some were concerned that the predominance of clinical experience narrowed ideas of health:

> *“a lot of people who come to work in this environment come from previous experience as a clinician and that’s dealing with the person in front of you but not thinking necessarily in population terms… looking at populations as a whole and thinking about systems of care rather than episodes of care.” (Board, Remote)*

Some recognised the importance of balancing clinical and population health experience and ideas among board representatives, in terms of broadening the scope of PHN actions:

> *“bringing together a composition of clinical as well as community representatives and population health - I think that’s a good thing. I think it increases the scope of what we can do, it increases our ability to implement wider and broader strategies that are a bit more inclusive of things like the social determinants of health. Rather than just looking at primarily downstream and reductionist models of health I think that having that is a good thing.” (Staff, Metro South, 2016)*

While it was clear that actors bring a wide range of experiences, both directly and indirectly, to the PHN planning ‘environment’, the research did not specifically examine how much influence actors’ experience had on PHC planning decisions.

This analysis has explored the complex environment in which PHNs operate, of various contextual factors, influences, actors and ideas. Foremost are the strictly regulated scope, funding and time constraints imposed by the federal government, representing a dominant regulatory institutional force.

Understanding this complex environment is vital in order to appreciate the vast range of factors that compete with use of evidence and consideration of equity in planning decisions. The next section will delve further into the process by which planning decisions are made, within the dynamic environment in which PHNs operate.

5.3 Planning Process

The previous section developed an understanding of the broad external and closer internal context and influences on PHN planning, this section addresses the process by which PHNs go about planning and decision-making.

5.3.1 Describing planning processes

The interview discussions and document analysis distinguished various types of planning that occur in PHNs: strategic planning (generally by the board); broad activity planning (as captured in activity work plans); and program development that specifies the details of the programs/services to be commissioned. There are also plans for particular focus areas. As outlined in section 3.4.1, in addition to the core (flexible funding) plans, PHNs prepare specific plans for mental health, Aboriginal health and alcohol and other drugs, for which they have specific funds allocated by the federal government. Some PHNs also prepare specific plans for other focus areas such as older people's health. It was also recognised that population health planning and service planning are done in different ways by different people. The focus of this research is on the (equity-oriented) activity/program planning and development for the use of 'flexible funds', and the use of evidence to inform the proposed activity. These plans can include clinical services as well as other population health interventions.

PHN public planning documents made general mentions of needs assessment and planning processes but provided little detail. There was frequent discussion of stakeholder involvement, as well as clinical council and community advisory committee input. Co-design was often mentioned, and around 12 PHNs indicated that they conducted needs assessment and planning processes in collaboration or partnership with key stakeholders such as LHNs. PHNs went into some detail about the criteria they use for prioritising needs and/or assessing potential strategies, for example:

> *"The criteria considered were: relative size of the problem compared to [state]; absolute number of people affected; policy or other imperatives surrounding the issue; amenability to primary health care; the severity or impact of the health problem on quality of life; the number of stakeholders who identified this as a key problem; and the number of agencies which could partner to address the problem... Proposed strategies were then reviewed by the [steering] committee using criteria such as evidence, cost effectiveness and equity" (Needs Assessment)*

Table 5.3 outlines the focus and detail given by interviewees for the main elements of the planning process in the case study PHNs. It indicates that even for elements on which there was greater focus, little detail was provided by the interviewees. The limited detail was in relation to generally describing the process of planning, however there was sufficient detail provided to draw conclusions about evidence use in planning.

Table 5.3: Planning process elements in case study PHNs based on interview data

Commissioning framework phase	Process element*	Extent discussed	Level of detail provided
Strategic planning	**Needs assessment** – analysis	Very high	Moderate
	Needs assessment – triangulation	Very low	Very low
	Needs assessment – prioritisation	Moderate	Moderate
	Needs assessment – option development	Low	Low
	Annual planning	Moderate	Low
Procuring services	**Program (co-) design/ development**	Moderate	Low
	Approach to market, tendering	Low	Low

*These elements of the needs assessment, planning and commissioning process were drawn from the PHN Commissioning Cycle as well as other details provided in the PHN Needs Assessment Guide (Department of Health, 2015a)

Relatively few interview participants provided a clear description of what happens in planning processes, and which staff are involved, beyond mentioning the key stages of the commissioning cycle. There was very little detail given as to what happens within the plan/design/development 'section' of the cycle (outlined in Figure 4.1), despite specific probe questions about this aspect of the process. Although Metro North's 'co-design' workshop format provided a novel example of how stakeholders are actively involved in informing development of strategies on five priority issues.

The apparent lack of clarity and detail as to how the various elements of needs assessment and planning are conducted suggests that internal institutional norms are not yet firmly established in this regard, as PHNs adjust to their changed internal organisational context post-transition.

Interviewees from three of the PHNs discussed internal PHN process documentation (e.g. templates, procedures etc). A Metro South interviewee was more specific in mentioning documentation ('project briefs' and 'commissioning plans') within the planning approvals process, and indicated the use of such documents to convey the evidence underpinning a project:

> *"the most normal process is that the executive team would receive a project brief which is an outline of what the need is. So, it has the high level data and justification for why we are intending to do it, it has something about the outcomes and the amount of money that we are putting to it, so we would get that and sign that off and then the next thing we get is a commissioning activity plan, which is a much more comprehensive document which is really getting the detail in place ready to go to commissioning. And then there will be either an RFT [request for tender] or an RFQ [request for quote] which is the information that the procurements team need to set the motion going with e-procure and contracts and all the rest of it. So, all three of those documents come through the exec team." (Senior Executive, Metro South)*

A Rural South interviewee similarly described such a process including documentation, stakeholder consultation and 'sign off'. A couple of Remote PHN interviewees referred to their RACI matrix tool that broadly outlined which roles within the organisation were *responsible*, *accountable*, *consulted* and *informed* for key tasks or deliverables, but this was not particularly detailed.

Some commented on the non-linear nature of planning:

> *"it's [matrix tool] presented linearly and the process can actually be a bit back and forward with stuff like that...in reality I think the lines are more fuzzy" (Staff, Remote)*

When asked about the process by which planning takes place, and how decisions are made, interviewees frequently responded with descriptions of needs assessment data analysis and stakeholder engagement, and organisational structures and capacity. Often, quite direct probing was required to elicit a response about how plans or strategies are developed following the needs assessment. For example, the following outlines the initial and then subsequent probe questions that I asked in the interview with the senior executive from Rural North, after the initial question was met with a description of the needs assessment. The quote provides an example of a response that lacked a clear, succinct description of the planning process, and my need to probe further.

> *Q: "First of all I would like to understand the process of planning at [deidentified] PHN and some of the factors that influence planning. So can you start by telling me about the primary health care planning process in this PHN?*
>
> *A: Yep. Okay. So I will probably focus just on the PHN experience and perhaps our more recent experience. So what we undertook last year was we had a joint committee for planning and that involved representatives from the LHN. So that was really useful just in terms of data sharing opportunities that that brings to the planning process. So we started that process probably around May and that was supported by [deidentified] from [deidentified] Consulting who last year conducted most of the analysis and it was a refresh year. So really just looking through the data, doing the analysis and providing the health needs assessment document back to us. So that team met every week, fortnightly maybe, to discuss how we were progressing along, what the data needs were for the needs assessment and then we would receive relevant data sets. It also enabled the opportunity to validate some of the findings that were emerging. So, for example, if there was - I think there was a data finding around high length of bed stays for aged care patients. But it was probably identified that, having LHN on board, that there were some coding issues in that data. So that I think joined approach brings some really good opportunities to validate the findings. You go, "Well, what's sitting behind that and is that valid in terms of what we need to consider for a needs assessment?" So that was I guess a process that we went through on a regular basis until we got to the time where - then we needed to start pulling that together in I guess in a more consolidated document to then seek feedback from representatives or consult with community around their preliminary priority areas and findings, and then our clinical councils, community advisory committees and our [deidentified] committee as well, which sits above our clinical councils and CACs. So it has representatives from both. So we worked through that process to the point where, once that - I guess all of those things had happened and we had clearly identified priorities, we moved to a point where one thing that was a real, I guess, primary driver last year is wanting to get to the end point with having a document that was community or broadly accessible by both community and health professionals. So what you will see is that we have created a 10-page summary document which summarises the [needs assessment] and then we have a technical paper of about 40 pages and the data book that sits under that. So there are 10 pages an easy to read 'here's the priorities and here's what we are going to do'.*
>
> *Q: "I am interested in how planning decisions are made and you mentioned the [deidentified] committee sort of sitting above the community and clinical councils. What role does that play and how does that work? How are the decisions made?"*
>
> *A: Yeah. So this is from the needs assessment into informing planning for service delivery? That process? Yep. So the role of that planning committee is to really have oversight of all of our planning. So ultimately it is the [deidentified] Committee*

> *that makes the recommendation to the board to approve the activity work plans. So all of the activity that we are going to progress with - what it will also do is look at any new models of care that are developed, so outside our activity work plans there are often new models of care that emerge throughout the year that need to be built and other planning that is undertaken and all of that is signed off or endorsed by the [deidentified] Committee and that's where we usually - it's a good point of consultation because of the diverse representation of both community health and health professionals and health management around the table. It's a really good point to be saying, "Okay, here is what we are thinking, how do we progress with this?" And then gaining feedback so they are very key, as their name suggests, to the whole planning cycle. And in fact have overview through most of the commissioning cycle in terms of activity."*

The discussion went off on to other tangents that were interesting and relevant to other aspects of the research for a few minutes, and feeling that I still was not satisfied with the detail of information provided about the planning process I probed further:

> *Q: "I am interested in the bigger picture of how planning takes places across the year? And also the finer details of how decisions are made? And so can you tell me about planning decisions and the role of the executive in that and how that interacts with the [deidentified] committee?"*
>
> *A: Yep. So, in terms of our planning processes, if we look at I guess when the planning commences and I guess I will draw on our recent experiences. We have just been recently submitting activity work plans, and that is really a trigger point coming out of the needs assessment, developing first the AWPs is the first major piece of planning work that occurs. And then of course that progresses in various - there's a lot of other planning that then falls out of that, once those high-level activities that are set. So, if we start there, the involvement, usually the senior management team is key in really setting broadly from the needs assessment, what activity might look like. But then we involve our contract, or our, we call them our portfolio managers, our contract managers - because each of them has a responsibility for a designed portfolio. So, in the instance of the mental health plan, once the plan - sorry, I am going to take a step back. Once the plan is developed and then those activities are broadly endorsed, we move into I guess, how is that plan going to be operationalised? And, because a lot of the activity is continuing activity in some instances, continuing activity, bringing the people in who were close to that on the ground as well, to understand well, if we are going to change something in this way, what might be the impact? And this has been the first year that we have done that so that has been quite interesting. So historically that planning is really started at exec governance level. So there has been a high level of operational input into that planning process and I mean I think that has been quite useful in increasing understanding of planning. That flows onto budgets and a whole range of other things."*

Some were quite explicit about concerns that needs assessment attracts greater attention and effort than the planning it informs:

> *"And the fact that we do need analyses all the time in Medicare Locals and now in PHNs, but very little time is spent on acting on any of it. It's always gathering it." (Board, Metro South, 2016)*

Responses also would often focus on actors *who* were involved in planning or 'co-design', rather than *how* it is conducted, in particular from PHNs that had strong partnership with other organisations, such as Metro North and Metro South.

> *"So, for example, one of our priority areas is [deidentified], which has higher levels of social deprivation and inequality, compared with the rest of our catchment. We've focused the majority of our mental health and AOD spends in that area, and again, we've consulted with the sector, we've actually set up steering committees or collaboratives or reference groups, depending on what you want to call them for things like children and youth mental health, suicide prevention, alcohol and other drugs, and then also, we've had our ongoing collaborative based on a PIR, Partners in Recovery work, which deals in more severe and persistent. So they've helped decide, co-design the services that we want to commission and the services that we've then commissioned." (Manager, Metro North)*

5.3.2 Planning process rigour and development

Interviews conducted in 2016 indicated some early concerns about the rigour of the planning process:

> *"I do think we've got a long way to go in developing sophisticated population health planning, but that's the thing. We're still at an early stage … And possibly, the commissioning process… that does offer opportunity there for being much more sophisticated." (Board, Metro South, 2016)*

The 2018 interviews suggested there were still mixed views about the rigour and development of PHNs' planning processes. Some were confident in their PHNs' planning processes:

> *"I think we recognise that we do pretty well. Probably a lot through luck and previous experience more than formal processes but we're trying to get better at that." (Staff, Metro North)*

A relatively common perception was that PHNs had improved the rigour of the planning process and the development of internal frameworks and policies to support that since their establishment (and since MLs). Although there remained room for improvement in formalising processes:

> *"It's not as process driven as I think it should be, but probably it is a lot more than when we first started." (Manager, Metro South)*

Others felt that the planning process had not changed considerably in recent years.

Several interviewees felt that the use of evidence to inform program development was an aspect that could be improved, indicating that evidence would be used indirectly and sporadically for this purpose, but not systematically:

> *"Probably one thing we need to bring earlier into the cycle, is that best practice evidence base research…I think we probably do it intuitively and anecdotally but not formally. Certainly all of our teams, when we talk to them about their planning, they will come to us "I read this best practice article." or "I've seen this." and bring that to the table so I think it's there, it just how are we capturing and recording that*

> *for future use I suppose is probably where it falls down a little bit, so we definitely need to get better at that." (Staff, Metro North)*

The flow of information between the stages of the commissioning cycle, or 'translating' needs assessment findings into 'action' was identified as a particular concern by some interviewees:

> *"the part of the process where perhaps the staff are not really good at yet or that we're not really good at as an organisation is translating the data into action to saying, "Here's the gap, here's the opportunity, here's what we could do about it." … I think we need to be more transparent, more sophisticated, better at doing that." (Board, Metro South)*

The influence of regulatory forces were again evident, in that short timeframes for needs assessment and plan 'deliverables' to the Department of Health early in the establishment of PHNs meant they were not able to develop sound planning processes from the outset, but have done so more recently.

5.3.3 Balancing systematic and flexible approaches to planning

The majority of interviewees felt that the planning processes of their PHN were midway between disorganised and systematic. There was some variation, in that some felt the processes leaned more towards disorder, and others felt they were reasonably systematic, even within the same PHN. For example, with regard to Metro North, one interviewee felt the process was not highly systematic (and that Department of Health requirements and timing don't allow for that), one felt the PHN was in the middle but towards 'organic', one felt the balance was 80% systematic and only 20% organic, and another felt the process leant towards the systematic end of the spectrum. Metro south had an even split of two interviewees leaning towards systematic, and two towards organic. At Rural North one reported there was a systematic process, one that it had been organic and was becoming more systematic, and one reported that it was in the middle of the spectrum. Remote and Rural South had similar patterns of varied responses from different interviewees. Many Remote and Rural South interviewees felt that planning was becoming more systematic:

> *"there hasn't really been a lot of systematic approach to things, so it was actually very haphazard finding what you needed. And, we've done a lot of work, and are continuing to do a lot of work to fix those issues." (Manager, Rural North)*

It was felt that a highly systematic approach to planning was not appropriate for PHNs, and that there needed to be a balance. A common theme emerged regarding the need to allow for some flexibility and responsiveness in plans in order to respond to emerging, high risk issues or shifts in government policy direction, which further indicates the importance of external influences on PHN planning:

> *"things come up all the time" (Manager, Metro South)*

> *"When you plan you've got to have a certain amount of knowing the unknown … that something's going to hit the fan and when something happens it can very easily turn to shit especially if it becomes a hot potato or a political issue." (Community Advisory Committee, Remote)*

> *"I think in this field you have to be, especially in [region], flexible with your planning because much can change on a whim especially within the political environment." (Community Advisory Committee, Remote)*

The need for some flexibility in planning process is also relevant to unsolicited proposals from organisations seeking funding, which interviewees reported PHNs received. This had however declined more recently, as commissioning processes had developed, and proposers had been directed to these. Only one case study PHN reported having a formalised process for assessing such proposals, and in others they tended to be considered by executives for alignment with PHN strategies. While unsolicited proposals were seen to potentially create opportunities for connecting with alternative (non-government) funding sources, and help the PHN to understand the 'market' of service providers, there was a considerable workload involved in managing them, so they were not actively encouraged.

Discussions of planning processes were frequently qualified by statements indicating that the federal government's tight regulatory influence over PHNs' did not allow for much flexibility or scope in health planning, as has been discussed earlier in the chapter. Planning was reported to often be more about refining activities and strategies, as the priority issues don't tend to change much:

> *"as we've gone along, we are using our planning processes almost like a refining process. Because the data doesn't change from year to year so much." (Senior Executive, Metro North)*

This potentially reflects a certain degree of path dependency, in that planning decisions made in the past constrain choices, resulting in a state of inertia (Schreyögg and Sydow, 2010).

The misalignment between Department of Health deliverables and PHN planning elements was also criticised:

> *"activity plans were all due on the 30th of June, but the needs assessment update is not due until mid November. But I guess that's then ready to workshop for the next lot of activity work plans, but it kind of seems like we're doing it a little bit backward" (Staff, Remote)*

5.3.4 Making evidence-informed planning decisions – roles of key actors

Earlier in this chapter I outlined the broad range of actors in the PHN 'environment. This section explores various actors' involvement and engagement with evidence in the process of planning and decision-making.

Interviewees from clinical councils and community advisory committees tended to focus on their respective roles in the planning process, and they were often unaware of what activity planning processes involved beyond their input. Several interviewees from different PHNs indicated that decisions were largely made at executive (or lower) level, informed by council/committee advice to varying extents, and approved by the board.

> *“my feeling is that most of that [planning services/activities] happens at an executive level” (Board, Metro South)*

> *“We [community advisory committee] don’t see a lot of what actually occurs in the planning space other than this larger strategic plan and what we do with emerging issues.” (Community Advisory Committee, Remote)*

The role of clinical councils and community advisory committees was largely to advise on, or critique proposed activities (as well as review/validate the needs assessment, identify emerging issues and advise on appropriate stakeholder consultation). It did not appear that the role of clinical councils differed greatly from that of community advisory committees, which was consistent with the findings reported earlier (section 5.2.2.3) that medical actors did not have greater influence than others within PHN forums. It was clear that such councils served an advisory function rather than decision-making.

Board member interviewees also tended to have greater focus and awareness of strategic planning processes than activity or program planning.

> *“That level of detail doesn't go to the board, I don't think ... a summary of the clinical council and community council [comment on the needs assessment] will go to the board. So the board will have some vision of it ... The board will have vision of what's happening, but we won't have a detailed discussion about a COPD program in [subregion], for example. So that won't be a conversation that will happen at board level, but it's a conversation that will happen at the clinical council level and it will feed back into the organisation … The organisation might have already decided, mind you! Usually I suspect they have.” (Clinical Council/Board, Metro North)*

This quote also reflects a point made by several interviewees from different PHNs, that decisions had already been made before the council was consulted.

There were mentions in interviews and PHN planning documents of annual planning workshops, and often involved the board as well as clinical council and community advisory committee members. In some cases these were entirely joint, and in others, there were some joint sessions (e.g. where proposed plans and rationale would be presented by relevant staff), followed by separate discussions, and then reconvening to share key points. Interviewees did not provide specific detail of planning that occurred in such workshops, but indicated it was more at a higher strategic level, than addressing more specific planned activities. One PHN noted that after such a planning day, the executives would do the more detailed planning and budgeting, using a more structured process that included consideration of factors such as ‘value for money’, and ‘ease of implementation’. Others emphasised that ‘big’ decisions did not tend to be made in a single meeting – they had to be ‘worked up’ over a period of time and several meetings.

Despite often not having a direct decision-making role in activity planning, interviewees recounted that boards, clinical councils and community advisory committees directly engage with evidence through the needs assessment. Some council/committee members would draw on their experience to validate needs assessment findings:

> *“We’ll have one of their [PHN] staff come in and talk about the latest work in that particular area that needs assessment. It’ll be tested back with the clinical people who are in that committee, they’ll look at the data if there’s something in the data that doesn’t sound quite right.*
>
> *Q: Bit of a sanity check, kind of.*
>
> *A: Yeah, a bit of a sanity check. A lot of them are clinicians working in the field so they can recognise something that just doesn’t gel … Now, it may be that the clinician hasn’t got his or her facts right, but it also may mean there’s a problem with the data. So there is that kind of process. So we do engage, as advisory councils we do engage with the data, and we are encouraged to do so, ‘does this all make sense to you’.” (Community Advisory Committee, Rural South)*

While there were some examples of boards being informed of service/program uptake data, there were no examples of boards or councils/committees being informed of evaluation findings, however it was frequently acknowledged at the time of interview that evaluation cycles had not yet been completed. There were examples of staff providing written and oral reports to boards to inform them about various programs within the PHN, and also examples of board and council/committee members being provided with various (external) reports as background reading. However, there were indications that while such ‘evidence’ is provided, it was not necessarily read.

> *“We do see plenty of papers and reports. How much actually gets read is another question.” (Community Advisory Committee, Remote)*

It was also reported that evidence tends to serve as background information rather than being actively discussed.

> *“[use of evidence] is ad hoc, reliant on the people at the table, which we probably need to get better at, but it’s generally as that background evidence to inform decisions.” (Staff, Metro North)*

Some interviewees commented that some actors’ other professions/roles expose them to evidence, and they bring this to the table as part of their professional expertise.

Staff involved in program development or ‘working up’ program detail were more likely to have direct engagement with evidence, overseen by executives who authorise plans.

The role of boards in managing risk was emphasised. There were mentions of board subcommittees for commissioning, finance, and clinical governance, but only one of the five PHNs had a subcommittee for planning, which suggests that planning is generally considered to be of lesser organisational risk. One PHN did have a planning subcommittee that considered the risks of proposed activities.

This analysis indicates that the influence of clinical council, community advisory committee and board actors is relatively peripheral with regard to program and service planning decisions, instead contributing to higher level organisational decisions. However, their input helps to inform the more specific activity level of decision-making, where PHN executives and managers hold considerable agency (albeit within the federal government's constraints) and have greater cause (than council/committee actors) to directly engage with evidence.

5.3.5 Planning environment findings summary

PHNs perform various functions in a complex environment, with many actors, influences, ideas and institutional forces at play. Principal among these is the tight regulatory constraints imposed by the federal government, in relation to scope, resources and time. Although PHNs interact with many actors, few of these have strong direct influence in planning decisions. Various contextual factors have important implications for planning: the broader Australian health system and its historical and political underpinnings create the policy settings within which PHNs operate; the largely disruptive transition from ML to PHN made for a difficult start; the nature of the local service provider sector influences local needs and planning options; local interests can drive political pressure on PHN decisions; and the local geography and social context are key influences and considerations in planning locally appropriate strategies. The culture and values within PHNs broadly favour evidence-informed decision-making. The variety of actors employed in PHNs and involved in their governance and advisory structures bring diverse experience and ideas which is both directly and indirectly of some influence in developing PHC strategies. Interviewees were generally unable to provide detailed accounts of planning processes within PHNs, suggesting a need for a certain degree of flexibility, but also frequently recognised that planning processes may require further development and rigour.

The next chapter will explore PHNs' use of evidence to inform planning within this context.

CHAPTER 6 FINDINGS: EVIDENCE USE

This chapter examines PHNs' use of evidence to inform planning, examined through analysis of PHN public planning documents and the interview data. Following an exploration of the differing conceptions, ideas and discussions *about* evidence from interviews and documents, I examine the evidence *evident* in documents, in terms of volumes, purposes, types (using several typologies) and sources of evidence.

6.1 Conceptions, ideas and intentions about evidence

It is frequently acknowledged in the literature that conceptions and interpretations of what constitutes 'evidence' in health policy, planning and practice can vary, and have an important influence on the use (or not) of evidence (Parkhurst and Abeysinghe, 2016). This research sought to examine PHN stakeholders' perceptions of 'evidence', and the following section outlines the various conceptions and inclinations that were identified in interviews.

Conceptions of evidence were generally broad, and many interviewees talked about a range of evidence, distinguishing between different sources (e.g. formal sources such as journals and national data sets, or informal sources such as local consultation feedback or experience) or types (quantitative/qualitative). For example:

> *"So we gather evidence from things like doing literature reviews from publications, grey literature, that tries to give us some of those more formal research approaches that we could use. We gather information from the work that we've undertaken ourselves in terms of lessons learned… Evidence for me is also stakeholder perspectives as well, so it's not just published articles… our own lessons learned in our own local context, which give us an understanding of where we might be at in terms of next steps... And then also bringing that local context and understanding of how we might best apply the evidence we've learned, and also readiness, I think, for new models, or new innovations, whatever they are. So that, for me, they would be the three, and the administrative data, and the numbers." (Manager, Rural South)*

While many spoke of a diverse range of evidence, some offered a simpler dichotomy of quantitative and qualitative. Some were quite explicit about having a "*very broad*" (Senior Executive, Rural North) conception of evidence and the need to consider the quality of evidence:

> *"You can run surveys and get poor quality data, so it's making decisions on the basis of good quality data." (Community Advisory Committee, Metro North)*

Some interviewees were surprised at being asked how they define evidence: "*OK, wow*" (Manager, Rural North) or "*Well, that's interesting"* (Senior Executive, Rural North), which indicated that it wasn't something that they had previously thought about. A couple of interviewees indicated a perception that they were not qualified, or not the best person to answer:

> *“I'm not an academic, so I'm not the right person” (Clinical Council, Metro North)*
>
> *“I think the planning team will give you an answer more broadly” (Manager, Metro North)*

This suggests that they were not confident to provide a ‘definition’ of evidence, or even their own interpretation, and possibly that ‘evidence’ is the domain of some ‘qualified’ people, but not others.

6.1.1 Emphasis on quantitative evidence over qualitative

When asked to define their conception of evidence, interviewees frequently emphasised quantitative types of evidence such as demographic, epidemiological, service utilisation, program outcomes/performance or clinical data. However, some limitations with statistics and quantitative analysis in terms of the trustworthiness, and availability of statistical evidence were acknowledged:

> *“evidence is about performance a lot of the time ... you can have all the numbers in the world but we all know how well statistics can be manipulated. They can tell you any story regardless.” (Community Advisory Committee, Remote)*
>
> *“I do like numbers but in the (region) context we often can’t get numbers at a small area level” (Staff, Remote)*

To a lesser extent, qualitative evidence drawn from stakeholder perspectives was identified as evidence however there was some variation in opinions towards qualitative evidence. While some interviewees placed high value on qualitative evidence, it was often framed as secondary or supplementary to quantitative evidence:

> *“So there’s that more qualitative aspect of receiving information and how we consider that. I mean, equally I would term that as evidence and I think it is very important evidence in fact, because it is often what is at times validating your findings” (Senior Executive, Rural North)*
>
> *“where you don’t have a lot of that statistical evidence you are working with anecdotal evidence, and quite often that’s the best that you’ve got, and I don’t dismiss it because it’s important to go as a starting point.” (Community Advisory Committee, Rural South)*

Qualitative evidence, particularly that which had not been collected or analysed with appropriate rigour was described as “*soft*”, “*intangible*” (Community Advisory Committee, Remote) or “*weaker*” (Manager, Rural North). At the other end of the spectrum, quantitative evidence from trusted sources such as peer reviewed journals was commonly spoken of in favourable terms such as “*pure*”, “*hard*” and “*good strong evidence*”, although acknowledged as *“not necessarily the best form of evidence”* (Staff, Rural South).

Some interviewees expressed concerns that there was an over-reliance on qualitative evidence due to lack of (more reliable) quantitative, particularly in relation to health outcomes, but also for identifying ‘gaps’.

While it was felt that PHNs have improved on divisions and MLs in terms of accessing quality data rather than ‘anecdotal evidence’, several interviewees made points about the importance of distinguishing ‘needs’ from ‘wants’, and ‘opinions’ from ‘evidence’ in reference to evidence drawn from consultation:

> *“just because they have an opinion it doesn’t mean it’s evidence.” (Staff, Rural South)*

6.1.2 Conceptions of the purpose of evidence

Conceptions of evidence were frequently about evidence for interventions and to a slightly lesser extent about evidence to identify needs. Discussion of intervention evidence was commonly framed in terms of clinical trials and best practice (i.e. evidence-based medicine), rather than evidence to inform population based PHC approaches. One interviewee did make the distinction between evidence for meso-level system interventions as well as micro-level clinical interventions.

> *“PHNs are really interesting organisations in this sense because to an extent you might consider that the evidence base we should be looking to is evidence underpinning system reform as one driver because our principal body is to change the way in which the system works for the better, that’s a principal focus. To achieve that however we buy clinical services in many respects, so we’ve got to be looking for an evidence base that actually underpins service planning and design but also the right clinical interventions for particular types of populations and particular environments, so we’ve got to look to a clinical evidence base as well.” (Senior Executive, Rural South)*

Numerous interviewees cited data and information collected by PHNs as part of their conceptions of evidence, including experiential knowledge and evaluation evidence that inform interventions.

> *“I sort of see evidence as being something that you utilise but you [also] collect along the way” (Staff, Rural South)*

The value of locally collected, highly appropriate intervention evidence was identified:

> *“our own lessons learned in our own local context, which give us an understanding of where we might be at in terms of next steps” (Manager, Rural South)*

The importance and power of accessing and using evidence in planning and commissioning was particularly well articulated by one interviewee:

> *“In all of my years in health care, I’ve never seen any change to the way things are done, unless it’s purchased in a different way. So if you’re purchasing with much more power, with much more data, with much more opportunity to actually evaluate what the effectiveness of your purchasing is, then the chances are that you will start to build up a database that says, “This works, this doesn’t.” ” (Board, Metro South, 2016)*

6.1.3 Professional background shapes evidence conceptions

There was a clear tendency for interviewees to focus on the evidence that aligned with their professional background, indicating the cultural-cognitive institutional forces that actors bring to policy-making and planning. In some cases, this was implicit, for example clinicians focussing on clinical ‘best practice’ evidence. In other cases, interviewees were quite explicit in acknowledging their background and how that influenced their conception of and preference for evidence, including clinicians, as well as academics, epidemiologists and people from a community or stakeholder engagement background:

> *“I have a background of epidemiology and biostats, so I have a fairly rigid idea of what I consider to be evidence, and good evidence. In a PHN world there is, if I looked at the proportions of what is really good strong evidence, compared to the weaker levels of evidence, it's certainly the pendulum would sway towards the weaker levels of evidence being available, and being used.” (Manager, Rural North)*

> *“As a clinician, we have evidence-based practice so that’s coming from well conducted trials and evidence” (Board, Remote)*

The value of having a diverse team who can understand and use a range of evidence was recognised:

> *“I certainly come at the qualitative evidence very strong given my engagement background, so I lean towards that side much stronger naturally. I do have a very strong population health data officer who brings me back to the other side as well. I’m pretty proud of the fact that I think we use both qualitative and quantitative data very well.” (Staff, Metro North)*

6.1.4 Evidence-informed planning statements and intentions

In addition to interview discussion that identified favourably broad definitions and attitudes about evidence and the historical basis for those, positive statements about conduct of, and intentions for evidence-informed planning were indicated in PHN public documents. The term ‘evidence-based’ was frequently used although this was often in the context of supporting or commissioning evidence-based clinical practice. There was also plenty of discourse around evidence-based planning (although very little use of the more contemporary term ‘evidence-informed’).

There were frequent statements that activities or interventions were evidence based:

> *“[Program] is a national evidence based program which consists of eight weekly group exercise sessions as well as healthy lifestyle education sessions, offering people an environment to manage their weight and to delay the onset or progression of chronic diseases such as type 2 diabetes and heart disease. Strong evidence shows that program participants achieve positive changes in many health outcomes including reduction of weight and waistline, increase in physical activity level and improvement in healthy eating.” (Annual Report)*

However, there were very few examples of specific, genuine discussion of evidence that had informed the PHN’s work. One positive but rare example that provided a description of the evidence findings, and its source (so that it could be validated or further examined) was:

> *“A review conducted by the Sax Institute commissioned by the NSW Agency for Clinical Effectiveness in July 2015 assessed the evidence for the use of risk stratification approaches in improving patient outcomes. It found that the use of risk stratification tools in combination with care management planning can improve patient outcomes, including reductions in hospital readmissions, and more appropriate health service use.” (Needs Assessment)*

There was frequent discussion within PHN documents of intentions to use evidence to inform planning. Often it was quite general with broad statements in PHNs’ strategic objectives indicating a future intention.

> *“We are committed to planning and designing services that are evidence based, and culturally appropriate” (Annual Report)*

In needs assessments there were many points at which the intention to conduct more detailed analysis or a ‘deep dive’ into an issue were identified:

> *“Currently no comprehensive understanding of how patients transition between different elements of the AOD [alcohol and other drug] sector is present. A key need arising from analysis indicates that extensive engagement is required with the whole AOD sector to determine the makeup of the service landscape.” (Needs Assessment)*

There were some examples that recognised the complexity and sensitivity of identified needs, and the requirement for a considered exploration of the issues and options, in order to develop appropriate strategies:

> *“It has been widely acknowledged by stakeholders that suicide prevention programs run by Aboriginal people are absent from the region. Further investigation is necessary to establish the range and type of services needed ... Stakeholders have indicated that skills and training for suicide prevention are generally inadequate and further investigation is required on models of care, skills required and different options for capacity building through training support.” (Needs Assessment)*

There were also examples of intentions to further investigate options for addressing identified needs and general intentions to improve evidence-informed planning:

> *“Collaboration with local academic institutions would greatly enhance the PHN’s capacity to conduct a more thorough and rigorous needs assessment.” (Needs Assessment)*

Activity work plans often included intentions to use evidence to inform planning. In some cases, there were broad intentions outlined instead of specifying an activity as such, for example:

> *“In response to ongoing needs analysis and regional health planning it is*

> *anticipated that we will initiate a number of future projects yet visualised." (Activity Work Plan)*

Others outlined more specific intentions such as implementing a trial or pilot project:

> *"The activity will investigate whether structured pharmacist and GP care reduces unplanned hospital readmissions in patients with complex co-morbid conditions." (Activity Work Plan)*

Intentions to undertake consultation, collaboration and co-design were also frequently outlined in activity work plans. Intentions to co-design with stakeholders were considerably more prominent than intentions to identify or generate evaluation evidence for a strategy.

Having explored attitudes, intentions and ideas about evidence, the next section will focus on an empirical examination of evidence presented in PHN planning documents.

6.2 Presentation of evidence in PHN planning documents

PHN public planning documents (needs assessments, annual reports and activity work plans) were analysed to examine the extent to which PHNs use of different types of evidence from different sources. Despite using a template mandated by the Department of Health, there was considerable variation between different PHN's needs assessment documents with regard to the length of the document (from 15 to 175 pages), format, and the content quality and detail. Some were well organised, with information clearly presented, with key points articulated, high quality analysis of data and presented succinctly, and with consistent referencing. Others were poorly structured, presented poor quality analysis of aggregated statistics for the whole region rather than granular data to identify 'hotspots' within their region, or little or no referencing. This variation suggests that PHNs had inadequate guidance from the department on the expectations for completing the needs assessment template, which was supported by interview data:

> *"[As] Medicare Locals we had a lot more comprehensive method of doing the needs assessment. We had to do a fairly large-scale stakeholder engagement and then the quantitative analysis as well and then put it all together, triangulate and make sense of it. Whereas the PHN version hasn't had that ... this time it was just a template with some fields in it and filling the gaps." (Staff, Metro South)*

There was less variation between PHNs in the preparation of activity work plans, which were completed on a more detailed mandatory template.

While some activity work plans had well defined intentions for implementing activities, others lacked detail. Some were able to outline clear plans for further analysis and activity planning, but others were somewhat vague:

> *"Based on engagement with priority local communities to identify priorities, work to*

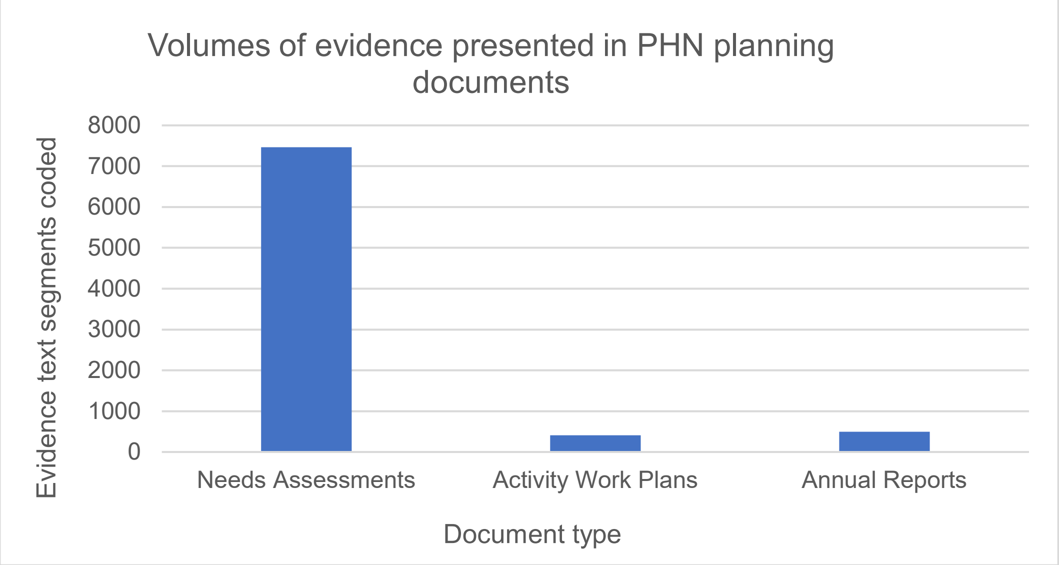
> *support the implementation of and/or commission the delivery of identified activities to meet identified priority needs" (Rural South, Activity Work Plan)*

Such wide variation between PHNs' needs assessments and activity work plans, which is detailed further in the coming sections, was unexpected, given that both of these documents are prepared according to a template provided by the Department of Health. The variation may reflect uncertainty from PHNs as to the scope and expectations for these documents. The 2016-17 activity work plans were the first to be prepared by PHNs, and they also had limited experience of preparing needs assessments in the PHN context. The variation may also indicate variation between PHNs in their capacity to select, analyse and distil evidence for the purpose of the document and its respective aspect of planning. The variation between annual reports is not unexpected, given that there is no clear template for these documents, and different PHNs adopt a different flavour, with some using the document to showcase their activities, achievements and connection with their communities, and others who provide primarily the basic financial and corporate information required of any business entity.

6.3 How much evidence is presented?

Analysis of PHN planning documents showed that overall, very high volumes of evidence were presented or referred to in needs assessments, compared with very low volumes of evidence presented or referenced in activity work plans or annual reports, as illustrated in Figure 6.1.

Figure 6.1: Volumes of evidence presented in PHN planning documents



To a certain extent this is to be expected given the different purposes and structures of these document types, but also possibly indicates the extent of use or non-use of evidence at the various stages of the planning process. This analysis indicates that much evidence is used in the needs assessment stage of the planning process, and relatively little in the analysis and development of interventions for addressing identified needs.

There was considerable variation between PHNs in the volumes of evidence presented in all types of planning documents, which is evident in the charts presented in the following section. There was some variation between coders in the approach to coding data (e.g. in blocks of text rather than individual ‘pieces’ of evidence) and interpretation of nodes, which may compromise the reliability of findings for a small number of PHNs. Nonetheless, considerable variation was also demonstrated between the PHNs coded by the same coder.

6.4 Evidence for what purpose?

Evidence is used and informs policy and planning decisions in a variety of ways. As part of understanding evidence use by PHNs, this research sought to identify the purposes for which PHNs use and present evidence in planning.

It is important to note that the different PHN public documents are prepared for different purposes, so it is to be expected that the patterns of evidence use will differ between document types. The needs assessment is undertaken to identify and prioritise opportunities for activity (Department of Health, 2015a), and one would expect the majority of evidence presented within, to be for the purpose of identifying and/or understanding needs, and the breakdown of those needs to population subgroups (to inform targeting of interventions). The activity work plan is for PHNs to articulate what they propose to do, and how they propose to do it, based on the opportunities, priorities and options identified in the needs assessment (Department of Health, 2016a). Evidence presented within activity work plans could be for various purposes, primarily for informing the design or development of the intervention, and more specifically demonstrating the effectiveness, economic value and acceptability/appropriateness of the intervention. Evidence to support how the intervention is to be implemented may also be present. Evidence of the needs that the planned intervention is intended to address may also be presented. The annual report, at its most basic level, fulfills the requirement of the Corporations Act 2001 to provide an annual financial report (Justice Connect, 2019). It can also serve various other purposes in providing information to stakeholders, at the discretion of the PHN: overview of the organisation’s structure and staffing, overview of the region’s demographic and health status, updates on program and service progress and uptake, updates on stakeholder engagement activities, plus more. One might expect to see some evidence for a variety of purposes, depending on the content of the report. That could include evidence of the identified needs, as well as intervention evidence (potentially from evaluations) that has informed or been learned from the interventions/ activities implemented.

The following typology of evidence purposes was developed based on purposes identified in the literature, in particular the SUPPORT tools for evidence-informed health policy-making (Lavis et al., 2009a). The development of the typology and coding framework is discussed in section 3.5.1. Table 6.1 describes the evidence purpose typology and provides examples of text, mainly from

PHN documents.

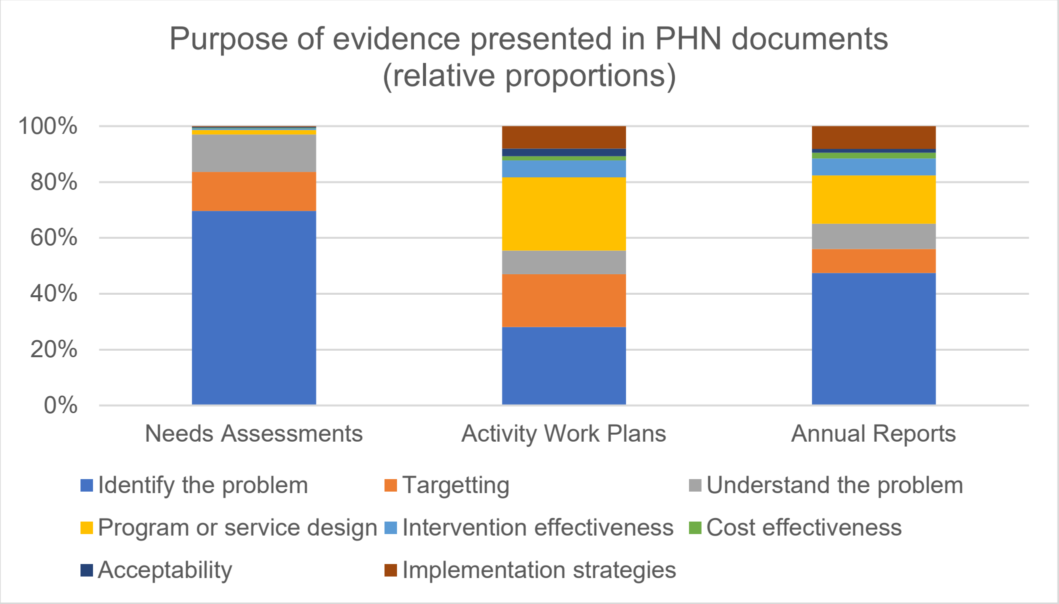
Table 6.1: Typology of evidence purposes, with examples

Evidence purpose	Definition of purpose	Example text
Identify the problem	Evidence that identifies the existence of a population health need or problem	*"Updated workforce data indicates that the health workforce in [subregion] is smaller than the rest of the region. Medical professionals working in [subregion], particularly GPs, report working longer hours compared to medical professionals working in other areas." (Needs Assessment)*
Targeting	Provides more detail on varying needs in specific sub-populations (geographic or cultural basis)	*"One in five adults in [subregion] self-assess their health as 'fair' or 'poor' compared to one in seven people across the PHN region." (Needs Assessment)* *"The CALD [culturally and linguistically diverse] community are disproportionately affected by Hepatitis B." (Needs Assessment)*
Understand the problem	Provides some explanation of why a need or problem exists or is important	*"An increasing body of evidence indicates that the first 1,000 days from the start of a woman's pregnancy to her child's second birthday are critical in the social, emotional and physical development of a child (reference provided)" (Needs Assessment)*
Program or service design	Non-specific input into the selection or development of an intervention. E.g. general mention of stakeholder input to select or design a strategy. E.g. drawing on an existing program developed elsewhere (which may or may not itself be evidence-based)	*"[PHN] in collaboration with [LHN] and [state] eHealth have developed functional specifications for a shared care planning tool." (Annual Report)* *"Simple Telehealth is a United Kingdom-based innovation brought to Australia by [deidentified] PHN." (Annual Report)*
Intervention effectiveness	Evidence to demonstrate the effectiveness (or lack thereof) of an intervention	*"Effective antimicrobial stewardship programs in Australian hospitals have decreased antibiotic use by between 22% and 36%, improved patient care, improved appropriateness of antimicrobial use and reduced hospital resistance rates, as well as reduced morbidity and mortality." (no reference provided) (Needs Assessment)*
Cost effectiveness	Evidence to demonstrate the economic strengths or weaknesses of an intervention	*"A review of the current service model has found that whilst it is well utilised and clearly fills a need, the model is not as cost effective as other potential models such as nurse outreach." (Activity Work Plan)*

Evidence purpose	Definition of purpose	Example text
Acceptability	Evidence to demonstrate that a proposed intervention is acceptable or appropriate to stakeholders (or not)	*"Consultation with the [deidentified] hospital to map existing systems and services and gain both strategic and operational agreement to participate in the implementation of the COPD collaborative." (Activity Work Plan)*
Implementation strategies	Evidence of how to best implement or 'roll out' a planned intervention	*"[clinical council has] advised on the development of innovative services and implementation of new models of care." (Annual Report)*
Other evidence purpose	Evidence to inform PHN operations (rather than planned interventions), such as commissioning, stakeholder engagement approaches or evaluation methods	*"one of the areas that we're working on now too is a monitoring and evaluation framework, and that's using the quadruple aim" (Manager, Remote)*

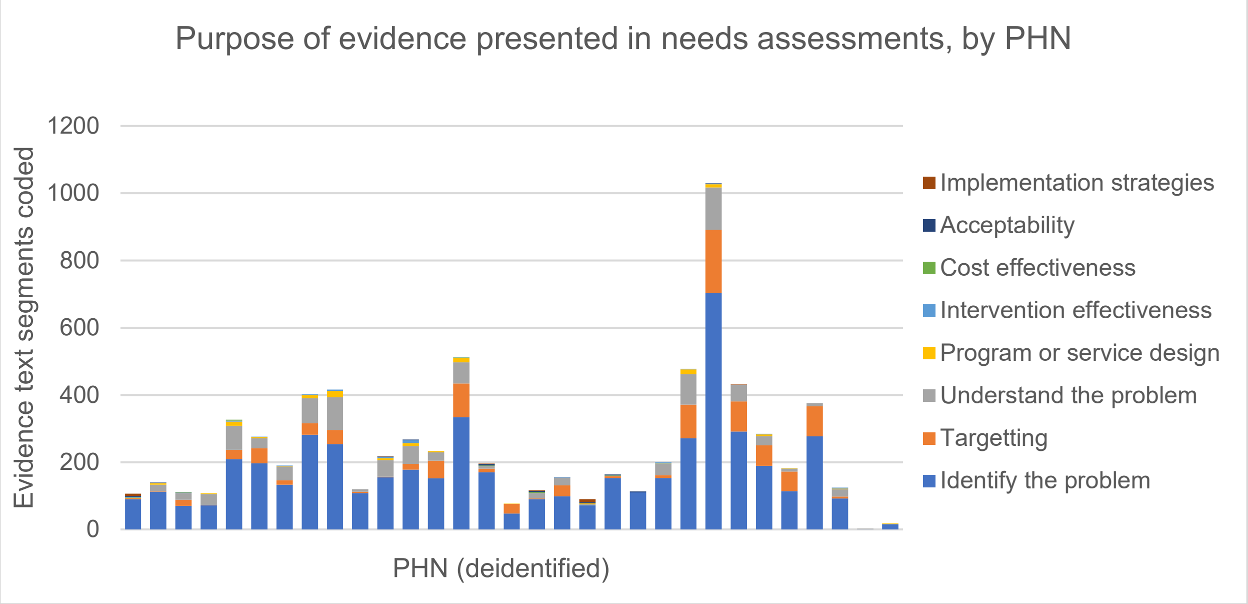
Figure 6.2 shows the relative proportions of evidence purposes presented in PHN documents, which are discussed in further detail below.

Figure 6.2: Purpose of evidence presented in PHN documents (relative proportions)



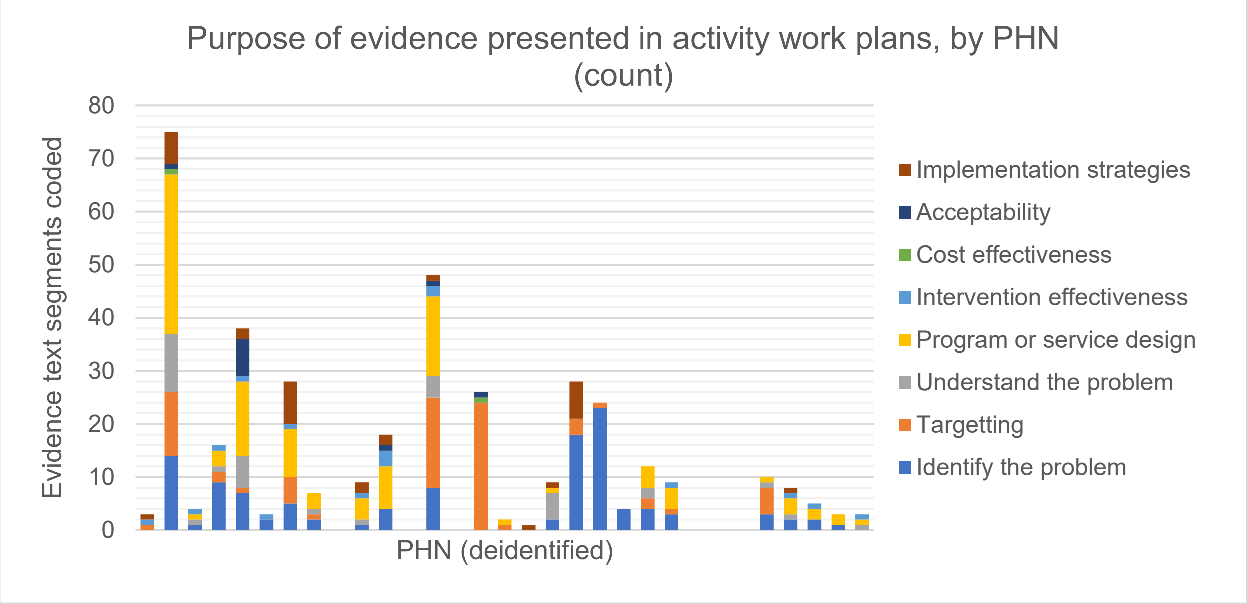
In needs assessment documents, the most prominent purpose of the evidence presented was to 'identify the problem', which was consistent across all PHNs, as illustrated in Figure 6.3 below. This finding is to be expected, given that the purpose of a needs assessment document is to identify and examine health needs in the region. The next most prominent purpose was to 'understand the problem' which is an element of assessing need. 'Targeting' is another aspect of needs assessment that was somewhat frequent within documents, as illustrated in Figure 6.2 and Figure 6.3. Identifying variation in health and social factors within a PHN is an important enabler of planning public health actions to address inequities (Freeman et al., 2018).

Figure 6.3: Purpose of evidence presented in needs assessments, by PHN



In activity work plans there was no consistent pattern in terms of the purpose of evidence presented, as shown in Figure 6.4 below. ‘Identifying the problem’ was still highly prominent, however ‘program or service design’ occurred with similar frequency. There was very little specific evidence presented that supported or informed design elements of activities. ‘Targeting’ and ‘understanding the problem’ were also reasonably prominent purposes of evidence presented, and there were some general indications of using stakeholder consultation evidence to inform implementation strategies. Activity work plans were notably lacking in evidence of the effectiveness or cost-effectiveness of planned interventions.

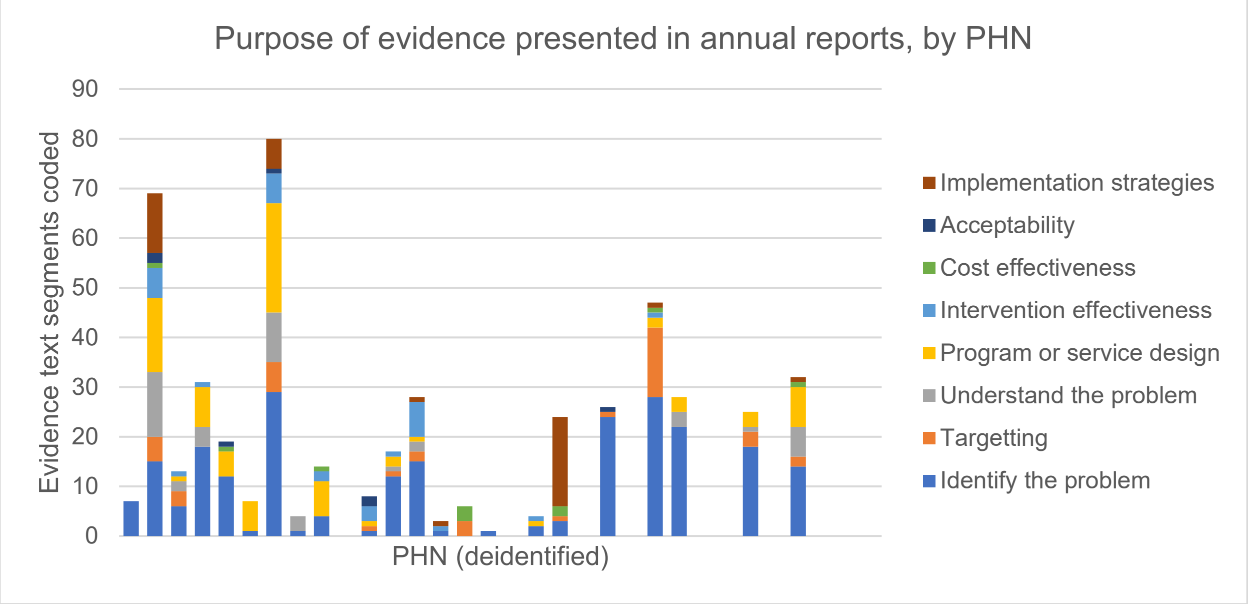
Figure 6.4: Purpose of evidence presented in activity work plans, by PHN (count)



Annual reports also displayed wide variation between PHNs in the purposes of evidence presented, as illustrated in Figure 6.5 below. Approximately one third of annual reports included very little or no evidence for any purposes, and others included a mix of evidence purposes.

Overall, evidence presented in annual reports was largely for the purpose of ‘identifying the problem’ and frequently took the form of ‘infographics’ illustrating demographic and epidemiological data about the region. Some Annual Reports included a moderate amount of evidence for ‘program or service design’.

Figure 6.5: Purpose of evidence presented in annual reports, by PHN



Annual reports also contained very little indication of evidence for ‘intervention effectiveness’ or ‘cost effectiveness’, which are more specific aspects of program design. Although there were several examples of a program being widely adopted following a successful pilot. There was also very little evidence for ‘acceptability’, although the acceptability and appropriateness of a program or service was potentially part of stakeholder engagement, that was just not explicitly outlined as such in these documents. Some annual reports contained evidence used to inform ‘implementation strategies’, which tended to be drawn from stakeholder advice - some general, some as specific program advisory groups.

The different purposes of evidence were also discussed in interviews. The relationship between evidence purpose and ‘questions’ was well articulated by one interviewee:

> *“Evidence to me requires a question, what’s something evidencing? You can have a bit of information, it’s going to be telling you something, but unless you know what to ask it, you’re not going to know what it’s telling you. And I think too in many respects we’re not yet in a position where we are fully able to articulate what it is that we want to know yet.” (Senior Executive, Rural South)*

In interviews, discussions of evidence tended to focus on needs assessment evidence for the purpose of identifying problems.

> *“Well, I would say that there's probably a greater emphasis on the needs assessment research evidence.” (Board, Rural North)*

When used for the purpose of identifying population health needs or problems, evidence use tended to be described as more direct and tangible, with concrete examples more frequently given, for example estimates of disease prevalence as a clear, direct indication of a health need in a region.

> *"we've got the numerical evidence to say we have terrible rates of this and terrible rates of that, and at a large regional level they might be worse in one than another. And we know where the services are or aren't to a certain extent." (Staff, Remote)*

There was also relatively frequent talk of evidence informing the design and development of programs, and evidence of the effectiveness of interventions, often in quite broad terms of 'best practice':

> *I think that's one of the things that we've got better at, that we've invested in it and are taking a much more deliberate approach to look at international best practice. So rather than just saying, "We have a pot of money, what should we do?" It's, "Well, we have a pot of money. What do we think will work? And is there evidence to support that?" (Board, Metro North)*

In interview discussions, and consistent with findings from document analysis, there was scant mention of evidence of the cost-effectiveness or stakeholder acceptability of interventions, or to inform the approach to implementing the planned intervention. There was also very little discussion of the more specific aspects of needs assessment, in targeting interventions to specific sub-populations, or 'deeper dives' to build greater understanding of the contributing factors underlying an identified population health need. There were some indications of using evidence for other purposes such as informing the federal government (of what, was not specified), informing the operations of the PHN itself (rather than the activity the PHN is planning), for example how to better engage with certain stakeholders, or how to commission or evaluate services.

This analysis of the purpose of evidence use has indicated that there is considerably greater emphasis on and use of evidence for identifying needs than there is to inform the development of effective and efficient interventions. The next section will examine the types of evidence used in planning.

6.5 What types of evidence?

Evidence for identifying population health needs can be further categorised as demographic, epidemiological, service capacity or service utilisation (Australian Government Department of Health and Ageing, 2013, Eagar et al., 2001). Table 6.2 provides a summary of the indicators and evidence for each of the types, with approximate indications of how common these were.

Table 6.2: Examples of evidence types presented in PHN public documents

Evidence type	Examples (in descending order of approximate frequency)
Epidemiological	Disease prevalence Premature mortality (mostly chronic disease, mental health and cancers, some communicable disease indicators) Survey data of self-assessed health status Life expectancy Chronic disease risk factors (overweight, smoking, physical inactivity) Low birth weight Smoking during pregnancy Childhood vulnerability Illicit drug use data Multimorbidity Disability prevalence Crime, domestic violence Evidence specific to particular population groups (e.g. Aboriginal and Torres Strait Islander people, people from CALD communities or people identifying as LGBTIQ)
Service capacity	Crude 'data' on service locations Health professional/ population ratios Stakeholders' knowledge of service 'gaps' 'Districts of Workforce Shortage' as defined by the Department of Health Acute hospital beds Aged care places Drug and alcohol treatment services (residential and non-residential) Lack of referral pathways Perceptions of cultural safety or appropriateness for Aboriginal and Torres Strait Islander people General practices' participation in the Practice Incentives Program (PIP) (surrogate indicators of service capacity) Perceptions of appropriateness for LGBTIQ people Waiting list data
Service utilisation	Hospitalisations e.g. emergency department presentations (including data specific to Aboriginal and Torres Strait Islander people), potentially preventable admissions (further broken down to show the main conditions/reasons for admission) Immunisation rates (childhood) (including data specific to Aboriginal and Torres Strait Islander people) Cancer screening rates (including data specific to Aboriginal and Torres Strait Islander people) GP consultations indicated by MBS claims data (chronic disease management, mental health, after hours items) Allied mental health services (PHN funded, or from earlier Mental Health Nurse Incentive Program) Utilisation of 'Headspace' youth mental health services Drug and alcohol treatment episodes (including data specific to Aboriginal and Torres Strait Islander people) Medication usage, indicated by Pharmaceutical Benefits Scheme claims

Evidence type	Examples (in descending order of approximate frequency)
	data Rate of bed days for hospitalisations by condition Data from the BEACH[4] study (conditions managed in GP encounters, treatment approaches employed) Use of ante-natal service in first pregnancy trimester (including data specific to Aboriginal and Torres Strait Islander people) Consumer surveys indicating service access barriers (e.g. cost, transport)
Demographic	population age structure (e.g. % of people aged 65+) % Aboriginal and Torres Strait Islander population % people born in non-English speaking countries (migrants, CALD) SEIFA (Socio-economic indicators for areas) Refugee numbers Median incomes Unemployment Educational attainment Population growth and projected changes to population age structure Homelessness Geographical remoteness Birth rates Indicators specific to Aboriginal and Torres Strait Islander populations (age profile, educational attainment, unemployment rates, incomes) Youth education enrolment or unemployment Housing stress LGBTIQ population data Social cohesion or social support networks

Demographic indicators are of particular importance in identifying health inequities among groups of people who experience disadvantage, as are epidemiological and service utilisation data that are specific to those groups. Demographic data are also important for examining the social determinants of health and health equity, such as socioeconomic status and poverty, housing and homelessness, educational attainment, employment, and social cohesion. The use of data and evidence to inform equity-oriented planning will be discussed further in Chapter 8.

Based on this typology, overall the most frequently presented type of evidence in needs assessments was epidemiological, followed by service utilisation, then service capacity, with relatively little demographic evidence presented, as shown in Figure 6.6 and Figure 6.7 (separate charts are used because the scale differs greatly). This indicates a predominance of medical and clinical ideas of health.

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[4] National study of general practitioner clinical activity based on the content of GP-patient encounters. https://www.sydney.edu.au/medicine-health/our-research/research-centres/bettering-the-evaluation-and-care-of-health.html

Figure 6.6: Types of evidence presented in needs assessments

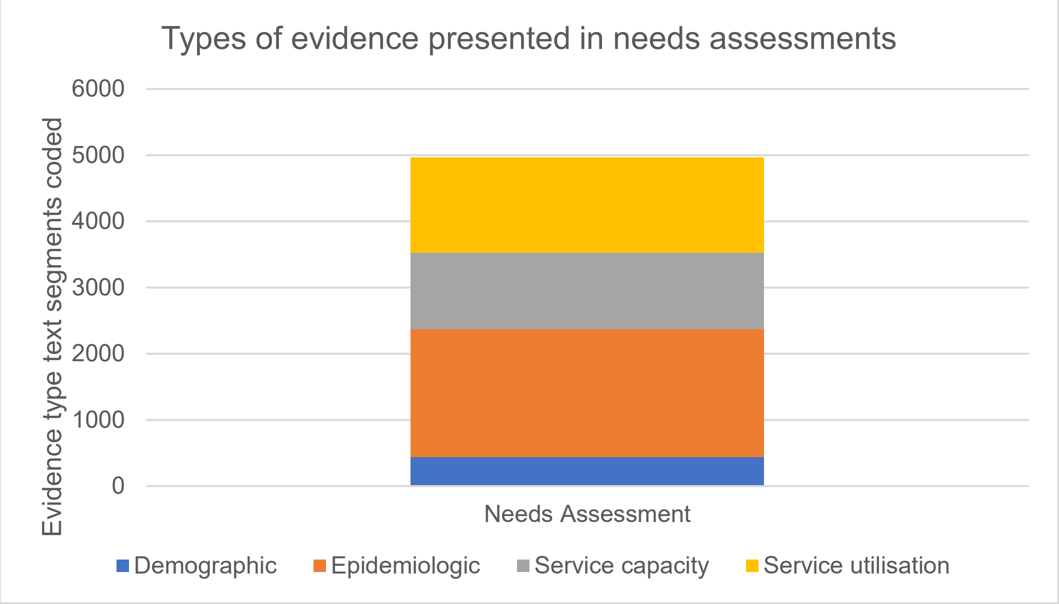
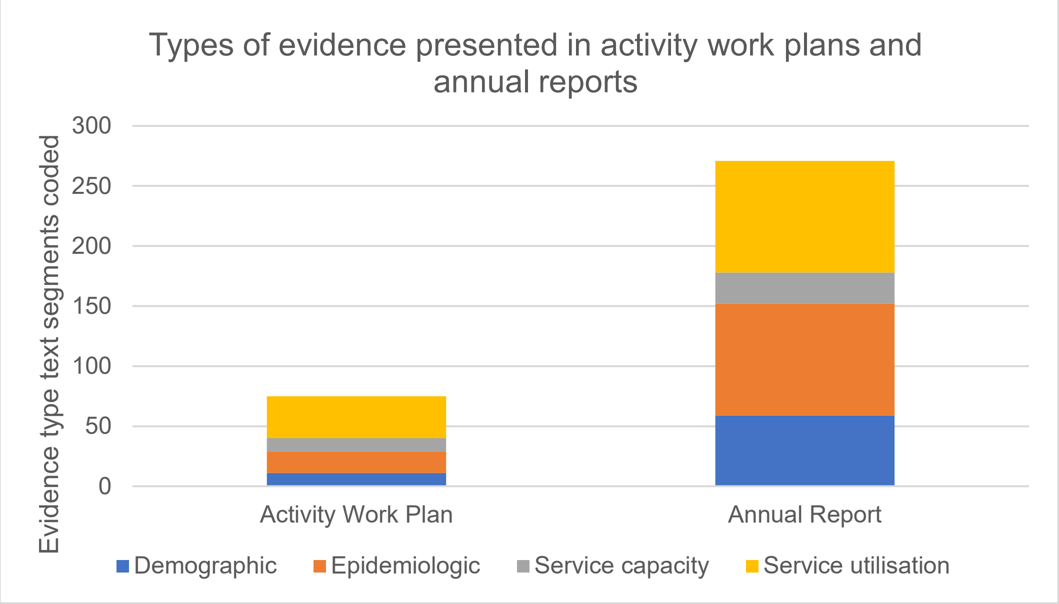
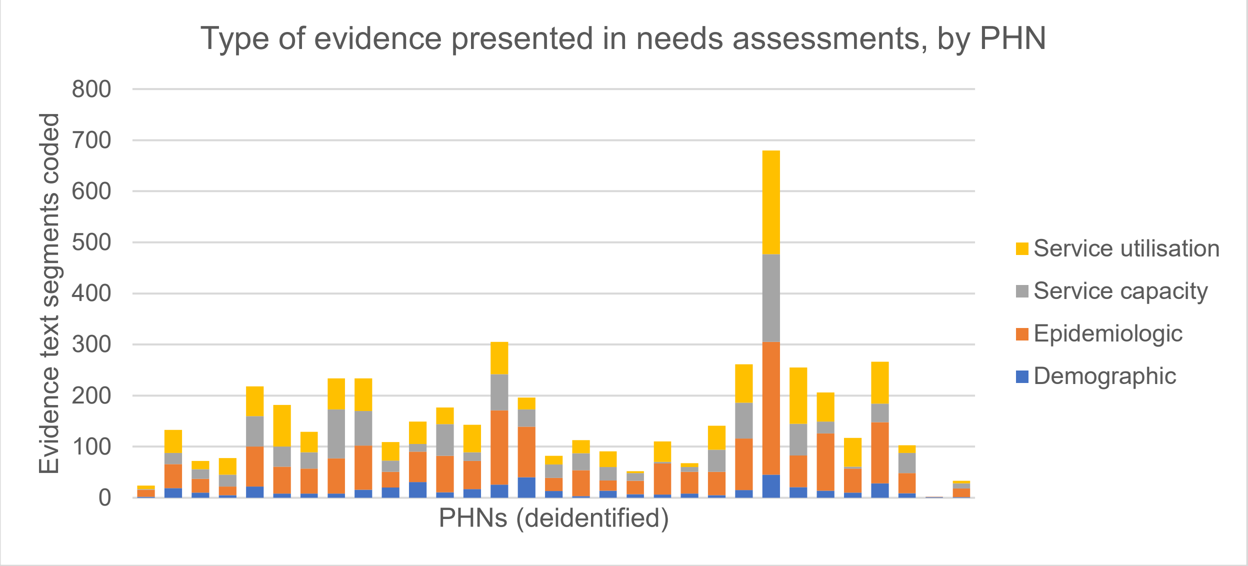


Figure 6.7: Types of evidence presented in activity work plans and annual reports



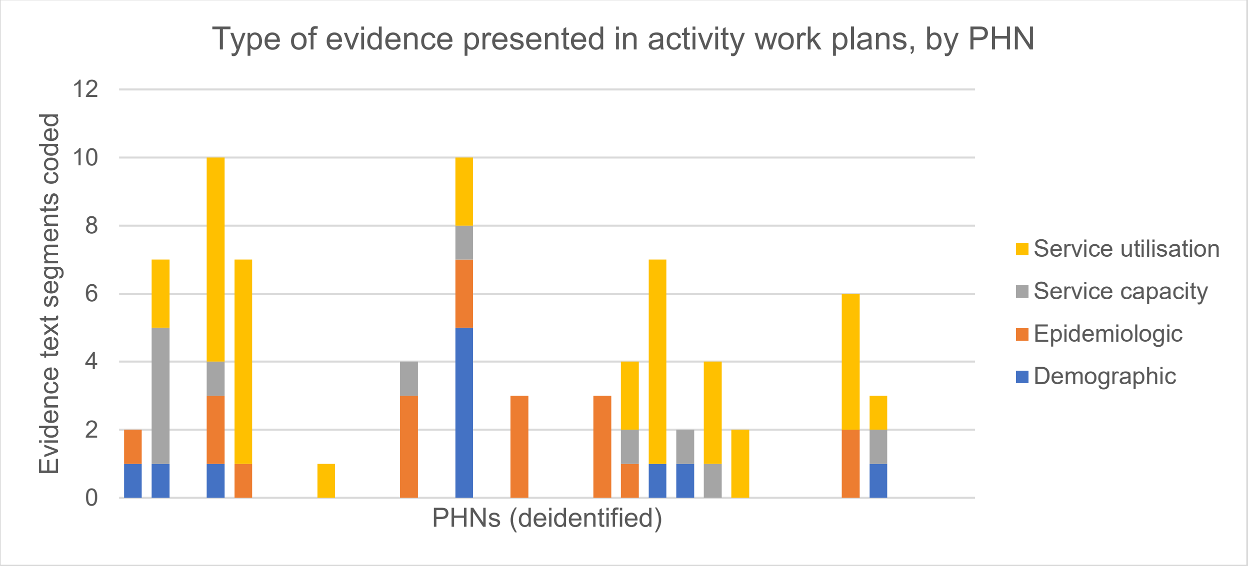
There was some variation between PHNs, however epidemiological evidence remained relatively high in the majority of PHNs, and demographic evidence was consistently low, as illustrated in Figure 6.8 below.

Figure 6.8: Type of evidence presented in needs assessments, by PHN



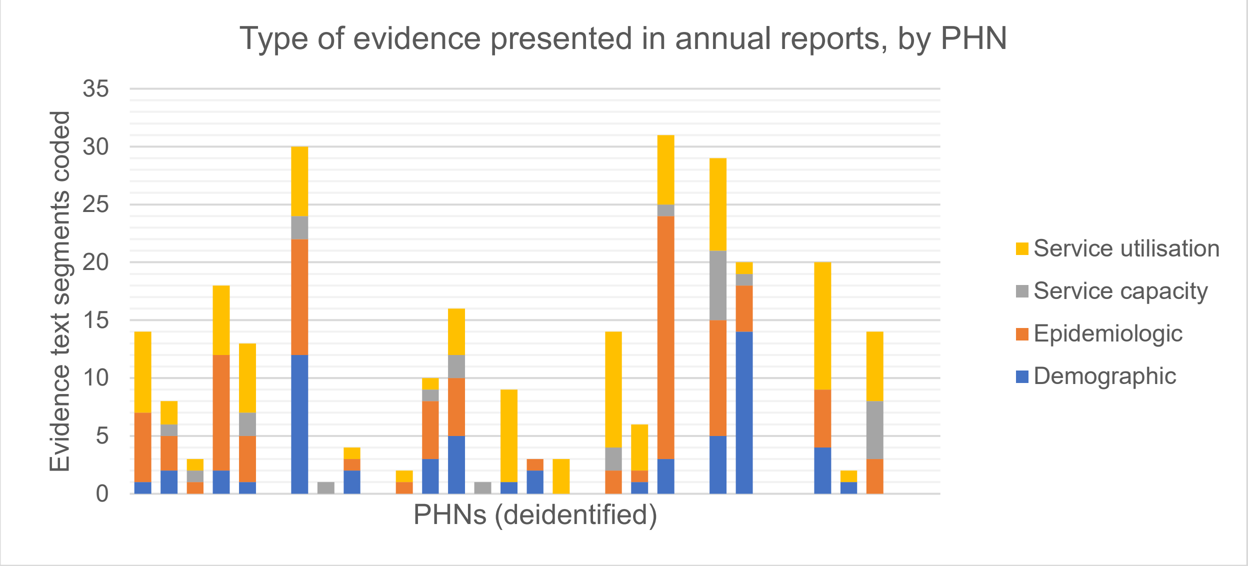
In activity work plans, service utilisation data were most frequently presented, followed by epidemiologic, then demographic and service capacity data were similarly low (Figure 6.9).

Figure 6.9: Types of evidence presented in activity work plans, by PHN



In annual reports, the most frequently presented type of evidence was epidemiologic, followed by service utilisation (Figure 6.10). There was considerably less demographic and service capacity evidence presented, however, proportionally, more demographic data were presented in annual reports that in the other two document types. This is likely explained by the popular practice of presenting 'infographics' describing the population profile in annual reports.

Figure 6.10: Types of evidence presented in annual reports, by PHN



The predominance of epidemiological evidence in documents was echoed in interviews, where much discussion of evidence focussed on epidemiological analysis, further indicating the dominance of biomedical ideas of health:

> *"The planning would appear to be based on an epidemiological analysis, and if you're basing something on an epidemiological analysis, you're basing it on disease." (Board, Metro South, 2016)*

6.6 What level of evidence is presented: data, information, knowledge, wisdom?

Another way to categorise evidence is according to the 'data, information, knowledge, wisdom' hierarchy model (Ackoff, 1989). A summary of the levels in this hierarchy, and examples of such text are provided in Table 6.3.

Table 6.3: Levels of evidence hierarchy, with examples

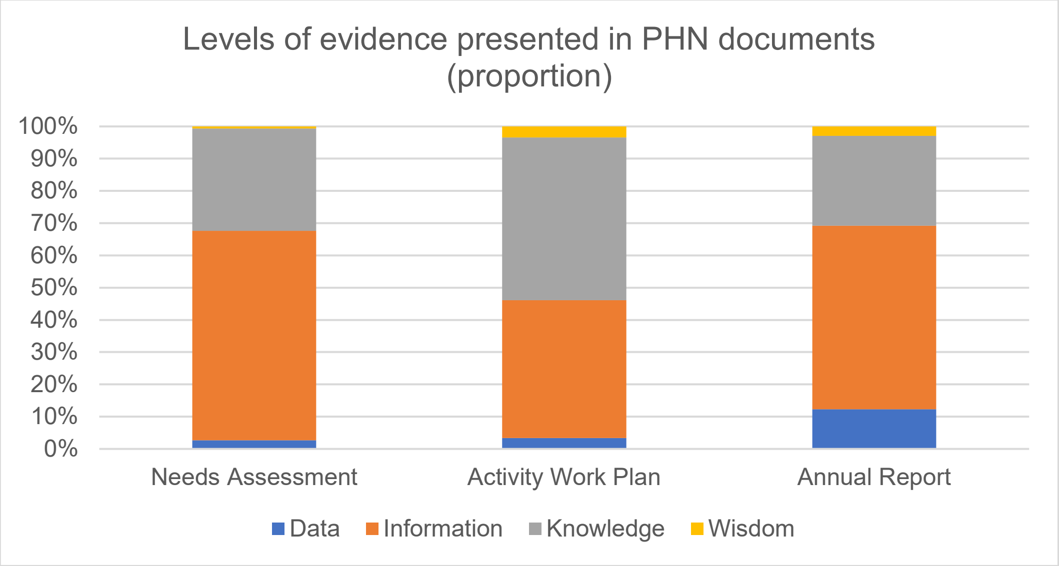
Evidence level	**Summary definition** (Ackoff, 1989, Rowley, 2007).	**Examples**
Data	The simplest level, representing the properties of objects or events. A 'piece' of data has been subject to no analysis or comparison and conveys little meaning	*"There were 12,423 [name] PHN funded Access to Allied Psychological Service (ATAPS) sessions from June 2015 to June 2016." (Annual Report)* *"397 General Practices" (Annual Report)*
Information	Combines, compares or otherwise processes pieces of data, and is more useful than data.	*"[region] is a diabetes hotspot with an average diabetes prevalence of 5.9% compared to the national average of 5.1%." (Activity Work Plan)* *"After adjusting for differences in age structure, the hospitalisation rate for diabetes for Indigenous population was 4.3 times higher than for the non-*

Evidence level	**Summary definition** (Ackoff, 1989, Rowley, 2007).	**Examples**
		Indigenous population in [state]" (Needs Assessment)
Knowledge	Conveyed by an individual or group, having been drawn from another individual or group, or an experience.	*"Aboriginal and Torres Strait Islander representatives highlighted the importance of adopting a more holistic approach, encompassing not just physical health, but also social and emotional wellbeing" (Needs Assessment)*
Wisdom	Involves exercising expert judgement	*"A recent survey of key [state] AOD experts nominated methamphetamine as the most problematic illicit drug due to being highly addictive, and because of the physical, mental and social impacts on individuals and family/friends." (Needs Assessment)*

Also commonly referred to as a 'pyramid', this model is not strictly a hierarchy in the sense that one 'level' is ranked as better or stronger evidence than another, rather it reflects that data can be used to create information; information can be used to create knowledge, and knowledge can be used to create wisdom. Each level arises from the transformation of the element below it – information is inferred from data, knowledge is based on information that has either been obtained by transmission from another or from experience, and wisdom requires the application of judgement to knowledge (Rowley, 2007). For PHNs, the difference is about the degree of analysis and interpretation that has been conducted, whether by the PHN or the creators of the evidence source.

Figure 6.11 shows the relative proportions of evidence of these levels, in the different document types (As the volume of evidence in needs assessments was far greater, this format better illustrates the comparison between document types).

Figure 6.11: Levels of evidence presented in PHN documents (proportion)



Overall, ‘information’ and ‘knowledge’ predominated as the most frequently presented ‘level’ of evidence in PHN documents. Within needs assessments, there was considerably more ‘information’ than ‘knowledge’, which is largely accounted for by epidemiological and health service capacity and utilisation statistics which had undergone some level of analysis and comparison and form a large component of the needs assessments.

‘Knowledge’ also formed a major component of evidence presented in all document types and included largely qualitative findings and input from stakeholder engagement activities.

To a lesser extent knowledge also included statements from published research or reports (although not necessarily referenced), such as:

> *“There is a large body of evidence that indicates that After Hour services have a significant impact on acute care utilisation.” (Needs Assessment)*

There was very little ‘wisdom’ evident in PHN documents, with only a few segments of evidence that drew on expert judgement. This is perhaps the most important finding in this aspect of the analysis, in that it suggests that the expertise and experience of key stakeholders, and in literature, is not informing planning. It may also be that such evidence is used but not explicitly captured in formal reports, as interview analysis did indicate that input from key stakeholders did play a role in informing planning and program development.

There was also relatively little (non-comparative) ‘data’ presented in documents, although proportionally more in annual reports. Annual reports commonly included ‘infographics’, which presented data about the PHN, which could include demographics, service delivery and/or capacity statistics. The minimal presentation of such data is not of concern, as without any kind of comparator, it is relatively meaningless.

6.7 Sources of evidence used by PHNs

The PHN planning documents were analysed to determine the sources of evidence presented. There was considerable variation between PHNs concerning the ways in which they referenced evidence. Some PHNs cited references for evidence to an academic standard, while others cited few sources.

Document data were analysed using the following typology of evidence sources, outlined in Table 6.4. As discussed in section 3.5.1, this typology was developed based on potential evidence sources identified in the literature (Prinja, 2010, Oliver et al., 2014b, Bowen and Zwi, 2005, Head, 2010), and preliminary analysis of a sample of documents.

Table 6.4: Typology of evidence sources

Source	Subcategories	Explanation/ example sources
Consultation	Community	Specific reference to community advisory committee input or other community engagement activity
	Service providers	Specific reference to input from clinical council or other provider engagement
	Experts	"*General Practitioners, subject matter experts and consumers provide input in the problem definition and diagnostics stages, and develop pathways to address identified gaps" (Activity Work Plan)*
	Researchers	*"[PHN], in conjunction with our academic partner, [deidentified university], undertakes analysis to identify service shortages based on a broad range of qualitative and quantitative data that we have either collected ourselves, have had provided to us by external partners or which is publicly available. This analysis is used to identify the health and service need priorities of the local population." (Activity Work Plan)*
	Unspecified stakeholders	*"Stakeholders have highlighted the importance of the need for a continuing care coordination service for those with severe mental ill health who do not transition to the NDIS." (Needs Assessment)*
	Other	E.g. non-government organisations, charities and peak bodies
External data sources	Commonwealth/ federal government	Australian Bureau of Statistics, Australian Institute of Health and Welfare (raw data rather than reports, which were coded as 'grey literature'), Medicare claims data
	State government	Example citation: "*Centre for Epidemiology and Evidence. Health Statistics New South Wales. Sydney: NSW Ministry of Health. Available at: www.healthstats.nsw.gov.au*" (Needs Assessment)
	Local hospital	Examples included specific reference to individual hospital websites, LHN data or data specifically provided by local public or private hospitals
	Local organisations	E.g. data provided by local 'headspace' youth mental health service, or local Breastscreen service
	GP clinical records extracts	E.g. specific reference to data extracted from local general practices using PenCS, PENCAT, PAT CAT, or POLAR GP clinical audit tools
Grey literature		Reports by various national and state organisations. Examples: "*The National Alcohol and Drug Workforce Development Strategy 2015-2018" (Needs Assessment)* *"Victorian AIDS Council, The Primary Health of SSAGD Victorians: A Brief Priority Needs Summary, 2016" (Needs Assessment)*
Published academic		Peer reviewed literature published in an academic

Source	Subcategories	Explanation/ example sources
literature		journal
Evaluation report		Example references: *"Trankle, S. A.,& Reath, J. (2015). The Nepean Blue Mountains Partners in Recovery Evaluation. Campbelltown: University of Western Sydney." (Needs Assessment)* *"National e Health Transition Authority (NEHTA) 2015, My eHealth Record to National eHealth Record Transition Impact Evaluation, Phase 1 Evaluation Report (July), NEHTA, Canberra." (Needs Assessment)*
PHN needs assessment (general reference to)		Most commonly in an activity work plan, where general reference was made to the respective needs assessment, for example: *"[PHN's] health needs assessment identified that people from culturally and linguistically diverse backgrounds (like refugees) often face many barriers in accessing primary healthcare, including service navigation and health literacy."* (Activity Work Plan)
Anecdotal evidence		Where evidence is explicitly stated as being anecdotal e.g.: "*Anecdotal evidence also suggests that the rate of suicidal tendencies in intersex people is significantly higher than the general population*" (Needs Assessment)
Existing model		Where an existing program is being adopted or referenced e.g.: "*NewAccess originated in the United Kingdom and was tested in three trial regions in Australia." (Annual Report)*
Expert staff		Reference to an academic advisor
Secondary analysis of an existing study		*"A desk-top analysis of existing reports in [region] including information about health needs identified by consumers and other stakeholders was undertaken."* (Needs Assessment)

Overall, by far the most common sources of evidence presented or referred to in PHN documents were 'external data', with 'consultation' and 'grey literature' moderately common. 'External data sources' cited were predominantly from federal and state/territory government data, with relatively little evidence from local hospital, other organisations' or GP clinical records data presented.

There was very little evidence presented from other sources, in particular 'published academic literature' (and even less with a retrievable journal article citation) or 'evaluation reports'. While this is to be expected in needs assessments, given the core purpose of these documents is to identify needs, rather than present intervention evidence for the strategies to address them, the lack of such intervention evidence in activity work plans is concerning. It is however consistent with the very low proportion of evidence presented for the purpose of demonstrating 'intervention effectiveness' as discussed in section 6.4. Combined results for each document type are shown in

Figure 6.12 and Figure 6.13 (separate charts are used because the scale differs greatly). While there was some variation between PHNs, generally external data sources were most common in needs assessments, while consultation was most common in activity work plans and annual reports, although far fewer in number.

Figure 6.12: Sources of evidence presented in needs assessments

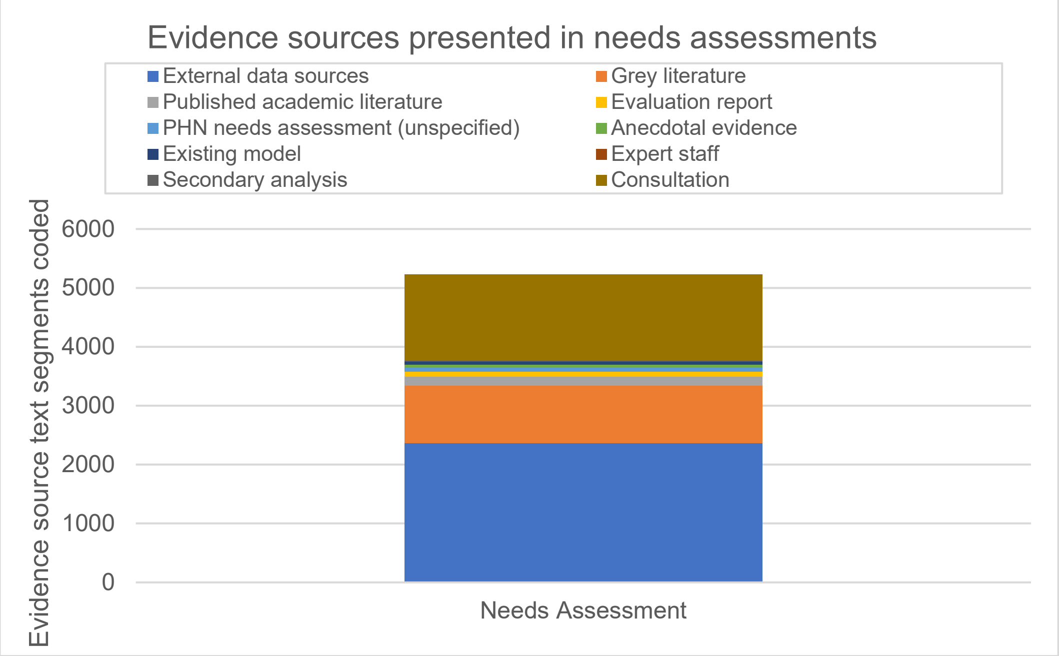
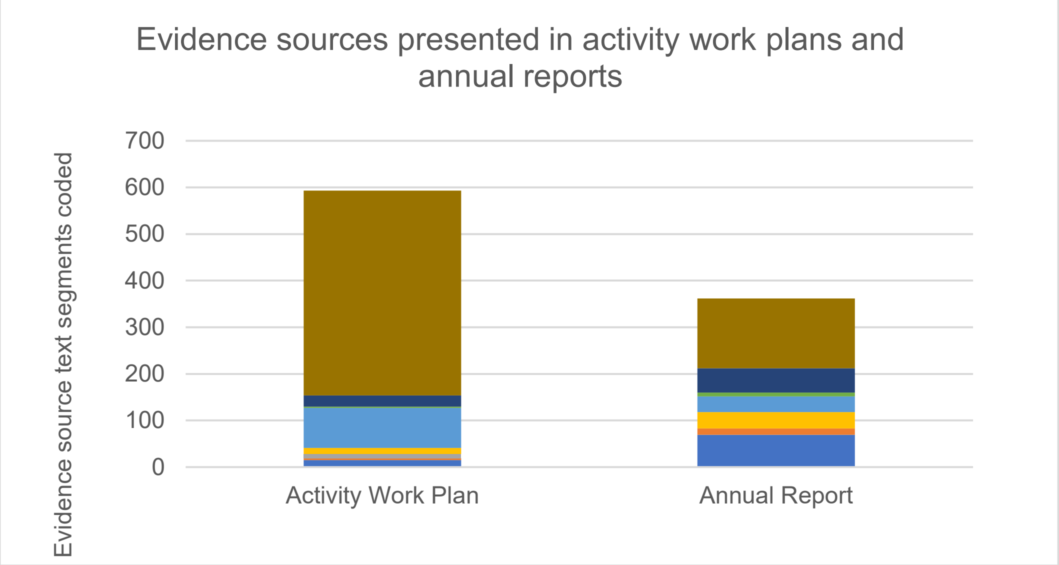


Figure 6.13: Sources of evidence presented in activity work plans and annual reports



Grey literature was also a relatively common source of evidence, particularly in needs assessments, and included government agency reports (such as from AIHW), reports by non-government organisations, consultants' reports and websites. In activity work plans, there were some generic references to the respective needs assessment as a source of evidence.

In annual reports, there was some evidence presented from 'existing model' sources which generally took the form of brief descriptions of the background of programs, such as 'NewAccess', or ‘Simple TeleHealth’ models.

There were numerous mentions of PHNs collaborating on research or pilot projects as well, which were informing activity development and implementation. PHNs’ data, such as health workforce statistics, or clinical service delivery were another source of evidence identified in documents.

There was frequent mention in interviews of the many quantitative, largely external data sources that PHNs use. There was relatively frequent discussion of GP clinical records data extraction, which was in contrast to the relative dearth of this type of evidence presented in planning documents. As will be discussed in the ‘capacity’ section (Chapter 7), there are various gaps and deficiencies in data from large national datasets, such as sub-regional granularity, and currency.

There was occasional interview discussion of lessons learned from programs implemented in other regions, such as a New Zealand clinical pathways program. There was also some discussion of evaluation as a source of evidence to inform PHNs’ planning:

> *“We’ve used formal evaluators, and our university as well. So they give us back information that we couldn’t get ourselves and we start to pull that together and use that as an evidence to inform how we will go about our work next time.” (Staff, Rural South)*

6.7.1 Evidence sourced from stakeholder consultation

Document analysis showed that ‘consultation’ based evidence sources were relatively common, although there was some variation between PHNs, with consultation evidence lacking in around a third of needs assessments. Also, in many cases such evidence lacked richness, and served to indicate the extent to which stakeholders perceived an issue to be a need, rather than building qualitative understanding of an issue. With regard to activity work plans, what appears to be a relatively high proportion of evidence sourced from ‘consultation’ may be an overestimate. The activity work plan template included a row where PHNs had to list who had been consulted, which in most cases was simply a list of organisations or categories of stakeholders (e.g. ‘GPs’). It did not provide any information about the content, method or rigour of the consultation and if/how it informed the development of the program. It may have been that those stakeholders had been included as part of needs assessment consultation. Further analysis of the ‘consultation’ sources showed that ‘service providers’ (medical, nursing, allied health etc) were the most common source of consultation evidence, followed by ‘community’ and ‘stakeholders unspecified’. There were very few indications of consultation with ‘researchers’ or ‘experts’ as sources of evidence.

Consultation activities were frequently discussed in annual reports, both in terms of the process of consultation, and also input/feedback gained through such activities, which is to be expected, given that a considerable part of the purpose of the annual report is for public relations, and to indicate to stakeholders that they have been listened to. This included ‘testimonial’ type input from stakeholders, for example:

> *““The Health Connections platform will be an important enabler for [state health department] to work more closely with GPs and implement ‘hybrid’ or collaborative models of care benefiting the patient,” said cardiologist, [name]” (Annual Report)*

Interview discussions about evidence similarly tended to focus on evidence gained through consultation activities. There were many favourable examples given of various stakeholder consultation and co-design activities, including community advisory committee and clinical council input as a source of evidence. It was evident from interviews that case study PHNs put considerable resources and effort into engaging with stakeholders. Identified benefits of consultation evidence included: overriding outdated statistical data with current local knowledge on a rapidly changing health issue in the drug and alcohol sector; drawing on the experience and local knowledge of community members and service providers; validating quantitative data analysis; and using clinical expertise as a ‘feasibility check’ for proposed strategies:

> *“I think that’s one of the biggest roles [of the clinical council] is to try and pick the good ideas that are going to work best, try and pick holes in things to make sure it doesn’t fall flat for some unknown reason to people who aren’t necessarily at the coalface.” (Clinical Council, Rural South)*

Some concerns related to consultation sourced evidence were also raised, in terms of difficulties in engaging with communities:

> *“it's like pulling teeth for some reason … building the trust and the relationships and the partnerships takes time and it takes resources.” (Community Advisory Committee, Metro South)*

As well as concerns about how genuine the consultation is:

> *“Sometimes I do get a feeling that a plan and a decision's already been made and it's more advisory I suppose, rather than consulting around what would work.” (Clinical Council, Rural North)*

There were also some concerns about over-reliance on informal or anecdotal ‘evidence’ in planning:

> *“I think that’s documented that there is an over reliance of anecdotal evidence generally in Indigenous health” (Clinical Council, Remote)*

> *“I think the problem is in this sector, generally, from what I see is there's an awful lot of still the ‘seat of the pants’ and even in the areas where there's actually fairly strong evidence … people tend to still be planning by anecdote. So ‘here's a couple of stories and so that must be true’. And so, much as we're trying to make sure that we have evidence-based decisions, I would say we're not there yet.” (Community Advisory Committee, Metro South)*

6.8 Chapter 6 summary

The analysis of documents and interview data has generated some key findings about evidence that PHNs use in their planning. Interviewees' conceptions of evidence tended to be quite broad and inclusive, but with greater emphasis on quantitative data, which was consistent with the findings from document analysis. Conceptions of and preferences for evidence types were closely linked to interviewees' professional background.

Document analysis showed that evidence is used to identify health needs to a far greater extent than to inform the planning and development of PHC interventions, and is largely based on quantitative analysis of epidemiological, service utilisation and service capacity data from government sources. Evidence from consultation was moderately common in documents, although this varied between PHNs. Such evidence was often used to indicate perceptions of the existence of a problem, rather than providing a rich, robust qualitative analysis of factors underlying a population health need. Such observations from the documents were supported by interviewee concerns about reliance on 'anecdote'.

The relative lack of evidence as to the effectiveness or economic value of PHC interventions was consistent with the findings that there was very little evidence sourced from evaluations or academic research. The strong use of evidence to identify population health needs in needs assessments was a positive finding, however the relative lack of 'intervention evidence' in activity work plans was of some concern.

The next chapter will explore PHN's organisational capacity for evidence-informed planning, to help understand aspects of capacity that influence why some evidence is used for certain purposes more than others.

CHAPTER 7 FINDINGS: ORGANISATIONAL CAPACITY FOR EVIDENCE-INFORMED PLANNING

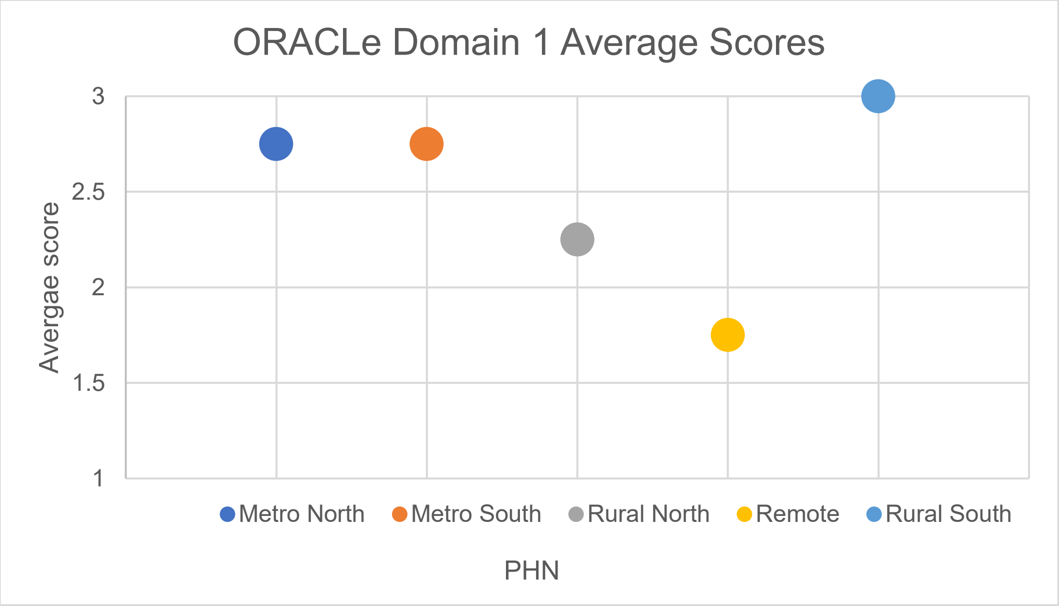
Chapter 6 found important limitations in PHNs' evidence use. This chapter presents the findings relating to PHNs' capacity for evidence-informed PHC planning that may have contributed to their limited evidence use. A key component of this examination was the ORACLe interview tool, which comprises 23 questions across seven domains, to measure the capacity of policy agencies to use research evidence (Makkar et al., 2016b). The structure of this chapter is based on those seven domains (listed as subheadings in this chapter, and in section 3.4.4.2 in the methods chapter), including results from the 2018 ORACLe tool interviews, in addition to thematic analysis of other data. Unless otherwise indicated, all quotes are from 2018 PHN interviews.

While the ORACLe tool refers to 'research' and 'policy', the tool was used to examine the broader concept of 'evidence' and its use in 'planning'. This terminology is employed throughout this chapter, except when explicitly referring to domains of the ORACLe tool.

7.1 Domain 1: documented processes to develop policy that encourage or mandate the use of research

Domain 1 examined whether PHNs had documented processes for planning that encourage research use. The results from this domain indicate that the case study PHNs have moderately high capacity in this regard. The average of PHN scores in this domain was 2.5 (out of 3) which was approximately the equal second highest average domain score. As shown in Figure 7.1 below, three of the five PHNs scored well on this domain, with one (Rural South) achieving the maximum average score (3, range 1-3), and two achieving 2.75 (Metro North and Metro South), indicating that these PHNs have relatively strong capacity in terms of documented processes to drive research use. Rural North achieved a moderate score (2.25) and Remote scored below the mid-point (1.75) indicating some shortcomings in this aspect of capacity.

Figure 7.1: ORACLe Domain 1 average scores



As reflected in the ORACLe scores for this domain, interviewees indicated, in varying detail, that all PHNs had internal documents to guide how plans or programs should be developed. Documents mentioned included frameworks, templates, policies and procedures. There were reportedly varying degrees of clarity in these documents of the expectation that evidence be used to inform planning. Metro North, Metro South and Rural South reported that their documented processes explicitly encouraged or required staff to use research/evidence in planning: "*It's explicit that things need to be evidence based*" (Senior Executive, Metro South), which contributed to their higher scores in this domain.

While ORACLe scores were assigned based on verbal interview responses, additional examination of PHN internal process documents also provided evidence of the existence of documented processes that encourage evidence use. There was considerable variation between the purpose, content, structure and length of the various internal documents analysed, with 18 different types of document provided, ranging from one to more than 100 pages. Some common types included comprehensive commissioning toolkits or manuals (3 PHNs), templates for activity or program plans (3 PHNs), terms of reference for planning/ collaboration/ governance bodies (5 PHNs) and documents outlining expectations regarding values, behaviours or culture (3 PHNs).

The wide variety of documents discussed and examined tended to include relatively broad guidelines for planning, such as outlines or diagrams of the general commissioning cycle, rather than specific procedures for planning or program development. There was much to indicate that the use of evidence was generally expected and encouraged, but only a few examples that explicitly required or prompted an evidence base or rationale to be documented. In other documents the guidance was minimal and specific to the scope of the document in question, such as outlining behaviour expectations within a staff competency framework. While the terms of

ORACLe tool Domain 1 were satisfied in most PHNs – there were documented processes that encourage or require evidence use – closer examination of these documents showed that such guidance often lacked detail or strong mechanisms.

Based on interview data, Rural South was notable in that they had reported having project management-based framework approaches to all their key processes, including planning, procurement and service delivery. Program logic models were reportedly incorporated as part of planning in this PHN. Interviewees also reported detailed templates for aspects of planning such as project proposals, implementation plans, communication plans, and project specification documents that demonstrate what evidence has been used to inform decision-making.

> *"we have templated documents with guidelines that talk about how we should be pulling our plans together" (Staff, Rural South)*

> *"Certainly many of our planning documents require the evidence base to be detailed at various points in the approval process. So in a project proposal and approval stages we require evidence to be demonstrated and articulated. In the needs assessment processes and that sort of thing, those things are quite strongly articulated by government, there hasn't been a need for us to go and create a whole approach of our own. It's pretty heavily directed what needs to apply, and it's a pretty sound and robust process. But yes, we do require evidence to be provided at various stages. Have we been always as good and as detailed as we should be in relation to that? No I don't believe we have." (Senior Executive, Rural South)*

The documented processes reportedly encouraged research/evidence use to be *"demonstrated and articulated*" at the proposal and approval stages, and also define where advisory councils (clinical and community) are to be consulted. However, much of what was reported about these internal process documents could not be verified, as this PHN did not provide any internal documents for this component of the analysis, despite repeated requests and giving initial indications of willingness to. Some documents were sourced from their website, including populated versions of templates, and gave some favourable indications regarding the use of evidence in planning.

Among the documents examined, the strongest example of a documented process providing consistent guidance that encourages or requires evidence use in planning was the Metro North PHN's activity plan template (as distinct from the activity work plan template required by the Department of Health), which explicitly asks the 'planner' to document "what is the evidence or policy base for this initiative?". Metro South similarly had an activity template which included detailed prompts that the 'planner' must consider and address, and a 'program logic' model. The comprehensive commissioning 'kits' from these two PHNs also included some detail to support the planning process, although the focus tended to be on supporting engagement and relationships with partners, understanding population health needs, or market analysis and procurement, rather than development of programs.

While not all of the documents examined addressed evidence use, those that did were broadly encouraging, in terms of outlining general principles and expectations e.g. "*making good business decisions based on evidence*" (Remote) and "*understanding evidence-informed ways to address the problem*" (Rural South). Many of the staff competency or 'values' type documents also explicitly included expectations that their work be evidence based, for example the Rural South staff competency framework included "*make recommendations based on relevant evidence*".

While not strictly a 'process', another positive indication/example of capacity for planning was Remote PHN's matrix tool that outlined the responsibilities, accountabilities, consultation and information involved in planning and program development, although it was not particularly detailed. This was the only example of such a tool among the case study PHNs, although it was acknowledged that the implementation and embedding of that tool across the organisation was still in progress and required a "cultural change":

> *"So we use that to try and embed that understanding and the richness of decision-making at the organisational level." (Senior Executive, Remote)*

While there was evidence across PHNs of documented processes to guide evidence-informed planning, many of the documents examined, and some of the interview discussions, had a stronger emphasis on documenting other aspects of the commissioning cycle. In particular the procurement functions tended to be outlined in some detail, more so than program development/design or contract monitoring.

The existence of internal policy and procedure documents that guide the planning process and encourage the use of evidence to inform program development is a positive and important aspect of organisational capacity. However, the value of such documents arguably relies on how well the guidance is applied or adhered to. There was some evidence in the interview data (from high scoring PHNs) to suggest that documented processes were not consistently followed due to being too detailed and not actively encouraged.

> *"we have internal procedures and templates but they're not always followed and not actively encouraged to be followed. They exist. Kind of voluntary if you use them or not … [they are] very detailed, which is why a lot of people don't like using them, because they're too detailed" (Manager, Metro North)*

Rural North reported that the encouragement to use evidence in planning was more implied than explicit, and this was explained as being due to relative lack of staff capacity to be able to use research, and to explicitly require that would be unrealistic.

> *"[encouragement or requirement to use research or evidence in planning or program development] can't really be explicit, because the capacity of the staff isn't there to do that. So, it has to be implied that really that's what we should do" (Manager, Rural North)*

There was some inconsistency between interviewees at one PHN, where the senior executive indicated less awareness of documentation than staff at lower levels in the organisation. This may indicate clearly devolved responsibility for this aspect of operations, or a lack of leadership for evidence-informed planning. Inconsistency between interview responses within a PHN also suggests that while the documented processes may exist, they are possibly not consistently used to guide the planning process.

7.1.1 Factors contributing to process documentation capacity

Thematic analysis of interview data identified a number of factors that contributed to the stronger capacity in documenting processes. A factor that was common among PHNs with high capacity was their reported endeavours to achieve accreditation for their 'quality management system', which requires robust documentation of the various functions of the organisation. For example, Metro South had had an audit of their quality management system conducted by a large accounting firm which had identified various opportunities for improvement regarding documentation. Such accreditation was required of Medicare Locals, but is optional for PHNs (Horvath, 2014), indicating there was not a strong regulatory institutional force to drive process documentation capacity.

Also contributing to the documentation capacity were leaders' favourable attitudes regarding the value of documentation, such as the desire to be transparent about evidence and decision-making, building shared understanding among stakeholders about commissioning, and documenting evidence in order to provide a justification of the project and its approach. The importance of documented processes was recognised as an enabler:

> *"As part of establishing projects, there's project proposals, implementation plans, we've got communication plans and things like that that enable us to ensure we've got a really consistent and - formal's a strong word, but a good project approach … they [the documented processes] are trying to bring some rigour to our work" (Manager, Rural South)*

7.1.2 Process documentation capacity development

Most PHNs recognised the importance of continuing to develop robust process documentation, evident in both 2016 and 2018 interviews.

> *"I think we would probably acknowledge that we still have a lot more work to do in regard to establishing more comprehensive planning processes." (Senior Executive, Remote, 2016)*

> *"the pressure is on to have … some real strong systems and processes around accountability and transparency and different ways of managing our business." (Staff, Remote, 2016)*

The PHNs that demonstrated slightly lower capacity (Rural North and Remote) recognised these shortcomings and had invested considerable effort into developing robust processes in the year before the interview. The recent recruitment of the planning manager was seen as being an important enabler of the development of internal procedures, and a key part of progressing such capacity further in coming months. The development and implementation of documented processes to drive evidence-informed planning was reported to be ongoing: "*it's a dynamic space*" (Manager, Remote).

PHNs who had demonstrated higher documentation capacity also indicated ongoing review and development of processes, with documentation having been identified as something of a 'gap' in 2016. For example Rural South reported being in the process of reviewing documented processes, to transition to an online system, with more detail ("*putting flesh on the bones*" – Senior Executive) after what was considered a lean beginning because of the need to adjust to their new commissioning role.

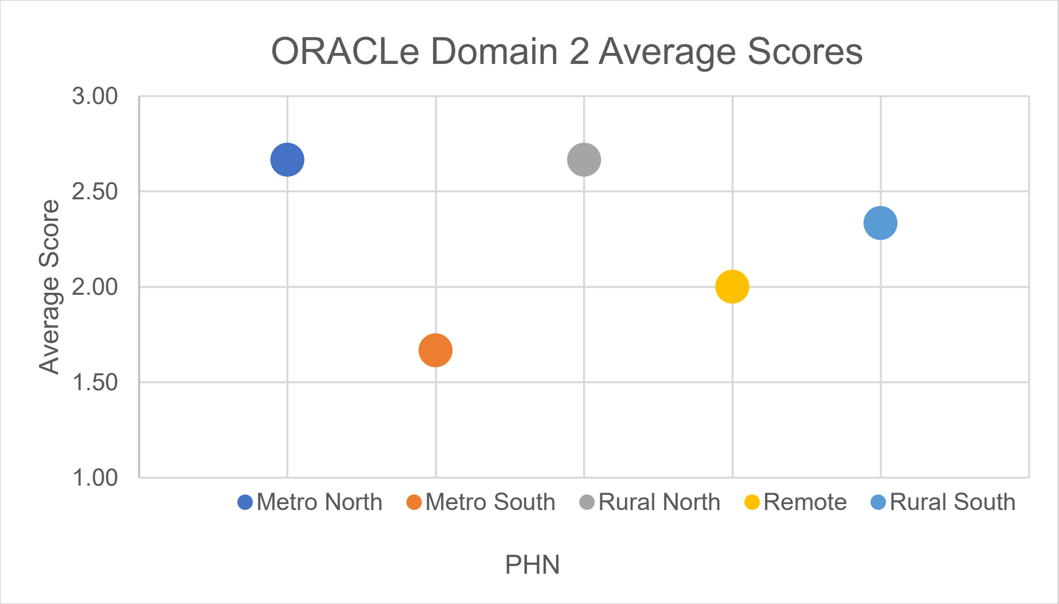
> *"we're building additional layers into those framework documents, and then building particular strategies and approaches around the frameworks that ensure that people are applying things consistently across the organisation" (Senior Executive, Rural South)*

7.2 Domain 2: tools and programs to assist leaders of the organisation to actively support the use of research in policy and program development

Leadership is recognised as an element of organisational capacity for evidence-informed policy-making (Green and Bennett, 2007). Thus, this domain examined the extent to which leaders supported the use of evidence in planning, with a focus on mechanisms that support the capacity of leaders, and leaders' internal communications. The ORACLe questions define leaders as "any level of executive or management, or anyone else with a formal or informal leadership role" (Makkar et al., 2016b). In PHNs, the organisational leadership structure typically includes the senior executive (CEOs, and senior managers), the board, and clinical council and community advisory committee.

Overall, PHNs demonstrated moderate capacity in this domain, with an average score of 2.3/3, although there was some variation between PHNs. Metro North and Rural North demonstrated moderately high capacity, Rural South and Remote moderate capacity, and Metro South somewhat lower.

Figure 7.2: ORACLe Domain 2 average scores



Most PHNs were broadly supportive of professional development for leaders, which tended to be ad hoc based on individual learning/development plans or linked to the needs of particular teams. While it was acknowledged that constraints of time and money hinder participation in relevant training, several PHNs mentioned having undertaken professional development in relation to commissioning (procurement), and monitoring and evaluation, which suggests that these areas of capacity had been a higher priority initially, than evidence use in planning. Others intended to undertake capacity analysis of their personnel and organisation in order to inform further professional development directions: “*to some degree we don't know what we don't know yet*” (Manager, Rural North).

Most PHNs reported that leaders’ position descriptions and performance management systems explicitly included expertise in the use of research in planning. A particularly good example was provided by Metro North where several interviewees spoke of a ‘leadership capability framework’ which outlines what degree of skills are required at which ‘levels’ of staff, across a range of domains. The capability framework included the expectation for leaders and staff to use evidence in planning. Having this embedded in the mechanisms by which staff and leaders’ activity and performance is assessed is a strong, systematic driver of evidence-informed planning and illustrates that using evidence to make decisions is a valued capacity and cultural norm across all levels of staff and leaders in this PHN. While the framework itself serves to drive evidence-informed planning, it also indicates strong leadership capacity, in that leaders have seen the need for such planning and have embedded it within organisational management systems. Rural South PHN similarly reported efforts to build a ‘learning profile’ for the organisation, and their aim to ensure that relevant skills are spread across teams, rather than that skillset sitting within a particular team. At the other end of the spectrum, one interviewee responded that there were no such mechanisms to support expertise in the use of research in planning, explaining that they have a “*research person*” (Senior Executive, Metro South). Further interview data I gathered indicated that such a role was more about conducting research rather than using it. The premise of this ORACLe domain is that using research is expected of a planning manager.

There was some variation between PHNs as to whether leaders referred to evidence in their internal communications, which sometimes was seen to be ad hoc. A good example illustrating positive leadership supporting evidence-informed planning was Rural North PHN, where senior staff added items to a ‘virtual reading room’ and alerted others to their availability, as well as sharing information in an ad hoc manner:

> *“it's probably [the CEO] and I that contribute to that [the virtual reading room] the most at the moment, but we figure that if we model behaviour, eventually people will take it on. And, so we actually will find those documents, and will actually put them up and then alert the senior managers” (Manager, Rural North)*

Other PHNs spoke of general circulation of media articles, a fortnightly staff newsletter, or general expectations to ‘share’ information, but not necessarily mechanisms for frequent dissemination of research evidence by leaders.

Thematic analysis of the wider data indicated other leadership characteristics as being important to facilitating evidence-informed planning. It was common among most PHNs for interviewees to identify the importance of good, appropriate leadership:

> *“I think leadership is really, really important, the right kind of leadership” (Manager, Remote).*

A key aspect of leaders’ capacity that was identified from thematic analysis of interview data was leaders’ connections and relationships with key stakeholders. ‘Communication and networks’ are recognised as important aspects of organisational capacity in the WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007). Numerous interviewees spoke highly of senior managers in this regard, particularly Rural South and Metro North:

> *“The beauty about [CEO] is that s/he's regarded everywhere; state, federal and so forth ... [CEO] knocks on the door people will talk to [him/her]. So that's a good thing.” (Board, Rural South)*

In 2016 interviews, leaders of these two PHNs were also credited with enabling smooth transitions from MLs, through being highly regarded and well connected to funders:

> *“they’ve got very strong relationships in Canberra and they understood the new directions and the model that we’re trying to implement very well.” (Manager, Metro North, 2016)*

Leadership was specifically identified as a key enabler of evidence-informed planning:

> *“the executive role in that is to foster that culture whereby we want to be evidence driven ... that culture is fostered from the top. We've had a CEO … with a strong personal commitment to those things. I think the leader sets the direction.” (Senior Executive, Metro North)*

> *“[CEO] is very big on evidence base so if there’s no evidence there’s no project really ... you’ve got to have a sound grounding ...you have to have the evidence to support it” (Staff, Metro South)*

In contrast, one senior manager commented that “*we’re not a research organisation*” (Manager, Remote). Such comments seem to equate the use of research as with being a ‘research organisation’, whereas, as the WHO framework (Green and Bennett, 2007) illustrates, the generation of evidence, and the use of evidence in planning are somewhat distinct functions, which may or may not take place in separate organisations in a planning ‘environment’.

The connection between leadership and accountability (both internally and externally) in enabling evidence-informed planning was also discussed:

> *“I think they’re [managers] actually pretty good … extremely insistent on doing nothing unless there’s good proof for it now ... you know, it’s got to be proven, it’s got to be – just like it’s changed from sticking out widgets to not just activity, it’s now got to have outcomes. So, it’s outcome, outcome, outcome, what’s the proof you’re doing, if there’s no proof that it’s done somewhere else, you can’t do it. Yeah, unless it’s got an outcome you’re not just allowed to do activity … because they know that people like us [clinical council] will say “well what are you basing that on”, and they’ll know that Canberra [i.e. the federal government] does the same.” (Clinical Council, Rural South)*

While it would be logical to assume that longer tenure and stability of leaders made for strong leadership capacity for evidence-informed planning, this did not hold true, as a PHN that had had relatively high turnover of senior executives compared favourably in this regard (Rural North), and others with stable leadership did not fare as well (Rural South, Remote).

A prominent theme to emerge was around the role and importance of board representation including academic/ research expertise:

> *“many of us [board members] have that [academic research] experience and have a familiarity and training to some extent whether by participation or formal training in research skills.” (Board, Remote)*

> *“we have a nice broad range of people, a reasonably sceptical bent for data and evidence, so we would question [proposals/strategies].” (Board, Metro North)*

However, PHNs that had board members with academic expertise did not necessarily demonstrate higher ORACLe capacity scores either in terms of leadership, or overall.

The importance of accountability to the board was discussed, to enable academic influence to drive evidence-informed planning:

> *"[Board] people are used to seeing key performance indicator reports all the time, reviewing evidence and using that evidence to drive their own delivery systems. So we have a high level of data literacy present on the board. So we have covered that extremely well in our competencies and our skills mix. We are, every board meeting tweaking, refining, giving feedback to the CEO around their key performance indicators and the PHN's key performance indicators to keep on nudging the bar higher in terms of the quality of the evidence that's presented to the board, whether that's looking at rates instead of proportions et cetera" (Board, Remote)*

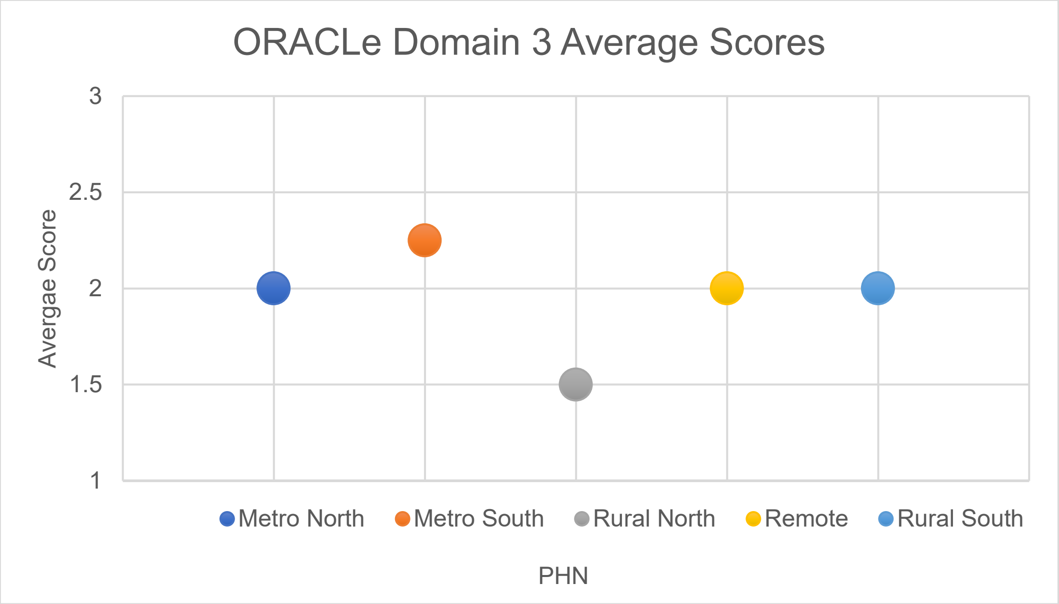
One interviewee discussed how academics are conscious of the need to "*take their university hat off*" in relation to PHN board matters, and balance evidence among other considerations, even though other academics might see them as having "*sold out*" (Community Advisory Committee, Metro South). This indicates a tension of institutional forces, where the academic, from a background of placing high trust and value in research evidence, comes up against the cultural-cognitive institutional forces brought to the table by other actors.

7.3 Domain 3: availability of programs to provide staff with training in using evidence from research in policy and in maintaining these skills

This domain examined opportunities and expectations for staff to undertake training in using evidence in planning. This domain is not about the capacity of the workforce as such, it is about the organisational capacity to support and develop staff capacity. This domain is similar to Domain 2 which addressed training for *leaders* in the use of research in planning.

Overall, PHNs showed moderate capacity in this domain, with an average score of 1.95/3, ranking 5th of the seven domains. Four of the five PHNs achieved average scores of 2 or more. Rural North scores averaged 1.5, indicating somewhat lower capacity.

Figure 7.3: ORACLe Domain 3 average scores



PHNs demonstrated moderate capacity in this domain, with training available to staff on an ad hoc basis, but not actively offered. While participation in training is generally addressed in performance management, there is no evidence from this data that it is explicit about the training content and tends to be relevant to the positions and needs of individuals. In order to achieve the highest scores in this domain, the training had to be explicitly about use of evidence, which was only the case in Metro South whose training in commissioning had included some information on how to access evidence. This PHN also reported access to a research database (EBSCO – to be discussed in Domain 4) and staff had been trained in that, which included accessing research. In contrast to the favourable score, some responses from this PHN brought into question the extent to which staff training was actively supported, and participation in training appeared to be largely driven by individual staff identifying and accessing opportunities for themselves.

Examples of training available at other PHNs included optional internal lunchtime sessions on a range of topics, subscriptions to online learning modules and project management training. Such activities indicate leadership support for professional development, as do such statements by leaders as: "*We consider ourselves a learning organisation*" (Senior Executive, Rural South).

While Rural North was yet to conduct an organisational capacity analysis to inform staff development directions, several other PHNs (Rural South, Metro North) had identified the need for strengthening capacity in using research evidence, and indicated intentions to progress this.

> *"[we have] identified the need to run some training internally so we're going to be doing that over the next 12 months. That's everything from identifying where to go to get research but also things like from an evaluation point how do to use the dashboard to monitor performance." (Manager, Metro North)*

> *"it's almost like evidence 101, how to read and interpret data, looking at how to do literature reviews, just at a really basics level. Understanding outputs versus*

> *outcomes, measuring what matters versus measuring everything you can think of." (Manager, Rural South)*

These findings indicate there are some cultural-cognitive institutional forces acting from within the organisation to promote development of skills in accessing, appraising and applying evidence to inform PHC planning.

7.3.1 PHN health planning workforce capacity

While the ORACLe questions focussed on mechanisms to support staff capacity *development*, the interviews also identified key themes in relation to the capacity of the *existing* workforce for evidence-informed planning within PHNs.

The 2016 interviews indicated many PHNs were still in a state of flux and development, in terms of adjusting to the new commissioning role, identifying workforce capacity needs to get the right skill mix, and recruiting. PHNs generally seemed somewhat more settled and established in the 2018 interviews, although some had still only relatively recently recruited key staff and in others there were recent redundancies or intentions to recruit further.

Between PHNs there were varying fluctuations in health planning staffing through transition from ML to PHN. Some lost staff with planning capacity and had to re-build, due to discontinuity of planning funding in the final ML year (Metro North, Remote). Others were able to retain planning staff/expertise. Some had had relatively high turnover (Metro South, Remote) and most had also recruited new staff. Several interviewees noted there hasn't been enough federal government investment in population health planning and commissioning capabilities in line with the shifting functions from divisions of general practice to MLs to PHNs.

There was mixed confidence in the evidence-informed planning capabilities of staff. Rural South were positive about the skills of their team, although there were frequently concerns about being under-resourced and only having a small team. This was a relatively frequent theme in terms of a barrier to 'trawling through' and summarising evidence for use in planning. Rural North expressed low confidence in such capacity:

> *"from a capacity of the person that's looking into that [evidence-informed planning], to be able to go through and to research, and to look to systematic reviews, and to find out what would be the best evidence for a new type of program, that's extraordinarily limited. And, I don't think it's probably just this PHN either, I suspect it's broader than that, but certainly from this PHN's perspective, it's not something we have a lot of skill or expertise in doing." (Manager, Rural North)*

Staff with university qualifications in public health were reasonably common across PHNs, and reportedly more so than would have been the case 10-15 years ago. In several PHNs most staff had undergraduate or postgraduate public health qualifications, but in others, capacity was limited to only one person with high level qualifications and skills plus several others with limited skills. There were staff with PhDs in relevant fields in three of the case study PHNs and several PHNs had public health physicians on staff or in advisory roles.

Rural South indicated progress towards developing a matrix structure for the organisation, where analysis and population health skills would be across the organisation rather than in a specific team:

> *"Working across projects, rather than just working on projects" (Manager, Rural South)*
>
> *"We have excellent clinical epidemiologists and health planners on staff however we need to bring our whole staff on board with the skills and knowledge to support a population health planning approach. This takes time and also a commitment from the Commonwealth [federal government] to allow this to happen within the funding parameters we currently have." (Rural South, PHN Survey 2016)*

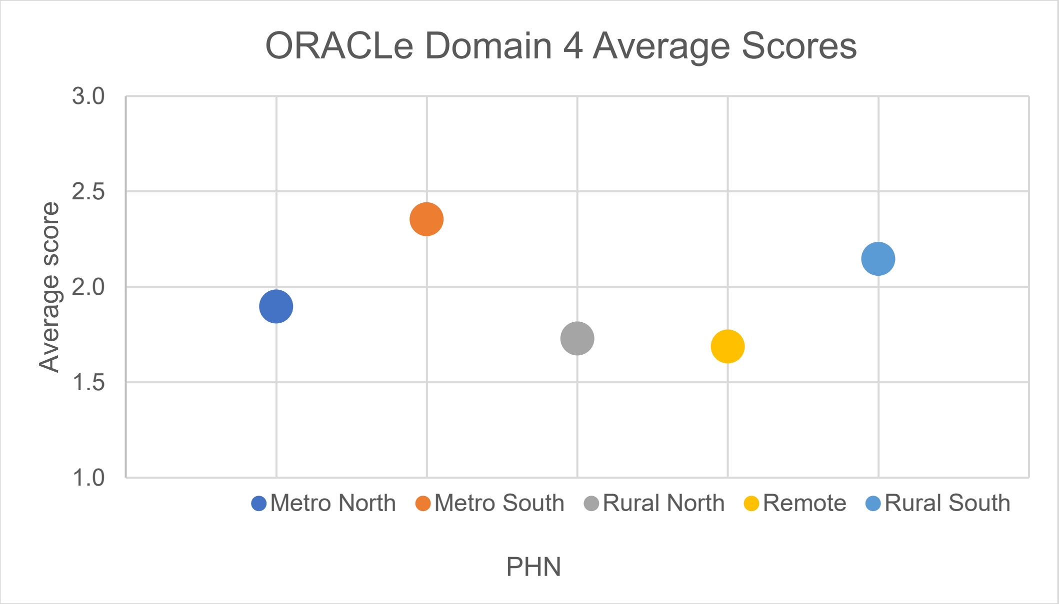
The focus of interviewees' responses tended to be on analysis and evidence generation skills (which are discussed further in section 7.5), and specific discussion of evidence utilisation skills was relatively rare.

Difficulties in recruiting people with appropriate skill sets were relatively common, and across PHNs, not just in rural or remote regions as might be expected. Recruiting people with knowledge of the local context was an additional challenge for Remote PHN. Barriers to recruitment and retention have been: insecure or short term employment; short needs assessment and planning timeframes; and broader lack of appropriately skilled people. Identified skills gaps included system reform, commissioning, health economics, data governance, longitudinal analysis, predictive modelling and other sophisticated quantitative data analysis.

7.4 Domain 4: availability of supports and tools to help staff access and apply research findings

Domain 4 examined PHNs' capacity regarding resources to enable and support use of evidence in planning. Overall, PHNs scored moderately on this domain, with an average score of 1.9/3. Metro South and Rural South demonstrated moderate capacity, achieving average scores just above the midpoint of 2, and Metro North, Rural North and Remote all averaged between 1.5 and 2, indicating somewhat lower capacity in terms of resources for evidence-informed planning.

Figure 7.4: ORACLe Domain 4 average scores



This domain addressed various aspects of evidence resources, and there was considerable variation between PHNs within the domain, which is masked when scores are averaged. Table 7.1 below shows the variation in responses regarding different types of evidence resources. None of the PHNs reported having written guidance resources on how to access, appraise and apply research (Question 9), and there was mostly high capacity in regard to expert staff to assist others (Question 10). Question 13 responses indicated most PHNs have moderate capacity in terms of knowledge management systems. In regard to research being disseminated within the organisation (Question 8), PHNs indicated moderate or high capacity. In other aspects, there was more variation between PHNs.

Table 7.1: ORACLe Domain 4 score details

Question	Metro North	Metro South	Rural North	Remote	Rural South
8. Research disseminated within the organisation	2	3	2	3	2
9. Guidance resources on how to access, appraise and apply research	1	1	1	1	1
10. Staff with recognised expertise in research use (to assist others)	3	3	3	2	3
11.1 Subscription to research journals	3	3	1	1	3
11.2 Subscription to database of research journals	3	3	1	1	1
11.3 A library	2.5	1.5	1.5	1.5	1.5
11.4 Endnote (or similar) license	1	1	2	1	2
12. Methods for commissioning reviews of research	1	3	1	2	3
13. Knowledge management systems	2	2	2	1	2
Average score for Domain 4	1.9	2.35	1.73	1.69	2.15

All PHNs indicated relevant research is disseminated within the organisation, generally on an ad hoc basis, and more frequently in some PHNs than others. Material tends to be targeted to those for whom it is most relevant. At Metro North it falls within the role of a specific staff member to summarise and circulate relevant documents, but otherwise, systematic approaches to evidence dissemination were not reported. Four of the five PHNs have staff with recognised expertise in accessing, appraising and applying research, who are available as a resource to other staff.

Only two PHNs (Metro North and Metro South) reported having subscriptions to journals, and databases thereof. It was acknowledged that having access to a wide range of journals is "*extremely expensive*" (Senior Executive, Metro South), and not a high priority for some PHNs:

> *"I think it would probably not be good use of Commonwealth [federal government] funding to have subscriptions to all of the things that you need to have subscriptions to for the sake of having reading material. And, again it's staff capacity, that would be probably okay for a handful of people that have a scholarly background, but for the majority of staff, it's not warranted, so you sort of forgo it for those that need it." (Manager, Rural North)*

Most PHNs did not have a library. Only Metro North indicated having membership to their state library, which included access to journals and databases. (Although only one of the three interviewees mentioned this, suggesting it is not well known of or used by staff.)

None of the PHNs had strong centralised knowledge management systems. Some had, or were in the process of developing collaborative platforms, through staff intranets or other software systems, having recognised that they do need to manage and access knowledge. Responses indicated these systems were not (yet) well organised such that content was easily searchable and accessible. Remote PHN showed the lowest capacity in this regard.

> *"I mean a lot of us file stuff and we're well aware that it's absolutely a complete disaster because we've got an Endnote library here and then folders of PDFs there" (Staff, Remote)*

Both Remote and Rural North indicated intentions to develop knowledge management systems. The considerable effort and time required to develop such systems was frequently noted.

7.4.1 Other themes regarding access to evidence

While the ORACLe tool examined specific supports and resources to facilitate access to evidence, further interview and document analysis identified important related themes regarding access to evidence.

7.4.1.1 Data availability and quality

PHNs all have access to large national data sets from agencies such as the Australian Bureau of Statistics, the Australian Institute for Health and Welfare, Medicare plus more. There were frequent concerns raised regarding the lack of sub-regional granularity of many such data sets, although there had been some recent improvements. There were also common concerns about the currency of much national data, with some data being three, five or even ten years old. Large national data sets were felt to be of limited value to Remote PHN, because a large proportion of services in this region are provided by ACCHOs, which are not reflected in national data sets.

There were various general comments about paucity of data and widespread awareness of the limitations of different types of data.

> *"because of the issue with data paucity some of the evidence that we really need to make fully informed decisions isn't there" (Board, Remote)*

> *"that's my criticism, is that we don't have access to what we need to get access to, but I don't know how we fix it either" (Manager, Rural North)*

Another common theme among PHNs was the complex challenges associated with accessing, analysing and using GP clinical records data. Quality of GP data was identified as a concern: "*the data that exists in primary care has generally been pretty crap, and it still is*" (Board, Metro South). Access to GP data was also reportedly problematic, hindered by interrelated factors such as poor GP engagement and trust of PHNs, GPs' data sovereignty and ownership concerns, and PHNs' need to develop data governance systems. Remote PHN reported very good clinical records data from a large number of Aboriginal health services providing services using a consistent system with common performance indicators, but limited data from 'mainstream' health services:

> *"we actually have very good data about the performance of our Aboriginal primary health care settings. We have a complete blind spot with mainstream general practice and allied health." (Board, Remote)*

There was some variation between PHNs in terms of their access to state/territory government data. Rural South had strong relationships and formalised agreements to facilitate access to a broad range of data, including hospital, ambulance, pathology. Others (Metro North, Metro South, Remote) acknowledged that this was a complex area, with access to state/territory government held data somewhat difficult. Inability to access data from private hospitals, or hospital data from a neighbouring state, were also identified as challenges.

7.4.1.2 Data linkage

There was a frequent theme among PHNs about the need for better linkage of data to enable patient journeys to be tracked between the primary care and hospital sectors. This was seen as potentially enabling evaluation of the effectiveness of PHC approaches/strategies to reduce avoidable hospital admissions.

> *"The ultimate unicorn is to have linked data across administrative datasets that's freely available. Never going to happen in my lifetime I don't think." (Staff, Metro*

> *South)*

> *"The other big gap is data linkage and data sharing. So we don't at the moment have any formalised data sharing with the Department of Health for example, which runs all the hospitals. So in terms of having joined up data sets to successfully implement initiatives such as Health Care Homes which are building algorithms around hospital risk and hospital avoidance, we really need to have joined up data to make that successful." (Board, Remote)*

7.4.1.3 Availability of intervention research evidence

While much of the commentary was around access to evidence and data related to evidence for identifying needs, there were also frequent concerns raised regarding difficulty in accessing strong evidence of program effectiveness or value, to inform development of PHC interventions. This was often attributed to shortcomings in evaluation, which will be discussed further later in this chapter.

Interviewees recognised that PHNs may not have evidence as to the model/program being implemented, but have evidence of the need for intervention. Where there was evidence, it may not be directly relevant or appropriate for the context in question, which was a particular concern in Remote PHN. PHNs were seen to be breaking new ground and doing things that have not been done in Australia, for which there is no local or national evidence base, and as such were having to build the evidence base in order to generate and access the most appropriate evidence for their context:

> *"and sometimes where there is no evidence - because I think we're doing a whole lot of work in suicide prevention where we've got a really great evidence based framework, but then we're thinking about how does that get applied in a regional context? How do we establish pathways and things like that? So it's actually building the evidence base and learning from that as we go along as well." (Senior Executive, Metro North)*

PHNs' lack of access to a library and peer reviewed research means that PHNs can't just "*go off and see what the latest Cochrane Review or systematic review around a program [is]*" (Manager, Rural North), however, alternate sources of reliable evidence such as 'Croakey' or 'The Conversation' were seen to be quicker, more accessible and "*just as valuable*" (Manager, Rural North) as peer reviewed research papers. This is consistent with the relatively common use of 'grey literature' as a source of evidence identified through document analysis in section 6.7. Having the time to search and appraise evidence was also identified as a barrier.

The lack of funding for health services research (compared to clinical research) was blamed for the lack of intervention evidence, and it was suggested that there needs to be coordinated and funded national efforts to generate evidence as to what works in PHC to inform PHN planning, program development and implementation.

7.4.1.4 Access to qualitative evidence

The majority of concerns raised about access to evidence related to quantitative evidence, yet there were some issues raised among PHNs specifically about access to qualitative, consultation-based evidence. Common concerns were raised regarding engagement and consultation to provide evidence of unmet need, in that data (both qualitative and qualitative) tend to be mainly about people who are already 'in' the health care system. Similarly, there were concerns about lack of connection with communities who experience disadvantage, such as Aboriginal and Torres Strait Islander people, or remote communities. Interviewees identified the need for genuine resourcing to do community engagement well.

Several interviewees recounted a certain degree of pragmatism and 'muddling through' in regard to deficiencies in appropriate evidence:

> *"we aren't always able to avail ourselves of the best of everything, so we have to do the best we can with what we've got." (Staff, Rural South)*
>
> *"in terms of the qualitative evidence we use, we certainly don't follow the best techniques perhaps for collecting that, because you're limited to what you can do. So, for example, we get feedback on our health issues from people out in the community, and we have a couple of mechanisms for doing that, but we don't have the capacity to perhaps run focus groups and then to go through an appropriate analysis of that information. So, to me that then weakens it slightly, in that it hasn't got the rigour that I know that it should have around it, but you still have to use that evidence, because it's still informing. So, to me that's that tension that you have with having to use something when nothing else exists." (Manager, Rural North)*

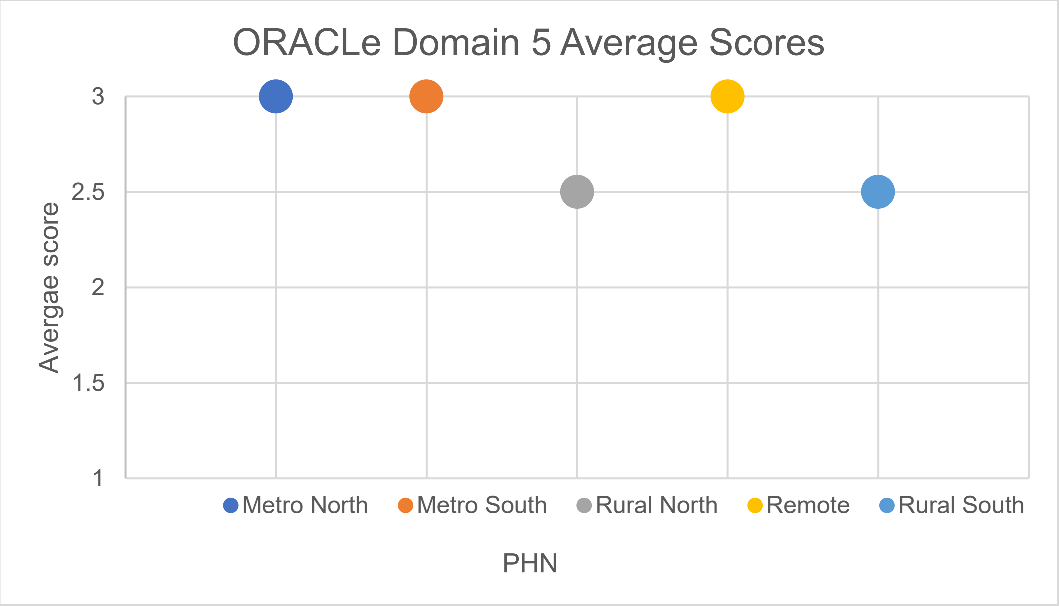
This latter quote also makes an important criticism of the rigour with which qualitative evidence is collected and analysed by PHNs. This is related to earlier concerns (section 6.7.1) about the over-reliance on anecdote, rather than robust qualitative evidence.

This section has highlighted some of the challenges PHNs face in accessing appropriate, high quality evidence to inform PHC planning. The moderate overall capacity with regard to organisational supports for accessing evidence, and the considerable variation between capacity factors within this domain, indicate there is not a strong institutional force driving capacity for accessing evidence.

7.5 Domain 5: presence of systems/methods to generate new research evidence to inform the organisation's work

Domain 5 results showed that overall PHNs' strongest capacity is in generating new research evidence to inform planning, through either conducting or commissioning research. The average of scores on this domain was 2.8/3. Three PHNs achieved the maximum score for the domain (Metro North, Metro South and Remote) with the other two also achieving a high average score of 2.5 across the two questions, indicating strong capacity in all PHNs.

Figure 7.5: ORACLe Domain 5 average scores



Interviewees reported that most PHNs generate evidence, either through commissioning or conducting research. This was consistent with findings from the document analysis component of this research. Original research activities included surveys, focus groups, interviews, forums, online engagement, and other methods. The size of research activities varied, both within and between PHNs. One interviewee articulated the inherent inclusion of research in PHNs' planning work:

> *"Yeah we do quite a bit of that sort of work, and of course when you're commissioning, you're collecting information and reports all the time, and data. So yeah I would say that we were pretty good at finding out more about what's happening in our own world" (Staff, Rural South)*

There were many good examples provided of commissioning research to inform planning, such as outsourcing the entire needs assessment, specific 'deep dives' into aspects of the needs assessment (LGBTIQ health needs, GP consultation, paediatric emergency department presentations), reviews of various service sectors (mental health, drug and alcohol, after hours services), market research to inform a particular campaign strategy, and 'action research' on wound care in older people.

7.5.1 Views on needs assessment capacity

All PHNs are required to do a needs assessment, which is itself a large, mixed methods research project. Some PHNs (Remote, Rural North) had previously outsourced their needs assessment, due to lack of internal capacity, but had since recruited appropriate staff, and taken back this function. This was also partly due to recognising the need for better 'local' information and understanding.

There were mixed views as to how well needs assessments had been done. While many interviewees expressed confidence that the PHNs' early needs assessments were done well others questioned their rigour: *"a little bit embryonic*" (Clinical Council, Metro South). Several clinical council and community advisory committee interviewees indicated that they had used PHN needs assessment documents as a source of evidence for their own work, indicating considerable trust in the quality of this work, due to its currency, local specificity and confidence in the capability of the people doing the analysis (Rural North and Rural South).

Several PHNs expressed confidence in the analysis and epidemiology capacity of specific staff or teams - Rural South was particularly positive about their capacity and recognised the importance of such capacity as "*absolutely foundational to our success*" (Senior Executive, Rural South, 2016).

> *"So we have good analytical manipulative and interpretive capability within that health planning unit and that makes a world of difference" (Senior Executive, Rural South)*

Others felt their PHN lacked capacity to analyse and interpret data, including longitudinal epidemiological analysis, or economic analysis. Some interviewees did acknowledge difficulties in recruiting staff, in that people with analysis skills are "*a bit like hen's teeth*" (Senior Executive, Metro South).

There was also evidence in some planning documents (of PHNs who did not participate as case studies) of low capacity in terms of basic concepts of epidemiology, for example referring to 'incidences' instead of 'prevalence':

> *"In some areas in the PHN, the Needs Assessment identified as an imperative, the development of, and education of, self-management strategies to increase people's ability to take responsibility for managing their health. It was also identified that the lack of these support strategies was a contributing factor to incidences of, and the continuation of chronic conditions." (Needs Assessment)*

(This quote also has a strong emphasis on individualistic responsibility for health, which will be discussed in further detail in Chapters 8 and 9.)

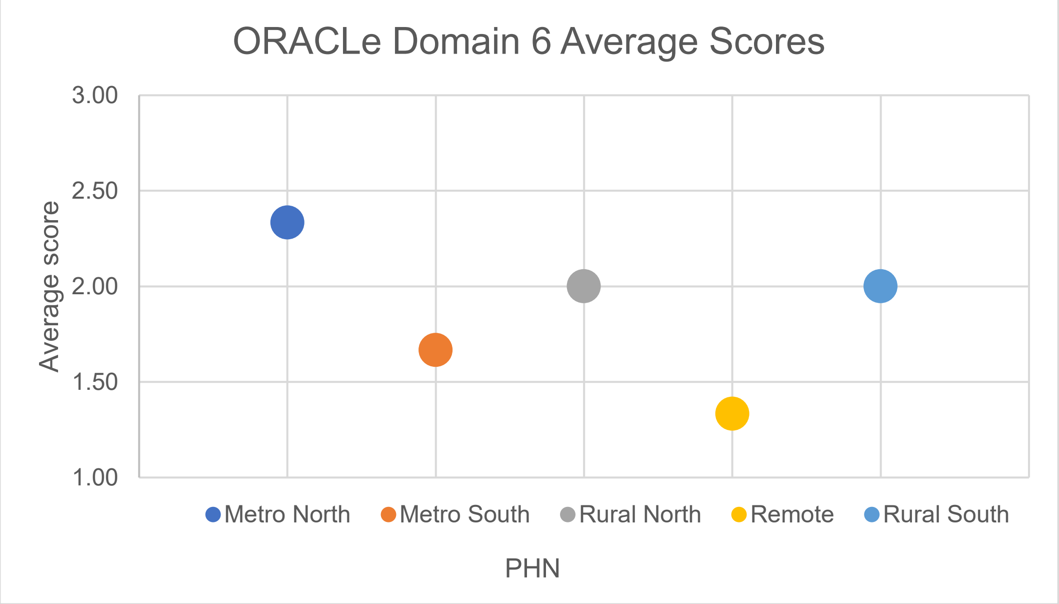
Discussion of analysis skills and capacity was predominantly in relation to epidemiology and quantitative data. Concerns regarding deficiencies in capacity for qualitative data collection and analysis have been discussed in section 7.4.1.4, but were particularly evident in Rural North and Remote PHNs.

There was a consistent view across PHNs that costs and restrictive timeframes limited the ability to conduct needs assessments optimally. Rushed engagement with stakeholders was felt to undermine the development and maintenance of relationships. The negative impact of time-constrained community engagement for equity-oriented PHC planning will be discussed in further detail in section 8.4.3.

7.6 Domain 6: clear methods to ensure adequate, evidence-informed evaluations of the organisations' policies and programs

Domain 6 results indicate that PHNs' capacity is relatively poor with regard to mechanisms to support robust program evaluation, whether that be conducted by the PHN itself, or outsourced to an external evaluator. Lower scores were achieved in this domain, compared with other domains, averaging 1.87 /3. Metro North, Rural North and Rural South demonstrated moderate capacity, with average scores between 2 and 2.5, and Metro South and Remote showed low capacity with average scores around 1.5.

Figure 7.6: ORACLe Domain 6 average scores



7.6.1 Mechanisms to facilitate evaluation

PHNs with higher capacity in this domain were those that reported being required to build evaluation into program planning, having documented processes for conducting evaluation, and having evaluation methods informed by research /evidence.

All PHNs talked about evaluation being part of program planning, but only two (Metro North, Metro South) reported having an evaluation component documented within activity plans, to prompt planning for evaluation on all programs. Three of the PHNs reported having documented guidance on how to conduct evaluation, although these were not particularly detailed or consistently applied. Rural South reported having an evaluation plan, based on a program logic model, built into the project management framework for each program. A further two PHNs also mentioned 'program logic' in regard to evaluation, which is a recognised tool to support the development of evaluation strategies (McLaughlin and Jordan, 2004). Some reported using validated tools or 'indicator banks' to help people select appropriate evaluation measures.

Three of the PHNs reported that evaluation is conducted by staff with recognised evaluation expertise, others favoured outsourcing evaluation to external organisations with appropriate expertise. Some tension was identified in relation to balancing principles and priorities in evaluation approaches. One PHN particularly favoured external, independent evaluation, citing strong relationships with, and confidence in the expertise of external evaluators (despite having a limited range of organisations to engage with for this purpose), and the benefit of avoiding potential bias or conflict of interest that may occur when providers evaluate their own service delivery. Other PHNs indicated that it would be quite acceptable and more economical for the PHN staff member responsible for implementing a program to also evaluate it.

7.6.2 Evaluation capacity development

All PHNs recognised that evaluation was an area in which there was ‘room for improvement’, evident in both 2016 and 2018 interviews. Evaluation was regarded as an ‘evolving’ space, in which there needed to be greater sophistication, diligence and rigour.

> *“I don’t think we were rigorous enough in that, and that’s certainly something that we want to build as an organisation, a methodology around evaluation” (Senior Executive, Rural South)*

While the challenges of evaluation were noted: “*Evaluation… is an onerous task”* (Community Advisory Committee, Rural North), good intentions and strategies to develop PHNs’ evaluation capacity were widely evident. In particular, Remote PHN did not demonstrate strong evaluation capacity, but the 2018 interview participants frequently spoke of the comprehensive monitoring and evaluation framework in development.

> *“the monitoring and evaluation [framework] is coming along. So there are definitely policies in place and under development and review. It’s quite a dynamic space.” (Staff, Remote)*

Strategies to develop evaluation capacity in PHNs included: incorporating indicators into tender release and assessment; mapping data/indicator availability; developing data storage and analysis capacity; consulting with advisory groups to inform evaluation framework development; reviewing funding agreements with commissioned service providers to ensure appropriate data are collected; strengthening mechanisms to gather consumer feedback; creating internal teams and building workforce capacity in evaluation; and developing internal frameworks, systems and processes.

PHNs’ changing role, focus and expectations as commissioners was frequently discussed in regard to evaluation capacity. Many recognised the importance of assessing the outcomes and value of commissioned services and programs, moving away from having previously conducted simpler assessment of process, activity, expenditure, outputs and “*counting widgets*” (Board, Rural South). In particular, Remote PHN interviewees reported incorporating the ‘Quadruple Aim’ approach to health system performance in their evaluation framework, which includes four dimensions: population health outcomes, patient experience, health care provider experience and per capita cost (Bodenheimer and Sinsky, 2014, Berwick et al., 2008).

However, the challenges associated with measuring outcomes (and value) were widely recognised:

> *"[measuring health outcomes] it's an easy thing to say and not such an easy thing to do, particularly when you get into things like mental health" (Board, Rural South)*

The time lag required to observe population outcomes from PHC was also noted, alongside acknowledgement that it is still "*early days*" for PHNs, who had not yet been able to meaningfully evaluate projects.

> *"what are your potentially preventable hospitalisations looking like? Well you know, that's not going to change over 10 years probably." (Staff, Remote)*

> *"We've tried to use evidence generated by ourselves, but it's never been big enough or never finished the circle yet ... to actually prove anything." (Clinical Council, Rural South)*

Attribution of outcomes to PHN activities was also seen as a challenge:

> *"It's often very hard to ascribe cause and effect, recognising that there are lots of confounders" (Board, Metro North)*

Some felt there was need for better use of patient reported outcome and experience measures (rather than biomedical clinical measures) but recognised the challenges in obtaining such data in certain contexts. Others were concerned about the lack of quantitative, statistical clinical outcome measurement, rather than qualitative outcomes (i.e. 'do you feel better'):

> *"to me being science based I find, - I'm not saying it's not a worthy thing [qualitative outcomes] I just want the full circle thanks and I want the actual statistical improvement." (Clinical Council, Rural South)*

7.6.3 Barriers to evaluation

Staff capacity was a key factor limiting evaluation. While some PHNs recognised strong skills within their evaluation-specific staff members but just needed more of them, other PHNs felt there was not adequate expertise among their staff to collect, manage and analyse evaluation data. Symptomatic of this was the frequent overlap of the concepts of contract monitoring and program/service evaluation. (In the context of PHNs, monitoring examines whether providers have fulfilled their contractual obligations to deliver a program or service, whereas evaluation examines the worth of the intervention in terms of relevance, progress, efficiency, impact, effectiveness and/or outcomes (Eagar et al., 2001).) In some interviews, questions about evaluation would be met with responses that tended to focus on performance monitoring, either of contracted service providers or the PHN itself, suggesting that the concepts and practice of performance monitoring and program evaluation are not very familiar or advanced.

One interviewee commented on the distinction:

> *"I think that a big shift will be required around the difference between monitoring and evaluation through a contract perspective, and monitoring and evaluation through the commissioning of health outcomes, because I think people sometimes think that you monitor and evaluate whether or not the contracted organisations are just ticking the boxes on their contract, whereas we see monitoring and evaluation also in terms of from a research perspective, are we actually doing what we said we were going to do, and getting the outcomes, the health outcome changes that we were hoping to? So I think that there's going to be a lot of work to do in that space for people to really understand and be comfortable with the two, what I consider to be the two levels." (Staff, Rural South)*

Insufficient funding, and high cost contributed to the lack of evaluation capacity, and interviewees expressed considerable frustration in this regard:

> *"one of the unfortunate by-products of the underfunding of our internal capability by government has been I think a real dumbing down of our own ability to evidence the value and importance of our own process and outcome" (Senior Executive, Rural South)*
>
> *"Look, frankly we are not sophisticated enough to do that [evaluation] and I'm not sure that we ever will be because gathering of data in its own right is a fairly fraught process and for the poor providers who are not geared up to collect data themselves and you've got to have a robust client information management system, which is another on-cost for us that we can't afford, so we've got to find some money to update that. From where, I don't know. And then you've got to get the providers to put the data onto the system. So, you can't give them a huge data set. So, you know, we're not set up for research. We are just not. So, our evaluation necessarily has to be fairly high level. We're not ever going to be researchers. We can't afford to do full scale evaluations." (Senior Executive, Metro South)*

In this environment of funding constraints, there were also concerns that evaluation is perceived as being at the expense of service delivery:

> *"we can't have people saying "I didn't get my visit with my psychologist because they spent the money on evaluation"" (Community Advisory Committee, Metro South)*

In the regulatory environment, the fragmented and short-term nature of government funding for PHNs was highlighted as being detrimental to evaluation. Several interviewees were critical of the federal government Department of Health's lack of support or investment in PHNs' evaluation capacity, and recognised that the department, like PHNs, is itself still maturing in its understanding and capacity regarding outcome evaluation in a commissioning context. The irrelevance of some performance indicators required by the department of PHNs was also criticised.

The particular focus of Government expectations and priorities in regard to evaluation was well articulated by one interviewee:

> *"Canberra [Department of Health] only wants numbers, they don't want to know that X people say they feel better, they want to know are they using the hospital less and are they going to cost them less." (Clinical Council, Rural South)*

The impact of several recent stages of PHCO reorganisation, and the imposition of short timeframes and high workloads in the transition from MLs, was also recognised as having hindered the development of evaluation capacity and the ability to generate evidence from the evaluation of programs and services:

> *"But it's [program evaluation] never really gone total full circle yet … to actually come out the other end, because it keeps getting chopped off and restarted" (Clinical Council, Rural South)*
>
> *"There's just been so much dumped on us" (Board, Rural South).*

These findings indicate strong regulatory institutional forces hindering evaluation capacity.

7.6.4 Enablers of evaluation

Various factors were identified as enabling evaluation capacity. The stance of PHN leaders towards evaluation was seen as an important factor. Across PHNs there were strong indications that boards and CEOs recognise the importance of robust evaluation, have invested in it and attempted to integrate it into commissioning. "*I think the organisation has taken a strategic decision to [do] evaluation*" (Manager, Metro North). There was also recognition of the importance of evaluation in commissioning and health system improvement:

> *"we're trying to understand how to be really effective at commissioning and certainly part of that is that continuous improvement and you can't do that without robust evaluation." (Board, Rural South, 2016)*
>
> *"to be innovative you need to know what's working, what's not working" (Board, Rural South)*

Such attitudes indicate a favourable cultural-cognitive institutional force enacted by organisational leaders.

Interviewees spoke of previous experience, both positive and negative, having provided valuable lessons on the importance and integration of evaluation. For example, one interviewee described an evaluation that had not been planned from the outset of a project, instead being later 'tacked on' and conducted poorly. The former 'Access to Allied Psychological Services' program from divisions and MLs provided a positive example and valuable lessons for evaluation, in having a rich minimum data set that included demographics as well as clinical outcome measures. Similarly, the

MLs' 'Partners In Recovery' program also provided a good example of community led evaluation that included people with lived experience of mental illness.

Good relationships with academics, state/territory government and contracted evaluators were also seen as enabling evaluation, in terms of expertise and guidance. In Remote PHN, there was recognition of the importance of cultural competence and understanding of remote context in the conduct of evaluation.

7.6.5 Evaluation to generate evidence

PHNs' role in generating evaluation evidence of intervention effectiveness was noted, progressing from their initial priority to maintain service continuity.

> *"Our first task was just to keep them [programs/services] going to make sure they didn't fall over, now we're reengineering them a bit, whether it's their model of care or through other things, and we need to now measure whether that approach is better or worse." (Board, Metro South)*

However, some interviewees raised concerns about PHNs' limited use or dissemination of evaluation findings.

> *"What I don't necessarily think we do well is promoting models that work, in the literature, I don't think we write them up, I don't think we form partnerships enough with academic organisations, to be able to see ourselves necessarily like pilot sites and then being able to disseminate those findings, in a more broad context. I think it happens very sporadically." (Manager, Metro North, 2016)*

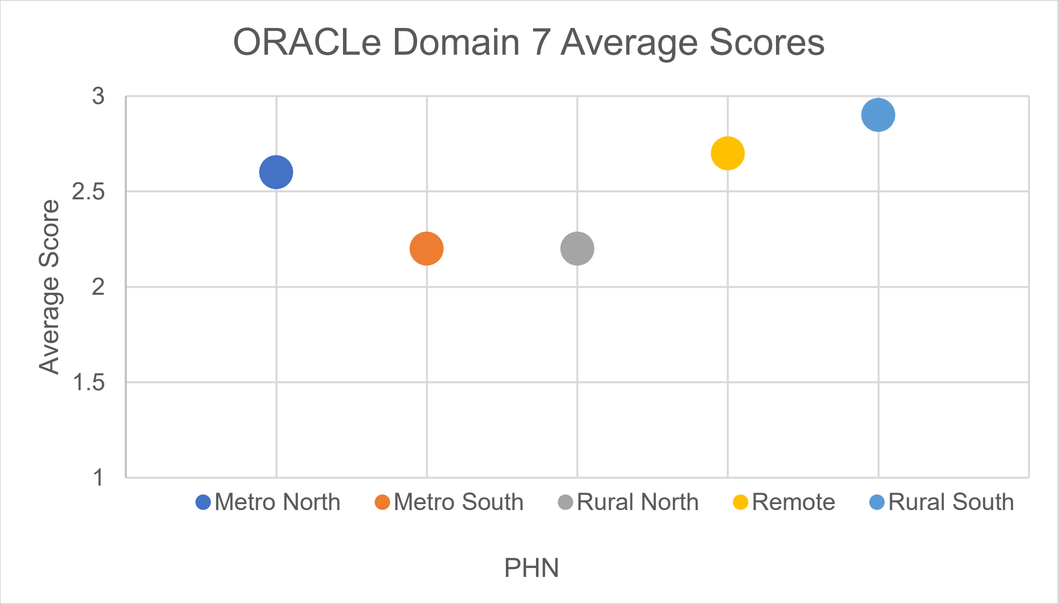
Evaluation is an important function of PHNs, in terms of assessing the effectiveness and value of planned interventions, and in generating contextually relevant intervention evidence. Yet this is an aspect of capacity that is somewhat lacking, hindered by financial and time constraints, and by the disruption of PHCO reorganisation, all of which are driven by regulatory institutional forces.

7.7 Domain 7: mechanisms that help strengthen staff relationships with researchers

Domain 7 examined mechanisms to support PHN staff relationships with researchers. This relates to, but is more specific than, the 'communication and networks' capacity domain in the WHO framework (Green and Bennett, 2007).

PHNs demonstrated moderately strong capacity in terms of mechanisms to strengthen relationships with researchers. The average score across PHNs in this domain was 2.52/3. Rural South achieved the highest average score on this domain (2.9/3), followed closely by Remote (2.7) and Metro North (2.6), indicating relatively high capacity in these PHNs. Metro South and Rural North demonstrated moderate capacity, with domain scores averaging 2.2.

Figure 7.7: ORACLe Domain 7 average scores



7.7.1 Mechanisms for staff relationships with researchers

All PHNs reported that attendance at conferences is broadly supported and relatively common, although not necessarily ‘research’ conferences, but often ‘industry’ or PHN network events. Interview data indicated that PHN staff are supported to attend conferences with the primary purpose of presenting, sharing and showcasing their work, and to a lesser extent accessing evidence/learnings from others.

> *“I do really try and strongly encourage us to be presenting and sharing things at symposia and events and things like that to help expose people to a whole range of things, as well as exposing what we’re doing to others.” (Senior Executive, Rural South)*

PHNs reported having formal relationships with universities, for different purposes and to different extents. Rural North, Rural South and Remote had numerous contracts with universities and research institutes for specific research projects. Additionally, Rural South is part of a formal research collaborative partnership, although they tended to be “*more of a backseat partner just simply because we’re not able to put in large amounts of money*” (Senior Executive, Rural South). Rural North similarly sits on their LHN health research committee alongside university representatives. Metro South interviewees indicated they decided against a formal research partnership involving universities and service providers working together to identify and develop practice-led research opportunities, as they did not see the value.

> *“they were looking for us to pay them an amount of money to join [research partnership], which I am yet to pay because I don't see the value in it. Because essentially what comes out of that place is research to suit themselves, not us” (Senior Executive, Metro South)*

All PHNs demonstrated strong capacity in regard to informal relationships with research organisations: "*We have some good strong links with those partners*." (Manager, Rural North). Examples of relationships with researchers included connection through PHN staff having previously worked in the university sector, and also a CEO having regular meetings with senior university academics:

> *"Informal relationships are really good and [region] does informal relationships very well" (Senior Executive, Rural South).*

It was uncommon for PHNs to have staff with adjunct university appointments. Metro North reported having one manager who also works part time as an academic, although not officially a 'joint' position between the PHN and university. Rural South had at least one, possibly two staff with adjunct appointments with the university, and were in discussions about trying to establish more formalised adjunct associate professorships.

There were mixed results about researchers' participation in PHNs' advisory committees. Three of the PHNs had researchers/academics frequently, systematically involved in the clinical or community councils, or other program advisory groups – Rural South, Remote and Metro North. Rural North did not have any researchers involved in advisory groups but indicated there had been discussion about future collaboration opportunities. Metro South had an academic as chair on one of their councils and had previously involved academics or researchers in mental health planning, on an ad hoc basis, but one interviewee stated that researchers were "*not a group that we would target for co-design."* (Senior Executive, Metro South)

7.7.2 Benefits and risks of relationships with researchers

Various themes emerged around the purpose and benefit of relationships between PHNs and researchers. Some interviewees identified that relationships with researchers, especially through more formalised networks or committees, potentially gave PHNs greater opportunity to influence the research agenda, so that researchers are investigating issues of greater relevance and benefit to PHNs. Researchers were seen to bring stronger rigour to research and evaluation projects. Partnering with university researchers was seen to enable PHNs to have some involvement in relevant research, in the relative absence of PHNs' research emphasis or investment:

> *"So we are not a research body. But we are interested in partnerships or encouraging others to undertake research that will inform our commissioning around evidence-based approaches. So we have a number of what I would call research partnerships, in that regard, where we've got organisations who are actually undertaking research around various pieces of information that we would like to know more about." (Senior Executive, Remote)*

Partnerships with researchers were also seen to have the benefit of building internal capability for research within the PHN.

> *"where we have opportunities, we collaborate with [research collaboration], and at times, other external consultants who work with us on some of that work where we don't have time, or we think the expertise to be able to do some of that more detailed work. And we often try and engage those people in a way that they work with us, so that through that process we're building our capability as well."* *(Manager, Rural South)*

Some practical benefits of relationships with researchers were also outlined, in terms of potentially enabling PHNs' access to a library, and university ethics committee, in the event PHN staff want to publish research or evaluation findings.

Discussion of researcher relationships tended to focus on benefitting PHNs' research or evidence generation, and less on researchers as a source of evidence or expertise to inform planning and program development. One interviewee did draw on the analogy of 'swimming between the flags' to indicate the potential benefit of researcher involvement in PHN planning:

> *"It's like going swimming, we've [the PHN] got to swim within the flags or else we end up wasting money on all sorts of rubbish and then we've got no chance of delivering any benefit. So we need academia to provide some idea of where the flags are. But in terms of the day to day movements in the surf to say should we be going left or right in order to get the wave, it's not overly useful." (Clinical Council, Metro South)*

There were only a few potential risks or disadvantages outlined regarding PHN relationships with researchers. Concerns included slowed progress, limited understanding of academia by PHNs, researchers focussing on their own research agenda, and advisory groups becoming 'top heavy' with academics rather than people with clinical expertise and experience. The potential for conflict of interest, in having researchers favour their own research in decision-making, was also noted.

It is recognised that broader relationships and networks with other actors contribute to capacity for evidence-informed policy and planning, just as 'evidence' is broader than that sourced from research (Green and Bennett, 2007). As noted in Chapter 5, PHNs have relationships with a variety of actors other than researchers, some of which have important implications for PHNs' capacity for evidence-informed planning. While the focus and strength of collaboration and partnerships varied between PHNs, they were widely lauded and recognised as being vital to PHNs' role, particularly in enabling research and evidence-generating capacity.

In light of PHNs' lack of research funding, relationships with various stakeholders were seen to be beneficial in terms of cost sharing or enabling access to data or information. Some PHNs felt they did this well (Rural South), and others reported that access to other agencies' data was complicated (Metro North, Remote).

> *"But that's a sensitive issue so we're approaching that one carefully" (Staff, Remote).*

> *"we've got quite a long way to go in being able to access and put in place data sharing agreements, and being able to do the analysis" (Senior Executive, Remote)*

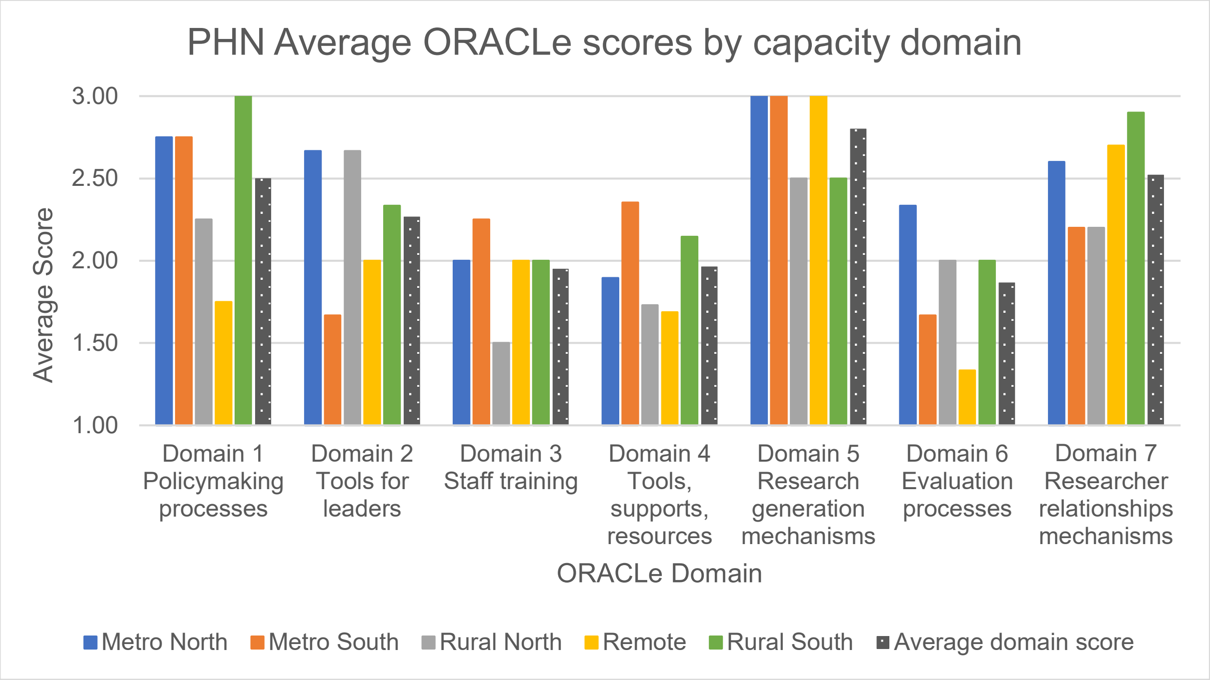
Relationships with other PHNs were seen to be beneficial for evidence-informed planning through collaborations to share or jointly develop resources and frameworks. Examples of jointly developed resources and frameworks included a national PHC data warehouse, the national performance and quality framework for PHNs, GP data governance systems, and a regional health information website. Joint projects and shared functions such as purchasing software or analysis services were also frequently mentioned as beneficial opportunities to share costs and increase efficiency.

7.8 Combined capacity findings

Based on the ORACLe results, PHNs broadly demonstrated moderate to high organisational capacity for evidence-informed planning, with average domain scores for all the PHNs combined ranging from 1.9 to 2.8 (out of 3). Overall, PHNs showed consistently strong capacity in generating research evidence (Domain 5). Relationships with researchers (Domain 7) was also an area of consistently good capacity across PHNs and while there was on average good capacity in documented processes to encourage research evidence use (Domain 1), there was greater variation between PHNs in this domain. PHNs demonstrated moderate capacity, and considerable variation regarding leadership support (Domain 2), and staff training (Domain 3). The capacity areas showing the greatest opportunity for improvement and considerable variation between PHNs were tools and resources for accessing and applying research (Domain 4), as well as evaluation capacity (Domain 6).

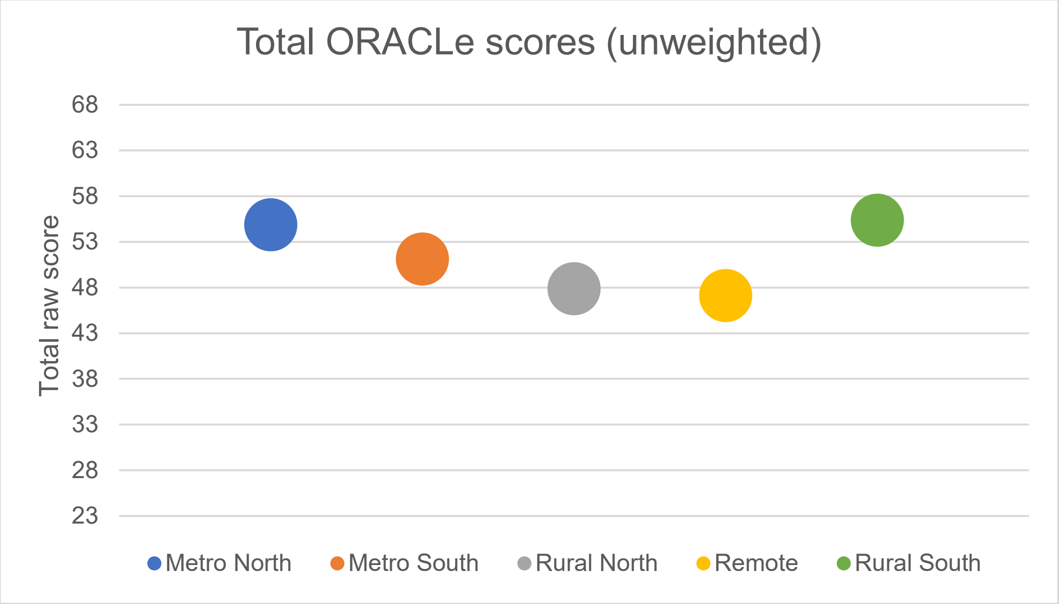
There was variation between the scores achieved by PHNs on each domain, and no PHN consistently scored higher or lower than others. Figure 7.8 shows each PHN's average score for all capacity domains, and the average of all PHNs' scores for each domain. Detailed ORACLe scores for each question are in Appendix L.

Figure 7.8: Average scores for all ORACLe domains



When scores for all 23 questions were added, it indicated PHNs had moderate to somewhat high capacity, with Rural South and Metro North leading, followed by Metro South then Rural North and Remote, as illustrated in Figure 7.9.

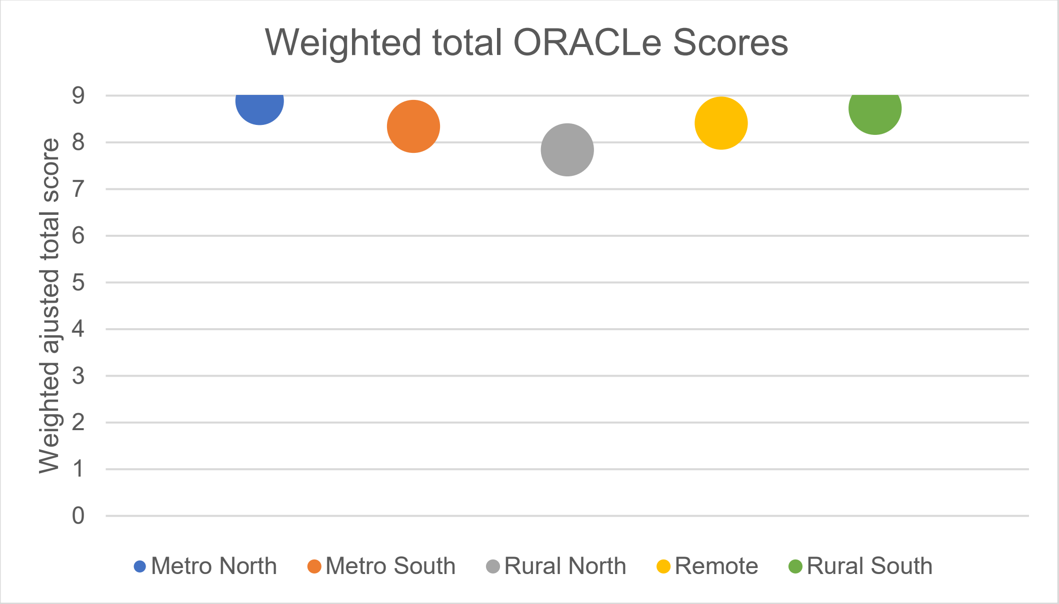
Figure 7.9: Total ORACLe score (unweighted)



The original version of the ORACLe tool involves applying weightings to each domain score, before tallying an overall capacity score. The weighting refers to the relative degree of importance of each domain to strengthening the overall organisational capacity for evidence-informed policy-making and planning (Makkar et al., 2016b). The weightings for each domain are listed in section 3.4.4.2. When recommended weightings were applied and domain scores were tallied, according to the recommended model outlined in the 'Additional File' to the ORACLe tool (Makkar et al., 2016b), all

PHNs scored highly, indicating strong overall capacity. There was relatively little variation between PHNs, and the ranking of PHNs changed slightly. While Metro North and Rural South still showed slightly higher capacity (8.9 and 8.7 respectively), the order of Metro South, Rural North and Remote changed to indicate that Rural North had the lowest capacity. This is illustrated in Figure 7.10.

Figure 7.10: Total ORACLe scores (weighted)



When the ORACLe tool is used as intended (Makkar et al., 2016b), these results suggest that PHNs have high organisational capacity for evidence-informed planning. The qualifications for, and implications of these findings will be explored further in the discussion. The results do consistently show that Metro North and Rural South have somewhat greater capacity for evidence-informed planning than the other PHNs in this research. The domain results indicate which domains of capacity are generally stronger or weaker in PHNs and also help to identify particular areas for focus within organisations.

7.9 Governance capacity

While not specifically addressed in the ORACLe tool, governance is recognised as an element of organisational capacity for evidence-informed policy-making (Green and Bennett, 2007). The 'good governance' framework (Hawkins and Parkhurst, 2016), incorporating the principles of appropriateness, transparency, accountability and contestability, was used to examine this aspect of PHNs' capacity for evidence-informed planning, using data from interviews and internal PHN documents, as outlined in section 3.2.2. Analysis indicates that while there are some general strategies that allow for consideration of the appropriateness of evidence, and transparency, contestability and accountability of decisions, the process by which planning decisions are made is somewhat opaque to those not directly involved.

7.9.1 Appropriateness of evidence

The ‘good governance’ framework advocates explicit mechanisms in the decision-making process to appraise the appropriateness of evidence for the given purpose (Hawkins and Parkhurst, 2016). As mentioned in Chapter 2, this is broader than assessing the methodological rigour or quality of evidence (Parkhurst and Abeysinghe, 2016).

In PHN internal documents, there were several references that implied consideration of the appropriateness or relevance of an information source, but there were very few indications of mechanisms to promote this.

The Remote PHN’s Needs Assessment Framework made explicit that local data are considered preferable: “*Good data, the more local the better, is essential for good needs assessments*.” It also included a matrix triangulation tool which counts the different sources of evidence but doesn’t assess their quality or appropriateness.

Interview data indicated that advisory groups and boards do play a role in querying and critiquing decisions and evidence:

> *“As advisory councils we do engage with the data, and we are encouraged to do so: ‘does this all make sense to you’… We’re invited to interrogate the evidence: does it make sense, is this what you would expect, what does it tell us, how is it going to inform practice, et cetera, et cetera. So we do have that opportunity.” (Community Advisory Committee, Rural South)*

Although some felt that there wasn’t in-depth discussion of evidence quality:

> *“We probably don’t have an in-depth discussion around quality of evidence, and I know that’s a potentially important issue” (Community Advisory Committee, Metro North)*

Judgements about the quality and appropriateness of evidence tended to be ad hoc, relying on the experience and skills of those concerned, whether that be staff analysing, or advisory groups querying, rather than being any sort of systematic assessment process.

> *“I have a criteria myself that I would apply to any evidence we have” (Manager, Rural North)*

There was also some recognition of the distinction between appropriateness and quality of evidence:

> *“It’s more around us understanding how might that apply or not in our local situation. I think that’s where we tend to focus.” (Manager, Rural South)*

7.9.2 Transparency, accountability and contestability of decision-making processes

The principles of transparency, accountability and contestability are closely interrelated, in that contestability and accountability can't be achieved without transparency. In order for decision-makers to be held accountable, or for decisions to be contested, decisions must be transparent, including what (if any) evidence was used to inform those decisions.

PHNs have minimal requirements for planning transparency, as directed by the Department of Health. They are required to publish the department-approved version of their needs assessment and activity work plan on their website – the outputs of their decision-making. There is no regulatory requirement that they have transparency mechanisms in place regarding the process by which planning decisions are made.

A handful of PHNs provided some detail in their needs assessments about the criteria they use for prioritising needs and/or assessing potential strategies, for example:

> *"The criteria considered were: relative size of the problem compared to [state]; absolute number of people affected; policy or other imperatives surrounding the issue; amenability to primary health care; the severity or impact of the health problem on quality of life; the number of stakeholders who identified this as a key problem; and the number of agencies which could partner to address the problem… Proposed strategies were then reviewed by the Population Health Steering committee using criteria such as evidence, cost effectiveness and equity" (Needs Assessment)*

It was however rare that criteria included appraisal of evidence:

> *"The strength of the evidence for each particular issue. (i.e. the quality of the quantitative evidence and whether it was verified by the qualitative evidence)" (Needs Assessment)*

Several PHN internal documents included broad but strong rhetoric about the principles of transparency, in particular Remote and Rural South. For example:

> *"[Remote] PHN ensures this [prioritisation and decision-making] process is evidence-based, takes account of different perspectives and decision-making is transparent, fair and reasonable". (Remote PHN Needs Assessment Framework)*

Transparency also featured explicitly in several documents outlining expected values and behaviours. '*We conduct ourselves with integrity and transparency'* (Rural South Values and Behaviours Chart)

Interview data indicated mixed views about the transparency of PHN decisions. Some were satisfied with the degree of transparency, which they saw as particularly important in PHNs' role as commissioners:

> *"I think it's pretty tight and transparent definitely yeah, to make sure everything's above board and everyone is taken into account and everyone's view is taken into account. And any decisions about the funding can be fully justified that that is definitely taken into big consideration at every decision… as a commissioner now you are even much more open to being questioned. But even before that, it was still – mainly because we thought it was the right thing to do, we've got a fairly good bunch of people who think straight and are ethical." (Clinical Council, Rural South)*

Others expressed concerns about the non-transparent process by which decisions are made at the executive management level:

> *"it's a little bit of a black box. I think as an organisation, drawing those links between evidence and services is probably not as transparent as it could be." (Board, Metro South)*
>
> *"I think it's a cloudy system from my perspective" (Community Advisory Committee, Rural North)*

There are several general mechanisms within PHNs that provide potential opportunity to incorporate the principles of transparency, accountability and contestability.

The importance of general communication and stakeholder relationships were widely discussed in relation to transparency and contestability. There was a consistent view that PHNs' focus on regular communication and consultation was important in that involving stakeholders in decisions along the way, and informing them about what is happening and why, helps to mitigate specific challenges or appeals. For example, Metro South had documented the expectation to communicate the outcomes of the 'design' stage of the planning process, through usual PHN communication mechanisms. There were also occasional mentions of general complaints and feedback mechanisms.

There was much discussion in interviews and documents about collaboration and co-design of initiatives with key stakeholders. This is inherently a mechanism for transparent and contestable decision-making. By participating in co-design, stakeholders can (in theory at least) question and debate evidence among other considerations in the planning and development of strategies. There was insufficient detail to indicate how co-design workshops are structured and facilitated, and to what extent they incorporate mechanisms to debate and challenge considerations (including evidence) for any given decision.

PHNs' community advisory committees and clinical councils, and in some cases other advisory groups, provide mechanisms for transparency, accountability and contestability, in that stakeholders and community members are informed about decisions and can query their rationale. A specific example from Rural South was described, where the board feeds back to the clinical council about what decisions had been made, and what the board had thought of the council's advice. While this does demonstrate some accountability for one factor informing decisions (the advice from the council) it doesn't necessarily account for other factors and considerations in the decision-making. While terms of reference documents contained material about being accountable for outcomes there was no evidence to indicate any specific mechanisms or expectations that advisory group members or other stakeholders would have oversight of planning decisions and the evidence used (or not used) to inform them. It was apparent that such groups' roles were primarily advisory, and a mechanism to have input to planning, rather than overseeing planning decisions and processes.

It also appeared that there was very little accountability for the process of decision-making, as evidenced by the relatively common lack of awareness of planning processes and documentation thereof by council and board members. PHN staff were accountable to boards and councils for the outcomes of their planning, but not the process of planning – it appeared the board and council trusted that there was a robust, documented process without having specific knowledge of it. For example, the following response was given to the question of whether the PHN has documented processes for planning and program development:

> *"Probably [a question] for the staff a little bit more, but (pause) we certainly have very well documented governance, policies and procedures. Lots … I can't tell you exactly the process that they [staff] follow. I wouldn't know exactly. But I know that there was a lot of work and thought that's gone into that" (Board, Metro North)*

This indicates a lack of process transparency and accountability, even to those closely engaged with the organisation. Furthermore, while some might claim that it is not within the remit of board or council members to know operational details, the role of a board includes establishing internal policies, and oversight - which includes ensuring mechanisms are in place (Arnwine, 2002). In the context of PHCOs, the duty of CCGs boards is "*to ensure good governance*", including accountability and transparency (Imison et al., 2011). The 'good governance' of evidence-informed health decision-making means having in place mechanisms to promote appropriate, transparent, accountable and contestable processes for making evidence-informed health planning decisions (Hawkins and Parkhurst, 2016). These findings indicate that those responsible for ensuring good governance, are not particularly knowledgeable about of the existence of such mechanisms within documented internal policies and procedures.

While the distribution of meeting minutes that capture decisions and their rationale has been recommended as a transparency mechanism (Hawkins and Parkhurst, 2016), this was not evident in any of the PHNs in this study. Minutes were generally only circulated to members of the respective groups, although there was some evidence of minutes being available to staff, or members of other committees within the same organisation.

7.9.3 Governance of decisions about identifying and prioritising needs

PHNs make many different decisions at various junctures in the commissioning cycle. In discussions of governance principles, decisions about identifying and prioritising population health needs were frequently prominent.

Rural South reported consulting with community members about interpretation of quantitative data, which provides some accountability for evidence used in needs assessment:

> *"this is what the facts and figures tell us in your community ... this is what we see your community looking like. Now let's challenge that, what have you guys got to say in response?" (Board, Rural South)*

Several PHNs would circulate a draft needs assessment for comment, prior to finalising decisions on priority issues, which aided transparency and enabled findings and evidence to be challenged. Transparency of needs assessment findings was also assisted by developing accessible, summarised versions of needs assessment documents for dissemination among the wider community and stakeholders.

Accountability to people who had participated in needs assessment consultation activities was also identified as being of importance to PHNs. For example, Rural South reported providing reports to participants and on their website after consultation activities, to 'close the loop' and show what they had 'heard'.

However, the 'good governance' framework (Hawkins and Parkhurst, 2016) is about the *process* of decision-making, and 'good governance' of decision-making processes (rather than outcomes) was less evident. A transparent process for prioritising population health needs was only reported by two of the PHNs – Remote PHN had a matrix to appraise evidence based on the number of triangulating sources, and Metro South reported a prioritisation tool. There was no evidence of any documented criteria for decisions about prioritising health needs, such as the number of people affected, the burden of disease or the cost to the health system.

Several PHNs acknowledged that their planning processes were not sophisticated enough to include documented criteria for prioritisation decisions:

> *"I recognise the need for getting a more documented criteria around prioritisation, so that you can back up what you're doing with that, but we're not there yet." (Manager, Rural North)*

7.9.4 Governance of decisions about planning and program development

Another key decision area for PHNs is about the selection or development of interventions to address identified needs. There was some evidence to indicate that prioritising needs and selecting strategies overlapped somewhat, rather than being distinct decision points.

The best specific example of transparency in this aspect of decision-making was in the Remote

PHN Needs Assessment Framework which included a matrix for considering the following aspects of a proposed strategy: impact, changeability, acceptability, resource feasibility, and alignment with national and/or local priorities.

The analysis of public documents identified criteria used to rank options in the Metro North Needs Assessment preamble: effectiveness; cost-effectiveness and affordability; feasibility; acceptability; appropriate and equitable; and alignment. These criteria were also mentioned in a 2018 interview, with the qualifier that they had only just been tested, weightings were yet to be developed and the criteria had not yet been applied in planning. This would explain why they were not evident in the internal document analysis.

There was interview discussion and document analysis evidence from Metro South, about executives considering program options against factors such as value for money, ease of implementation and potential impact.

> *"for all of the priorities that came out of the annual planning day we then as an executive and a management group went 'okay we're going to rate that against how easy is that going to be to implement and what are the outcomes going to be' ... and that was quite a structured process." (Manager, Metro South)*

There were very few examples of mechanisms to ensure the transparency (and thus contestability) of evidence used to inform the selection or development of an intervention, as advocated by the 'good governance' framework (Hawkins and Parkhurst, 2016). Only Rural South had a template-based document that made transparent to the broader community what evidence had informed a planned program:

> *"we use that document to demonstrate what evidence we've used to inform our decision-making. And then what we've proposed to design as a result of that process. So that's one of the mechanisms for communicating and being transparent with our stakeholders" (Manager, Rural South)*

However, this provides transparency of the *outcome* of planning, rather than the *process* of planning.

A further key decision area for PHNs relates to the procurement or contracting aspect of commissioning, and much of the discussion in both interviews and document analysis about transparency and contestability principles focussed on this stage. This suggested that transparency of decisions about *who* to contract was more important than decisions about *what* or *where* to contract.

Several interviewees commented at the relative immaturity of the PHN sector with regard to governance, and it was suggested by an interviewee that PHNs' development of governance capacity had been hindered by the frequent organisational and sector changes, and the need for

PHNs to be responsive to policy changes:

> *"if the federal government make another decision that they [the PHN] haven't dealt with before, well that rocks the boat a bit ... It's very hard to have good governance in place when you really don't know what can be popped on you and I think that's an issue." (Community Advisory Committee, Rural North)*

This analysis indicated there were not strong institutional forces to drive 'good governance' of the planning process.

While there were some indications of mechanisms to enact 'good governance' principles in PHNs' functions, these were largely in relation to the outcomes of planning decision-making, rather than the process by which decisions are made, and more in relation to prioritisation of needs rather than development of interventions. Systematic mechanisms to promote and institutionalise good governance - appropriateness, transparency, accountability and contestability - of evidence-informed PHC planning process are lacking.

7.10 Broad capacity themes

PHNs' capacity for evidence-informed planning should be considered in the broader context of their capacity for commissioning. It was consistently acknowledged in interviews that PHNs had not had strong commissioning capacity initially, and that while there had been improvement and it had been a steep 'learning curve', there was still room for further development and maturity. This was supported by evidence in PHN planning documents, as to the recent focus on developing commissioning capability.

> *"building on Medicare Local experience, that move into the commissioning environment, it is a very different move. Commissioning requires a very different set of organisational expertise and competency." (Senior Executive, Rural North).*

The ability to 'join up' the elements of the commissioning cycle, particularly such that evaluation informed subsequent planning, was a common theme.

> *"What we've recognised is that we've got some gaps in transferring information between what we call those quadrants so needs assessment, co-design, delivery, evaluation. Whilst we're pretty comfortable with our processes within each sector, quadrant, the flow of information between those sectors is not as good. That's probably where we need to formalise our processes a bit more about how information gets transferred" (Staff, Metro North)*

While it was frequently acknowledged that it is still 'early days' for PHNs and that to a certain extent they are still developing foundational systems and structures, there was a strong sense that PHNs' capacity, broadly spoken of in terms of "rigour", "professionalism" and "maturity", has greatly improved since divisions and MLs:

> *"There's more and more knowledge and we are much wiser and better and much, much more professional with each sort of organisation, I do agree with that. But they're [PHNs] allowed to do less and less with it I think." (Clinical Council, Rural South)*

This quote also captures an important point about the external constraints imposed on PHNs, which was discussed in Chapter 5.

PHNs' potential for ongoing capacity development is reflected in their perception of themselves as 'learning organisations':

> *"we're an organisation that is constantly learning, so we don't always get it right. But I think what we try to do is learn from how we do that (Senior Executive, Metro North)*

7.11 Chapter 7 summary

This chapter has provided a comprehensive examination of PHNs' organisational capacity for evidence-informed PHC planning, and the contributing factors. While overall PHNs' capacity appears strong, there were some capacity shortcomings identified with regard to evaluation of interventions, access to tools and resources, and systematic mechanisms to foster planning processes embedded with 'good governance' principles.

Evidence-informed decision-making is fundamental to promoting health equity though PHC planning. The next chapter will explore PHNs' equity-orientation in PHC planning.

CHAPTER 8 FINDINGS: PRIMARY HEALTH CARE PLANNING FOR HEALTH EQUITY

I am interested in evidence-informed PHC planning in the pursuit of health equity goals. Comprehensive PHC, with its focus on care, prevention and promotion is concerned with working towards equitable population health outcomes. Regional PHCOs can employ numerous strategies to reduce health inequities. The previously described framework by Freeman et al. (2018) (Figure 3.2) displays the ways in which this can happen. This chapter uses this framework to first examine PHN intentions for addressing health inequity, and then look at which equity issues attract greater focus from PHNs in their gathering of health equity information. The following section will explore PHN actions that can affect health inequity, and then delve into the factors that influence the extent to which PHC planning is equity-oriented.

8.1 Equity intentions

This section will explore PHNs' intentions and ideas in relation to addressing health inequity, as reflected in their statements regarding goals and objectives. This is important because Freeman et al. (2018) suggest PHCOs should start by having equity as a stated goal.

Analysis of PHN planning documents showed that 22 of the 31 PHNs (71%) state clear organisational and/or program goals for addressing health inequity in their region. Examples of equity-oriented goals are:

> *"Strategic priorities: 1. Addressing health gaps and inequalities" (Organisational goal, Annual Report)*
>
> *"Expected Outcome: Improve equitable access to primary health care through removal of systemic barriers by development of clinical pathways and service redesign through clinician engagement." (Program goal, Activity Work Plan)*

There were hundreds of statements of equity-oriented objectives and strategies, in 26 of the 31 PHNs' planning documents (84%).

Intentions to reduce health inequities were also frequently echoed in PHN interviews, either as broad goals (first quote below) or more specific objectives or strategies (second quote below).

> *"the board is not involved in saying, "commission organisation X to do Y", we're involved in saying, "We want to make a difference in inequalities in these areas and your job now is to go away and design services and commission services to address that" " (Board, Metro South)*
>
> *"at the moment we're trying to work across the sector to look at increasing the number of Aboriginal health practitioners available in the workforce" (Senior Executive, Remote)*

Interviewees tended to speak about the equity objectives of certain initiatives, but few recognised the inherent equity purpose underpinning the overarching needs-based PHNs planning model.

> *"one of the components of a needs analysis is to look at the social determinants and the equity issues within that needs analysis and as such we will be doing our best to focus on the areas where we can get the best value and the best outcomes for the people that need it the most." (Board, Rural South, 2016)*

This analysis suggest that equity-oriented intentions and ideals are relatively common in the PHNs' planning documents. The next section will examine which equity issues take prominence.

8.2 Conceptions of equity

Information on health inequities is a necessary factor enabling PHCOs to address health inequity (Freeman et al., 2018), and can include various demographic, epidemiological and/or health services indicators, or qualitative data. This section looks at the extent to which PHNs acknowledge or mention various issues of health and social inequity, either explicitly or implicitly in their planning documents. The analysis examines the extent to which equity information is collected, as well as indicating which equity issues are highlighted and prioritised by PHNs. The typology of equity issues was developed based on the framework employed in the RPHCO project, and through preliminary analysis of PHN public documents. The social determinants of health are included in this analysis of equity considerations because the WHO Commission on the Social Determinants of Health recommends that strengthening health equity requires action on these underlying social determinants, not just concentrating on the immediate causes of disease (Marmot and Commission on Social Determinants of Health, 2007). Action on the social determinants of health is a key feature of comprehensive, equity-oriented PHC (World Health Organization, 1978). The typology of equity issues, with examples is shown in Table 8.1.

Table 8.1: Typology of equity issues, with examples

Type of equity issue	Explanation/description*	Example text
Access to services	Text relating to inequity or disadvantage in access to services	"*General practice plays an integral role in the delivery of health care to the community and is most likely to be a person's first point of contact with the health care system. An insufficient number and/or uneven distribution of health services, and health professionals, can impede access to care. A number of locations within the [PHN] region had a lower concentration of general practices and pharmacies."* (Needs Assessment)
People who experience disadvantage	Text relating to health inequity among people who experience disadvantage	"*The Needs Assessment identified that there is a higher mortality rate of children aged under five years of age among the Aboriginal population. It was also identified that in some areas of the PHN, prenatal and postnatal care is not tailored for Aboriginal women and*

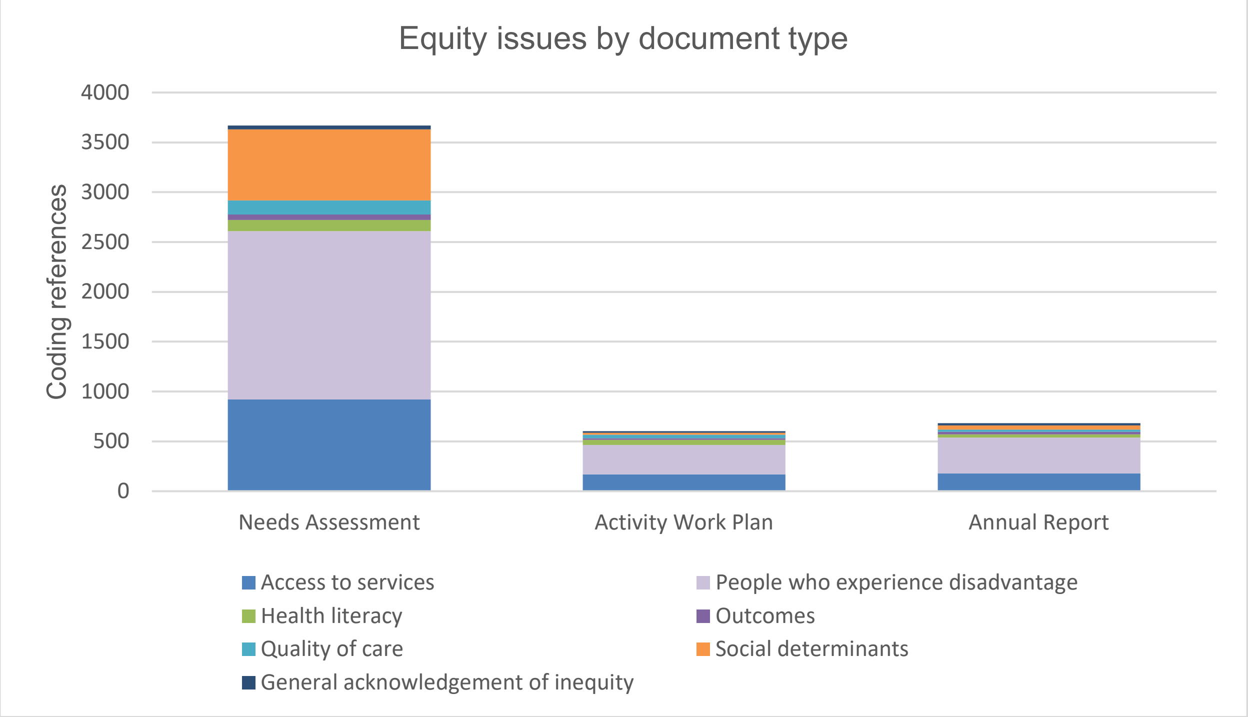
Type of equity issue	Explanation/description*	Example text
		therefore the outcomes for Aboriginal mothers and their children is problematic." (Needs Assessment)
Health literacy	Explicit mentions of health literacy	*"[PHN's] health needs assessment identified that people from culturally and linguistically diverse backgrounds (like refugees) often face many barriers in accessing primary healthcare, including service navigation and health literacy. These barriers may result in poorer health outcomes and put them at a greater risk of mismanaging their medication and condition."* (Activity Work Plan)
Health outcomes	Text relating to in/equity of health outcomes**	"*The Aboriginal population experience far worse health outcomes than non-Indigenous people with earlier onset of chronic disease, such as diabetes, CVD and COPD, and higher rates of hospitalisations and mortality*." (Needs Assessment)
Quality of care	Text relating to quality of care	*"Cultural sensitivity among service providers, including particular health and service needs of population sub-groups, could be improved.*" (Needs Assessment)
Social determinants of health	The 'causes of the causes' of health inequity e.g. transport, poverty, violence, housing, education etc.	"*Consumer interviews revealed that affordability of healthcare is a common barrier to accessing health services, including GPs, specialists and allied health. There were also mentions of unemployment, pension changes and poverty, all as health issues of note*" (Needs Assessment)
General acknowledgement of inequity	General, broad mentions of health inequity	"*We will address the priority health gaps and inequities identified by developing contextualised, person-centred models of care."* (Annual Report)

*a more detailed description of this typology is available at Appendix H: Document Analysis Coding Framework

** While health outcomes are defined as "a change in the health of individuals or a group of people or populations that can be attributed wholly or partially to a health intervention" (Australian Health Ministers Advisory Council, 1993), much of the text referring explicitly to 'health outcomes' was actually referring to health status.

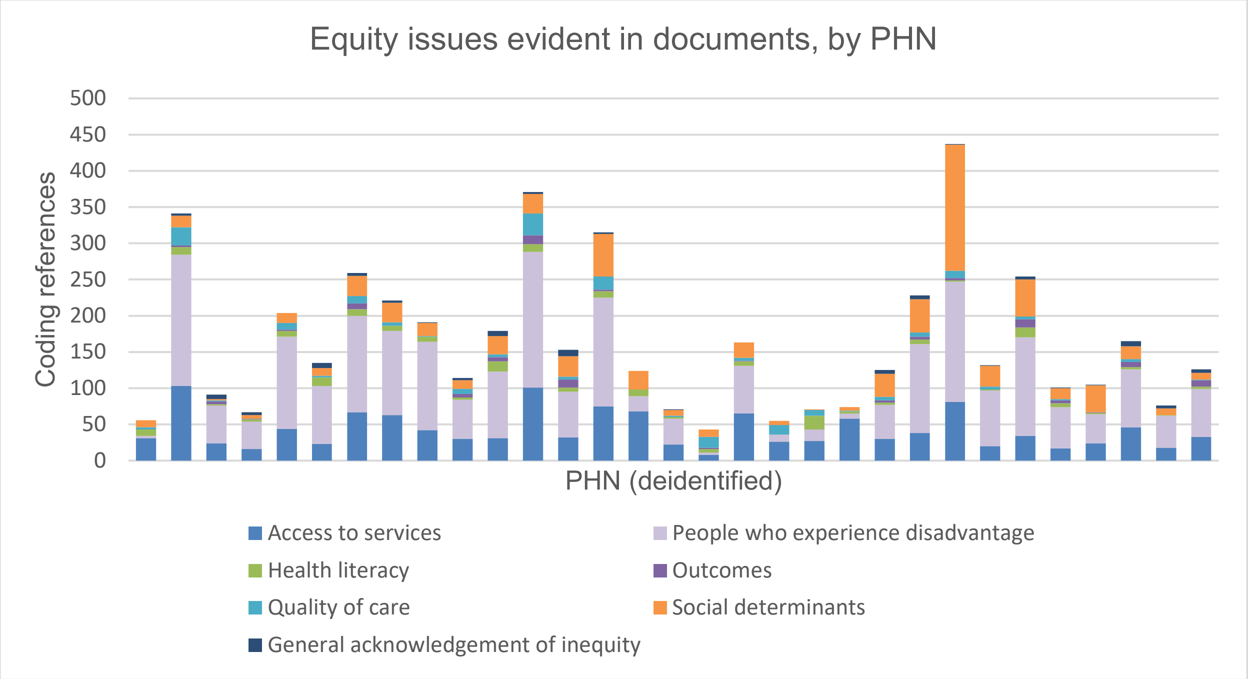
References to equity issues were more frequent in needs assessments than in activity work plans or annual reports, as illustrated in Figure 8.1 below. This reflects the relatively high use of evidence to identify needs, as discussed in Chapter 6, and also suggests that the identification of inequity exceeds the planned action to address it.

Figure 8.1: Equity issues in PHN documents, by document type (count)



This analysis also indicates that PHNs do collate population health evidence on health inequities, although to varying extents, as shown in Figure 8.2 below. However, this may be partly explained by the varying detail and structure of documents.

Figure 8.2: Equity issues evident in documents, by PHN



The above two charts also illustrate the prominence of certain equity issues within PHN public planning documents. This analysis indicates that PHNs' primary focus with regard to inequity concerns people who experience disadvantage, followed by access to clinical services, and social determinants of health, and this was a relatively consistent pattern between PHNs (Figure 8.2).

The emphasis on people who experience disadvantage, and access to clinical services aligns with PHNs' objective to "*Increase the efficiency and effectiveness of medical services, particularly for patients at risk of poor health outcomes*" (Australian Government Department of Health, 2018).

It was common for text to be categorised as relating to two or more health equity issues, for example the following text would be considered as being about both 'access to services' and 'people who experience disadvantage':

> *"The [region's] Aboriginal population has multiple and complex health needs, and experiences unique barriers to accessing appropriate services." (Needs Assessment)*

Table 8.2 indicates the overlap of equity issues in coded text segments.

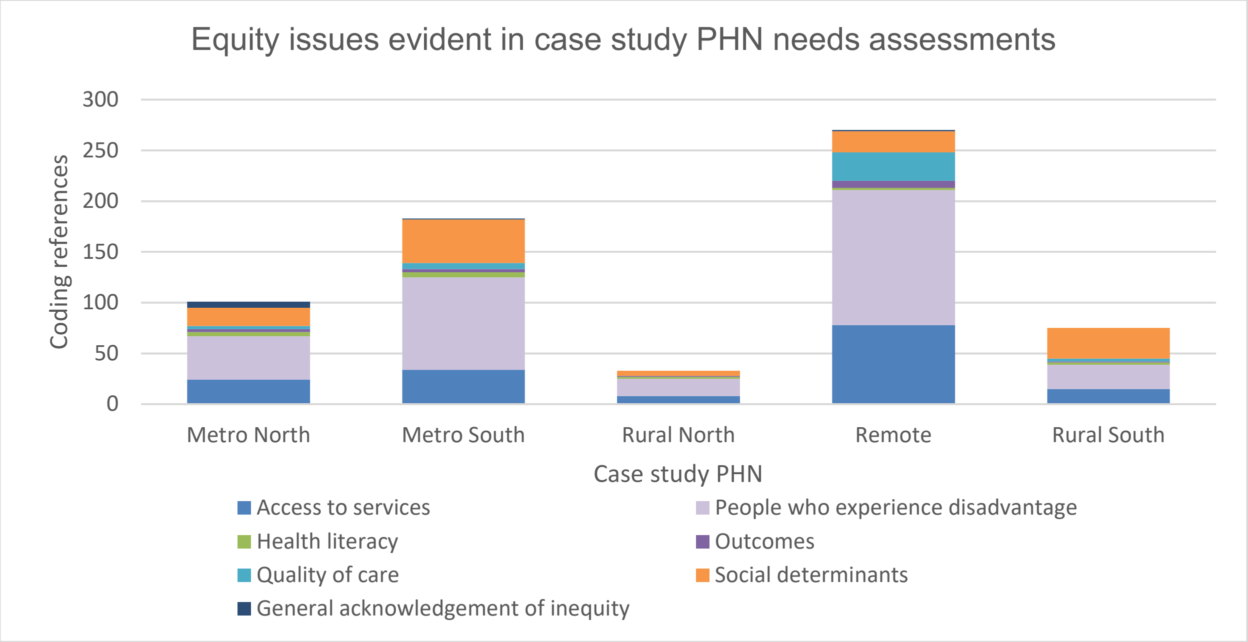
Table 8.2: Overlap of equity issues (count of text segments coded to each node)

	Access to services	Disadvantage groups	Health literacy	Outcomes	Quality of care	Social determinants	General acknowledgement of inequity
Access to services	1269	686	38	13	103	213	8
Disadvantage groups	686	2344	76	64	142	256	17
Health literacy	38	76	195	6	3	18	2
Outcomes	13	64	6	97	2	15	7
Quality of care	103	142	3	2	198	10	1
Social determinants	213	256	18	15	10	764	16
General acknowledgement of inequity	8	17	2	7	1	16	81

The equity issues of 'people who experience disadvantage' and 'access to services' were consistently prominent across the three document types, however there was considerably more focus on 'social determinants' in needs assessments than in the other two types of documents (Figure 8.1). This suggests that while there is much acknowledgement and examination of the social determinants of health in identifying population health needs, there is little action on them that carries through as initiatives outlined in activity work plans or annual reports.

Closer examination of the case study PHNs' needs assessments (Figure 8.3) showed similar variation between PHNs, and similar predominance of 'people who experience disadvantage', 'access to services' and 'social determinants' as equity issues examined.

Figure 8.3: Equity issues evident in case study PHN needs assessments



The relatively low attention to equity issues in the Rural North PHN's needs assessment cannot be interpreted as meaning that this PHN has low regard for health equity issues. Interview data indicates quite the opposite. The needs assessment analysed was prepared in a very succinct, synthesized form, with very little presentation of raw data which may account for the low volume of equity issues mentioned.

What this analysis does quite accurately indicate is the variation between PHNs in terms of the equity issues most relevant for their regions' populations. The high equity 'presence' and focus on 'people who experience disadvantage' by Remote PHN is to be expected and reflects the high population of Aboriginal and Torres Strait Islander people in this region, and access issues associated with remoteness. Of the social determinants of health equity issues that were present in Remote PHN's documents, there was similar attention to poverty, housing/homelessness, violence/safety, food security and education, indicating the broad range of factors that are of concern in this region where there are high levels of disadvantage. The somewhat lower proportion of focus on 'people who experience disadvantage' in Rural South, and greater emphasis on 'social determinants of health' reflects the low populations of culturally and linguistically diverse communities in this region, as well as the higher rates of poverty and socioeconomic disadvantage, compared to other PHNs. In Metro South, the predominance of 'people who experience disadvantage' as an equity issue reflects the relatively high population count of people from culturally and linguistically diverse communities, and to a lesser extent, Aboriginal and Torres Strait Islander people, consistent with the region's population profile. The considerably greater focus on 'social determinants of health' by this PHN reflects a focus on poverty and socioeconomic disadvantage, as well as greater recognition of transport issues, trauma and safety/violence than other PHNs, even though socioeconomic disadvantage is less prevalent in this PHN overall compared with other PHNs. Metro North PHNs' focus on 'people who experience disadvantage' reflected their somewhat high population of Aboriginal and Torres Strait Islander people, and the predominant social determinant of health equity issue was poverty and socioeconomic disadvantage. The approximate alignment of the pattern of equity issues prominence with regional demographic characteristics demonstrates the importance of local planning to address local priority issues.

8.2.1 People who experience disadvantage

As mentioned above, the most prominent health inequity theme in PHN documents was in relation to people who experience disadvantage. The largest groups were Aboriginal and Torres Strait Islander people and people from culturally and linguistically diverse communities, and to a lesser extent people who identify as lesbian, gay, bisexual, transgender intersex or queer (LGBTIQ), people with disabilities and people experiencing homelessness. This reflects what is arguably the most important health inequity issue in Australia, being the 'gap' in life expectancy and health status between Aboriginal and Torres Strait Islander people and non-Aboriginal people. It also likely reflects that one of the PHN priority areas, set by the federal government, is Aboriginal and Torres Strait Islander Health (Australian Government Department of Health, 2018). The greater availability of data and evidence for Aboriginal and Torres Strait Islander people, compared to culturally and linguistically diverse people and other population groups who experience disadvantage may also partly account for the greater presence of this health equity issue identified in documents. While the focus on Aboriginal health is important, it does suggest that perhaps other inequities are not proportionately identified or addressed. This was recognised in an interview:

> *"Sometimes I think we forget that the majority of our population is not Aboriginal ... you have to remember the white population for example, and there's starting to be more thinking about the refugee and CALD population too. Obviously the biggest health needs are in the Aboriginal population but yeah, we just have to remember sometimes that we're serving more than just that." (Staff, Remote)*

There was frequent explicit acknowledgement of inequity in the health status of particular population groups, or overrepresentation of people from a particular group who experience disadvantage, and direct comparison made with the 'general' population. This included quantitative (first quote) or qualitative (second quote) data.

> *"Life expectancy for Indigenous Australians in Queensland is 10.9 years less for males and 9.7 years less for females than non-Indigenous population." (Needs Assessment)*

> *"Consultation with local mental health service providers also indicates that people who identify as LGBTIQ are also at risk of poorer mental health than the general population in the PHN region." (Needs Assessment)*

In activity work plans, strategies identified certain population groups as the target for the activity but did not explicitly comment on the inequity underpinning such initiatives.

> *“Provide resources to health professionals (health pathways, education, etc.) on emerging CALD and newly arrived refugee groups” (Activity Work Plan)*

I acknowledge that this document analysis was conducted on the ‘core’ activity work plans, and it is expected that equity issues relating to people who experience disadvantage would likely have been more prominent in the activity work plans specifically for ‘Integrated Team Care’ (Aboriginal health), mental health and alcohol and other drugs.

Interviewees also identified population groups who experience disadvantage as a key equity concern:

> *“one of our priorities is Aboriginal and Torres Strait Islanders, and we invest significantly in that” (Manager, Metro North)*

> *“there’s starting to be more thinking about the refugee and CALD population here too” (Staff, Remote)*

8.2.2 Access to services

Access to clinical services was also frequently mentioned, although rarely explicitly acknowledged as an issue of inequity. Much discussion of inequitable service access was specifically about access barriers experienced by population groups who experience disadvantage (in which case it was coded to both categories). For example:

> *“Less than 8% of the practices in the [PHN] region are registered to the Indigenous Health Incentive, which impacts upon access to primary health care services for Aboriginal people” (Needs Assessment)*

There were also more general indications of service capacity ‘gaps’ in particular geographic areas:

> *“A number of locations within the [PHN] region had poorer access to after-hours general practices, when compared to the region.” (Needs Assessment)*

Needs assessments commonly included data indicating health inequity in service access, such as health workforce numbers/ratios within the PHN region, as well as statistics from the National Health Survey indicating proportions of the population who did not see a GP, or did not have a prescription filled due to cost (which was also recognised as a social determinants of health equity issue, in that poverty is the cause of poor access). Varying immunisation rates were also frequently presented, and implied variable access to immunisation services.

Interview data from 2018 similarly showed a focus on access to services, as a prominent health equity theme in discussions.

> *"It has always been a strong focus in providing equity of access, from the very very beginning" (Clinical Council, Remote)*

> *"we have many small towns and public transport is not great, so access still, fundamentally, is quite a big issue. And what we're seeing in some areas is that people are moving out into these areas because of housing affordability, but what then becomes issues are things like transport, access to services, food security, those sorts of things." (Manager, Rural South)*

8.2.3 Social determinants of health equity

Inequitable variations in the social determinants of health were also a somewhat prominent theme, in both the documents and interviews, particularly in relation to socioeconomic disadvantage and low income:

> *"Income inequality, health outcomes inequities and poorer access to health services are of considerable concern in [sub-region]. Children are particularly vulnerable and are at risk of inequitable physical and mental health outcomes." (Needs Assessment)*

Nineteen of the 31 PHNs presented data on the Socioeconomic Index for Areas (SEIFA) in their needs assessment – a composite measure to compare socioeconomic characteristics of regions and sub-regions. Other social determinants of health equity were less frequently recognised. Those that were mentioned included discrimination and racism, domestic violence, unemployment, transport, low educational attainment, housing/homelessness, trauma, problem gambling and social isolation.

The link between social determinants and health status was well acknowledged by some PHNs:

> *"The health needs assessment conducted by [PHN] identified that residents of the [sub-region] have poorer social determinants of health, leading to poorer health outcomes for the population." (Activity Work Plan)*

Some references in the documents indicated shortcomings in the understanding of how social determinants impact health, instead suggesting individual behavioural reasons for poorer health among those who experience disadvantage:

> *"Socioeconomically disadvantaged groups experience more ill health, and are more likely to engage in risky health behaviours." (Needs Assessment)*

What was notably scarce in PHN documents and interviews was the concept of a gradient in health and socio-economic status, in terms of the correlation between health status and socio-economic status across the social strata. Only two PHNs mentioned it in their needs assessment documents. Instead, discussions of inequity tended to focus on those in the group (quintile) of greatest social disadvantage and disease prevalence. The Marmot Review (2010) of health inequalities in England recommended that "Focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. We call this proportionate universalism" (p16, Marmot Review, 2010). In the data collected for this research there were only two mentions of the concept of 'proportionate universalism' - one in an interview and another in a needs assessment (from a non-case study PHN).

> *"we're now approaching this from a proportionate universalism approach. So where we're commissioning services such as mental health, alcohol and other drugs, rural health within our commissioning framework, we have incorporated aspects of equity and inclusion. So mandating that we start where the problems are biggest and where the needs are greatest in our commissioned responses and actually picking services that address and try to reduce the gap between those who have and those who haven't, those who are affected and those who aren't, as much as we possibly can." (Staff, Rural South, 2016)*

Paradoxically, this quote then goes on to outline an approach targeting those that are most disadvantaged, rather than an approach that distributes a universal intervention across the health gradient according to need. This quote reflected the prominent theme among PHNs of focussing on the most disadvantaged populations, rather than proportionally acting across the social and health gradient.

8.2.4 Other equity themes

Quality of care, health outcomes, health literacy and general acknowledgement of inequity were much less commonly discussed in PHN documents. Equity issues regarding quality of care overlapped considerably with equity issues for people who experience disadvantage and access to services. Many of the (equity of) quality of care issues related to culturally appropriate and safe services for Aboriginal and Torres Strait Islander people, where the poor quality of (culturally inappropriate) care also hindered access.

> *"Consumers identified factors relevant for Indigenous people's access to health services, such as racism and culturally inappropriate service models." (Needs Assessment)*

Quality of care issues were also identified with regard to fragmented services, and perceptions on how well GPs listened to and respected patients.

> *"The current health system response is fragmented, not well integrated or coordinated. This impacts negatively on equity of access to services, continuity of care and the patient journey." (Needs Assessment)*

Some PHNs identified 'health literacy' as a health equity issue, which was largely framed as being an explanation for the poorer health status of people who experience disadvantage, or for their lack of awareness of appropriate health care services:

> *"People with inadequate health literacy have limited ability to search for and use health information, make informed decisions or maintain their basic health." (Needs Assessment)*

> *"Socioeconomic disadvantage is generally associated with lower levels of health literacy and poorer health outcomes, impacting both morbidity and mortality." (Needs Assessment)*

Such attitudes indicate a misunderstanding of the complex, systemic relationships between socio-economic disadvantage and health, instead regarding it as a matter of individual deficit.

There was very little discussion of equity of health outcomes in documents, although there were frequent generic intentions to 'improve health outcomes' for particular communities identified as being in need. There was no indication that PHNs assessed/evaluated how equitably distributed the outcomes of their interventions were, or the impact of their activities on health equity. In interviews, several participants noted the lack of collection or analysis of outcomes measures (as noted previously with regard to evaluation capacity) and this would make it impossible to establish whether there were differential or inequitable health outcomes from PHN initiatives.

There were some general acknowledgements or statements about health equity issues in PHN planning documents, which were mainly in recognition of varying levels of unspecified disadvantage or general health inequity, or statements of intent, as were discussed in section 8.1.

This analysis of equity issues has identified that PHNs collect information on health inequities in their needs assessments. Inequity issues are discussed to a considerably lesser extent in activity work plans and annual reports. 'Population groups who experience disadvantage', and 'access to services' emerged as the most prominent equity issues. While there was considerable variation between PHNs, these issues appeared to be most prominent consistently. While 'social determinants of health equity' was prominent in needs assessments, it was considerably less so in activity work plans and annual reports, indicating these issues were recognised but not greatly acted upon.

The next section will further explore PHNs' strategies and actions to address health inequity.

8.3 PHN activities to address inequity

This section examines the interventions and actions planned by PHNs and looks at the various ways in which the work of PHNs may reduce health inequity.

Analysis of activities described in activity work plans identified a range of actions planned by PHNs that can address inequity, and categorised them according to part three of the framework developed by Freeman et al. (2018) which outlines the strategies that PHCOs plan and enact to address inequities:

- Actions to orient local PHC services towards health equity
    - address equity of access to local PHC services
    - support access to other health and social services
    - address equity in quality of care
- Actions to address determinants of health inequities
    - downstream - individual behaviour
    - upstream - local intersectoral action on living and working conditions
    - contribute to broader advocacy on social, political and cultural determinants of health

8.3.1 Actions to orient local PHC services towards health equity

Orienting local PHC services towards health equity is an important category of strategies that PHCOs can use to reduce health inequity, and can include: addressing equity of access to local PHC services; addressing equity in quality of care; and supporting access to other health care and social services (Freeman et al., 2018).

By far the most common approaches being planned by PHNs were associated with clinical PHC services. Strategies to promote access to services were common, as were to those that enhance quality of care, although clearly stated objectives to enable the distinction between access and/or equity aims were infrequent. An example of an activity with clear ‘access’ objectives is below, although the descriptions of planned activities/ strategies were typically less detailed:

> *“This activity aims to increase access to primary health care, in particular to GPs, in areas of rural and remote [region] where there is no permanent service or where recruitment and retention of health care professionals impacts on access to after hours services (including through emergency departments). Through a range of service delivery modalities such as FIFO [fly in, fly out] or telehealth, access to primary health care will be enhanced for remote and very remote and communities with low or no primary health care coverage. The activity includes the following components: 1. Enabling an increase in Royal Flying Doctor Service primary health staff available on base to triage and respond to patient issues and emergencies outside of normal clinical hours; 2. Enabling an increase in GPs available to respond to level 4 and below cases via video in locations with recruitment and retention issues as identified through the [deidentified] program” (Activity Work Plan)*

Many of the strategies would arguably serve to achieve improvements in both access and quality of services. For example, the frequently described HealthPathways Program that all PHNs implement seeks to improve the referral pathways and connections between local health services, which can improve access to services, as well as improving integration and coordination of care and thus enhance the quality of care. Similarly, strategies to ensure services are culturally safe by making care more appropriate, also serves to improve access. An example of such a strategy is a card developed with Aboriginal and Torres Strait Islander people, for providing patient information to service providers:

> *“It allows all patients registered with Closing the Gap to be issued with a card which contains information commonly gathered by General Practice on registration of a new patient. This card allows the practice/service to access appropriate information with limited patient interaction. This addresses barriers including illiteracy, cultural safety, communication, confidentiality (trust) and self-identification. All information gathered is collected during one-on-one interviews by Indigenous staff, where available, allowing the patient to disclose information in a culturally safe and trustworthy environment.” (Activity Work Plan)*

Table 8.3 indicates the classification of all activities described in the ‘core /flexible’ activity work plans of case study PHNs, according to the different types of PHCO actions on health inequity identified. This shows the predominance of activities that (seek to) reduce inequity in access to PHC services, as well as some addressing equity in quality of PHC services.

Table 8.3: Counts of case study PHN planned activities that are equity-oriented

Equity-oriented activities	Plan and **Enact Effective Strategies** to Address Inequities: Orient local **PHC services** towards health equity:				Plan and **Enact Effective Strategies** to Address Inequities: Address **determinants** of local health inequities			
	Strategies addressing equity of **access to local PHC services**	Strategies addressing equity in **quality of care**	Strategies addressing equity in **access to and quality of** PHC services	Strategies supporting **access to other health care and social services**	Equity-sensitive **health promotion** targeting **individual behaviour**	**Intersectoral collaborations** to act on local inequities in **living and working conditions**	Contributions to **broader advocacy** on social, political, and cultural determinants of health	Activities not evidently equity-oriented
Metro North	3	1	2	1	?			8
Metro South	2		1					11
Rural North	3		1		?			5
Remote	2		1					5
Rural South	4	3	1		?			6
Examples	Outreach allied health care to vulnerable children (Metro North) - - - - - - - - - - - - - PHC services in rural/remote areas (Remote, Rural North, Rural South) - - - - - - - - - - - - - Immunisation for newly arrived refugees	Community of practice and provider support to integrate care of heart failure patients in identified areas (Rural South)	Care coordination services for people with complex needs, including dedicated component for Aboriginal and Torres Strait Islander people (Rural North) - - - - - - - - - - - - - Cross sectoral collaboration addressing child health needs in sub-region with high rates of social disadvantage (Metro North)	PHC and other social support services for Aboriginal and Torres Strait Islander people (Metro North)	(*Behavioural interventions identified, but insufficient detail to determine if equity-sensitive)* - - - - - - - - - - - - - Weight management and lifestyle education delivered via general practice in selected locations with high obesity rates (Rural North) - - - - - - - - - - - - - Quality use of medicines initiative, in selected locations, targeting providers and community (Rural South)			HealthPathways – information for clinicians on local health referral pathways (all PHNs, although Remote PHN outlined special consideration for health needs of Aboriginal and Torres Strait Islander people) - - - - - - - - - - - - - Provider support in digital health initiatives (Rural South, Rural North, Remote)

Caution should be exercised in interpreting the numbers for each type of activity, as these are intended to be indicative only. Some PHNs provided greater detail of numerous strategies employed within a program area, and others provided a broader overview of a program area. Some PHNs had yet to develop intervention strategies for some programs, and as such they are included as ‘activities not evidently equity-oriented’ (particularly Metro South).

While general discussion of linkage with stakeholders from other health and social services was reasonably common, there were few activities that clearly sought to facilitate access to other health and social services. One exception was in relation to comprehensive services for refugees that included general practice as well as linkage with other social services:

> *“[service] aims to improve the health of refugees by having them seen by culturally appropriate health General Practices / and improves general practice capability to treat refugees. The service provides a single point of contact for refugee health for health service providers, schools, community organisations and settlement services in order to connect newly arrived refugee clients with appropriate health care.” (Activity Work Plan)*

Another example was education for primary care service providers to enable better linkage to domestic violence crisis and legal services.

In some cases, it was difficult to ascertain specific details about the proposed intervention, as some descriptions were vague and tended to outline objectives rather than strategies, which made the activity difficult to categorise. There were also examples of PHNs offering grants within broad topics of identified need, without specifying whether the activities sought to address access and/or quality of care, or any other objective.

8.3.2 Determinants of local health inequities: health promotion targeting individual behaviour

The other main category of strategies that PHCOs can employ to address inequities are those that act on the determinants of health, a subset of which is those that target individual behaviour in their context with an equity sensitive approach (Freeman et al., 2018).

Strategies that aimed to change the behaviour of individuals were moderately common in PHN activity work plans overall, although less so in those of case study PHNs. Some such strategies clearly overlapped with the objective of increasing access to PHC services, for example an information campaign or service directory to increase awareness of available PHC service options as alternatives to hospital presentation. There were instances where a community information strategy and modifying ‘lifestyle’ behaviours was an element of a broader program. For example, a social marketing campaign to influence behaviour was one element of a program that also included some ‘upstream’ initiatives in partnership with employers and local government:

> *"Social media - undertake a locally developed social marketing campaign, targeting families to engage parents in healthy lifestyle behaviours including health food choices" (Activity Work Plan)*

Other programs had a narrower focus on commissioning service providers to deliver (in this example, yet to be developed) lifestyle modification education:

> *"[PHN] will commission weight management and lifestyle education through general practice. The program will be required to suit the general practice environment and have capacity to be delivered by Practice Nurses or other relevant qualified staff working within general practice. The program will reflect a multicomponent approach that addresses all three lifestyle areas; nutrition, physical activity and psychological approaches to behaviour change. Identified general practices will work with the commissioned program developer in a co-design process, along with other relevant allied health clinicians." (Activity Work Plan)*

While behavioural health promotion initiatives were somewhat common, only around a half of them appeared to have a clear equity objective, in that they focussed on particular community groups or subregions. Other than such targeting, it was generally not possible to determine whether the intervention was equity-sensitive.

There were indications that some PHNs associated health inequities with deficits in individuals' knowledge and skills, or unhealthy 'choices' – suggesting subscribing to the idea that people are responsible for their own poor health, and not sensitive to the underlying social factors that influence health-related behaviour.

> *"The aim of this activity is to address health disparities through improved access to information, resources and skills … Improved health literacy enables people to make informed choices in regards to their health and supports the application of skills and knowledge to act on understanding." (Activity Work Plan)*

The 'choice' narrative was particularly concerning when complex problems such as substance abuse among Aboriginal and Torres Strait Islander people were framed as being about 'lifestyle choices' remediable with 'health literacy' education:

> *"1. Improving overall health literacy of Aboriginal and/or Torres Strait Islanders through education and community health, closely related to influencing better lifestyle choices in nutrition, substance abuse and exercise;" (Activity Work Plan)*

It is widely recognised that health inequities experienced by Aboriginal and Torres Strait Islander people reflect the social determinants of health (Zubrick et al., 2004), in particular systemic racism (Paradies et al., 2008) and intergenerational trauma stemming from colonisation (Thorpe and McKendrick, 1998). Fifteen of the 31 PHNs (48%) provided some indication in their planning documents (predominantly needs assessments) that this understanding of the social determinants of Indigenous health was acknowledged. However, the suggestion in some documents that serious health issues such as substance abuse are 'lifestyle choices' that can be remedied through simple individualistic, educative behaviour change strategies indicates limited understanding of the complex factors underpinning the health inequities experienced by Aboriginal and Torres Strait Islander people.

There were also individual behaviour change strategies that were not based on a rationale that blamed people for their own health status, but rather recognised an underlying reason for the need. For example, bilingual community educators to work with refugees (with limited English language proficiency) to provide information and facilitate access to appropriate local health services were seen in two PHNs. There were also examples that recognised and sought greater understanding of underlying cultural barriers to care:

> *"Community engagement strategies based on empowerment approaches have been effective in promoting participation in preventive health behaviours among Aboriginal women in rural Australian communities. In addition Aboriginal women have qualitatively been found to seek a culture-centred approach to cancer care and treatment from healthcare providers, which honours and accommodates their cultural needs. This activity will commission a local Aboriginal agency to work with the local community to encourage breast screening participation amongst Aboriginal women in [town]. A particular focus of the activity will be to link Aboriginal women participating in breast screening to their primary care provider. The approach will aim to identify enablers and foster a culture centred, community ownership and empowerment that contributes towards increasing Aboriginal women's breast screening participation rates in [town]." (Activity Work Plan)*

Individuals' knowledge and judgement deficits, and strategies to address them, were commonly framed using the term 'health literacy'. While it is recognised that low health literacy can be a barrier to accessible and quality care, it was almost exclusively discussed as a deficit that needed to be remedied in individuals, rather than recognising that some individuals do have low health literacy, and that health services need to make accommodations to minimise health literacy related barriers to care. While low health literacy was frequently associated with social disadvantage, there was rarely any acknowledgement that low health literacy in itself reflected inequity in the underlying social determinants of health.

In a handful of PHNs, individualistic strategies were also sometimes framed as aiming to "*activate*" or "*mobilise*" patients to change their behaviour, whether that be in their approaches to seeking health care, chronic disease self-management, using medicines or adopting healthy lifestyles.

> *"The primary aim of this collaborative project is to develop strategies, tools and resources to activate consumers and the community at the local and point of care delivery level to take up [program] key messages and calls to action." (Annual Report)*

Such language implies an attitude deficit on the part of individuals, in that they are just not motivated enough to adopt healthier behaviours, again failing to recognise the complex connections between social disadvantage and poor health.

Approximately a quarter to half of planned health intervention activities or actions could be placed into several categories of ‘action on health inequity’, where there were multiple strategies employed within a program. For example, a refugee health program that facilitated linkage with mainstream PHC services, and other social services, as well as education strategies to improve the health literacy of newly arrived refugees.

8.3.3 Determinants of local health inequities: ‘upstream’ health promotion and social determinants of health actions

Actions to address the determinants of health inequities can also include ‘upstream’ action on living and working conditions through intersectoral collaboration, or contributing to broader advocacy on social, political and cultural determinants of health (Freeman et al., 2018).

What was abundantly clear from this analysis was the very small number of activities (or elements thereof) that involved ‘upstream’ action on social determinants of health. There was very little indication of local intersectoral action on living or working conditions to address the ‘causes of the causes’ of health inequity. The few examples tended to include PHN participation in a broad network of multi-sectoral stakeholders to develop comprehensive plans, or activities with a specific, narrow focus and not necessarily equity-oriented. For example: working with local government or transport agencies to promote active transport or facilitate transport to health services; or working with Alzheimer’s Australia to implement ‘dementia friendly environments’. There was only one activity identified that approximated broader advocacy, but even that was focussed on health policy rather than the social, political, and cultural determinants of health.

> *“Advocating on behalf of primary care through submissions to government reviews and inquiries and driving [PHN’s] policy stance through the corporate communications strategy and engaging with key stakeholder groups; Providing guidance and advice in respect to relevant primary health care reform, reviews, inquiries and discussion papers” (Activity Work Plan)*

This analysis has shown that the specific strategies and actions planned and commissioned by PHNs, by focussing on individualistic clinical services and behaviour change initiatives, fall short of employing a rich comprehensive PHC approach that would better address health inequity. The next section will investigate the factors that influence equity-orientation in PHC planning.

8.4 Influences on equity-orientation in PHC planning

Having examined the health equity goals, information collection and actions of PHNs, this section examines the factors that enable or hinder an equity focus or orientation in planning. This includes elements from the Freeman et al. (2018) framework for assessing regional PHCOs’ actions on health equity: community participation and engagement (section 8.4.6) and considering the equity impact of initiatives (among other systematic process mechanisms, section 8.4.7). As well as these elements, this section outlines other factors that this research identified as enabling or hindering equity-oriented PHC planning. It is important to make the distinction that this section is concerned with consideration of equity in the planning process, rather than factors that hinder or enable the implementation or effectiveness of interventions to address inequity.

8.4.1 Constrained scope hinders PHNs' equity-oriented planning

The key barrier that hinders PHNs' ability to plan equity-oriented programs, is their significant lack of autonomy and scope, due to the tight regulatory constraints imposed by their funders, the federal government. The constrained scope and funding particularly limit their leverage to influence the broader influences on health and develop programs in health promotion and prevention to address the underlying causes of health inequity.

> *"we have the ability to identify gaps in equity, but we have a very limited ability to address them." (Board, Remote, 2016)*

> *"And there just isn't the money there to do what needs to happen in areas like this. So, my worry is that inherently PHNs in a commissioning responsible sense are going to be squeezed away from the equity, social determinant, promotional space in an environment where we know that the primary contributor to inequity are those social inequities - are those social challenges and issues - housing, health literacy, employment - all those sorts of things. But our worry is that it is not the orientation of a conservative set of governments, that permits the level of investment that we believe is required in this space." (Senior Executive, Rural South, 2016)*

As the above quote indicates, these limitations were identified as reflecting the individualistic ideology of the prevailing conservative Liberal-National coalition government and a selective, clinically-focussed interpretation of PHC, which act as a strong cultural-cognitive institutional force:

> *"unfortunately we're in a 'blue' phase at the moment, and the 'blue' phase is not overtly [sic] friendly to an equity based approach to health service delivery. They just want the veneer of everyone getting the same" (Senior Executive, Rural South)*

> *"It was an obvious shift in the political landscape with the change of government, where Medicare Locals and AMLA were talking a lot about issues about equity and inequality and social disadvantage and social determinants of health. A lot of that discussions seemed to have been shut down quite abruptly by the change of government. It came back to the equal distribution of the technical aspects of health care rather than the broader discussion about the determinants of health." (Board, Remote, 2016)*

PHNs' limited autonomy was seen as being in contrast to the idea of "locally relevant" planning and decision-making espoused by the Department of Health (2016b), and the regional planning function of PHCOs internationally, some of whose remit includes a broader role in population health, as identified in section 2.4.2.

> *"there needs to be some investment in the PHNs' ability to lead innovations at a local level because not all good ideas come out of Canberra, sometimes they're locally driven." (Board, Remote)*

> *“There could also be stronger discussions around advocating for increased investment in health promotion and prevention and that the PHN is well positioned to provide that advocacy. But they haven't done that because I think that they don't want to cut off the hand that feeds them, so to speak” (Community Advisory Committee, Remote, 2016)*

The latter quote also indicates PHNs’ perceived powerlessness and lack of agency due to the strength of the government’s regulatory force over their actions, as discussed in section 5.2.2.1.

Equity-oriented, needs-based planning was seen to be challenged by the influence of powerful, privileged actors advocating in their own interest, over those with greater need but less voice. As outlined in section 5.2.1, the most influential actors were generally clinical service providers (general practice and ACCHOs), LHNs and government/political actors. The influence of powerful actors’ vested interests was particularly an issue for PHNs faced with the prospect of having to redistribute or decommission services:

> *“there's lots of political imperatives, the people who understand the system also understand how to put political pressure on… Where the people who need the services the most are the ones who usually don’t agitate as much. So we’re doing a lot of work around identifying where those areas of needs are” (Manager, Metro South, 2016)*

This quote also outlines the importance of needs assessment evidence in countering vested interests and promoting equity.

8.4.2 Equity-oriented PHC planning in a commissioning paradigm

As well as constraining the scope of actions that PHNs can plan, the federal government require PHNs to operate a market-based commissioning model, rather than directly providing services. Several interviewees from two PHNs, both of which served communities that experience high levels of disadvantage, commented on the tension between the commissioning model and the principles of needs-based planning and resource allocation.

At one level, there was concern that small (non-government, not-for-profit) service providers could be excluded due to their limited capacity to respond to PHNs’ ‘approaches to market’. It was recognised that being skilled in health service delivery was not sufficient for competing against other service providers for contracts. The risk to relationships with Aboriginal service providers through insensitive competitive tender processes was also well recognised.

At a broader conceptual level, some questioned the logic of using market-based commissioning strategies to address health inequity in service access, where the inequity was largely attributable to market failure.

> *“Commissioning works well when there’s capability and a market to deliver it but if in fact there’s failing of the market - and in some ways the sheer fact that that*

> *[ML/PHN funded] clinic's already there and has been identified as a gap – I'd be sceptical about it being able to be commissioned." (Clinical Council, Rural South, 2016)*

The idea of competitive, market-based solutions to address policy problems such as the maldistribution of health services, reflects the underlying neo-liberal ideology of the Liberal-National coalition government, and is another example of the regulatory force over PHNs advancing neoliberal cultural-cognitive forces.

8.4.3 Time constraints hinder equity-oriented planning

A consistent theme in interviews, closely tied to PHNs' limited scope which hinders 'upstream' population health interventions, was the detrimental effect of tight time constraints on evidence-informed, equity-oriented planning.

Inadequate time (and resourcing) to conduct culturally safe community engagement and 'bottom up' planning was a common problem, and at least two PHNs specifically identified that their engagement with community members had been limited due to time constraints. This was particularly a concern for the Remote PHN, where hurried or inadequate engagement was seen as detrimental to relationships, trust and meaningful engagement with Aboriginal communities and service providers:

> *"We cannot do a piece of work around population health planning without consulting with the right people and in our context that includes people living in remote and very remote locations. And ideally that consultation needs to be face to face so it's expensive to do and it takes longer than it does for an urban-based PHN that has a population catchment that's quite defined and easy to access." (Community Advisory Committee, Remote, 2016)*

> *"across the board the timelines that PHNs are being asked to respond are utterly ridiculous. Utterly, utterly ridiculous and in some ways, I would consider it disrespectful. Disrespectful to the organisations and but also the community." (Staff, Remote, 2016)*

It was also felt that long tenure and stability of PHN staff, and having Aboriginal staff is particularly important for trusting relationships with Aboriginal communities.

> *"it takes years of visiting the same community to establish the personal relationships with people before anyone's really going to want to engage… It takes a long, long time to establish trust and rapport with community members" (Clinical Council, Remote)*

Government restrictions and approval requirements meant that PHNs could not release information and reports back to communities who had provided input, in a timely manner. This was identified as a particular issue in regard to Aboriginal communities and the important cultural principle of reciprocity (Pearson, 2007): where communities provided information and input but didn't hear anything back in a timely manner, they lost trust and respect.

Tight time constraints also limited the opportunity for the PHN's own community council and clinical advisory committee input as well as hindering stakeholder relationships more broadly:

> *"Once again, the short timelines just don't give you the opportunity to develop good, trusting, well-understood relationships so that people can get on with their work. You always feel like you're rushing to catch up or you haven't quite connected, but you haven't got time to really build the connections well." (Staff, Rural South, 2016)*

The ability to access external evidence to inform development of equity-oriented programs was also limited by tight planning time constraints:

> *"one day when time permits, I'd like to get together a library of research on other health initiatives in Indigenous and remote locations throughout the world, so from Inuit to native Americans to whatever. I think, you know, "what has worked in a primary health care setting?"" (Staff, Remote)*

Initially the PHNs were only funded by the federal government for a year at a time, which was seen to be aligned with short-term political objectives. The short-term nature of funding which only allows short-term service or program contracts was also seen as hindering equity-oriented comprehensive PHC initiatives, which require extended vision and sustainability:

> *"there is a hell of a lot could be done [about social determinants of health equity] but it requires the long view and I don't know that anyone's got the long view." (Board, Metro South)*

Inadequate time allowed for planned activities was also seen as problematic in terms of health equity. The short-term nature of funding allocated to PHNs means that they can only offer short term service delivery (or employment) contracts to providers. This was identified by one interviewee as a factor influencing inequity of service quality, particularly in remote communities. Communities that rely on services provided by professionals on short-term contracts are more likely to experience frequent turnover of clinicians, which compromises the continuity of care that people in those communities receive. In contrast, in communities where there are established providers with more secure employment or business sustainability, there will be less turnover and better continuity of care. Long-term strategies were also seen to be important to ensuring culturally safe services in remote Aboriginal communities:

> *"part of that flexibility is having longer timeframes to do the work that's required in a culturally and socially responsible manner." (Community Advisory Committee, Remote 2016)*

Since their establishment, PHNs have moved to rolling three-year contracts, which is something of an improvement, but still not conducive to long-term strategies.

8.4.4 Organisational culture, values and leadership for health equity

The ideology and 'deeply held beliefs' of actors, both within and external to the organisation, are an important influence on policy and planning. A strong theme from the interviews was the enabling force of organisational culture, values and leadership toward health equity, and organisational culture that valued equity was evident in all five of the case study PHNs.

> *"we have it [equity] as a fundamental value, so that means that we focus on who's got the worst health outcomes and why is it that they've got bad outcomes" (Board, Metro South, 2016)*

> *"[Equity] is a very very strongly held value and really affects a lot of the conversations that we have at the board level" (Board, Remote)*

There were clear indications from all PHNs of a high degree of altruism, good intentions and people motivated by passion and desire to "*make a difference*" (11 interviewees) indicating this is a strong cultural norm within PHNs.

> *"the values base of the staff and their commitment to do the right thing by their community. It's almost a passion" (Board, Rural North)*

Addressing health inequity was commonly acknowledged as being almost inherent and the *raison d'être* of PHNs:

> *"[Equity] that's our reason for being, really." (Clinical Council, Metro North).*

> *"a key part of the business we're in is addressing health gaps and inequalities" (Board, Metro South)*

The consistency and depth of equity values indicate a strong normative force within the PHN planning system, however there was evidence of some tension between the equity-conscious ideology of PHNs, and the priorities of federal or state/territory governments.

> *"I believe there's a genuine sense of the importance and recognition of equity as a key factor that needs to be built into the commissioned work … But they [PHNs] are hamstrung to some degree by what their funding model tells them they can do." (Community Advisory Committee, Rural South)*

> *"The current [state] health minister is very much of a neoliberal view of the world that it's all about individuals and we always say to him, "Well, individual responsibility's great but we need to get more [residents] into a place where they can actually exercise some responsibility over themselves - if they're unemployed, living in poverty, in unsafe circumstances etc, then they're not able to do that" " (Board, Rural South, 2016)*

Many interviewees from all five of the case study PHNs highlighted that this culture and attitude among board and management leaders of PHNs was a particularly important enabler of equity-oriented planning.

> *"That is very firmly embedded as an agenda ... I think equity is absolutely fundamental aspect of [PHN] and it's something that the board members live and breathe as well. It's not like it's something we can ignore." (Community Advisory Committee, Remote, 2016)*

One interviewee felt that there was however some disconnect between the values of the board, and the decisions made by staff:

> *"I think because we're a new organisation, we haven't actually necessarily transferred what the board would mean in terms of culture around inequity or social determinants of health, into day-to-day staff decisions. It would be nice to think that we were heading in that way, but I think we're not there yet." (Community Advisory Committee, Metro South)*

Part of the culture around equity was attributed to there being endemic social disadvantage such that equity considerations are the 'norm' and underpin everything, particularly in Remote and Rural South PHNs:

> *"I think just the exposure to and knowing how inequitable everything is. You can't escape it. The statistics are appalling… I think just living and working in this environment, you are just hyper aware … and I don't think you'd last long if you weren't switched onto it. You just wouldn't be a good fit in [region] let alone in this organisation probably" (Staff, Remote)*

> *"we are a poor region, we have poor health status and poor health outcomes. So it's kind of so much a part of the way in which we live and breathe that we probably even forget that that's what we're very focused on" (Staff, Rural South)*

Leaders from two PHNs spoke of particular strategies that helped to foster an equity-oriented culture in their respective organisations. At Remote PHN, the development of an organisational Reconciliation Action Plan and associated cultural safety training was recognised as having contributed to equity-oriented culture and capacity within the organisation. Interviewees from Rural South PHN described an internal committee and cultural engagement program to showcase and reward work that demonstrates the organisational values. While not themselves equity-oriented planning, these activities were seen to foster an equity-oriented culture within the organisation, to promote the equity orientation of planned interventions.

More broadly, others commented on PHN actors' advanced understanding of equity, in terms of the distribution of resources proportionate to need, as well as the influence of social determinants of health equity.

> *"I think it's about us accepting that giving everybody the same service doesn't achieve equity. What you have to do is target your services in the areas of greatest need, and try and lever up people's ability to access services and enjoy good health … I think that's the sort of culture that we have." (Manager, Metro North)*

> *I think there's a very good understanding around the table of the place of social determinants of health, there's no doubt there. There's people around the table who've taught it - but in terms of the job we're being given to do at the moment, it is more focused on health services and the clinical side of health services, there isn't must room for prevention yet, there isn't much room for social determinants. But I think those are things that as the PHNs get more established, they will need to consider (Board, Metro South, 2016)*

The latter quote also illustrates PHNs' constrained scope of clinical services rather than broader prevention approaches that act on the social determinants of health equity.

Similarly, it was recognised in several PHNs that sound understanding of Aboriginal and Torres Strait Islander peoples' right to self-determination and community control helped to facilitate culturally appropriate equity-oriented planning processes that empower communities to make decisions.

The retention of people with equity-oriented values, despite the transition to a PHN and a more neoliberal political environment was seen as a positive enabler of equity-oriented upstream health promotion strategies, even if somewhat 'underground'.

These findings reflect a tension between the normative institutional forces within PHNs where there is a deep-seated value favouring health equity and broad collective strategies to promote it, versus the regulative institutional force of the Department of Health which enforces actions underpinned by the individualistic cultural-cognitive position of the neoliberal government.

8.4.5 Evidence enables equity-oriented planning

A strong theme from the interviews was the importance of evidence in enabling equity-oriented PHC planning. The tangible benefits of analysing and using high quality data to identify variation between different population groups on health and social indicators, as well as service capacity 'gaps' were frequently outlined, and is consistent with the principle of 'collect health equity information' from the framework for RPHCOs actions on health equity (Freeman et al., 2018).

> *"by drilling down, you identify areas where there's high need… you've got evidence of the need to continually work in that area." (Board, Rural North)*

> *"a thorough understanding of our needs allows us to better meet the needs of our community." (Clinical Council, Metro North)*

As outlined in section 8.2, it was evident that all PHNs collected evidence of various types of inequities (to differing extents) for their needs assessments.

The capacity for epidemiological analysis was described by one interviewee as the "*powerhouse*" and "*engine room*" (Senior Executive, Rural South) of the PHN's population health equity approach and intent. However, as previously raised in Chapter 5, the emphasis on, and valuing of such a disease-based understanding of health potentially contributes to constraining equity-oriented planning to clinically-based interventions rather than broader, comprehensive action on the social determinants of health equity.

The ability to use an evidence-informed population health approach and commissioning levers to help address the maldistribution of health services and the 'Inverse Care Law' (Hart, 1971) was particularly noted, alongside the failure of the "*traditional model of primary care*" (Clinical Council, Rural South) to meet the needs of patients with chronic and complex conditions.

> *"Historically, with some of our outreach services that the PHN funds … a lot of those were determined by the service providers themselves, so they picked the nice places to go to and not necessarily were providing a per capita equity of service provision ... What we've been able to do is to make that more obvious through our mapping of access to care and services that are delivered … we've seen a lot of that being moderated by good use of data and tracking service provision." (Board, Remote)*

> *"the mapping that we've done of our whole region shows very clearly hotspots where we have greatest need for mental health services, and we have the least services available, and where we have the worst socio-economic situations; and when we map our [commissioned] services now they absolutely mirror those same areas. So we are delivering and causing those services to be directed more towards those areas of need and less just dictated by where the GPs are. Because in the past I can tell you a lot of those services were going to the leafy green affluent suburbs that have tonnes of GPs and tonnes of psychologists, because that's where the providers were; and now we're getting that more directed to [disadvantaged] areas … we have capped services in the more advantaged areas, and we've left it uncapped in the disadvantaged areas and we see, after quite a few years, we see that complete change in how that program is delivered and the outcomes that it's achieving, which is great … we knew that there was a lot of cherry picking going on when the market was left to its own devices" (Senior Executive, Metro North, 2016)*

The use of evidence to monitor the reach of interventions or identify variation between groups in health outcomes or patient experiences was rarely discussed but was recognised as being somewhat deficient.

> *"we actually have to know who we are providing services to. And, so if I can go to them [the board] and say, "Look, we're providing all of these services, but we're not actually providing that much to people with health care cards or low incomes, maybe we could do that a little bit differently." (Manager, Rural North)*

> *"I think we just talk about it [equity] as a concept. So we would never know if we fixed it" (Community Advisory Committee, Metro South)*

There were various other concerns identified in relation to evidence to inform equity-oriented planning, in particular insufficient granularity of evidence and the 'invisibility' of small pockets of disadvantage, as well as the inappropriateness of national data for remote contexts:

> *"We can't just have a population data, we actually have to have an Aboriginal database, an Aboriginal presentation of data and then mainstream presentation of data because if you combine the two you'd miss important learnings because there's big differences in the equity between those populations" (Board, Remote)*

Other concerns regarding evidence and implications for equity-oriented planning included: paucity of data from non-health sectors; inadequate service mapping (to identify 'gaps'); inappropriateness of standard tools and measures of patient reported outcomes and experiences for Aboriginal and Torres Strait Islander people; lack of qualitative narratives to report program/service outcomes to demonstrate the 'human' outcomes of health initiatives; overreliance on informal anecdotal evidence rather than rigorous local qualitative evidence; insufficient knowledge of emerging communities of need e.g. new migrants; and lack of evidence of 'what works' in particular community groups.

8.4.6 Community and service provider engagement enables equity-oriented PHC planning

Engagement and participation of members of communities affected by health inequities is a core principle of comprehensive PHC action to address health inequity (Freeman et al., 2018, World Health Organization, 1978).

It was recognised by numerous interviewees in all PHNs that connection with relevant actors greatly enabled equity-oriented planning, drawing on their experience and knowledge to inform planning decisions and program design. This could take many different forms at different 'levels' within the organisation.

Robust and respectful community engagement relationships were seen as crucial to enabling equity-oriented planning: "*going out and asking people*" (Board, Rural South). Such engagement was seen as vital for enabling cultural safety in program design, or adopting 'strengths-based, grass roots' community development approaches rather than 'top down' strategies. These elements were recognised as being particularly important in communities who experience socio-economic disadvantage, or Aboriginal and Torres Strait Islander communities. As identified in Chapter 6, community consultation was a relatively common source of evidence informing PHNs' planning. My analysis of organisational capacity (Chapter 7) also recognised that PHNs undertake considerable community engagement research activities such as surveys and focus groups.

As discussed in section 8.4.3, externally imposed time constraints hindered PHNs' engagement with communities. Partnering with 'intermediary' organisations and service providers helped engagement with some communities who experience disadvantage and were otherwise considered 'hard to reach'.

The inclusion of representatives from communities experiencing disadvantage on community advisory committees, program steering groups or co-design committees was seen to help decision-makers to understand the complexity of issues.

> *"because we have that very strong community representation within the PHN structure. So you are hearing about that first hand often a lot more than perhaps may have existed … ensuring that it is well-informed by the right people [from the target population groups]" (Senior Executive, Rural North)*

As well as bringing 'lived experience', it was identified by one interviewee (Rural South) that such representatives were expected to ask critical questions about equity related considerations of the programs being put forward. This mechanism for considering equity in planning is not particularly systematic and relies on people asking the right questions at the right time.

Achieving appropriate representation was identified as a challenge in two PHNs. One had experienced significant difficulty in recruiting Aboriginal people to the community advisory committee, and also felt that the LGBTIQ community was not represented. Another expressed concern at a lack of connection with people who experience disadvantage and lack of diversity on the community advisory committee:

> *"I think that [committee establishment/ recruitment] process was a little bit flawed. The same sort of thing that we got previously with articulate middle-class people and doing a really good job in terms of advocating for their particular community" (Board, Rural North)*

Strong connection between PHNs and service providers with clinical experience in communities experiencing disadvantage was seen to be an important enabler of equity-oriented culture and planning. However, one PHN was concerned at the underrepresentation of Aboriginal perspectives on the clinical council and another felt that experienced clinicians were decreasingly represented among PHN decision-makers which was to the detriment of equity-oriented PHC planning.

Strong representation from Aboriginal health and community services sector peak bodies on the board was seen to be important by Remote and Rural South PHNs respectively.

Partnership with other organisations with a strong equity orientation was seen as a key enabler of equity-oriented planning, especially if those organisations had strong capacity and an equity-oriented mandate or remit. Such partnering enabled greater flexibility for equity-oriented health promotion strategies that would likely not be permitted by the Department of Health. For example, a PHN partnering with a key Aboriginal health service provider who can:

> *"put buckets of money together and massage them a little bit… they do have the capacity to spend money on social issues which then allow people to get good care" (Board, Metro North).*

8.4.7 Planning process mechanisms to consider equity

A recognised way in which PHCOs can act on health equity is to assess the equity impact of initiatives and strategies that they plan, for example through an 'equity focussed health impact assessment' process (Freeman et al., 2018). While there were strong indications of organisational culture and leadership to support equity-oriented planning, analysis of interview data and PHN internal policy documents showed that systematic mechanisms to consider equity in planning and program design were rare. Most interviewees responded that there were no systematic mechanisms or criteria for ensuring equity consideration in planning decisions, and one explained that time constraints and high workloads in the transition from MLs hindered PHNs' ability to establish from the outset planning systems and processes that embed equity considerations.

Instead, consideration of equity in planning was frequently framed as a 'lens' through which decisions are considered.

> *"we put an equity lens on things" (Manager, Remote)*

> *"There's always issues of health equity that have to be considered and they do get considered when we do the commissioning process … Equity lens I think is the term that gets used" (Staff, Metro South)*

The equity 'lens' was presented as the means for aligning planning decisions with the PHN's strategic priorities/objectives, which themselves reflected the values and culture of organisations.

Of the 30 internal documents analysed, 11 made no reference to equity considerations and nine included general rhetoric about equity, such as reiterating organisational goals or values. Analysis of PHN public planning documents did identify one PHN (not a case PHN) that outlined in the preamble of their needs assessment their considerations when prioritising identified needs, which included "*Consideration of equity of social determinants, health outcomes and service access.*"

The use of frameworks to inform the planning process was discussed as being beneficial to equity-oriented PHC planning. Three interviewees from the same PHN (Rural South) commented on their use of an established population health planning framework approach to guide the PHN's needs-based planning process.

One interviewee highlighted the importance of adopting a 'program logic' approach in program design, to ensure the clarity of objectives, and consideration of evidence of the effectiveness of equity-oriented interventions regarding the social determinants of health:

> *"So I think it's a difficult space … you have to be very, very clear about what you're trying to achieve and I think sometimes even the language that can be used around programs in the social determinants of health space just need to be … need to be very clear about the objectives and sub-objectives … And to really understand how those factors can drive health and what are the elements that we can actually truly*

> *influence or mitigate against in commissioning or designing a service … I just think it's very important to understand the complexities and the processes and I think really the logic behind your program, to use that program logic approach in designing a program just to make sure that there's very strong evidence and program design that will increase your likelihood of being effective in improving health." (Clinical Council, Rural South, 2016)*

Several interviewees from Rural South also described their matrix organisational structure as enabling consideration of health equity considerations across all program areas, rather than being a specific program (with the example given of equity implications for Aboriginal and Torres Strait Islander people).

Of the few mechanisms identified, many related more to guiding commissioning decisions, than planning and design decisions. For example, one PHN had an internal 'policy' of preferencing ACCHOs for Aboriginal health services, and directly contracting such services, rather than tendering, to promote culturally safe service delivery.

One PHN had adopted a broader strategy of developing a discussion paper to highlight health inequity in their region and articulate organisational principles and commitment to identifying and addressing social disadvantage. This approach is perhaps better considered as a mechanism to foster a broader culture and ethos of equity-orientation, more so than being a prompt for considering equity in planning and program design.

Evaluating or assessing the equity impact of strategies is an important PHCO action to address health inequity (Freeman et al., 2018) and the Metro North quote on page 214 gives a good example of evaluation demonstrating more equitable distribution of mental health services. However, while equity considerations were factored into evaluation processes in some PHNs, there was no indication in internal policy/procedure documents of any PHN systematically seeking or considering evidence of the equity implications of the activity being developed.

8.4.8 Summary of influences on the equity-orientation of planning

This research has identified key influences on the equity-orientation of PHNs' PHC planning. The strongest influence, which hinders equity-orientation, is the tight constraint imposed by the federal government, which narrows the scope of activity that PHNs can plan and commission. Related to this is the tight timeframes PHNs are allowed, which hinder their ability to conduct robust evidence-informed, equity-oriented planning, as well as the requirement to operate market-based commissioning model to address the identified population health needs. In contrast, the strong equity-oriented values and culture within PHNs promote equity-oriented planning, as does the connection with community members and services providers in populations experiencing disadvantage, although it was recognised that community engagement was somewhat hindered by time constraints. As identified by Freeman et al. (2018), the collection of evidence to identify health inequities is an important enabler of action on health inequity, and was recognised as such by PHNs. While there was some acknowledgement of the value of systematic planning mechanisms to include health equity considerations, there was very little evidence of such mechanisms in PHN planning processes.

8.5 How equity-oriented are PHNs?

This chapter has drawn on an established framework to examine PHNs' actions on health equity (Freeman et al., 2018), as well as identifying further factors that influence the equity-orientation of the organisation and it's planning. While some of the actions outlined in the framework were common among PHNs, there were other actions that were rarely employed. Table 8.4 outlines a summary of findings regarding PHNs actions on health inequity.

Table 8.4: Summary of PHNs' actions on health equity

Health inequity action (from framework by Freeman et al. (2018))		**Extent of action by PHNs**	**Examples, evidence basis**
Health equity as a **goal** of the organisation		High	71% of PHNs state clear goals for addressing health inequity
Collect health equity **information**		Varies	Presence of equity issues in needs assessments varied between PHNs. Some very high.
Evaluate equity impact of **general initiatives**		Low	Very few indications of systematic process mechanisms to consider equity impacts of planned strategies
Community participation and engagement with communities affected by health inequities		Moderate	All PHNs have a community advisory committee and include community engagement as part of needs assessment and planning, but quality of engagement varies. (Inclusion of people from communities affected by inequities was not systematically assessed, but was evident in some PHNs)
Plan and **enact effective strategies** to address inequities: orient local **PHC services** towards health equity:	Strategies addressing equity of **access to local PHC services**	High	E.g. on-site allied health services at selected schools, for children who have been identified as developmentally vulnerable and have experienced trauma E.g. funding general practice nurses to maintain recall and reminder systems, to support immunisation, targeting regions or population groups with lower immunisation rates
	Strategies supporting **access to other health care and social services**	Low	E.g. Education, training and resources for primary care providers on appropriate referral pathways for domestic violence
	Strategies addressing equity in **quality of care**	Moderate	E.g. facilitating workforce capacity building to support the delivery of culturally appropriate care

Health inequity action (from framework by Freeman et al. (2018))		**Extent of action by PHNs**	**Examples, evidence basis**
Plan and **enact effective strategies** to address inequities: address **determinants** of local health inequities	Equity-sensitive **health promotion** campaigns targeting **individual behaviour**	Moderate	E.g. wellness program for Aboriginal and Torres Strait Islander people on nutrition, diabetes and child health E.g. community health literacy program for refugees
	Intersectoral collaborations to act on local inequities in **living and working conditions**	Very low	E.g. participate in a regional child and youth mental health plan addressing (among other things) child protection/family violence E.g. Work with local council to encourage active recreation and active travel
	Contributions to **broader advocacy** on social, political, and cultural determinants of health	None	

This chapter has highlighted various tensions in PHNs' equity-oriented planning. While there are variable efforts to identify broad social and health inequities through needs assessments, and many good intentions to address them and their upstream causes, there are minimal planning mechanisms to incorporate equity considerations, and the actions that PHNs employ are constrained to a narrow idea of PHC at the level of clinical services for individuals and individual behaviour modification. This is in part due to the strong regulatory influence and cultural-cognitive force of their principal funders, the federal government, which exceed the normative force of the equity values widely held among PHN actors.

CHAPTER 9 DISCUSSION

This chapter discusses the findings of this research in relation to existing literature and theory. It is structured to answer each of the five key research questions, drawing on institutional theory (Scott, 2013), the WHO framework (Green and Bennett, 2007), the 'good governance' framework (Hawkins and Parkhurst, 2016) and the PHCO equity actions framework (Freeman et al., 2018) to explain the findings. The research questions were:

1. What does the PHN planning environment look like in terms of context, influences and actors?
2. How do PHNs undertake the process of PHC planning and decision-making?
3. What types of evidence do PHNs use, for what purposes in the planning process?
4. Do PHNs have strong organisational capacity for evidence-informed planning?
5. Do PHN activities have an equity focus consistent with comprehensive PHC, and what influences the equity-orientation of planned activities?

The chapter begins by considering the complex range of factors identified as influencing meso-level PHC planning, and presents my conceptual framework, adapted from the WHO framework, to represent the planning environment. Discussion of the dominant regulatory institutional force and the impact of medical actors and ideas then follows in sections 9.1.2 and 9.1.3. Section 9.2 discusses the 'fuzziness' of the planning process that this study identified, leading into consideration of the findings regarding the types of evidence that are used, and the input of local community actors' evidence into planning in section 9.3.2. The findings regarding organisational capacity factors are then discussed, focussing on specific concerns identified in the research in section 9.4.1, and the importance of addressing 'higher' levels of capacity rather than that of individuals in 9.4.2. The next section (9.5) considers the equity aspects of the research, focussing on: the implications of the individualistic, selective PHC focus of activities (9.5.1); the issues of 'victim blaming' and understanding the link between disadvantage and health (9.5.2); opportunities to enhance the equity-orientation of planned activities (9.5.3); and the linkage between evidence use and equity orientation in PHC planning (9.5.4). A critique of the strengths and limitations of this research will conclude this chapter (section 9.6), leading into a final brief chapter outlining the conclusions and implications that can be drawn from this research.

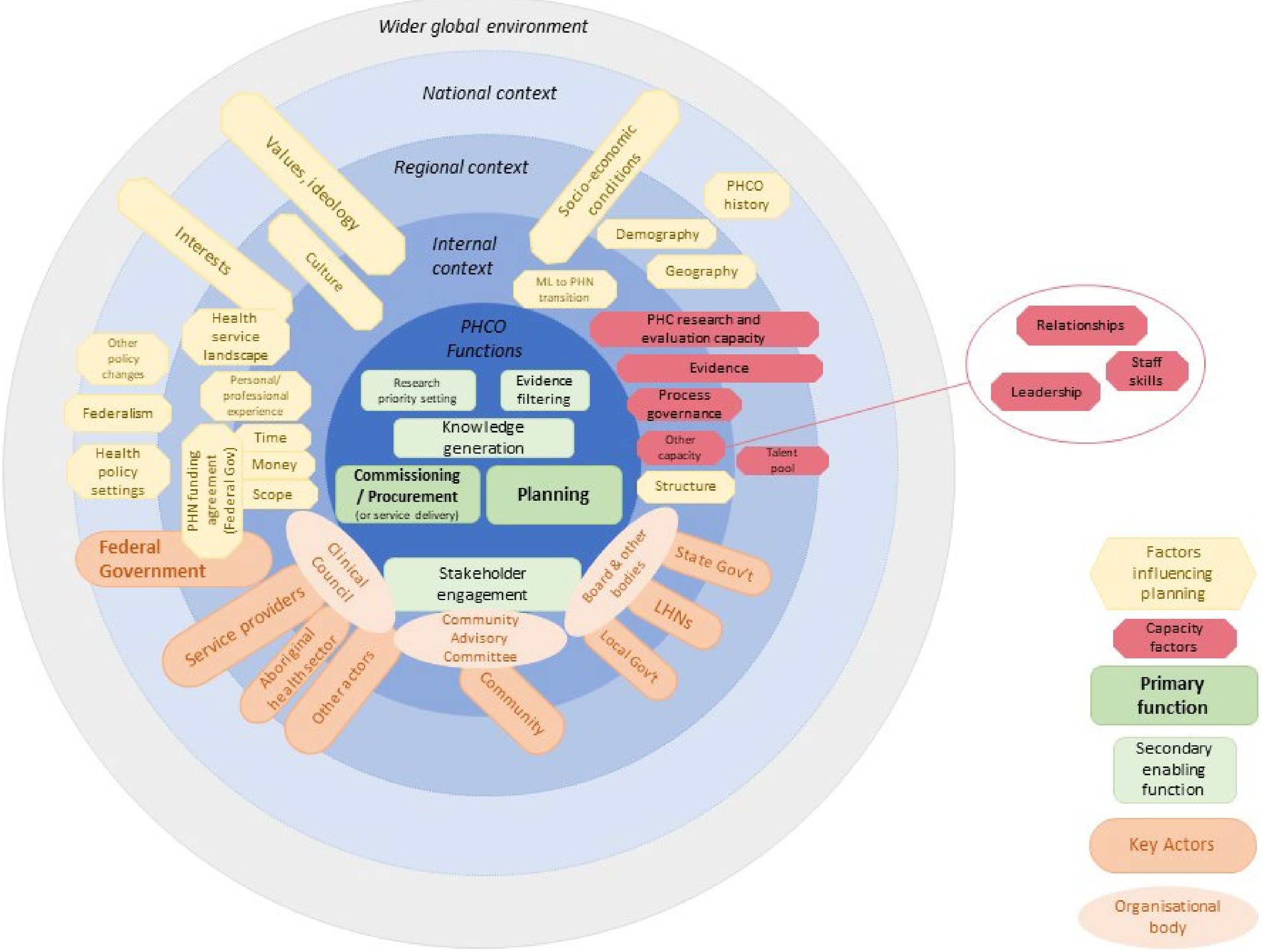
9.1 What does the PHN planning environment look like in terms of context, influences and actors?

9.1.1 Complexity of factors influencing PHC planning

A wealth of literature recognises that health policy-making and planning occur in a complex, dynamic system or 'environment', where a range of external and internal factors influence decisions (Oliver et al., 2014b, Orton et al., 2011a, Hawkins and Parkhurst, 2016). This complex 'system' is represented in the WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007) which informed the analysis in this research. This complexity is true of PHNs' planning environment. This research has identified that PHC planning at the meso-level similarly occurs in a complex environment, involving a range of functions and influenced by a range of contextual factors, actors and influences. Understanding the complexity in the planning environment is important for understanding why evidence use and equity-orientation may not be optimal in decision-making – there are so many other factors and considerations involved as well.

Based on the findings of this research, I have developed a conceptual framework of the meso-level health planning environment (Figure 9.1) expanding on the WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007). The following paragraphs will highlight key distinctions between the two frameworks, and adaptations of the WHO framework.

Figure 9.1: Conceptual framework for the meso-level PHCO planning environment (adapted from Green and Bennett, 2007))



The WHO framework, as depicted in Figure 3.1 in Chapter 3, relates to policy-making at a national level, encompassing the functions of different organisations that play various roles in the generation and use of evidence, whereas I have constructed the framework in Figure 9.1 to represent the complexity of the planning environment and influences on meso-level health planning organisations. This framework puts the functions of PHCOs at the centre, and represents the influences and actors, and the contextual levels from which they derive. This research did not allow for specifically mapping the interconnections between the factors and actors represented in this framework, which would also detract from the readability and purpose of the framework. Rather than showing how the various factors interact with each other, the key purpose is to broadly show that there are many actors and factors with many complex direct and indirect influences on meso-level evidence-informed, equity-oriented PHC planning.

The WHO framework illustrates four key functions conducted by different organisations in relation to evidence-informed policy-making. My framework includes two additional functions that are somewhat particular to meso-level commissioning organisations and did not feature in the WHO framework: commissioning/ procurement, and stakeholder engagement are considerable functions that account for a significant proportion of PHNs' workload. While stakeholder engagement is represented as a distinct function in the framework, my research identified that this also contributes to other functions such as 'knowledge generation', 'planning' and 'commissioning and procurement'. My framework notes 'direct service delivery' alongside the commissioning/ procurement functions, which while considerably more common in Medicare Locals, does occur in select circumstances in some PHNs.

Context is an integral component of evidence-based decision-making (Dobrow et al., 2004). The WHO framework distinguished between the national context and the wider enabling environment, and this research approached the analysis with the simple distinction of external and internal context, as proposed by Dobrow et al. (2004). However, my analysis has identified that the external context factors can be national or regional. While internal context factors can be modified, factors in the external context are largely fixed (Dobrow et al., 2004). Understanding the context in which influences occur can assist organisations in adapting to or managing influences to improve evidence-informed decision-making (Mirzoev et al., 2017).

Some factors and influences occur solely in the regional level and differ between some regions (e.g. local geography and demography, composition of the health service provider sector). Variation between regional context factors indicates the importance of local engagement and planning, in order to respond to local issues effectively. Other factors span the levels of context, for example socioeconomic conditions have influence in all contexts. However, those factors that act at multiple context levels may or may not be consistent, for example this research found indications that values and ideologies sometimes differ between the organisational and national contexts.

The concentric circular arrangement of my framework is intended to represent the respective influence of distal factors in the outer contexts on more proximal factors in the inner contexts. For example, the federal government is responsible for national health policy which indirectly influences PHN planning, and also directly influences (limits) the scope of PHC interventions that PHNs are contracted to develop. Regional factors also influence internal factors, for example, health workforce shortages in rural and remote PHNs are a key factor influencing planning. As with the WHO framework, the broader (international) environment is represented, to reflect the influence of forces and trends that are beyond national borders, such as neoliberalism.

The WHO framework treats capacity as a distinct and dominant factor (and neglects capacity of individuals within organisations). My framework differs in that it includes ‘capacity’ factors among others and includes individual, organisational and institutional capacity. It does not go into detail of specifying which factors are from which level of the capacity hierarchy (Potter and Brough, 2004) in the way that Jakobsen et al. (2019) distinguish factors influencing research use. Capacities may span individual, organisational, and/or institutional. For example, ‘staff skills’ is solely an individual capacity factor, whereas ‘relationships’, ‘leadership’, ‘evidence’, and ‘PHC research and evaluation’ capacity factors can relate to individuals within the organisation, or aspects of the organisation itself. They could even arguably be considered also as institutional levels of capacity in terms of the norms or rules that govern operations. Process governance is primarily an ‘institutional’ level of capacity, and ‘talent pool’ relates more to the capacity of the region than the organisation. The identified capacity factors, and their identified shortcomings are discussed further in section 9.4.

9.1.1.1 Actors in the planning environment

It is well recognised in the literature that policy-making and planning involves many actors, and PHNs are required to engage widely with stakeholders. My research found that there was a wide range of actors with varying degrees of influence in the PHN planning environment. The large range of local service provider and community actors involved in PHN planning is to be expected, and a positive aspect of their planning environment – a key principle of comprehensive PHC is that the community have some ownership and control of it (World Health Organization, 1978). Others have also found that local service and population health knowledge is of key importance in local health care commissioning organisations (Checkland et al., 2018). Frumkin and Galaskiewicz (2004) argue that involving a broad range of actors helps to mitigate against internal institutional isomorphism, a kind of ‘group think’ where everyone is coming from a similar perspective or background, with similar ideas. While the WHO framework represents organisations in a distinct band, my framework illustrates the various ‘actors’: individuals, organisations and broader ‘structural interests’ at different levels of context. It also represents those whose influence spans context levels, particularly those engaged in PHN clinical councils and community advisory committees who are technically external but have a direct ‘line’ of influence through their formal engagement.

This research has shown that PHNs operate in a complex environment of many actors and internal, regional and national factors and influences, yet the federal government has the greatest influence over PHN activities. The influence of a small circle of community or service provider actors is at best secondary to that, and yet more actors are peripheral to the extent that their influence is negligible. The next section will discuss this dominant influence by the federal government, and its impacts.

9.1.2 Dominant regulatory influence

A key finding from this research was the very strong influence of the federal government. PHNs' funding, timeframes and scope of action were tightly constrained by their contractual conditions. PHNs are almost entirely funded by the federal government and are accountable to them in terms of having plans approved before they can be actioned and being required to report regularly. PHNs' predecessors, Medicare Locals were also found to have their activities tightly controlled by the federal government (Javanparast et al., 2018b). This is a key contextual factor somewhat particular to meso-level planning organisations – macro-level policy agencies, while similarly subject to a complex array of influences, are not directly controlled by a 'higher' authority. The constraints imposed on PHNs' planning scope, finances and time reflect a dominant regulatory institutional force that is largely fixed (unless government practices change) and that PHNs do not have power or autonomy to challenge. The findings also illustrate the position of PHNs, as 'agents' of the federal government 'principals' (Howlett et al., 2003). The direct contracting of PHNs by the federal government, and the power exerted through their enforced reorganisation are characteristic of policy instruments exerting a high level of government control over a complex PHN policy subsystem (Howlett et al., 2003). Keating and McEwen (2005) also noted that devolved, meso-level bodies operate within distinctive institutional contexts that can drive them to pursue particular policy paths.

The dominant regulatory force creates practical challenges through the inflexible timeframes and inadequate budgets, with several implications. This research found that PHNs' culture and values broadly favour evidence-informed planning, indicating a supporting normative institutional force. However, the imposed budget and time constraints were found to have a detrimental effect on PHNs' ability to do robust, evidence-informed, equity-oriented planning, and their ability to develop relevant capacity. This is especially so with regard to accessing and using intervention evidence of 'what works' and appropriately engaging with communities in understanding issues and developing appropriate strategies together (a core principle of comprehensive PHC). The clear sense of frustration and futility expressed by some interviewees indicates the practical impossibility of doing robust, evidence-informed, equity-oriented PHC planning within the time and financial boundaries the federal government place on PHNs.

Perhaps more significantly, the tight level of constraint creates an important tension with regard to ideas of health and how health care should be planned and organised. A key function of meso-level organisations such as PHNs is the ability to be responsive to local issues (Department of Health, 2016b), more so than a centralised organisation can be, drawing on local knowledge and relationships, and aligned with local ideas. However, to be responsive, there needs to be a certain degree of agency and autonomy from the ‘principal’, which PHNs lack. When planning is so tightly constrained and compressed by the overwhelming regulatory institutional force of the federal government (via the Department of Health), PHNs’ potential to achieve positive health outcomes for their communities through comprehensive PHC approaches is considerably undermined. Such tight constraints to a certain extent defeat the purpose of having local PHCOs identifying local issues, if they then have such limited autonomy and scope to address them. PHNs’ constrained scope of action is limited by the federal government’s underlying selective ideas of PHC. A frequent theme in this research was that the Department of Health will not approve PHNs’ plans that include upstream action on the social determinants of health, instead favouring activities within a limited scope of clinical primary care services and some behaviour change interventions. Sturmberg (2011) noted prior to the commencement of MLs, that government proposals had a strong focus on PHCOs implementing government priority initiatives, and that this would leave little room for PHCOs to respond to local issues, particularly those socially determined factors that arise from outside the health care sector.

Integrating primary care and public health contributes to strengthening PHC, and PHCOs can and have played a role in this, for example in the UK’s former PHCOs, Primary Care Trusts (Martin-Misener et al., 2012). Several studies on such integration have found that a supportive policy environment is a key enabling factor – such integration needs to ‘fit’ with the government agenda and ideas of health. There also needs to be adequate funding, and an environment where there is not frequent disruptive reorganisation and health care reform, and where community-level priorities are not usurped by national priorities. ‘Fee-for-service’ remuneration of medical practitioners, lack of resources for evaluation and information infrastructure, as well as dominance of medical, illness ideas of health, rather than more holistic wellness ideas, have also been recognised as impeding primary care and public health integration (Martin-Misener et al., 2012, Wong et al., 2017, Valaitis et al., 2018). In these respects, PHNs have had the odds stacked against them, as this research has found these all to be key problems experienced by PHNs. As well as the ‘practical’ challenges of funding and resourcing, reorganisation, fee-for-service policy settings and competition from national government priorities, they are dominated by strong regulatory forces underpinned by bio-medical, individualistic ideas of health, that are in conflict with the principles of strong, comprehensive PHC. While ‘innovation’ features loudly among their organisational values, PHNs’ ability to innovate away from the selective medical focus towards a comprehensive approach to health that is better for improving health equity upstream is extremely limited. Because of the dominant regulatory forces that control their actions to align with the federal government’s selective

PHC ideology, PHNs' innovation is limited to nibbling at the edges of PHC with apps and campaigns.

The next section will focus on the dominance of medical ideas and actors.

9.1.3 Medical dominance – ideas and actors

The constrained scope for planning experienced by PHNs reflects the dominance of biomedical, individualistic ideas of health in the broader policy 'environment'. As has been described in Chapter 4, the prevailing policy settings of the wider Australian health system, in terms of a fee-for-service based primary care funding instrument (Medicare) and autonomous private service providers dominated by medical interests, make for an environment that is underpinned by, and perpetuates deeply held ideas of health as being a matter for individuals, to be remediated by treatment from health professionals in an episodic, transactional arrangement. A biomedical focus can also be seen in other areas of health policy, such as the restriction of Medicare largely to medical services, and the recent creation of a '*Medical* Research Future Fund' (emphasis added). While there is good evidence for comprehensive PHC (Labonté et al., 2014), such approaches struggle to gain traction in a system where the dominant regulatory and underlying cultural-cognitive institutional forces subscribe to bio-medical, individualistic ideas of health. A political and ideological context sympathetic to ideas of government responsibility for redistributive health and social protection measures is required to support comprehensive PHC approaches (Labonté et al., 2014).

Medical actors, as a 'structural interest', contribute to the dominance of biomedical ideas of health. A structural interest is an alliance of interest groups that gain or lose from the health care system as it is currently organised, which include 'professional monopolists', 'corporate rationalisers' and 'community interest' (Palmer and Short, 2010). As described by Palmer and Short (2010), citing earlier work by Alford (1975), professional monopolists are principally medical practitioners, who have been able to persuade the population that the knowledge and skills of its members make a unique contribution to the health of the community. They benefit from the health care system the way it is and are usually very resistant to proposed changes in the system. The dominance of the medical profession in Australian health in particular has been well established, and remains a strong force in health care (Willis, 2006). The Australian Medical Association has historically been, and continues to be a very powerful lobby in federal politics (Willis, 2006, Duckett, 2016).

This research identified some indications to suggest that medical professionals are not particularly dominant within PHNs – some interviewees reported that medical actors did not have greater influence than others, and there were indications of GP disengagement in some PHNs. While there may be some 'high level' influence directly via medical lobby voices 'in Canberra', biomedical ideas of health are mostly perpetuated indirectly through the underlying cultural-cognitive institutional forces and deeply held beliefs, that advance medical interests and ideas of health for the overarching macro-level PHN program, rather than at the meso-level of planning.

The lack of direct dominance by medical actors at the PHN level of decision-making and input is perhaps because there doesn't need to be – medical ideas of health are a foundational influence on the scope of PHN strategies and objectives. Input from clinicians is more at the level of a 'sanity check' in terms of fine-tuning the feasibility of given interventions, that are already largely limited to clinical service for individuals, or strategies to modify the behaviour and knowledge of individuals.

The formalised inclusion of non-medical actors in PHN governance structures (clinical councils and community advisory committees), as distinct from earlier PHCOs (divisions of general practice) that were entirely led by GPs, indicates that there has been at least some minor dilution of the power of medical actors. However, this has been for the political purpose of including other clinical disciplines, more so than pursing social ideas of health. In regard to PHNs' tightly regulated planning, the enforced dominance of biomedical ideas and approaches has remained relatively unchallenged.

9.2 How do PHNs undertake the process of PHC planning and decision-making?

The WHO framework includes 'policy-making process' as a key function in the policy system (Green and Bennett, 2007) and Dobrow et al. (2004) argue that the process is the most important internal contextual factor influencing evidence-informed decision-making. The literature on evidence-informed policy-making has seen a shift in emphasis from policy outcomes, to policy process (Hawkins and Parkhurst, 2016).

The PHN commissioning cycle is widely depicted as a neatly defined, cyclical process of discrete stages (Department of Health, 2016a) in which PHNs are required to operate and meet non-negotiable deadlines and deliverables, as shown in Figure 4.1. Yet my research has shown that the reality of PHN planning processes is less clear. None of the case study PHNs could provide a clear, detailed description of the planning process, particularly with regard to decision-making. It is well recognised in the literature that policy-making, rather than being a linear process of distinct stages, is complex and iterative (Masood et al., 2020, Sabatier, 1999), "fuzzy, political and conflictual" (Head, 2010) and involves a certain degree of "muddling through" (Lindblom, 1959). 'Windows' of policy opportunity present depending on various other factors within and beyond the organisation (Kingdon, 1984). Cairney (2014) argues that the shift in academic thinking regarding policy-making is not reflected in the models that governments use, and there remains an attachment to stages-based models of policy-making. Similarly, while the discourse around health planning reflects the iterative, political nature, planning tends to be represented as a linear, somewhat technical process of distinct stages (Eagar et al., 2001). This appears to be true of the PHN planning environment, where guiding material frequently refers to the commissioning cycle

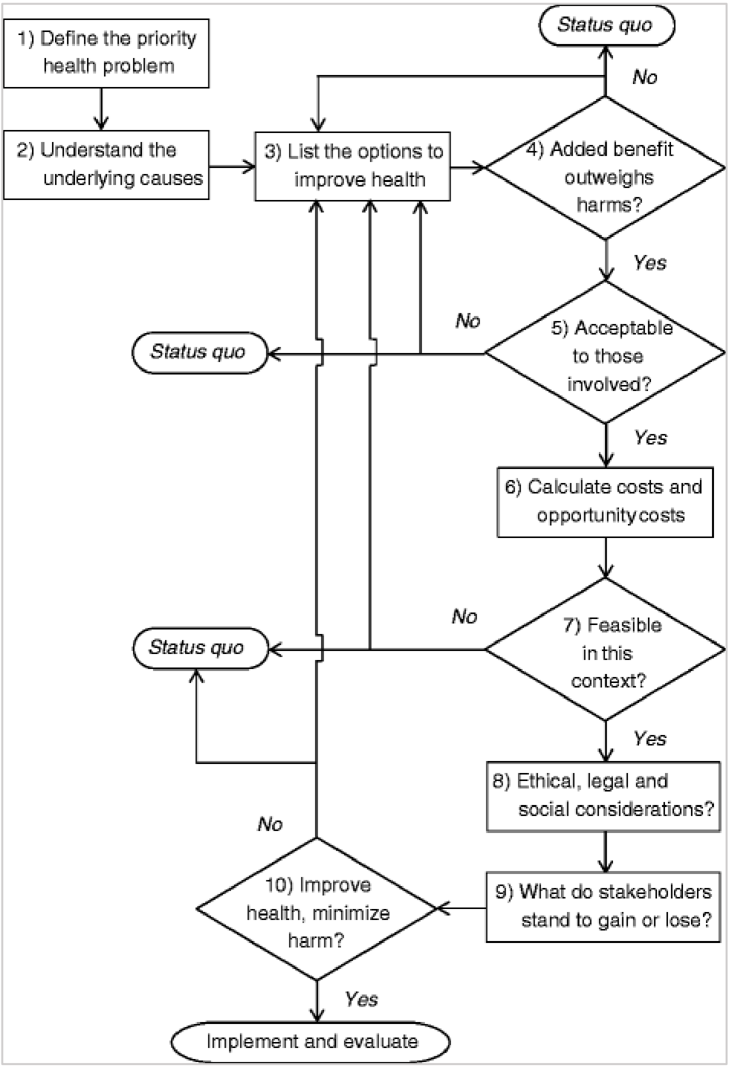
(Department of Health, 2016a, Department of Health, 2015a), and versions of which are presented in PHNs' documents. My study shows that the commonly depicted commissioning cycle is oversimplified. PHNs are required to carry out the main components of commissioning in set timeframes. However, within these broad functions, there appears to be considerable iteration, and much 'fuzziness', within and between each 'stage' of the cycle. The connection between the 'stages' of commissioning were not necessarily even clear to those in the organisation. This creates a tension particular to organisations conducting planning at the meso-level. While being required to meet the demands of their 'principals' within tight time, scope and funding constraints within a cyclical, sequential commissioning model, PHNs are also challenged to make PHC planning decisions in a complex environment, balancing multiple influences in a non-linear, iterative way.

The Covid-19 pandemic which started in 2020 is an example where rapid change in focus and activity was required of PHNs. A brief examination of case study PHN websites indicated that PHNs implemented additional activities in 2020 in relation to Covid-19, largely in providing information for health care providers and consumers regarding testing locations, but also in distributing personal protective equipment for health care service providers, providing information to support general practice in delivering (and appropriately billing for) services via telehealth, and some provided information to support mental health in relation to the impacts of the pandemic. The need to rapidly pivot to this new urgent activity would likely have impacted on existing activities and planning processes.

Opacity of planning processes appears not to be unique to PHNs. Browne (2017) similarly found that there was no clear process through which actions were selected in the development of Local Government Municipal Public Health and Wellbeing Plans in Victoria, Australia. Evaluation of Local Health Integration Networks in Ontario, Canada also found unclear decision-making processes and recommended refinement of accountabilities, processes and governance (KPMG 2008 report cited in Oliver-Baxter et al., 2013). However, an analysis of evidence use in Clinical Commissioning Groups in the UK was able to generate a much clearer picture of decision-making processes in those organisations, describing repeated, somewhat messy, cycles of finding information, persuading others, justifying decisions, finding more information and so on, as proposals moved through the decision-making process (Wye et al., 2015). That study employed different methods including direct observation of commissioning meetings, and analysis of minutes, which likely enabled a more robust, direct analysis of the process than was possible through the few interview questions employed in this broader research. In theory, the many iterative steps and tasks of PHN planning and the broader commissioning cycle could be mapped, to illustrate the complexity. This research, while examining a broad range of factors relating to evidence-informed planning, was not designed to enable direct observation and detailed examination of the complex planning process carried out by PHNs.

Even if not linear, evidence-informed planning can nonetheless be somewhat systematic and transparent (Oxman et al., 2009a). Various authors have argued for systematic procedures and systems to enable evidence-informed decision-making (Field et al., 2012, Liverani et al., 2013, Jakobsen et al., 2019, Parkhurst and Abeysinghe, 2016, Lavis et al., 2009a). The WHO recommends systematic use of research evidence in health policy-making to strengthen health systems and ensure the right programmes, services and medicines get to those who need them (WHO Regional Office for the Eastern Mediterranean, 2017). Andermann et al. (2016c) have developed an algorithm that lays out a systematic approach to considering the key issues that are part of evidence-informed decisions to improve health, recognising that there is no ‘right’ way to order the various elements. This algorithm is illustrated in Figure 9.2. A similar approach could be used by PHNs to clarify key decision points and elements of their planning process, if not necessarily the order.

Figure 9.2: Algorithm for making evidence-informed decisions to improve health (Andermann et al., 2016c)[5]



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[5] Available at https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-016-0085-4/figures/1 under a Creative Commons Attribution 4.0. Full terms at http://creativecommons.org/licenses/by/4.0/

The lack of clarity around PHNs' planning process is partly explained by the findings regarding limited 'good governance' of the planning process (Chapter 7). It is likely that the relationship is mutually reinforcing – a vicious cycle. It may be that meta-policy documentation and governance mechanisms are lacking because the process is 'fuzzy' and hard to define, and the limited governance likely contributes to the fuzziness of the process. If there were stronger governance mechanisms in place, the process may be clearer and more systematic. While the many elements of planning and commissioning may not occur in a linear, sequential manner, delineation of the tasks, roles and responsibilities such as that in the RACI tool employed by Remote PHN and described in section 5.3.1 (although with greater detail), help to ensure that key elements are carried out with appropriate consultation of stakeholders and evidence, and adhering to governance principles.

As well as limited ability to describe *planning* processes, there was also a widespread tendency among interviewees to instead describe the *needs assessment* process. PHNs are given detailed guidance on how to conduct needs assessment (Department of Health, 2015a) as were Medicare Locals before them (Australian Government Department of Health and Ageing, 2013) and some general guidance on how to plan and develop programs and services (Department of Health, 2016a), but there is not a strong regulatory force to drive planning processes. Development of robust planning processes requires a planning environment where there are favourable, or at least not opposing, institutional forces. While there were some positive elements evident, PHNs do not consistently have robust, systematic, readily describable planning processes (with supporting governance) because there is not a strong institutional force driving this. What processes there are have been driven internally within the PHN, by the normative and cultural-cognitive forces of (some) internal PHN actors, doing things the way they think they should be done, not because they are required to do them that way. For example, it was evident that a key driver of the developing planning process at Metro South PHN was the relevant manager, who perceived shortcomings in how systematic the process was, and desired to improve it. The Remote PHN RACI matrix, which went some way to outlining tasks within the broader commissioning process, was something that had been initiated from within the PHN, with no external guidance or requirement to do so. There is instead an opposing regulatory force that requires deadlines and deliverables are met (and adds additional activities/requirements periodically) which hinders the development and conduct of robust processes. There is also a lack of resourcing in terms of funding or capacity development, to facilitate process development in PHNs. I acknowledge, and several interviewees noted, that at the time of data collection, PHNs were still relatively immature, and it is possible that in time the planning process will become more established, concrete and describable. Stronger guidance and expectation, if not mandating, as well as resourcing and capacity building from the Department of Health would serve to drive the development and adoption of more systematic, well-governed planning processes, as would allowing less rigid timeframes for planning 'deliverables' and greater devolution of planning autonomy to PHNs. These changes to planning processes would facilitate evidence-informed, equity-oriented regional PHC planning, for improved population health outcomes.

9.3 What types of evidence do PHNs use, for what purposes in the planning process?

This research has generated some important findings about the types of evidence that are used in PHNs' planning. This section will compare those findings to others in the literature and offer some practical and theoretical explanations for the patterns observed.

9.3.1 The predominance of descriptive evidence over intervention evidence

This research found considerable use of descriptive evidence to identify, understand and map population health problems, but relatively scant use of intervention evidence, particularly in activity work plans, where one might expect such evidence to be documented. Population health intervention evidence is an umbrella concept that includes program evaluation, health promotion research, policy research, health impact assessment and health services research, that is concerned with all aspects of designing, testing and implementing solutions to population (not individual clinical) health problems (Hawe et al., 2012). The lack of intervention evidence found in this study is consistent with the findings that there was very little evidence sourced from published academic literature or evaluation reports, and quantitative epidemiologic and health services data were considerably more common. PHNs' limited capacity for evaluation is also consistent with their limited use of evaluation evidence.

Other studies have examined evidence use in local or regional health policy and planning, and similarly found greater use of descriptive evidence for identifying problems, than intervention evidence for developing strategies (Browne, 2017, Armstrong et al., 2014, Kneale et al., 2018).

A study of evidence use in local Health and Wellbeing Strategies produced jointly by Health and Wellbeing Boards and CCGs in the UK by Kneale et al. (2018) similarly found that intervention evidence was underutilised, and systematic reviews were rarely cited. However, in contrast to my research, this study found that academic sources were frequently cited, but were limited to a narrow range of trusted, accessible sources. For example, two of the most common sources were the Marmot Review 'Fair Society, Healthy Lives' (Marmot and Bell, 2012), and the Dahlgren and Whitehead (1991) report on promoting social equity in health, frequently used to justify a focus on health inequalities and social determinants of health, rather than specifically to inform planned interventions. Like my research findings, this study found that the published evidence used was largely statistical data and did not include any qualitative academic research. There were however indications of local qualitative research in terms of consultation and engagement activities, as my research found was the case for PHNs, although similar concerns about the rigour of such internal qualitative research activities were raised. The use of such consultation evidence was suggested by Kneale et al. (2018) as being due to a lack of published research evidence to meet local authorities' requirements in terms of locality, political salience or economic focus. They found that use of evidence derived from consultation had increased over time, which they suggested may reflect the trend towards increased local accountability in public health decision-making. The study by Kneale et al. (2018) also found poor standards of referencing in the documents examined, as was the case in my research.

Browne et al. (2017) proposes three possible explanations for the lack of intervention evidence, which potentially equally apply to PHNs: relevant evidence does not exist; it exists but is not accessible; or it is available and used, but just not publicly documented.

In relation to the first point, there was little evidence in this study to suggest that PHNs had sought locally relevant intervention evidence but not been able to find it. Recent research has shown that there is plenty of current Australian evaluation evidence published regarding health care delivery models, much of it relating to primary and community care (Roseleur et al., 2020). The problem was not so much that PHNs couldn't find intervention evidence, it was more that they didn't have time or resources to go looking, so they prioritised what was immediately accessible. The question of local relevance of evidence was a concern for Remote PHN in relation to their particular context but was otherwise not a commonly reported factor. This was in contrast to Kneale et al. (2019) who identified that the regionalisation of public health decision-making in the UK called for more evidence of local applicability to support health policy decisions.

My research found very limited presentation of evidence drawn from local general practice (or other organisations). This is interesting in light of the considerable efforts that some PHNs put into the collection, cleansing and analysis of such data, which was mentioned in some interviews and documents. One might expect that such locally sourced data would be highly valued for local planning, in that it was directly reflective of the local context. But it may be that while such evidence has direct local relevance, there may be other factors that render it less useful or trustworthy to inform planning decisions. Locally sourced GP clinical records data extracts would require somewhat sophisticated analysis to generate reliable intervention evidence, and this research has indicated that such efforts would be unlikely given resource and time constraints. Using GP data to inform the identification of local health needs would be more feasible, but probably not warranted, in light of other reliable descriptive evidence sources available. Without mechanisms to embed the good governance principle of assessing (and recording) evidence 'appropriateness', it can be difficult to determine why some evidence is used and some not.

The second of Browne's (2017) explanations offers what is probably the most practical explanation for the patterns of PHNs' evidence use: locally relevant evidence exists but is not readily accessible and PHNs favour what is most readily available. PHNs are provided with a range of data via a Department of Health web ‘portal’, some of which is publicly accessible, and some is secure and accessible only by PHNs (Department of Health, 2018b). This is largely from big national databases, covering many epidemiologic, health service and demographic indicators. PHN data is also publicly available through PHIDU (Public Health Information Development Unit (PHIDU), 2020), which PHNs are directed towards (Department of Health, 2015a), and was the recommended principal source of data for Medicare Locals’ comprehensive needs assessments. The data are quite granular, broken down to sub-region levels within PHNs, and enable comparison with state and national averages. While in some regions, such as remote areas, the large national databases are reported to be not readily transferable to their context, it would seem that for the most part, national databases are far more readily accessible than locally specific data, and sufficient for the purpose of identifying ‘hotspots’ of need for most PHNs. However, such data do not provide intervention evidence, so the considerable emphasis on descriptive evidence of need probably reflects the ready access to, and previous experience with, such evidence. The identification and prioritisation of needs (and corresponding interventions), however reliably evidenced, requires judgement and is thus vulnerable to professionals defining solutions in terms of what (services) they have to offer. The influence of underlying ‘problematizations’ are discussed further later in this section.

Other sources of evidence, particularly for PHC interventions, appeared to be somewhat more difficult and time consuming for PHNs to access. ORACLe tool analysis showed that PHNs have limited capacity in terms of (research) evidence resources, in that access to libraries or databases of academic research evidence was not common. Interview findings indicated that PHNs lacked the resourcing and time to search, appraise and apply research evidence. The greater presentation of evidence from grey literature sources may reflect the pragmatic preference for synthesised information relevant to specific health topics, and the limited capacity for conducting reviews of primary research literature.

The extensive literature, assessed in numerous systematic reviews, has identified that access to evidence and practical constraints are common barriers to evidence-informed policy and planning (Oliver et al., 2014a, Orton et al., 2011a, Innvaer et al., 2002, Masood et al., 2020). Two such reviews showed that research evidence was used less commonly than other forms of evidence (Orton et al., 2011a, Masood et al., 2020), which is consistent with the findings from my research.

Browne’s (2017) third possible explanation - that intervention evidence is used but not documented - further suggests that intervention evidence may be captured in internal documents such as program logic or in-house feasibility analyses. This may be true of PHNs. The needs assessment and activity work plan templates they are required to use (which formed the basis of this analysis) certainly do not prompt documentation of intervention evidence. Analysis of PHN internal documents indicated that two of the five case study PHNs do have more comprehensive templates for planning programs, which prompt documentation of an evidence ‘base’, and it may be that this is where such evidence use is documented, rather than in the publicly available documents on Department of Health templates. It is also important to note that 3 of the five did not appear to have more comprehensive templates for planning documentation, and so were less likely to have evidence documented elsewhere. As discussed by Browne, documentation of an evidence ‘base’ also implies that evidence use is direct and instrumental, to inform specific decisions, whereas the various indirect modes of evidence use, where knowledge percolates and diffuses through society, have been well documented (Weiss, 1979). Such indirect use of evidence is likely to be the case in PHNs where this research has shown there are iterative, ‘fuzzy’ planning processes with input from various actors. PHNs may have used intervention evidence in a more tacit way, informally derived from consultation and co-design activities, the detail of which was not captured in the activity work plans. This particular aspect of ‘consultation’ evidence will be discussed in further detail in the following section.

A further consideration regarding the limited use of intervention evidence, is PHNs’ limited scope for intervention action. Given that much of their activity is prescribed (e.g. HealthPathways, eHealth) or limited to nudging the redistribution of clinical services and to a lesser extent, simple individual educative behaviour change interventions, there was possibly no great need for intervention evidence to inform major innovations. Also, in some cases, PHNs’ ‘activities’ were grants programs where the detail of the intervention is developed by the applicant, and so the PHN would have less cause for consulting relevant intervention evidence. Given their time constraints, PHNs are possibly more concerned with identifying *where* to implement interventions, consistent with the finding that evidence for targeting was relatively common, much more so than *what* intervention to develop. While there is undoubtedly plenty of evidence and scope for ways in which to enhance the delivery and integration of primary care services, other (time and resource) factors probably limited use of evidence for such interventions. The limited use of intervention evidence also potentially contributes to the somewhat common planning of individualistic behaviour changes strategies, despite there being little evidence for the effectiveness or value of such interventions (Baum and Fisher, 2014). If PHNs had examined evidence of effectiveness, they might have been less likely to pursue such interventions.

Alongside practical access barriers, the other common ‘category’ of barriers to evidence-informed decision-making, is the complex balancing of the other influences in decision-making, and the selective use of evidence in line with political or ideological reasons (Oliver et al., 2014a, Orton et al., 2011a, Hawkins and Parkhurst, 2016). My research identified a variety of factors (besides evidence) that influence PHC planning decisions, as well as clear indications that actors gave preference to evidence that aligned with their professional background. The types of evidence that decision-makers value, access and use is influenced by social, political and ideological ideas and associated institutional forces. Policy and planning decisions are rarely a simple technical question, definitively addressed by evidence of ‘what works’, they typically involve multiple options and competing interests, social priorities and values (Parkhurst, 2016). Key authors in the field are critical of views that see evidence as neutral and an objective tool that is above political ideology, and attempts to ‘depoliticise’ policy decision-making through technocratic use of evidence (Hawkins and Parkhurst, 2016, Liverani et al., 2013, Marston and Watts, 2003). Certain forms of evidence can be deliberately invoked to obscure the social or political nature of decisions (Parkhurst, 2016) or evidence can be framed in a certain way, to drive a particular agenda, motivated by ideological, political or commercial agendas. A hypothetical example might be where a key actor provides a certain service, they are likely to favour (and possibly have better access to) evidence that is favourable about the effectiveness and value of that service. A physiotherapist is more likely to advocate evidence that says that physiotherapy treatment is preferential to surgery or pharmacological treatment of a musculoskeletal condition. The selection and use of evidence can also be biased unintentionally, based on underlying ideas, values and norms, which appears to be the case in the current research. While this research did not identify (or look for) any malfeasance or intentional subverting of evidence, interviewees did tend to link their conceptions of evidence with their professional background, influencing their preference for quantitative or qualitative evidence, which indicates the impact of underlying normative institutional forces at play.

Another underlying reason behind why PHNs did not use very much intervention evidence may be because they weren’t expected or encouraged to, as reflected by the lack of prompts in the mandatory templates - there were no regulatory institutional drivers from the Department of Health to facilitate use of intervention evidence. Similarly, they far more commonly used epidemiological and health services evidence, because they were expected to, and because they were essentially given it. The prominence of quantitative epidemiologic and health services evidence is important - the prominence of certain types of evidence, and relative neglect of others has implications for what ‘problems’ are identified, and what ‘solutions’ lend themselves to those problems.

Bacchi’s ‘problematization’ theory (2009) describes how the way in which a problem is viewed will determine what strategies are adopted to address it, and that problematization is loaded with ‘ideas’ and value judgements underpinned by cultural-cognitive and normative institutional forces. The emphasis on epidemiological and health service evidence to identify problems, suggests that the identified problems are matters of disease, behavioural risk factors and treatment, and so lend themselves to clinical or behaviour change solutions for these problems. This ideologically driven ‘problematization’ is a dominant regulatory institutional force from the federal government Department of Health regulating the actions of PHNs. The Department will only allow clinical or individual solutions, and emphasize epidemiological and health services evidence because they are consistent with the government’s deeply held ‘ideas’ about health as a matter of disease (epidemiology) and its treatment (health service capacity and utilisation data), consistent with a selective conception of PHC, rooted in neoliberal, individualistic world views.

While the deeply held beliefs and associated cultural-cognitive forces are not likely to be readily modifiable, there may be some relatively simple procedural changes that could serve to drive greater use of intervention evidence to inform PHC planning. Consistent use of a program logic-based template, as indicated by some of the PHNs examined, would enable clarification of PHC 'problems' and their underlying causes, interventions' effectiveness, efficiency and appropriateness/acceptability, outputs and outcomes, and documentation of the evidence underpinning each 'decision' leading up to, and including the commissioning of a service or program intervention. To make such documentation publicly available would greatly enhance the transparency and accountability of the planning decision-making process, which is needed. It would also enable identification of any evidence 'gaps', which would help to inform research and evaluation agendas. While the process by which such decisions are arrived at is not direct and linear, once a decision has been made, it is feasible, and desirable to capture the basis for such decisions.

9.3.2 Local input to local planning?

The findings from this research in relation to consultation-derived qualitative evidence were mixed, particularly with regard to needs assessments. Although consultation appeared generally to be a somewhat common source of evidence, there was considerable variation between PHNs in terms of the volumes of evidence derived from consultation. This may genuinely reflect varying degrees of consultation and its use to inform planning decisions, or it may reflect the varying composition and detail of needs assessments. Very few needs assessment documents gave clear indications of what consultation had provided what evidence. A prompt in the needs assessment template seeking indications of consultation evidence would likely make for more consistent presentation of consultation evidence.

While consultation appeared to be a common source of evidence in activity work plans, this may reflect the somewhat crude listing of consulted (or intended) stakeholders, as prompted by the template, rather than reflecting stakeholder consultation and what bearing it may have had in genuinely informing the development of planned activities. While there were certainly indications from documents and interviews that a considerable volume of stakeholder engagement and consultation takes place, and that qualitative consultation evidence is regarded by many as valuable, the rigour of the collection and analysis of that 'evidence' was largely questionable, as was the matter of if and how such evidence informed PHC planning. Such evidence lacked richness, and often served to indicate the extent to which stakeholders perceived an issue to be a need, rather than building qualitative understanding of an issue. Kneale et al. (2018) had similar concerns about the rigour of qualitative research and stakeholder engagement conducted in the development of regional Health and Wellbeing Strategies in the UK. It may be that my analysis of planning documents simply did not capture rigour that may have been recorded elsewhere. This in itself is an issue, in that there is a lack of transparency and accountability to any consulted stakeholders regarding the use and value of their input. However, there were also doubts expressed in interviews about the rigour of qualitative data collection and analysis.

There are many ways of doing community participation (Rifkin, 2009), which can be considered along a spectrum of empowerment – at one end community input is short-term for a defined purpose within controlled parameters, at the other, community participation is an ongoing relationship where participants have significant control and greater scope of influence (Oakley, 1989, Baum, 2008). While this research was not specifically designed to critique PHNs' community engagement, indications from the document analysis and some interview discussions are sufficient to raise concerns about the consistency, transparency and utilisation of community input in PHC planning. The broader RPHCO project also cast doubt on the extent to which the community advisory committees were effective and had input into priorities and decision-making (Baum et al., 2020).

Local relevance and community participation in health planning are key PHC principles of the Alma Ata Declaration (World Health Organization, 1978), and reiterated in the Astana Declaration (World Health Organization and United Nations Children's Fund (UNICEF), 2018). Regional decision-making bodies in decentralised health systems can make for greater local authority and accountability (Saltman et al., 2007). Community engagement and participation is crucial to developing appropriate PHC strategies to address inequities, in terms of both contributing to the collection of health equity information and in addressing underlying power relationships (Freeman et al., 2018). Lay knowledge is valuable in identifying and understanding factors underlying population health problems (Popay and Williams, 1996). Connecting with communities and local service providers, and other stakeholders is explicitly expected of PHNs and recognised as fostering community empowerment (Department of Health, 2015a). PHNs are also required to include clinical councils and community advisory committees in their governance structure (Department of Health, 2016b). Yet numerous interviewees in this research identified that there are other factors which hinder the quality of engagement and qualitative analysis – resource and time constraints. Time constraints make it difficult to form and maintain genuine relationships with stakeholders, as opposed to doing episodic consultation activities. Interviewees identified this as particular concern with regard to communities that experience disadvantage, such as Aboriginal and Torres Strait Islander people. It is recognised that community participation requires resources, time, clarity and capacity support (Zakus and Lysack, 1998). While there is no question that considerable effort goes into community and stakeholder engagement, the way in which such evidence is used and recorded could be enhanced, to ensure transparency and consistency. Without such detail and transparency, it is impossible to say whether consultation was tokenistic, or whether there was genuine participatory health planning. Again, a relatively simple modification of templates could facilitate the conduct and recording of community and stakeholder engagement. An improved needs assessment template could facilitate better triangulation of qualitative evidence of needs and priorities with quantitative evidence from other sources, and improve the transparency of prioritisation. An improved activity work plan template could prompt (and capture) qualitative evidence of the co-design of, or community/stakeholder consultation on proposed interventions, to encourage community participation, even if it is only at the most basic level. Such changes would improve the governance of evidence-informed planning, and good governance is equated with processes that facilitate community participation (Hawkins and Parkhurst, 2016). While community and other stakeholder involvement is required of PHNs, the regulatory institutional force does not extend as far as actively supporting it through specific resourcing, capacity building, documentation expectations and time allowance. Without such strong regulatory drivers, the extent and quality (and reporting) of community participation is at the discretion of each PHN, and may explain the inconsistency observed in this research.

Local input is at the core of regional PHC planning for health equity. With better resourcing, adequate time, and mechanisms to drive the robust collection, analysis, use and reporting of community ‘lay knowledge’ evidence and community participation, PHNs would be better placed to foster genuine community empowerment in regional PHC planning to better address local population health priorities.

9.4 Do PHNs have strong organisational capacity for evidence-informed planning?

Capacity of policy and planning agencies is increasingly recognised as an important factor that influences evidence-informed decision-making (Redman et al., 2015, Jakobsen et al., 2019, Huckel Schneider et al., 2014, Williamson et al., 2019). Organisational capacity is a key feature in the WHO Conceptual Framework of Evidence-Informed Health Policy-Making (Green and Bennett, 2007).

This research found that overall, PHNs had relatively strong organisational capacity for evidence-informed planning. However, the analysis does highlight particular aspects of organisational capacity that warrant further development in PHNs, and there are some capacity shortcomings that are more concerning than others. As outlined in Chapter 2, there is a hierarchy of capacity for evidence-informed decision-making, ascending from individual to organisational, to institutional (Potter and Brough, 2004). When the ORACLe tool questions are considered against this hierarchy, some domains tend towards individual capacity (2 and 3), some are largely about organisational capacity (4, 5 and 7), and domains 1 and 6 can be considered more at the ‘institutional’ level of capacity that addresses systems, structures and roles. As such, the capacity shortcomings in these domains are of greater importance. In particular, the low capacity evident with regard to evaluation (domain 6) highlights a particular priority for development. While the domain 1 findings themselves were not unfavourable, the additional insights provided by application of the 'good governance' framework (Hawkins and Parkhurst, 2016), and internal process document analysis did identify shortcomings in factors that serve to generate institutional norms to drive evidence-informed planning, such as internal policies, which are a further key area for improvement. Hawkes et al. (2016) and Potter and Brough (2004) argue that organisational and institutional capacity is more influential than that of individuals. My research has found that it is this 'institutional' level of capacity that needs development. While there was also relatively weaker capacity identified in other domains, their lower position in the 'hierarchy' render them of lesser concern.

Makkar et al. (2018) found that Australian state government policy agencies had moderate to high levels of organisational capacity for using research to inform policy-making, as indicated by agencies' overall (weighted) ORACLe scores ranging from 1.5 to 2.75 out of 3. My research on PHNs has shown they have somewhat higher capacity, with overall weighted ORACLe scores ranging from 2.61 to 2.96 out of 3. PHNs demonstrated considerably stronger capacity regarding support for leaders, slightly stronger capacity in regard to generating research, and somewhat lower capacity in regard to mechanisms to facilitate access to research evidence. The differences may reflect differing research evidence needs between the different types of agency – meso-level agencies have less need for research evidence and greater need for locally-generated (in-house) evidence. There may also be different contextual influences on their capacity, particularly autonomy and funding volumes. The ORACLe tool results may have been less valid in meso-level health planning organisations than the 'higher' policy level for which it was initially designed.

Recent analysis has shown that the use of evidence in policy-making in an Australian rural local government context differs to that of higher levels of state and national government, largely due to limited access to relevant evidence, local social norms preferencing local 'stories' over less relevant research evidence, and limited staff capacity to access and interpret research evidence (Alston et al., 2019). My research, in examining a similarly regional level of policy/planning decision-making similarly identified capacity concerns in regard to access to research literature, and the importance of local perspectives in the development of local strategies. My study did not specifically assess PHN staff capacity for accessing and interpreting research evidence, although there were indications it was mixed.

9.4.1 Specific capacity shortcomings

This research identified two particular capacity shortcomings of note – evaluation capacity and governance of the planning process. Firstly, the ORACLe domain with the lowest capacity was mechanisms to support evaluation of programs. This is consistent with the questionable capacity regarding documented planning processes, and with the document analysis findings of low use of intervention evidence, and evaluation reports more specifically, to inform planning and program development. There were some encouraging examples of PHNs' efforts to develop evaluation capacity – particularly Remote PHN which was in the process of developing a monitoring and evaluation framework.

The low capacity is concerning because evaluation is an important source of context-specific intervention evidence. The indication that PHNs have relatively poor capacity for evaluation of their planned interventions makes for poor availability of such evidence and contributes to the low use of such evidence. Such locally appropriate evidence is particularly important for regional decision-making (Kneale et al., 2019). Very little evaluation evidence was cited in PHN public documents, and what there was tended to be measures of program reach rather than intervention outcomes, for example, reporting on patterns of youth mental health service utilisation in particular age brackets. A rare example of an evaluation of program outcomes/value informing planning referred to the cost-saving benefit of advance care planning programs in residential aged care facilities.

This is important in terms of the PHNs themselves, and the wider sector that could also benefit from disseminated evaluation findings. The limited evaluation capacity is somewhat in contrast to the government's objective that PHNs "Increase the efficiency and effectiveness of medical services, particularly for patients at risk of poor health outcomes" (Department of Health, 2016b) – without the capacity to evaluate, it is impossible to know whether the efficiency or effectiveness of services has increased, or whether they particularly have for patients at risk of poor health outcomes.

Participants in this research were critical that PHNs do not receive specific funding or support from the Department of Health to conduct evaluation or develop evaluation capacity. Other authors have also noted a lack of investment in evaluation capacity in government as a key barrier to evaluation of public health initiatives (Freund et al., 2019). Recent Australian research has also identified that evaluation of health care at the local level is a major gap in Australia, with local level capability hampered by lack of education and training, shortage of skilled evaluators, inadequate resourcing and poor sharing of evaluation outcomes between organisations. It also highlighted the importance of decision-makers' need for local evaluation evidence (Searles et al., 2019). My research similarly identified that resourcing was a key barrier to local evaluation of health services and programs. Improved use of contextually relevant intervention evidence requires greater generation (and dissemination) of such evidence through evaluation. Regional health planning organisations need support and funding to develop evaluation capacity to enable generation of such evidence.

The second capacity shortcoming of concern related to documented processes for planning. While the ORACLe Domain 1 findings showed that most PHNs report having documented processes that encourage evidence use in planning, closer examination of PHNs' internal 'meta-policy' and procedures was less favourable. The use of evidence and consideration of equity was broadly encouraged in the main, but there were very few examples of systematic mechanisms to drive such considerations. Those PHNs that did demonstrate stronger capacity in this regard were those that employed established frameworks such as ‘program logic’ and/or project management in their planning processes. Consistent with the common lack of detailed process documentation, PHNs also all lacked guidance resources on appraising and applying research, even though various tools are available to support the use of evidence in health policy-making and planning (Lavis et al., 2009a, National Collaborating Centre for Methods and Tools, 2018, National Collaborating Centre for Methods and Tools).

PHN commissioning guidance from the Department of Health suggests that PHNs should have “clear rationale and criteria for decision-making” and “a clear audit trail that demonstrates why decisions were made” (Department of Health, 2016a). Such mechanisms were rarely identified in this research, although a good example of prioritisation decision-making criteria seen in a needs assessment, as given in section 5.3.1, prompted consideration of: the number and proportion of people affected; associated policy imperatives; amenability to PHC; impact on quality of life; stakeholder perceptions; and partnership potential.

Embedding such mechanisms that institutionalise ‘good governance’ principles into systematic planning and decision-making processes helps to identify and manage the range of competing political interests, values and other influences, and promote the transparent, appropriate use of evidence to inform health policy and planning decisions (Hawkins and Parkhurst, 2016). Proceduralist approaches to health priority-setting have drawn from the principles of deliberative democracy, and are aimed at achieving procedural fairness and justice (Barasa et al., 2015). It was evident in this research that PHNs needed to manage the interests and political power of local service providers (among others), and that the objectivity of decisions about resource allocation were sometimes compromised by local political influences. This is a risk to the equity goals and objectives of PHNs, as needs-based planning can help reduce health inequities, while if this is undermined by responding to interests rather than identified needs, existing inequities could be exacerbated. Improving the transparency, appropriateness, accountability, and contestability of evidence-informed planning helps to ensure that political influences do not adversely impact on PHC planning decisions. ‘Good governance’ capacity development acts at the highest ‘institutional’ level of the capacity hierarchy (Potter and Brough, 2004), and while more challenging than addressing individual capacity, offers great potential for sustained improvement in evidence-informed planning (Hawkes et al., 2016). By developing institutional structures locally to operationalise ‘good governance’ principles, organisations can ensure that they are specific to the particular political systems and cultures of that context. Given the complex range of factors under consideration in health policy and planning, the transparent, systematic use of multi-criteria decision analysis matrix tools is recommended (Baltussen and Niessen, 2006, Parkhurst, 2016). Barasa et al. (2015) have proposed a framework for health priority setting that includes both procedural considerations (as Hawkins and Parkhurst's (2016) 'good governance' framework argues for) as well as consequential considerations, as illustrated in Figure 9.3. The considerations outlined in this framework could be used by PHNs as criteria in discussions and decisions about what health needs and associated interventions take highest priority.

Figure 9.3: Framework for evaluation for priority setting (reproduced from Barasa et al. (2015)[6]

Consequentialist outcomes		Proceduralist conditions
1. Efficiency		1. Stakeholder engagement
2. Equity		2. Empowerment
3. Stakeholder satisfaction	⟺	3. Transparency
4. Stakeholder understanding		4. Revisions
5. Shifted priorities (reallocation of resources)		5. Use of evidence
6. Implementation of decisions		6. Enforcement

Proceduralist condition 7: Community Values

The Australian General Practice Network was the peak body for Divisions of General Practice, Australia's first iteration of PHCOs prior to MLs and PHNs, and recognised that good governance of decision-making is beneficial for partnership between regional organisations (AGPN 2009, cited in Oliver-Baxter et al., 2013). The principles of transparency and community accountability in particular align with PHC core principles of local community participation and control of decisions that affect community health (World Health Organization, 1978, World Health Organization and United Nations Children's Fund (UNICEF), 2018). As well as decision-making criteria, further simple mechanisms to improve transparency and accountability could be public access to decisions and minutes of meetings, or formal oversight by independent academics or non-government organisations (Hawkins and Parkhurst, 2016).

To move towards comprehensive PHC, PHNs should develop more robust internal processes embedded with 'good governance' principles to conduct appropriately evidence-informed planning in ways that are transparent and accountable to their communities. This will need support and resourcing from the Department of Health, if not stronger drivers such as 'accreditation' programs and associated accountability mechanisms.

There were two other domains in which PHNs generally showed lower capacity, however these are of lesser concern. While mechanisms to facilitate staff training (Domain 3) were not consistently present, this domain is focussed on development of individual skills, and sits lower on the capacity hierarchy in terms of generating sustainable improvement (Potter and Brough, 2004). The

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[6] Available at https://www.ijhpm.com/article_3096_616.html under a Creative Commons Attribution 4.0. Full terms at http://creativecommons.org/licenses/by/4.0/

availability of supports to access and apply research (Domain 4) were also variable and overall lower. However, this domain focussed very much on access to academic research and perhaps did not appropriately reflect the evidence needs of meso-level health planning organisations. This is particularly an area where the assessment of capacity should reflect the need of the organisation. If meso-level PHCOs don't perceive a great need for accessing academic literature, then they are not likely to invest in such capacity, particularly when many academic publications sit behind a publisher's 'pay-wall'. Any concerns about limited access to academic research evidence are mitigated by the perceived limited value of such evidence for local planning decisions, although may contribute to the limited use of intervention evidence. The ability to generate evidence specific for the local context both in terms of identifying and understanding needs are arguably of greater importance for meso-level health planning organisations, and this aspect of capacity was found to be strong in PHNs.

9.4.2 Institutional underpinnings

An interplay of institutional forces acted on the various aspects of organisational capacity for evidence-informed planning, which are summarised in Table 9.1 below. Generally, there was a lack of strong regulatory institutional force to drive capacity, and where there was strong capacity, it was largely due to normative and cultural-cognitive forces acting within the PHN.

Table 9.1: Summary of institutional forces acting on aspects of capacity for evidence-informed planning

ORACLe capacity domain	Overall capacity rating	Dept of Health (DoH) regulatory force for	Dept of Health regulatory force against	PHN normative/ cultural-cognitive force for	PHN normative/ cultural-cognitive force against
1. Documented processes	Moderate-strong, variable	Weak. DoH suggests mechanisms. No DoH oversight of PHN planning process or governance thereof. Not required to have accredited 'quality management system', as recommended by Horvath (2014). Templates do not require intervention evidence documentation	Yes, cost and time constraints Lack of support for such capacity development	Some – history (norm) of having accredited internal 'quality management systems' as MLs and DGPs Some - use of program logic and project management frameworks (inconsistent) Driven by internal leaders, but no oversight by boards	Yes – not consistently valued and used
Good governance of planning process (not from ORACLe)	Low, consistent	See above	See above	Possibly some – experience of decision criteria in previous PHCOs	No
2. Support for leaders	Moderate, variable	No	Yes, cost and time constraints	Some – indications of leaders valuing evidence and fostering a culture of evidence use	Not perceived as a capacity need, leaders already have adequate individual capacity or are not directly involved in accessing evidence Lower priority than other aspects of leaders' roles and professional development
3. Staff training	Low-moderate, variable	No	Yes, cost and time constraints	Partially – professional development is a norm, but not specifically re evidence-informed planning	Yes – perceive there is already good capacity among staff
4. Resources for accessing research evidence	Low-moderate, variable	No	Yes, cost and time constraints Constrained scope for intervention reduces need for intervention evidence	Yes – using evidence is the right thing to do	Yes – don't perceive need to access (full text) academic literature

ORACLe capacity domain	Overall capacity rating	Dept of Health (DoH) regulatory force for	Dept of Health regulatory force against	PHN normative/ cultural-cognitive force for	PHN normative/ cultural-cognitive force against
5. Generating evidence	Strong, consistent	Strong with respect to internal analysis of descriptive external quant data. Data are provided. Moderate with respect to qual evidence collection and analysis	Yes, cost and time constraints, hinder qual research more so than quant	Yes – qualitative consultation is important	Some perceive ‘research’ (excluding needs assessment) as lower priority
6. Evaluation capacity	Low-moderate, variable	No – No evaluation resources on DoH PHN website	Yes, cost and time constraints (no quarantined funding for evaluation)	Yes - evaluation is important	Yes – evaluation is not urgent, lower priority that other functions Evaluation is difficult and expensive
7. Relationships with researchers	Moderate-strong, consistent	Not explicitly expected or encouraged	Yes, cost and time constraints	Some – existing relationships, researchers/academic on boards/community advisory committees, opportunity to influence research agenda	Some - lower priority than other relationships
Relationships with other stakeholders (not an ORACLe domain)	Strong, consistent (but key stakeholders varied between PHN)	Yes – required to have clinical council and community advisory committee, expected to engage widely, AWP template asks about consultation. Strong with respect to LHNs.	Yes, cost and time constraints	Strong – relationships with key stakeholders are frequently well established and widely valued	

Barman and MacIndoe (2012) have investigated the relationship between institutional forces and organisational capacity. They found that despite similar institutional pressures acting on similar non-profit organisations, there was inconsistent implementation of a particular practice (in that case outcome measurement). The implementation of the practice was found to be moderated by organisational capacity factors. They also found that organisations with strong capacity in terms of written internal policies are more likely to implement the desired organisational practice. My conclusion takes a slightly different tack in arguing that the desirable practice (evidence-informed, equity-oriented PHC planning) is influenced by institutional forces and by organisational capacity factors, and organisational capacity factors are themselves also influenced by institutional forces. While the work of Barman and MacIndoe (2012) highlights the importance of organisational capacity in addition to other internal traits to determine an organisations' susceptibility to adopt (normative external) institutional expectations, my research identifies the importance of normative internal institutional forces to drive capacity in the relative absence of external institutional forces.

This research has identified that while PHNs broadly have good capacity for evidence-informed PHC planning, there are inconsistencies and some key concerns with regard to governance of the planning process, and evaluation to generate contextually appropriate intervention evidence. There are also concerns about some PHNs' planning capacity in terms of understanding the relationship between social determinants and health inequities, which will be discussed further in section 9.5.2. Capacity development initiatives at the 'institutional' level, with appropriate support and resourcing from the Department of Health could make important sustainable improvements to drive evidence-informed decision-making that effectively and efficiently strengthens PHC.

9.5 Do PHN activities have an equity focus consistent with comprehensive PHC, and what influences the equity-orientation of planned activities?

This section begins by discussing PHNs' limited scope of action to act primarily 'downstream' with an individualistic focus, and draws on examples from the international literature of ways in which their scope of action could be broadened to include upstream actions. It then focusses on concerns regarding victim blaming and its reflection of individualistic ideas of health, as well as some PHNs' limited understanding of how the underlying social determinants influence health. The following section explores the shortcomings and potential options for improving process mechanisms to foster health equity consideration in planning, leading into discussion of the implications of evidence use deficiencies for equity-oriented PHC planning.

While the analysis and discussion in this research is based on 'core' activity work plans using 'flexible funding', I acknowledge that PHNs all receive dedicated funding for Aboriginal and Torres Strait Islander people's health, mental health, and alcohol and other drugs. In these respects, all PHNs are to a certain extent acting to reduce health inequities. The focus of my analysis is what actions PHNs are taking of their own volition, to reduce health inequities.

9.5.1 Good intentions, but individualistic focus and lack of upstream action

Most PHNs expressed in their planning documents clear intentions to address health inequities through their PHC planning and commissioning. These documents also showed that PHNs collected considerable evidence to identify local health inequities, including social determinants of health inequity. However, their examination of population health needs tended to focus mainly on epidemiological disease prevalence and health service factors, and their examination of health equity issues was largely about health status difference of population groups who experience disadvantage, and access to health services. Correspondingly, the activities planned by PHNs largely entailed ‘downstream’ clinical service-based interventions, and some individual behaviour change interventions, with very little ‘midstream’ or ‘upstream’ action to address the social determinants of health equity. PHNs’ actions for health equity are required to align with a somewhat narrow, selective understanding of health and PHC, reflecting an underlying cultural-cognitive institutional force that sees health as an individual concept, to be addressed by medical care or individual behaviour change.

PHNs’ limited scope to act ‘downstream’ with clinical services and individualistic strategies is a concern. Their considerable effort in identifying local priority needs and inequities is undermined by their limited ability to act.

Many of the upstream social, environmental and political determinants of health equity are genuinely beyond the direct remit of PHNs. Macro-level policy settings determine key factors such as housing, poverty, education, transport, food systems and also the distribution of health care services generally. Intersectoral collaboration for upstream action on the social determinants of health may also be complicated by misalignment of jurisdictional boundaries, where PHN boundaries sometimes do not align with local government or LHN boundaries. While federal, state/territory and local governments are better placed than PHNs to directly act on the broader social determinants of health, in acting within a narrow scope of primary (clinical) health care, PHNs are missing an opportunity.

There were a few examples in this research of PHNs acting on the social determinants of health, such as working with local government to develop and promote active transport options, and developing programs aimed at domestic violence prevention. It would be good to see more of such initiatives being developed and implemented by PHNs. Experience from the UK shows that upstream health promotion action can be achieved by meso-level, regional health organisations. Clinical Commissioning Groups (CCGs), as their name suggests, very much have a focus on commissioning clinical services. But they also contribute to the broader wellbeing of their populations, supporting early interventions to address social determinants of health inequalities and social exclusion, and working with local partners to promote health and wellbeing (NHS Clinical Commissioners, 2016). There are also examples of some metropolitan CCGs having a broader role in local economies, recognising the important interrelationships of population health and economic prosperity, particularly in areas of major cities (other than London) where there is greater prevalence of disadvantage. There is a network of Core Cities CCGs whose purpose is “to improve the health outcomes of populations that live in complex city environments” and whose aims include raising awareness and influencing national policy to take into account the distinct needs of ‘core cities’ communities (NHS Clinical Commissioners, 2016). These CCGs in deprived urban areas, work with partner organisations with a particular focus on employment as a fundamental social determinant of health and contributor to local economies. There are also examples of CCGs working with other agencies to promote physical activity through urban design/ planning and transport interventions. Employment, transport and design of built environments are social determinants of health on which PHNs (in the right circumstances) could also collaborate to act. These upstream health promotion functions are good examples of the advocacy and intersectoral action functions outlined in the framework for PHCO health equity action (Freeman et al., 2018). Importantly, CCGs and local governments operate with a permissive legal framework to enable devolved, broad intersectoral policy decision-making within and across council boundaries, as well as partnership with private businesses (NHS Clinical Commissioners, 2016). With the right settings and resourcing in place, PHNs could similarly collaborate with other levels of government and non-health sector agencies to act on the underlying social determinants of health and health equity.

Another example from the UK of an intervention that spans the interface between clinical primary care and action on the social determinants of health, is a general practice-based social prescribing and community development scheme that addresses social isolation, and was found to significantly reduce unplanned hospital admissions (Abel et al., 2018). While this specific example was not the work of a CCG, such interventions could be commissioned by PHCOs.

Looking further upstream, the health care sector, particularly leveraging the political power of medical actors, can provide leadership and stewardship, working with other sectors to drive action on the social determinants of health, as well as improve the equity orientation of the health care system (Baum et al., 2009). Just as Core Cities CCGs aim to influence national policy in the interests of their specific communities’ needs (NHS Clinical Commissioners, 2016), PHNs could be doing more in terms of local leadership and broader advocacy for action on the social determinants of health. With their strong evidence of health needs and inequities in their regions, they are well placed to advocate for targeted action to address priority upstream issues.

As well as the associated time and funding constraints, the key factor limiting PHNs’ ability to take a comprehensive PHC approach and act on social determinants of health as well as accessible clinical health care service is the constrained scope of activity allowed by their ‘principals’ – the federal government. This strong regulatory force, underpinned by entrenched biomedical and individualistic ideas of health and cultural-cognitive institutional forces, is a fundamental challenge. This research identified a tension between these regulatory forces, and the normative forces in the ideas, culture and values within PHNs. There are many PHN actors with considerable population health education and experience who recognise the importance of collective approaches to address the upstream ‘causes of the causes’ of health inequity, and they drive a normative force from within the PHN. PHNs’ *raison d’être* is to identify and address local needs, yet they are not permitted the autonomy to draw on their local knowledge and understanding, to comprehensively address the underlying factors that create the needs and inequities they identify.

While PHNs are not going to be able to overhaul the wider systems that entrench social disadvantage and the consequent gradient in population health, a more permissive relationship with their ‘principals’ and appropriate resourcing, would enable them greater agency to collaborate with other sectors, and leverage their knowledge of health inequity to advocate for broader incremental change in the living and working conditions that perpetuate health inequity. Greater scope to enact primary prevention strategies based on genuine community participation would enable PHNs to foster elements of comprehensive PHC and have greater impact on health inequities.

By acting locally on the ‘causes of the causes’ of ill-health, as well as the work they already do to improve access to, and quality of PHC services, PHNs could make incremental changes to nudge what is primarily a health care service system towards a comprehensive PHC system that enables good communities and good lives for the people who live in them. While this will be challenging in the fee-for-service paradigm of existing health policy settings, with a broader permitted scope of action, and commensurate funding, PHNs could play a greater role in upstream preventive action on the social determinants of health.

9.5.2 Limited understanding of the link between socio-economic disadvantage and poor health – victim blaming

While some PHNs demonstrated sound understanding of the complex relationships between the underlying social, political and environmental ‘causes of the causes’ of ill-health and health inequity, others indicated shortcomings in such understanding. While they were not in the majority, there were indications in PHN documents of ‘victim blaming’ in statements suggesting that the ill-health of people experiencing social disadvantage was due to their knowledge or attitude deficits. Issues of ‘health literacy’ (a term almost synonymous with victim blaming (Jamrozik, 2010)) were also relatively prominent in PHN documents, predominantly framed as a deficit of individuals requiring remediation on their part. Individual behaviour change interventions were also moderately common among PHN activities.

Victim blaming ideology is explained as arising from the threat of high medical costs, popular expectations of medicine and government coverage or funding of medical treatments, and politicisation of environmental and occupational health issues (Crawford, 1977). The ideological position that individuals are responsible for their health, that was apparent in a few PHNs, diverts attention from the social causes of disease and the contributions of commercial and industrial sectors to those underlying causes of disease. It also provides governments of that persuasion with justification for abrogating responsibility to mitigate such factors through regulation, or fund medical services for consequent illness (Crawford, 1977). Victim blaming and individual responsibility for health is popular with governments who subscribe to a neoliberal philosophy of free markets, minimal government control and reduced state-funded welfare (Baum, 2008, Jamrozik, 2010, Baum and Fisher, 2014). Victim blaming is overly simplistic in that it ignores the underlying ‘causes of the causes’ – the social, cultural and economic factors that hinder behaviour change, and assumes that health is a central concern in people’s lives (Baum, 2008). The indication of some PHNs subscribing to the idea of ‘victim blaming’, alongside some PHNs’ limited attention to socioeconomic variation, is concerning - if they genuinely do not understand the underlying determinants of health and their deeply held beliefs are of individual responsibility, their potential for planning and developing upstream health promoting interventions will be limited.

Health promotion strategies that seek to drive individuals to improve their health behaviour, for example undertaking more physical activity, quitting smoking or eating less sugar and more fruit and vegetables, have an inherent logic to them, and can generate positive health outcomes in some individuals, particularly if employed in concert with other strategies (Baum and Fisher, 2014). However, they work best in high socioeconomic groups where the social, cultural and economic conditions are favourable, and less among people who experience disadvantage, and so risk exacerbating health inequalities (Baum and Fisher, 2014). Where PHNs are developing and commissioning behaviour change activities, they should do so with great care, informed by evidence to ensure that interventions are contextually appropriate and equity-sensitive, and part of broader strategies that also address the underlying causes of ill-health.

9.5.3 Improving the equity-orientation of planned activities

Aside from their inability to act upstream to address local health needs, this research has identified room for improvement in PHNs’ action to orient local PHC services towards equity. While there was some evidence of PHN activities to address equity of access to and quality of PHC services, the majority of planned activities were not evidently equity-oriented.

There was very little indication of PHNs employing systematic process mechanisms to encourage or incorporate equity considerations into the planning process. None of the case study PHN documents analysed included any such mechanisms, and only one non-case PHN indicated a needs assessment prioritisation criterion regarding consideration of equity. This is consistent with the shortcomings identified in their internal process/procedure documentation regarding the (governance of) use of evidence to inform decisions. Some might argue that such a level of rigorous, detailed planning process is aspirational in a small to medium meso-level PHC planning organisation, yet there are numerous examples from Canada where similarly small regional health organisations have clear processes and simple tools to support evidence-informed, equity-oriented health planning and program development (Fraser Health, 2018, Guichard et al., 2015, Pauly et al., 2016). As discussed in section 9.4.1, Barasa et al. (2015) recommend a framework of prioritisation criteria for macro and meso-levels of decision-making, which includes equity. Oxman et al. (2009b), as part of a comprehensive suite of resources to support evidence-informed health policy-making, have suggested a simple, structured approach of 4 questions to guide considerations of health inequity impacts in planning and policy development. Equity-focussed health impact assessments have been identified as a way in which PHCOs could assess the equity impacts of planned activities (Freeman et al., 2018) yet there was no indication of PHNs using such methods despite the fact that Australian resources have been around for many years (Simpson et al., 2005). While there were many indications of intentions and activities to promote cultural safety of PHC services, there was no indication that PHNs used any kind of evidence-based framework, such as that developed by Mackean et al. (2019), to develop such activities, or ensure that other activities were culturally safe. Distributional cost-effectiveness analysis is another way that equity impacts of health interventions can be assessed (Asaria et al., 2013), however, such analysis is likely to exceed PHNs' limited capacity with regard to health economics. A standard risk-assessment matrix that included a consideration of whether there might be (adverse) equity implications of the planned activity would arguably be within the capacity of PHNs to incorporate in their planning process. While such matrices were evident in some PHNs, they did not specifically call for equity risk consideration. Even within their somewhat limited scope of action, there are simple procedural changes that PHNs could make to facilitate planning that considers health inequities, ensures that initiatives are not exacerbating health inequity, and ideally reduces health inequity.

9.5.4 Evidence use and implications for equity-oriented planning

A key principle of equity-oriented policy and planning is that strategies should be based on appropriate research, monitoring and evaluation (Whitehead, 1991). Evidence is vital to equity-oriented planning – collecting information about health inequity is fundamental to acting to address it (Freeman et al., 2018, Andermann et al., 2016a, Marmot et al., 2008). The findings about PHNs' use of evidence have some important implications for the equity-orientation of their planning. Their generation and use of evidence to systematically identify variations in population health needs is mainly positive – all PHNs' needs assessments identified different types of health inequity issues to varying extents – but the emphasis on epidemiology and health services, and somewhat limited presentation of socioeconomic and other demographic data reflects and perpetuates individual, biomedical ideas of health, as discussed previously. While clinical services and behaviour change strategies can be developed and distributed such that they promote equity, PHNs' 'selective' assessment of health needs and approach to PHC is inferior to stronger comprehensive PHC in its potential to address health inequities at scale, through mid- and upstream action on the social determinants of health (World Health Organization, 1978).

A further evidence use issue with equity implications is PHNs' minimal use of intervention evidence of 'what works', let alone 'what works for whom'. There appears to be no consideration of the equity impacts of planned initiatives, or equity-sensitive evaluation of implemented initiatives (to generate their own evidence). The lack of evidence one way or another means that PHNs may be implementing initiatives that have no impact on equity, or have a detrimental effect in exacerbating health inequity in their regions (Oxman et al., 2009b). They may be unknowingly worsening inequities. Greater use of equity-sensitive intervention evidence to inform PHC planning could help to ensure PHN activities have a favourable impact in reducing health inequities.

PHC policy and planning is more likely to be effective, efficient, safe and equitable when it is informed by appropriate evidence. This research has shown that PHNs have good capacity for using evidence to inform equity-oriented regional PHC planning, and as decentralised, meso-level PHC planning organisations, they are well placed to identify and appropriately respond to priority local health issues in partnership with local communities. They need to be allowed greater scope, resources and time to realise that potential, and employ a wider range of actions that optimise the equity of clinical and non-clinical services as well as promoting the individual and broader social determinants of health equity. This will help to ensure that all Australians have a 'fair go' at a happy, healthy, productive life.

9.6 Reflexivity

In coming to this research with a background and history in PHCOs, I was conscious of the potential risk of influencing the research with my own experiences and ideas, but also of the potential benefit from my background contextual knowledge. I was well aware that with my experience, I was not an impartial, detached observer of PHCO planning phenomena – I was an outsider to the case study organisations, but an insider in terms of having previously worked in similar organisations. I employed a number of reflexivity strategies to 'check' my involvement and interpretation.

I took a careful approach in interviews of introducing myself and my background enough to facilitate rapport and establish credibility, but not 'giving away' too much about my experiences and views to be suggestive in any way. When conducting interviews, I also sometimes adopted an element of naivety, to make sure that I wasn't applying my own interpretation or understanding onto an issue – I was probing to ensure I understood what the interviewee meant, not assuming that I knew what they meant by certain statements. However, I also felt that by having and demonstrating a relatively high degree of background knowledge, it meant that interviews did not need to dedicate too much time to asking the ‘nuts and bolts’ practical questions of what PHNs do and how they work, it meant that we were able to rapidly explore more detailed, complex issues. I also felt that I was able to genuinely empathise with interviewees, which helped to establish rapport and gather open, honest responses in what was essentially a critical analysis of the organisations. I was conscious of wanting to give the impression that ‘I’m on your side’. I also took field notes following each interview, which included personal reflections, and prompted me to think about how I was feeling about the interview, in terms of being reminded of my experiences in PHCOs. Was there anything about the interview that had negative or positive associations for me? My field notes also prompted me to reflect on whether there were points that I consciously agreed or disagreed with.

With respect to analysis and interpretation of interview data, I took the approach of making reflexivity ‘disclosure’ notes in the margins of drafts, to be open and honest with myself and supervisors where aspects of the research had reminded me of something from my PHCO experience. Occasionally, my experiences were included in supervision meeting discussions of data interpretation and emerging findings. I was also conscious to look for, and report dissenting views in the data, to make sure that I wasn’t just focussing on what I agreed with, or what resonated with me.

I am confident that by employing these reflexivity approaches, the experience that I brought to this research did not compromise the interpretation of results or introduce any bias. My understanding of the context facilitated rich collection, analysis and interpretation of data and enabled me to generate actionable recommendations.

9.7 Strengths and limitations of this research

This research employed a range of methods and data sources to examine the complex issue of evidence-informed, equity-oriented, meso-level PHC planning. The triangulation of data sources and methods was a key strength of this research, as was the rigorous use of multiple coders and inter-coder reliability testing. While the methods employed enabled the research questions to be reliably addressed, there were some limitations, which will be outlined in this section.

9.7.1 Planning process analysis limitation

While this research did ask questions about the process of planning, and the ways in which decision-makers engage with evidence, it fell short of classifying the ‘type’ of evidence use. Several authors have described varying ways in which evidence is used to inform decision-making. The seminal work of Carol Weiss (1979) described seven models of research utilisation. A more recent synthesis by Redman et al. (2015) described research use as conceptual, instrumental, tactical or imposed. The current research design did not allow for specific analysis or classification of evidence use, which would probably require a more in-depth, observational approach. Such research scrutiny may be a challenge in highly politicised, busy organisations. Interviewees' responses to questions about planning process tended to lack detail, or focussed on needs assessment process, despite my efforts to probe further, and I was reluctant to compromise rapport early in the interviews by 'interrogating' interviewees too much. While this may be a limitation of the research, I think that participants' common inability to clearly articulate the planning process, and what in some cases appeared to be obfuscation, accurately indicate that PHN planning processes lack clear definition.

The ORACLe tool was developed and intended to be used alongside the SAGE tool (Makkar et al., 2016a) which combines interview and document analysis to examine how (or if) evidence was used to inform a particular policy. Use of the SAGE tool alongside the ORACLe tool may have provided a more comprehensive understanding of PHNs' planning process, use of evidence (and barriers thereto) and added to understanding of capacity for evidence-informed planning. I did not use the SAGE tool, as to do so would have greatly increased the scope of the research project, for which I had limited resources and capacity, as well as requiring considerably greater input from research participants.

9.7.2 Capacity analysis critique

Use of the ORACLe tool facilitated identification of strengths and weaknesses in PHCOs' organisational capacity for evidence-informed planning, however in applying the tool I learned of some of its shortcomings.

A key concern was the use of the term 'research', which reflects, and potentially constrains responses to a narrow conception of evidence. While much of the evidence-informed policy literature focusses on research evidence generated by academics and published in peer-reviewed journals, it is frequently recognised that a wide variety of academic and non-academic information sources, from a range of disciplines inform policy-making and planning (Parkhurst and Abeysinghe, 2016). As this research has found, locally appropriate evidence such as region-specific epidemiologic and health service data, and stakeholder consultation is more likely to be used in meso-level regional planning, than academic research literature. The focus of the ORACLe tool on 'research' and the inconsistent substitution with the term 'evidence' is potentially a limitation. Providing a broad definition of 'evidence' at the outset of interviews and using such terminology consistently may have generated responses more valid to the meso-level context.

Another concern with regard to capacity analysis was the ORACLe tool's somewhat narrow examination of network capacity, which only examined relationships with researchers, and focussed on the numbers of relationships, rather than organisational mechanisms to establish and maintain relationships with a range of actors. Various studies have identified that organisational mechanisms to facilitate knowledge exchange can increase the uptake of evidence (Uneke et al., 2011, Liverani et al., 2013). Employing additional questions to the ORACLe tool did enable broader analysis of the various actors and their influence, but the research may have benefitted from a more sophisticated social network analysis of the relationships and impact of the many actors evident in the PHNs' planning environment. Such analysis has been conducted in other examinations of evidence-informed decision-making (Lukeman et al., 2019, Oliver, 2013) and is attracting increasing research attention (Oliver and Faul, 2018). Nonetheless, the impressions provided by interviewees did give an indication of which actors have greater influence, and where engagement could be improved.

While ORACLe Domain 1 partly addressed governance by examining the existence and detail of 'documented processes', the assessment of governance capacity for evidence-informed decision-making was strengthened by the addition of interview questions to examine 'good governance' (Hawkins and Parkhurst, 2016) mechanisms, as well as focussed analysis of PHN internal policy and procedure documents. Employing these methods in addition to the ORACLe tool considerably strengthened this aspect of the analysis and generated less favourable, but more valid findings. Further analysis of documents such as position descriptions, performance management frameworks and training records may have helped to validate responses to other relevant questions. A more comprehensive 'audit' type process may yield more valid findings about organisational capacity and process.

Use of the ORACLe tool was strengthened by administering it with several participants from each organisation, instead of only the CEO (as originally recommended by Makkar et al. (2016b)). It helped to overcome some paucity of data, either through insufficient probing, or interviewee knowledge gaps. Qualitative analysis also complemented ORACLe findings in respect to understanding why capacity might be limited, or progress in developing capacity, as well as allowing a broader exploration of related themes.

The critique of the ORACLe tool, as well as its adaptation and application to meso-level PHC planning is a contribution to the research literature and I have authored a publication that has recently been published in the international journal Health Research Policy and Systems, and is included at Appendix M.

9.7.3 Document analysis limitations

The analysis of PHN planning documents (needs assessment, activity work plans and annual reports) had some important limitations. As with any such analysis, the documents were not written for the purpose of research analysis, rather for other different purposes, and represent a certain period in time, which was several years ago. The document analysis is a proxy indication of evidence use and equity-orientation – it does not necessarily represent all the evidence that has informed planning decisions, either directly or indirectly. It is however indicative of what is important to PHNs in needs assessment and planning. This illustrates the limitations of analysing the outputs/outcomes of planning/policy-making, and fortunately this research was strengthened by also examining the process of planning through interviews with key PHN staff. I acknowledge that PHNs also produce additional plans in the areas of mental health, drug and alcohol, and Integrated Team Care (for Aboriginal and Torres Strait Islander people), the analysis of which was outside the scope of this research. These documents may have provided further evidence regarding PHNs evidence-informed, equity-oriented planning.

With regard to the typology of evidence purposes, it may be worth noting that there was potentially some overlap in the concepts of ‘implementation’ and ‘acceptability’, however, neither were very prominent in documents. It may be that such considerations were considered in stakeholder consultation, but not specifically noted in the public documents. It is also important to clarify that the purpose of ‘program or service design’ included general indications to inform the selection or development of a program, usually from stakeholder consultation, and frequently in regard to the development of local HealthPathways referral pathways. This type of evidence ‘purpose’ is underpinned by a broad conception of ‘evidence’ that includes the input of any stakeholders. This is problematic as stakeholder input may or may not be valid evidence. For example, one PHN reported community survey responses favouring ‘education’ as the preferred means of increasing childhood immunisation rates. However, vaccination is known to be a complex aspect of health care behaviour that educational strategies alone are unlikely to resolve (MacDonald, 2015). The purposes of evidencing ‘intervention effectiveness’ and ‘cost effectiveness’ were based on much more specific indications of evidence, and the findings are more likely to accurately reflect the relatively low use of such evidence.

The understanding of consultation as a source of evidence is somewhat limited by the challenges of document analysis. While consultation was frequently mentioned, the presentation of consultation evidence in documents was generally crude. More focussed analysis of PHN internal stakeholder engagement frameworks (if they exist), and reports and analyses of consultation activities would give a more reliable indication of the quality and use of consultation evidence to inform planning.

The document analysis was challenged by wide variation between the length and detail of PHNs’ documents, which limited the ability to make valid comparisons between PHNs. The variation between documents may reflect a lack of clear direction and expectations from the Department of Health, and it may also reflect capacity differences between PHNs. The coding framework enabled examination of a broad range of themes and factors, but its complexity made for labour-intensive document coding. However, it did enable a more complex analysis of the purpose, type, source and level of evidence. Similar analysis of evidence use in planning and policy-making has employed a simpler distinction between ‘descriptive’ and ‘intervention’ evidence (Browne, 2017), which while easier to code and analyse, does not allow for such detailed analysis. In their examination of local Health and Wellbeing Strategies in the UK, Kneale et al. (2018) developed a somewhat more complex framework to analyse sources of evidence (some quite specifically, e.g. guidance or research from the Kings Fund), although this did not include other typologies such as purpose or level of evidence, or type of data. The complexity of my final coding framework also reflects the iterative approach to data coding and analysis, which is a strength in mixed-methods qualitative research.

Analysis of activity work plans was constrained by their limited detail. Detailed program and/or contracting specifications would give a more reliable indication of elements of activities that impact on health equity, however such documents are not publicly available. The classification of equity issues was not directly informed by an established framework as such, rather it was developed iteratively. Use of an established framework may have improved the consistency and breadth of identification of equity issues. It is also important to note that equity ‘issues’ were not mutually exclusive. For example, text could be coded as relating to ‘access to services’, as well as ‘people who experience disadvantage’. This nonetheless gives an indication of the relative prominence or absence of equity issues in relation to each other.

The next chapter will outline the conclusions and implications of this research and make some recommendations.

CHAPTER 10 CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusion

The 1978 Declaration of Alma Ata outlined a comprehensive vision of PHC grounded in the idea of health as a fundamental human right. In 2018 the Declaration of Astana reaffirmed the commitment to health as a human right, and the conviction that strengthening PHC is the most inclusive, effective and efficient means of enhancing people's health. Primary health care is an essential, foundational component of health systems. Strong, comprehensive PHC is that which is scientifically sound and includes: accessible, multidisciplinary primary care services including treatment, prevention and rehabilitation; action on the social determinants of health; and involves community participation to ensure appropriateness and responsiveness to priority local needs. The broad global vision of PHC has not been realised, and there remain opportunities to strengthen PHC for improved population health. Meso-level, decentralised regional PHCOs such as Australia's PHNs enjoy certain features that place them well to strengthen comprehensive PHC: they are locally based; in their community advisory committees they have structures for engaging with the community; they can identify local health priorities and inequities informed by communities; and they have some autonomy to develop evidence-informed PHC interventions in response to local needs.

This research has shown that PHNs undertake PHC planning in a complex environment, influenced by a wide range of factors and actors, fraught with tensions, spanning several layers of context – internal, regional/local, national and international. Their planning process is more complex and iterative than the PHN commissioning cycle model suggests. While PHNs' overall organisational capacity for evidence-informed planning is strong, there are key shortcomings that detract from their ability to make PHC planning decisions informed by evidence. This research found limited use of intervention evidence to inform the development of PHC programs and services, despite high use of evidence to identify health needs and inequities. While PHNs mainly expressed good intentions regarding addressing health inequities, most of their planned activities were not equity-oriented, and those that were employed 'downstream' strategies in terms of services and individualistic behaviour change interventions. There was little indication of systematic mechanisms to consider the health equity implications of planned activities. PHNs' scope of action is much narrower than that envisaged for PHC by the WHO, largely constrained by the Australian Government and dominant biomedical, individualistic ideas of health.

There is more that PHNs could be doing, even within their constrained selective primary care-oriented scope, to ensure that interventions are effective, efficient, and equity-promoting. Improving their capacity for evaluation would not only enable assessment of the interventions, but it would also generate valuable intervention evidence that could be used across the sector to inform program development. Attention to the planning and decision-making process, embedding mechanisms to operationalise governance principles to promote the use of evidence for the many aspects of planning, and consideration of health equity impacts, would help to enhance the effectiveness, efficiency and equity of interventions to strengthen PHC.

While a strong and equitable primary care service sector is a core component of a comprehensive PHC system, the downstream focus represents a missed opportunity for PHNs to foster local intersectoral collaboration to act on midstream health determinants, and also for the primary care service sector to provide leadership, stewardship and advocacy for upstream action to address the underlying social determinants of health and health equity.

The tight regulatory constraints that enforce a limited scope of selective primary care hinder the actions and capacity of PHNs to achieve their potential to address regional health priorities and inequities through comprehensive PHC approaches. A main advantage of having decentralised, meso-level PHCOs is identifying, understanding and acting on local priority issues, however, the tight federal government constraints greatly limit the autonomy and flexibility to be responsive to local issues. It risks PHNs largely being an implementation arm of the federal government, and not fulfilling their potential or capitalising on their position to improve local population health. By acting within their narrowly permitted scope, tiny budgets and rushed timeframes, applying band-aids to their local health ‘system’ to fill gaps in service access, and nudging individuals to change their behaviour, PHNs are tinkering at the edges of the health care system.

Even in the neoliberal paradigm that has dominated high income countries such as Australia since the time of Alma Ata, the notion of scientifically based, effective, contextually appropriate care and prevention is not radical.

PHNs should progress towards a stronger comprehensive PHC system scope of action, but even if they retain the selective primary care services scope, they need to be enabled to develop appropriately evidence-informed strategies to ensure they spend ever-scarce public money to commission services and programs that are effective and efficient, and promote health equity. Otherwise their PHC planning decisions are just ‘guesswork and hunches’, that may or may not mitigate the injustice of health inequities.

This thesis concludes with some recommendations for PHNs and their funders, the Australian Government, to strengthen evidence-informed, equity-oriented PHC planning, as well as some recommendations for further research.

10.2 Recommendations

10.2.1 For PHNs

- Develop more robust internal processes for evidence-informed program planning and evaluation, incorporating good governance principles, and prompting the consideration of evidence and equity at multiple junctures or decision-points within the planning process.
- Employ established frameworks such as program logic, RACI (responsible, accountable, consulted, informed) and project management, as has been done by some PHNs, and the various national and international resources that guide equity-oriented program and service development.
- Consider and use intervention evidence more in the selection and development of PHC programs and services.
- Develop and apply stronger systems for evaluating planned programs and services, and disseminate the findings of those evaluations.
- Draw on existing capacity strengths to build consistent capacity across the PHN and broader PHC sector for accessing, appraising and applying appropriate evidence to inform PHC planning.
- Maintain and strengthen community and stakeholder participation in the planning process, and provide more consistent transparency mechanisms to show exactly how and where professional and 'lay knowledge' has informed needs assessment and planning decisions.
- Act locally to strengthen the PHC system and services towards a comprehensive orientation consistent with the principles of the Alma Ata Declaration.
- Employ systematic planning mechanisms to ensure that interventions to improve access to and quality of local primary care, other health care and social services are equity-oriented.
- Ensure that individual behaviour change interventions are carefully developed in partnership with relevant communities to ensure they are equity-sensitive and part of a broader suite of strategies.
- Avoid language and actions that blame individuals' deficits for health inequities, and foster widespread understanding of the complex relationship between social, political and environmental determinants and health inequities.
- Collaborate locally across health and non-health sectors, and with other levels of government, to act on the social determinants of health and integrate public health and primary care services.
- Leverage the power of local medical and clinical actors, to lead and advocate for action on the mid- and upstream factors that underpin local health priorities.

10.2.2 For the Australian Government Department of Health

- Provide greater (dedicated) resourcing for PHNs to evaluate PHC interventions.

- Provide capacity development interventions and appropriate resourcing for PHNs to address shortcomings in their capacity for evidence-informed program planning and evaluation.
- Provide support and peer-learning opportunities for PHNs to develop capacity in internal meta-policy, embedding good governance principles, to drive evidence-informed planning and evaluation.
- Allow PHNs adequate time (and resourcing) to apply greater, more consistent rigour in participatory, evidence-informed, equity-oriented PHC planning, to ensure effectiveness and efficiency of interventions in their local context.
- Resource and facilitate the dissemination of context-specific and generalisable intervention evidence generated by PHNs through evaluation.
- Employ appropriate accountability mechanisms to provide a stronger regulatory force to drive sustainable, institutional capacity improvement in systematic, evidence-informed planning processes with good governance principles embedded, for example an accredited quality management system or similar.
- Refine planning document templates (needs assessment, activity work plan) to prompt explicit documentation of the evidence (or limitations thereof) that has informed the prioritisation of a local health issue and development of associated interventions, particularly local consultation-derived qualitative evidence and community participation.
- Allow PHNs greater scope to strengthen comprehensive PHC and improve population health by acting on the mid- and upstream factors that cause identified local health issues, capitalising on their position, capacity and local knowledge as meso-level regional health planning and commissioning organisations, rather than limiting their function to largely implementing Australian Government policy.

10.2.3 For further research

- Examine factors that enable better integration of public health and primary care, and allow greater action on social determinants of health in international PHCOs, such as the UK’s CCGs.
- Evaluate and compare the impacts of PHCOs on health systems and population health outcomes.
- Evaluate strategies to enhance organisational and institutional capacity for evidence-informed, equity-oriented PHC planning in PHCOs.

The Astana Declaration reminds us that good health is a fundamental human right, and the persistence of health inequities is socially, ethically, politically and economically unacceptable. Primary health care is the cornerstone of a sustainable health system and strengthening PHC is the best approach to enhance population health. With political will and a more permissive environment, PHNs could embody and drive a stronger, more comprehensive PHC system, that as well as facilitating a coordinated system of locally appropriate primary care services, truly involved genuine community participation and empowerment, and advocated for and acted on the broader social determinants of health. With a looser regulatory chain, adequate time and money, and targeted capacity development, PHNs could optimise their potential and develop innovative, co-designed, evidence-informed comprehensive PHC strategies to achieve real population health outcomes and reduce health inequities.

APPENDICES

Appendix A: List of PHN public documents analysed

PHN	Document name	Classification
ACT	ACTPHN Annual Report 2015_16	Annual Report
ACT	ACTPHN_Activity_Work_Plan_Core	Activity Work Plan - Core
ACT	ACTPHN_Needs Assessment 2016	Needs Assessment
Adelaide	APHN_Annual_Report_15_16	Annual Report
Adelaide	APHN_Core_Activity_Work_Plan_2016-18	Activity Work Plan - Core
Adelaide	APHN_Needs_Assessment	Needs Assessment
Brisbane North	BNPHN Needs Assessment update Nov 2017	Needs Assessment
Brisbane North	BNPHN_Annual Report_2017	Annual Report
Brisbane North	BNPHN_AWP Core Flexible_170717	Activity Work Plan - Core
Brisbane South	BSPHN_Annual report 2016	Annual Report
Brisbane South	BSPHN_Core activity work plan	Activity Work Plan - Core
Brisbane South	BSPHN-2019-2022-Needs-Assessment.pd_template	Needs Assessment
Central and Eastern Sydney	CESPHN_Annual_Report_2017	Annual Report
Central and Eastern Sydney	CESPHN_Core_Operational_and_Flexible_AWP_2016-2018	Activity Work Plan - Core
Central and Eastern Sydney	CESPHN_Needs_Assessment_15_Nov_2016	Needs Assessment
Central Qld and Sunshine Coast	CQSCPHN 2016-18 Activity Work Plan web	Activity Work Plan - Core
Central Qld and Sunshine Coast	CQSCPHN Annual-report-2016-17	Annual Report
Central Qld and Sunshine Coast	CQSCPHN BNA Needs Assessment	Needs Assessment
Country SA	CSAPHN 2016-2018 Activity Work Plans	Activity Work Plan - Core
Country SA	CSAPHN Needs Assessment 2016-2017	Needs Assessment
Country SA	CSAPHN_Annual Report 16-17	Annual Report
Country WA	CWAPHN_Core activity plan	Activity Work Plan - Core
Country WA	CWAPHN_Needs assessment	Needs Assessment
Darling Downs West Moreton	DDWMPHN Annual-Report-2016-2017	Annual Report

PHN	Document name	Classification
Darling Downs West Moreton	DDWMPHN Core Activity Work Plan	Activity Work Plan - Core
Darling Downs West Moreton	DDWMPHN-Needs-Assessment-Report-FINAL	Needs Assessment
Eastern Melbourne	EMPHN Core-Funding-Updated-Activity-Work-Plan-2016-2018	Activity Work Plan - Core
Eastern Melbourne	EMPHN Needs-Assessment-_Nov-2017	Needs Assessment
Eastern Melbourne	EMPHN-Annual-Report-2016-17	Annual Report
Gold Coast	GCPHN002_2016-Annual-Report	Annual Report
Gold Coast	GCPHN-Activity-Work-Plan-15-08-2016	Activity Work Plan - Core
Gold Coast	GCPHN-Needs-Assessment-NOVEMBER_1	Needs Assessment
Gippsland	GPHN Needs-Assessment-2017	Needs Assessment
Gippsland	GPHN-Annual-Report-2017	Annual Report
Gippsland	GPHN-Updated-18-Core-AWP	Activity Work Plan - Core
Hunter New England Central Coast	HNECC PHN 2017-annual-report	Annual Report
Hunter New England Central Coast	HNECCPHN core-activity-work-plan 2016-2018	Activity Work Plan - Core
Hunter New England Central Coast	HNECCPHN-needs-assessment-2016	Needs Assessment
Murray	MurrayPHN_AnnualReport2017	Annual Report
Murray	MurrayPHN_Core-2017_18-AWP	Activity Work Plan - Core
Murray	MurrayPHN_Needs-Assessment-201617	Needs Assessment
Murrumbidgee	MurrumbidgeePHN Annual Report 2017	Annual Report
Murrumbidgee	MurrumbidgeePHN Needs Assessment	Needs Assessment
Murrumbidgee	MurrumbidgeePHN updated Core AWP	Activity Work Plan - Core
Nepean Blue Mountains	NBMHPN-Needs-Assessment-2016	Needs Assessment
Nepean Blue Mountains	NBMPHN_Annual-Report-2017_WEB	Annual Report
Nepean Blue Mountains	NBMPHN-Core-Activity-Work-Plan_2016-18	Activity Work Plan - Core

PHN	Document name	Classification
North Coast (NSW)	NCPHN-Annual Report-2017	Annual Report
North Coast (NSW)	NCPHN-Needs-Assessment	Needs Assessment
North Coast (NSW)	NCPHN-Updated-2016-18-Core-AWP	Activity Work Plan - Core
North Qld	NQPHN_Annual report	Annual Report
North Qld	NQPHN_Core Activity Plan	Activity Work Plan - Core
North Qld	NQPHN-Needs assessment-Core-2017-18	Needs Assessment
Northern Territory	NTPHN Activity Work Plan 2016-2018 - Core	Activity Work Plan - Core
Northern Territory	NTPHN Annual Report 16_17	Annual Report
Northern Territory	NTPHN Needs Assessment	Needs Assessment
North West Melbourne	NWMPHN 2017_Financial_Report_FV	Annual Report
North West Melbourne	NWMPHN Needs Assessment_Nov 2016	Needs Assessment
North West Melbourne	NWMPHN updated_2016-18-Core-AWP	Activity Work Plan - Core
Perth North	PNPHN_Core activity work plan	Activity Work Plan - Core
Perth North	PNPHN_Needs assessment	Needs Assessment
Perth South	PSPHN_Core activity work plan	Activity Work Plan - Core
Perth South	PSPHN_Needs assessment	Needs Assessment
South Eastern Melbourne	SEMPHN updated_2016_18_Activity_Work_Plan_Core	Activity Work Plan - Core
South Eastern Melbourne	SEMPHN_Annual_report_2017	Annual Report
South Eastern Melbourne	SEMPHN_Needs_Assessment_2016	Needs Assessment
South East NSW	SENSWPHN AWP_updated_2016-18-Core	Activity Work Plan - Core
South East NSW	SENSWPHN_2017-Annual Report	Annual Report
South East NSW	SENSWPHN-Needs-Assessment-Nov-16	Needs Assessment
Sydney North	SNPHN Needs-Assessment-Update-2016-17	Needs Assessment
Sydney North	SNPHN-Annual-Report-16-17_LR	Annual Report

PHN	Document name	Classification
Sydney North	SNPHN-Core-AWP_2016-2018	Activity Work Plan - Core
South Western Sydney	SWSPHN activity work plan 2016-18_updated	Activity Work Plan - Core
South Western Sydney	SWSPHN Annual Report 2016-17	Annual Report
South Western Sydney	SWSPHN Needs assessment update Nov 2016	Needs Assessment
Tasmania	TasPHN 2016-18 Needs Assessment Report	Needs Assessment
Tasmania	TasPHN 2016-18_AWP_core2017_updated	Activity Work Plan - Core
Tasmania	TasPHN Annual-report-2016-17	Annual Report
WA Primary Health Alliance	WAPHA-Annual-Report-2016-17	Annual Report
Western NSW	WNSWPHN Activity Work Plan 2017-18 -Core	Activity Work Plan - Core
Western NSW	WNSWPHN Needs Assessment 2016-17	Needs Assessment
Western NSW	WNSWPHN_Strategic_Plan	Annual Report
Western Qld	WQPHN Annual Report	Annual Report
Western Qld	WQPHN-AWP	Activity Work Plan - Core
Western Qld	WQPHN-Needs-Assessment	Needs Assessment
Western Sydney	WSPHN_ Core_Activity_Wk_Plan_2016-2018	Activity Work Plan - Core
Western Sydney	WSPHN_Annual Report_2017	Annual Report
Western Sydney	WSPHN_Needs Assessment_Mar2016	Needs Assessment
Western Victoria	WVPHN_AnnualReport_2017	Annual Report
Western Victoria	WVPHN_Needs_Assessment_2017_Core	Needs Assessment
Western Victoria	WVPHN_Updated_Activity_Work_Plan_2016-18_Core	Activity Work Plan - Core

Appendix B: 2018 Interview participant invitation email text and phone script

Invitation to participate

Email text

Dear….

The Southgate Institute at Flinders University is pleased to be expanding its PHN research project into 2018, focussing on the planning process, use of evidence and equity considerations in planning. (*Name*) PHN has agreed to participate and given your role as a (*CEO, board member, community/clinical council member, planning staff member, planning manager*) I would like to invite you to take part in an interview. This aspect of the project is being conducted as a PhD study by Alice Windle, under the supervision of chief investigators Dr Sara Javanparast, Professor Fran Baum and Dr Toby Freeman.

The overall aim of this study is to understand PHNs' process of PHC planning and the various influences on decision making, with particular focus on organisational capacity and governance of the planning process. The study will also analyse evidence use, influences on planning and the inclusion of health equity considerations in PHC planning. The main component of the study involves interviews with key individuals involved in population health planning, program development or decision making in PHNs, in addition to document analysis.

I would like to invite you to participate in an interview. Interviews will preferably be conducted face-to-face on a visit to (*name*) PHN, or over the telephone if you prefer, and will take approximately 60-90 minutes. I will liaise with (name) PHN to arrange suitable dates to visit, aiming to conduct most, if not all interviews over a two day period.

You may choose whether or not to participate, or you may wish to nominate a more suitable interview participant from your organisation. Information about participation will remain confidential. All information provided in the interview would be treated in strict confidence, and every effort made to protect your anonymity throughout.

A **Participant Information Sheet** is attached for further information. If you have any further questions, please contact me (alice.windle@flinders.edu.au phone 08 7221 8413); or Dr Sara Javanparast (sara.javanparast@flinders.edu.au phone: 08 7221 8414).

If you would like to participate, please print and complete the attached **Consent Form**, and return it to alice.windle@flinders.edu.au. Alternatively, you may indicate your consent to participate in the text of your return email. I'll then contact you again to make the arrangements for the interview.

Please do not hesitate to contact me if you have any queries. I look forward to hearing from you soon.

Yours sincerely,

Alice Windle
PhD Candidate
Southgate Institute for Health, Society and Equity
Flinders University

Verbal script – follow-up phone call

Hello,

My name is Alice Windle, I'm a PhD student at the Southgate Institute at Flinders University. I'm calling to follow up on an email I sent you recently inviting you to participate in an interview for a study we're doing looking at population health planning process and evidence use in PHNs. Have you had a chance to look at that, and would you be willing to participate? Do you have any questions at this stage?

(If yes) That's great, thankyou so much. If I could just ask you to confirm that consent, either in a quick email, or by signing and returning the consent form, that would be great thanks, and then we can arrange a time for the interview.

(If not considered yet) That's fine, I can give you some more time to look that over – would you like me to send through the information sheet again?

(If no) No worries, I understand. Is there anyone else you work with, in a similar role who might be a suitable participant?

Thankyou

Appendix C: Interview participant information sheet

Participant Information Sheet

Project Title:
Regional Primary Health Care Organisations: Population health planning, participation, equity and the extent to which initiatives are comprehensive.

PhD project component: Primary Health Networks: organisational capacity for evidence-informed, equity-focussed primary health care planning

Description of the study:
These interviews are part of a PhD research project within the NH&MRC funded project entitled '*Regional Primary Health Care Organisations: population health planning, participation, equity and the extent to which initiatives are comprehensive'.* The project is administered by the Southgate Institute for Health, Society and Equity at Flinders University, South Australia.

The overall project aims to assess the extent to which regional PHC organisations in Australia, have the capacity to:

- develop population health plans based on a collaborative approach and an understanding of population health principles,
- consider and act to reduce health inequities,
- improve management and prevention of chronic disease in the community,
- address social determinants of health
- engage with PHC stakeholders in the region to ensure collaborative approach in population health planning and program implementation

The aims of this PhD component of the research are:

- To understand the process of PHC planning in regional PHC organisations, and the factors that influence the use of evidence and consideration of equity;
- To identify opportunities to enhance organisational capacity for evidence-informed, equity focussed regional PHC planning.

The study has been underway since 2014, with particular focus on how PHC organisations address the needs of groups whose health status is typically worse than that of the broader population including Aboriginal and Torres Strait Islander peoples, new migrants and refugees and people with a mental illness. The first stage of this research worked with Medicare Locals and partner organisations across Australia to assess their population health planning process and the level of engagement with other stakeholders in relation to the three population groups of interest. This was undertaken through analysis of needs assessment and population health planning documents, an online survey and interviews of senior staff and board members from Medicare Locals. The second stage involved in-depth case studies of 6 PHNs across Australia to examine aspects such as transition from Medicare Locals, population health planning, corporate governance and partnership with PHC stakeholders.

This extended PhD component of the project involves further in-depth case studies of 5 PHNs across Australia. The CEO from each of the selected PHNs has been approached to seek agreement on their involvement as a case study. These case studies will involve interviews with PHN CEOs, board members, clinical/community committee members and planning/program development staff and managers, as well as document analysis. Case studies aim to examine:

- What the PHN planning 'environment' looks like and how PHNs undertake the process of planning and decision making;
- the extent to which PHC planning is informed by evidence
- what the various 'political', institutional and other influences on planning are and how these influence evidence use;

- what organisational capacity/structural factors hinder or enable use of evidence in planning, with particular focus on governance around the planning /decision making process; and
- what aspects of the planning process facilitate equity considerations.

Some of you may have participated in a previous stage of the study either at your PHN or a previous Medicare Local.

What will I be asked to do?
You are invited to take part in an interview session to discuss the PHNs' population health planning process, factors that influence evidence use and incorporation of equity considerations. The interview (approximately 60-90 minutes) will be organised at a time convenient for you. We intend to conduct face-to-face interviews during a site visit to the participating PHNs. We will be however flexible to do a telephone interview if more suitable for you. The interviews will be conducted by the PhD candidate Alice Windle and the audio will be digitally recorded.

What benefit will I gain from being involved in this study?
There will be no direct benefits to participants however the sharing of your experiences will provide valuable information that will help to improve the process of PHC planning to promote evidence use and equity considerations.

Will I be identifiable by being involved in this study?
The interviews will be transcribed by professional transcribers. Once the interview has been transcribed and saved as a file, any identifying information will be removed from the transcript and the transcript file stored on a password protected computer that only the lead investigator and project researchers will have access to. No information which could lead to the identification of any participant or their employer will be released.

Are there any risks or discomforts if I am involved?
We anticipate few risks for you and your PHN from taking part in this interview. If you have any concerns regarding anticipated or actual risks or discomforts, please raise them.

How do I agree to participate?
Participation in the study is totally voluntary. You are free to withdraw from the study during the interview or refuse to answer any questions. Declining to participate will not have any impact on employment or stakeholder status with the PHN.

A consent form accompanies this information sheet. If you agree to participate we will ask you to sign the consent form and return it to: alice.windle@flinders.edu.au. You may also indicate your consent in the text of a return email.

Investigators team:
Southgate Institute for Health, Society and Equity Flinders University

Alice Windle, PhD Candidate	Ph: (08) 72218413
Dr Sara Javanparast	Ph: (08) 72218414
Professor Fran Baum	Ph: (08) 72218410
Dr Toby Freeman	Ph: (08) 72218468

Thank you for taking the time to read this information sheet and we hope that you will accept our invitation to be involved.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (project number 6376). For more information regarding ethical approval of the project please contact: Executive Officer of the Flinders Ethics Committee on (08) 8201 3116, or by email human.researchethics@flinders.edu.au

Appendix D: Interview participant consent form

Flinders
UNIVERSITY

CONSENT FORM FOR PARTICIPATION IN RESEARCH

(by interview)

‘Regional Primary Health Care Organisations: Population health planning, participation, equity and the extent to which initiatives are comprehensive’

Primary Health Networks: organisational capacity for evidence-informed, equity-focussed primary health care planning

I …..

being over the age of 18 years hereby consent to participate as requested in an interview session for the research project on the population health planning process in primary health care organisations, factors that influence evidence use and incorporation of equity considerations.

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I agree to audio recording of the interview
4. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
5. I understand that:
    - I may not directly benefit from taking part in this research.
    - I am free to withdraw from the project at any time during the session and am free to decline to answer particular questions.
    - While the information gained in this study will be published as explained, I will not be identified, and individual information will remain confidential.

Participant’s signature……………………………………Date…………………...

Appendix E: Research questions and analysis strategy

(Incorporating Yin's (2013) hierarchy of case study questions)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
RQ1 What does the PHN planning 'environment' look like….	Is there variation between PHNs? Is this better/worse/about the same as you might expect? Do better performing PHNs (wrt evidence and equity) have certain characteristics in their planning environment?	*What structures are in place?* *What is the broader scope of PHNs' role? What else are PHNs doing and how does the planning process fit in?*	Thematically analyse each of the relevant nodes, on a case-by-case basis, to develop a 'picture' of each organisation's structure and functions. Case description.	Planning system/environment > Corporate Governance structure/mechanisms PHN functions > Research priority setting > Knowledge generation/ dissemination > Evidence filtering/amplification	(draw on data from 2016 interviews)
RQ2 How do PHNs undertake the process of PHC planning … RQ2 …and decision-making? Is a systematic approach to planning a good thing? Does it enable evidence use and equity consideration?	How do PHNs go about PHC planning? Is there much variation between cases in their planning processes? Why might that be? What is a reasonable expectation and how do the PHNs compare to that? Do PHNs planning processes support or enable evidence use and equity consideration?	*How does this PHN go about planning? How does the planning process work?* *Can they describe it, and are the different respondents consistent?* *Does this PHN have a systematic approach to planning?* *Does the planning process support/enable evidence use and equity consideration?* *Is this PHN reactive in its planning approach? To what extent?*	Thematically analyse each of the relevant nodes, on a case-by-case basis, to map out a 'process' diagram (if possible) Compare each case against each other and against what might be expected (from theory/literature)	Planning system/environment > Planning/ decision making process >Ad hoc? >Unsolicited proposals	IQ1.1.Can you tell me about the primary health care health planning process in X PHN? •How are priorities selected? •How are planning decisions made? How do you arrive at what goes into your annual plan? •Is there a defined, systematic process, or is it more 'organic'? •How are strategies/programs developed? IQ1.2 How are planning decisions discussed among the executive? IQ 4.8. Are there other ways in which planning decisions are made outside of the yearly planning cycle? To what extent? IQ 4.9. How are unsolicited proposals handled?

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
RQ2 How do PHNs undertake the process of … decision-making?	Are there differences between PHNs in how they engage with evidence? What is a good example, what is a poor example? Why might there be differences? What is reasonable to expect?	*(How) do decision makers engage with evidence in this PHN? (detail question)* *Does this PHN have clear and consistent means by which decision makers can be informed by evidence? (Weiss evidence use model)*		Planning system/environment > Planning/ decision making process >Engagement with evidence	IQ 2.5. How do decision makers engage with evidence? In what sort of form do you see evidence and how is it used? IQ 4.9 •How is evidence used in the assessment of unsolicited proposals, and does the assessment include consideration of equity?
RQ2 How do PHNs undertake the process of PHC planning and decision-making? Are PHNs still developing their processes and maturing? Is that reasonable at this stage?	Are these PHNs still developing their processes and maturing?	*Has there been progress in developing the planning process in this PHN in the last 2 years?* *What has changed? Are they heading in a 'good' direction?* *How does their progress correlate with their transition/ history (context)*	Thematically analyse the relevant node, on a case-by-case basis (may need to create further sub-node) Compare 2016 data with 2018 data for each PHN. Compare PHNs with each other, and to the 'ideal', whatever that might be.	Planning system/environment > Planning/ decision making process	IQ1.3 In what way has the planning and decision-making process changed over the last 2 years? (Also draw on data from 2016 interviews)
RQ1 What does the PHN planning environment look like in terms of … actors? Who are the influential actors and how are they involved? Are the actors different to who you might expect in macro health policy?	What 'types' of actors influence PHN planning? Are there differences between PHNs? Why? What is the connection between context and different types of actors? Is there dominance by a particular 'structural interest' eg medical? Why?	*Who are the players/actors in this PHN?* *Who is more influential? Why?*	Network analysis/diagrams of interactions/relationships between PHNs and other stakeholder organisations as part of the analysis (Potentially quite a bit of overlap between this node and the 'Org Capacity > networks and communication node') I will treat the 'actors' node as a simple description/list of 'who'. May need to code further for degree of influence.	Planning system/environment > Actors, organisations	Who has input into the planning? How do they have input? Who has more influence, who has less influence? Why is that? (Also draw on data from 2016 interviews)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
RQ1 What does the PHN planning environment look like in terms of context …? Are these external factors a barrier or enabler to evidence and equity? What can be done by the policy ‘principal’ (ie DoH) to improve PHNs’ planning wrt evidence and equity? Could PHNs do better local evidence informed, equity focussed planning if they had more autonomy or better support from the DoH?	What are the fixed, uncontrollable, external context factors that influence planning in PHNs? Are there differences between PHNS? Can these be explained by geographic and/or demographic factors? Do PHNs have much autonomy or support from DoH, and is that a problem? (*I think it probably is*)	*What are the fixed, uncontrollable, external context factors that influence planning in this PHN?*	Thematically analyse the relevant nodes, on a case-by-case basis (combining 2016 and 2018 data)	Context> External >> The Commonwealth Department of Health >> Scope limitation, inflexibility of funding >>> Geography, size >> Legislation >> Time constraints/ pressures imposed externally	IQ 1.6. What sort of broader external influences or constraints does your PHN face with regard to what you can and can’t do?
What can be learned from the ML-PHN transition at a national level? What do macro level policy agencies need to do to better implement meso level planning agencies?	Did the transition from MLs to PHNs help or hinder? Could it have been done better? Is there a pattern between transition and capacity?	*What is the history of this PHN’s formation? Did it have a simple or complicated transition?*	Thematically analyse the relevant nodes, on a case-by-case basis (combining 2016 and 2018 data) Qual comparative analysis? Truth table to cross check transition and capacity correlation	> ML transition	(+ 2016 interview data)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
RQ3 What types of evidence do PHNs use, for what purposes in the planning process? In the main, is PHC planning informed by evidence at the meso level?	What differences/ similarities are there between PHNs? Are they giving similar examples, in terms of the type of evidence, and the stage of the process at which it is used? What can explain these differences/similarities?	*To what extent does this PHN use evidence to inform planning?* *Are there explicit mentions/indications of evidence use in planning, is there rhetoric about evidence?* Sub question: does the documentary evidence agree with the perceptions of interviewees?	(How to 'quantify' and compare the extent of evidence use between PHNs? – this is pretty much impossible using these methods, which is why this study has focussed on the process for planning, rather than the outcomes of planning) Thematic analysis of examples and rhetoric regarding evidence. (This main question will largely be answered by the sub-questions.) Cross check interview data with document analysis findings.	Examples of drawing on evidence (documents and interviews) Evidence-informed planning > Explicit mention of "evidence" (*in documents*)	(External document analysis) IQ2.6 Can you give me some examples of where the PHN's plans have drawn on evidence? •identifying/prioritising needs? •supporting evidence for the planned strategy?
How widely is 'lay knowledge' and qual data regarded as 'evidence' (as it arguably should be)? Are PHNs constrained by a narrow conception of evidence, stemming from EBM, and medical/clinical influence?	Are PHNs using a broad definition of evidence? Does this correlate to other attributes of the PHN's (eg workforce/leadership capacity) that could explain any differences?	*How is evidence conceived by the PHN, what do they consider evidence to be and not be?* *Does it differ depending on the type/experience of interviewee?*	Thematic analysis of relevant node by PHN and by interviewee classification	Conception of evidence	IQ2.1 How do you define 'evidence'? What do you consider evidence to be? (possibly also some data from 2016 interviews)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
RQ3 What types of evidence information do PHNs use, for what **purposes** in the planning process?	Do PHNs tend to have similar proportions/purposes? Is there any connection between those with a similar profile that could explain the difference from other PHNs?	*For what purposes is evidence used more/less in each PHN? At what 'stages' of planning is evidence used more/less?* *Is it mainly about needs assessment and less about the strategy development?*	Document data: Matrix coding query in NVivo, to examine for each PHN, the relative proportions of text coded to the various 'purpose' nodes. By PHN and also by document type (source classification) Interview data: thematic analysis of relevant nodes	Types of evidence >Purpose >> Identify the problem >> Understand the cause of the problem >> Indicate effectiveness of an intervention >> Targeting >> Stakeholder acceptability >> Cost-effectiveness >> Implementation	Document analysis data (2016 interview data) (2018 interview questions) IQ2.2 For what purposes does your PHN use evidence, what types of questions do you use research/evidence to answer?

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions

RQ3 What types of evidence information do PHNs use … in the planning process?
What **source** of evidence/ information do PHNs use?
Do PHNs tends to favour certain data sources? This potentially relates to capacity (resources) as well as other factors
	Are there similarities or differences between PHNs? Is there any explainable pattern to it? Why?	Which sources of evidence are used more/less at each PHN?
		Are they doing any systematic research themselves?
		Are they using good quality /appropriate evidence?
			Document data: Matrix coding query in NVivo, to examine for each PHN, the relative proportions of text coded to the various ‘purpose’ nodes. By PHN and also by document type (source classification)
			Interview data: thematic analysis of relevant nodes (especially noting what they don’t say)
				Evidence-based/ evidence-informed planning
				>Types of evidence
				>> Source
				>>> PHN Needs Assessment (non-specific)
				>>> Consultation:
				•Community
				•Service providers
				•Experts
				•Researchers
				•Others?
				>>>Secondary analysis
				>>>External data sources
				•Cwlth Govt data
				•GP records extracts
				•State bodies
				•Hospital data
				•Local organisations
				>>> ‘anecdotal’ evidence
				>>>Expert staff
				>>>Evaluation report
				•By PHN
				•By other organisation
				•Unknown author
				>>>Grey literature
				>>>Published literature
				•Reference not provided
				•Reference provided
				>>> existing model
					(External document data)
					IQ2.3 What sources of evidence are used to answer those questions and inform planning?
					•What tends to be most used?
					OQ14 In the last 6 months, has your organisation undertaken internal research to support policy development/ implementation/ evaluation? (5)
					OQ15 In the last 6 months, has your organisation commissioned external research to support policy development/ implementation/ evaluation? (5)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
RQ3 What types of evidence information do PHNs use … in the planning process? Are PHNs doing analysis and interpretation, or are they relying on the interpretation of others? Indication of the quality/ rigour of evidence being used (?)	Are there differences or similarities between PHNs?	What 'level' of evidence does each PHN use?	Document data: Matrix coding query in NVivo, to examine for each PHN, the relative proportions of text coded to the various 'purpose' nodes. By PHN and also by document type (source classification)	Evidence-based/ evidence-informed planning >Types of evidence •Demographic •Epidemiology •Service utilisation •Service capacity mapping >Levels of Evidence •Data •Information •Knowledge •Wisdom	(External document data)
RQ1 What does the PHN planning environment look like in terms of context, influences and actors? What are the various 'political', institutional and other internal context influences on planning and how do these influence evidence use? Do meso-level (agent) planning organisations need clarity of purpose and expectations to optimise their functioning? (probably!)	Are there differences or similarities between PHNs? What would be expected? Does this differ from macro level policy influences? Has the planning (or other) function of PHNs been hindered by lack of clarity or purpose?	*What influences act on planning decision making in each PHN, which are the more common, which are more influential.* *Does the culture of this PHN support evidence-informed planning?* *Do the stated values of the PHN relate to being evidence-informed?* *Has uncertainty been a factor influencing planning? Has it hindered progress and capacity development? (this is potentially a capacity factor, but I'll keep it here with general internal context influences)*	Interview data: thematic analysis of relevant nodes, by PHN. Compare each PHN. 'Word Cloud' of stated PHN values (if not in document, then find on websites)	Influences on decision making > Ideology/values > Ability to use evidence > Personal or professional experience and intuition > Interests/agendas > External influences >> Politics Context >Internal/organisational >> Institutional influences >>Culture/ values >>> general org culture Values Uncertainty of expectations/purpose	(data from 2016 interviews) IQ1.5 Can you think of any examples of particular interests/agendas of stakeholders that influence planning at your PHN? •Which interests/agendas are most influential and why? (External PHN documents)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Does the organisational culture place importance on using evidence?	Is there similarity or differences between PHNs? Why?	*Does the culture of the PHN support evidence use?* *What are the stated and implied values of the PHN/staff? Is there consistency/drift between what is stated/official and what emerges in the data?*	Interview data: thematic analysis of relevant nodes, by PHN. Compare each PHN.	Context >Internal/organisational >>Culture/ values >>>evidence Values	IQ2.7 Can you give me an example that illustrates how the culture or leadership of your PHN supports or doesn't support the use of evidence to inform planning? OQ8. In the last 6 months, has relevant research (papers, reports, syntheses or summary bulletins) been disseminated within your organisation? (4) (*also indicative of resources capacity*) (External document data)
RQ4 Do PHNs have strong organisational capacity for evidence-informed planning? In what aspects/domains is there need to enhance organisational capacity for evidence-informed policy making? *What are the characteristics/ capacities of PHNs who have stronger capacity? Is the pattern explained by the meso-level and/or the Australian context?*	*Do PHNs tend to have similar patterns of strengths and deficiencies with regard to domains of organisational capacity for EIHP?* *Why? Do the patterns of strengths and deficiencies correlate with rurality/size/funding or any other characteristics?*	*Does this PHN have organisational capacity for evidence-informed planning – in which domains? In which domains is capacity lacking? Why?*	Scoring using the ORACLe tool. Compare domains within and across PHN	See below	(*See rows below for questions specifically relating to domains of organisational capacity*)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Is there 'good governance' capacity around the planning /decision-making process? What are the implications for planning, of having 'good governance' or not?	*Is there a pattern- what is the pattern?* *Do PHNs with 'good governance' for EIHP also display a relatively high extent of evidence use?*	*Does this PHN have well-defined processes for planning and decision making?* *Does this PHNs have 'good governance' to facilitate the use of evidence in planning - transparency, accountability, contestability. Is it better/worse than expected? How does this capacity domain compare with others – stronger or weaker?*	ORACLe score for Domain 1 - Documented processes that encourage/mandate use of research, for each PHN, compare PHNs.	Organisational capacity > Governance of planning >>Documented processes >>>Existence of (OQ1) >>>Encourage/require research use (OQ2) >>>For commissioning reviews (OQ12)	(2016 interview data, document data) OQ1. Does your organisation have documented processes for how policies should be developed? (1) How are they documented? OQ2. Do these processes encourage or require staff to use research in policy development?(1) IQ 4.9a Are there documented procedures/processes around assessing Unsolicited Proposals? IQ4.1 Are there documented criteria for prioritising issues/needs? IQ4.2 Are there documented criteria for options analysis? Weighted? OQ12 Does your organisation have established methods for commissioning reviews of existing research? (4)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Capacity – governance cntd…	*What can be said of PHNs as a whole – are there differences or similarities? What enables transparency in decision making?* *Correlation with extent of evidence use?*	*Does each PHN have a transparent process for making planning decisions, and for using evidence?* *Are decision makers explicit about how evidence is considered and used (or not) in the policy-making process?* *Do documented processes facilitate transparency?*	Thematic analysis of relevant node for indications of transparency, by PHN, by source classification (interview data, internal document data). Cross-check the two data sources for agreement. Compare PHNs. (Existence of documented process is also related to transparency)	>>Transparency	IQ4.5 When it comes to those meetings where decisions are made about priorities and plans, are the minutes of those meetings available to others – within the PHN, or the wider stakeholder base? Are there measures in place to disseminate minutes? (Internal document data)
Capacity – governance cntd…	*Differences or similarities between PHNs? Why?* *Correlation with extent of evidence use?*	*Are explicit decisions made about how appropriate evidence is, other than just its methodological quality?*	Thematic analysis of relevant node for indications of appropriateness consideration, by PHN, by source classification (interview data, internal document data). Cross-check the two data sources for agreement. Compare PHNs.	>>Appropriateness	OQ2.1 Are there documented criteria for identifying and using evidence to inform planning decisions? Eg assessing quality or appropriateness of evidence? (Internal document data)
Capacity – governance cntd…	*Differences or similarities between PHNs? Why?* *Correlation with extent of evidence use?*	*Are decision makers accountable to the community members and other stakeholders who are affected by the planning decision?*	Thematic analysis of relevant node for indications of appropriateness consideration, by PHN, by source classification (interview data, internal document data). Cross-check the two data sources for agreement. Compare PHNs.	>>Accountability	IQ4.6 Is there any other sort of feedback to stakeholder groups (or availability to the wider public) as to priorities and plans, and what informed those decisions? (Internal document data)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Capacity – governance cntd…	*Differences or similarities between PHNs? Why? Correlation with extent of evidence use?*	*Are decisions and interpretation of evidence able to be contested by policy actors and community members?*	Thematic analysis of relevant node for indications of appropriateness consideration, by PHN, by source classification (interview data, internal document data). Cross-check the two data sources for agreement. Compare PHNs.	>>Contestability	IQ4.7 Are there mechanisms for challenging the priorities and plans, and the evidence that may be used? Are there any sort of appeals procedures around planning decisions made by the PHN? (Internal document data)
Is there leadership capacity for planning /decision-making? Why/not?	*How do PHNs compare with each other with respect to leadership capacity, as indicated by domain score and themes? Are they better/worse than expected?*	*Does this PHN have leadership capacity to support evidence-informed planning? Is it better/worse than expected?* *How does this capacity domain compare to others for this PHN – stronger or weaker?*	Oracle Score for Domain 2 - Tools and programs to assist leaders, for each PHN and then compare PHNs. Thematic analysis of relevant nodes for each PHN.	Organisational capacity: >Leadership >> Tools/programs to support leaders' capacity >> Position description requirement? >> Internal communications	OQ3 Are programs available for leaders to improve their confidence or expertise in use of research in planning? (2) OQ4 Do the position descriptions or performance management systems for senior managers in your PHN cover expertise in use of research in planning? (2) OQ5 In the last year, have leaders of your PHN referred to research in their internal communication? (2)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Is there organisational capacity with respect to 'Communication and Networks' To what extent are researchers involved in PHNs' 'policy systems/ environments'?	Is there a pattern- what is the pattern? What sort of relationships do PHNs have with other actors, and what relationships enable/ hinder evidence-informed planning? What differences or similarities are there between PHNs? Does strong network capacity correlate with any other factors? How does this compare with what might be expected?	*What relationships exist (or not) between the PHN and researchers, and others?* *What relationships does the PHN have with other actors to enable/ hinder evidence informed planning?* *What are the mechanisms that facilitate relationships?*	Score and compare ORACLe Domain 7 – mechanisms to facilitate relationships with researchers, within PHNs and between PHNs. Thematic analysis of relevant nodes, by PHN, then compare PHNs. Truth table? Network map?	Organisational Capacity >Communication & networks >>'two communities' relationships with researchers >>>Researcher participation in advisory committee >>Collaboration c other PHNs >>Collaboration with other local stakeholders >>Mechanisms >>>conferences? >>>Formal contractual >>>Informal relationships >>>Adjunct appointments?	(External document data, 2016 interview data) OQ23 In the last year, have researchers participated in advisory committees (or similar) in your PHN? (7) OQ19 In the last year, has your PHN been represented at any research forums or conferences (7) OQ20 Does your PHN have formal, contractual relationships with external research organisations? (7 OQ21 Does your PHN have informal, collaborative relationships with external research organisations? (7) OQ22 Do staff members of your PHN have joint or adjunct appointments in research organisations? (7)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Is there organisational capacity with respect to resources? (human, workforce) Is workforce a barrier to EI planning in meso PHCOs? Are there common resource limitations that PHNs face (that could be addressed by DoH)?	Are there differences or similarities between PHNs wrt workforce for EI planning? Is there correlation with other factors? How does this compare with what might be expected?	What resource access or limitations influence capacity for planning at each PHN? Does the PHN have workforce with appropriate expertise? Do they have systems to acquire, maintain and develop skills in their workforce? Does the PHN have resources to guide and support staff in using evidence?	Score and compare relevant ORACLe domains, within each PHN, and between PHNs. Domain 3: Availability of programs to provide staff with training in using evidence from research in policy and in maintaining these skills Domain 4: Availability of supports and tools to help staff access and apply research findings Thematic analysis of relevant nodes, by PHN, then compare PHNs. Truth table? Traffic lights?	Organisational Capacity >Resources >>PHN Workforce capacity >>>Staff with expertise >>>training/development >>>PD requirement >>>Guidance resources	(+ some data from documents and 2016 interviews) OQ10 Does your PHN have staff with recognised expertise in accessing, appraising and applying research to program development or implementation? (4) OQ6 Does your PHN provide access to training for staff in how to access research, appraise and apply research for planning/ program development? (3) OQ7 Is participation in training on how to access research, appraise and apply research for program development or implementation considered in staff performance management? (3) OQ9 Does your PHN have resources that provide guidance on how to access, appraise and apply research? (4)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Is there organisational capacity with respect to resources? (continued) (evidence and associated tools etc)	Are there differences or similarities between PHNs wrt access to evidence and associated tools for EI planning? Is there correlation with other factors? How does this compare with what might be expected?	Does the PHN have access to appropriate evidence? (also partly addressed by the Evidence >source node)	Score and compare ORACLe Domain 4: Availability of supports and tools to help staff access and apply research findings Thematic analysis of relevant nodes, by PHN, then compare PHNs. Truth table? Traffic lights?	Organisational Capacity >Resources >>Availability of evidence >>>Dissemination in PHN	(+ some data from documents and 2016 interviews) OQ8 In the last year, has relevant research been disseminated within your PHN?
Do PHNs have access to appropriate evidence? Is there evidence that they commonly lack access to?				>>Availability of evidence >>>Subscriptions, Endnote	OQ11 Does your PHN have research resources such as: - journal subscriptions? - database subscriptions - A library - Endnote or similar (4)
Do PHNs have the related tools and systems to support evidence access and use?					IQ2.4 Are there other types of evidence that you think could be useful to PHNs?
		Does the PHN have internal systems and resources to manage evidence and facilitate is use in planning? What do they have and what do they lack?		>>Resources/systems to facilitate the analysis/use of evidence eg software >>>Knowledge mgmt. system	OQ13 Does your PHN have systems for managing knowledge from research? (e.g. systems for retrieving, collating, storing and translating external and internal research) (4)
		Is the PHN doing or commissioning (purpose specific) research to inform planning? (This possibly indicates capacity for using research, if you can do research you are more likely to be able to access, interpret and apply research)		>>>Commissioned research	OQ15 In the last year, has your PHN commissioned external research to support planning/ program development? (also evidence type>source)
				Planning system/ environment > PHN functions >> Internal research	OQ14 In the last year, has your PHN undertaken internal research to support planning/ program development? (also 'source' node)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Is there organisational capacity with respect to resources? (continued)	Is the evidence-informed planning capacity of PHNs constrained by lack of budget? Are the PHNs different or similar?	Does budget constrain the capacity of this PHN to use evidence in planning?	Thematic analysis of relevant node, by PHN, then compare PHNs.	>>Budget constraint	(No specific Q in 2018, refer to 2016 interviews)
Evaluation capacity (not originally a research Q but ORACLe includes it) Evaluation is a source of evidence and a key part of the commissioning cycle– do PHNS have adequate evaluation capacity?	Are there differences or similarities between PHNs wrt capacity to evaluate programs (and generate evidence)? Correlation with other factors?	Does this PHN have capacity for evaluating their work? (ie generating further evidence) Why/not?	Score and compare within and between PHNs: ORACLe Domain 5 – Systems/methods to generate new research evidence And Domain 6 – methods for evidence-informed evaluation Thematic analysis of relevant nodes, by PHN, then compare PHNs.	Organisational Capacity: >Capacity for generating new evidence >Evaluation >>Evaluation required? >> Documented processes for evaluation? >>Based on research?	OQ16 Does your PHN encourage or require that evaluation be built into program planning and development? (6) OQ17 Does your PHN have documented processes for how programs should be evaluated? (6) OQ18 Are these evaluation processes and methods based on research? (6)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
RQ5 Do PHN activities have an equity focus consistent with comprehensive PHC …? *(Additional question: what are PHNs doing? What sort of strategies are they employing? Are they living up to their potential as meso-level PHC planners or is their scope too narrow? Comprehensive or selective?)*	Are there differences or similarities between PHNs wrt equity intentions and actions? Correlation with other factors? How does this compare with what might be expected? What sort of strategies are PHNs employing? Does it differ? How does it compare to what might be expected? If and when PHNs have objectives/strategies to reduce inequity, are they employing universalist or levelling-up approaches?	*Does the PHN focus on equity? In what way – are they broad goals and intentions, and do they have firmer objectives and active strategies? Beyond acknowledging and talking about equity, what are they doing to address inequity?* *What sort of strategies are employed by this PHN? (including but not limited to strategies to address health equity)*	Thematic analysis of relevant nodes, by PHN, then compare PHNs. Documents: matrix coding query to examine proportions of text references of each node	Equity >Examples of approaches to address inequity >>Goal >>Objective >>Strategy >Type of strategy >>Clinical service >>Population health/ systemic >>Individualistic/ behavioural >Universality of equity approaches >>Universal >>Targeted/limited	(+ External document analysis and 2016 interviews) IQ1.8 Can you give me some examples of your PHN's plans/activities that seek to address health inequities? IQ1.10 Has there been discussion about whether the services and programs commissioned by the PHN are universal, available to everyone, or limited eligibility? IQ1.11 To what extent are services and programs commissioned for specific 'high need' groups in the population?

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
RQ5 Do PHN activities have an equity focus consistent with comprehensive PHC …?	Are there differences or similarities between PHNs wrt equity rhetoric and focus? Correlation with other factors? How does this compare with what might be expected?	*How equity is 'framed' or conceived by the PHN? Which 'types' of equity issues get attention and why/why not. What sort of rhetoric is the PHN using in relation to equity – implicitly and explicitly?*	Documents: matrix coding query to examine proportions of text references of each node Thematic analysis of relevant nodes, by PHN, then compare PHNs	Type of inequity mention >General acknowledgement of inequity >Access to services >Health literacy >Social determinants >Health outcomes >Quality of care >'Disadvantage' equity groups >Explicit >Implicit	External document analysis IQ1.8 Can you give me some examples of your PHN's plans/activities that seek to address health inequities? (+ data from 2016 interviews)
RQ5 … and what influences the equity-orientation of planned activities? What are the capacities / characteristics of PHNs who are comparatively good at equity focussed health planning? (other questions will help to address this question eg mechanisms, culture, capacity etc)	Are there differences or similarities between PHNs wrt equity barriers and enablers? Correlation with other factors? How does this compare with what might be expected?	*What are the barriers and enablers of an equity focus in this PHN?*	Thematic analysis of relevant nodes, by PHN, then compare PHNs.	Equity >Barriers >Enablers	(No specific questions on this – draw on data from 2016 and 2018 interviews)

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
Does the organisational culture place importance on (using evidence and/or) addressing inequity?	Are there differences or similarities between PHNs wrt equity values? Correlation with other factors? How does this compare with what might be expected?	*Does the culture of this PHN support equity consideration? What has enabled/hindered that?* *Does this PHN have equity (or related terms) as a stated value? Is there evidence to support or contradict this?*	Thematic analysis of relevant nodes, by PHN, then compare PHNs. 'Word Cloud' of stated PHN values (if not in document, then find on websites)	Context >Internal/organisational >>Culture/ values >>>equity Values	(+ document and 2016 interview data) IQ1.12 Can you tell me about the culture and values of the PHN when it comes to equity, and addressing inequity? What factors have influenced that part of the culture?
Are there systematic (governance) mechanisms within the planning process to facilitate equity considerations in conjunction with the use of evidence? Is there need/ opportunity to enhance and embed the equity focus of PHNs' planning?	Are there differences or similarities between PHNs wrt equity mechanisms? Correlation with other factors? How does this compare with what might be expected? *What are the characteristics/ capacities of PHNs who are comparatively good at equity focussed health planning?* *Are PHNs who are good at using evidence also good at identifying and addressing health inequities?*	*Does this PHN have equity systematically embedded in their planning process? How?*	Internal document data: coding query to examine if/which PHNs have mechanisms. Interview data: Thematic analysis of relevant node, by PHN, then compare PHNs Truth table?	Equity >Enablers >>Systematic mechanisms	(Internal document data) IQ4.3 In those documented processes that we talked about earlier, do they explicitly include consideration of health equity? • Are there any criteria that relate to addressing inequity? • What sort of weighting is given to equity? IQ4.4 Are there any other mechanisms for considering equity in primary health care planning?

Level 4 Questions asked of an entire study **Research Questions** (proposal)	**Level 3** Questions asked of the pattern of findings across multiple cases	**Level 2** Questions asked of the individual case to be answered by the investigator	**Analysis strategy**	**Node**	**Level 1** Interview Questions (2018 interviews) OQ= ORACLe questions (Domain in brackets) IQ = additional Questions
	What indications were there from the survey data regarding evidence use and equity focus? With regard to case study PHNs, or across the range of PHNs?		Draw on key findings from survey results summary. What data from the survey has been coded to relevant nodes in NVivo? Focus on Pop health planning and commissioning effort and capacity questions, and 'acting to influence SDH', obstacles.		(2016 online survey)

Level 5. Normative questions about conclusions and policy recommendations.

- (discuss level 4 questions framed by relevant theory)
- Do these findings agree or contrast with a.) theory on evidence-informed policy-making/planning and b.) what might be reasonably expected of PHNs at the meso level?
- What could help PHCOs and regional health policy organisations enhance their evidence-informed, equity focussed health planning/policy making?
- Are the findings particular to the meso level of planning/policy?
- Do these findings indicate there needs to be improvement in planning to make it better informed by evidence and equity focussed. What can be done to achieve such improvements?
- Are the findings particular to Australian context?
- How might these findings be relevant or helpful to other countries?

ORACLe Domains

Domain 1: Documented processes to develop policy that encourage or mandate the use of research

Domain 2: Tools and programs to assist leaders of the organisation to actively support the use of research in policy and program development

Domain 3: Availability of programs to provide staff with training in using evidence from research in policy and in maintaining these skills

Domain 4: Availability of supports and tools to help staff access and apply research findings

Domain 5: Presence of systems/methods to generate new research evidence to inform the organisation’s work

Domain 6: Clear methods to allow adequate, evidence informed evaluations of the organisations’ policies and programs

Domain 7: Mechanisms that help strengthen staff relationships with researchers

Appendix F: PHN employee interview schedule (including ORACLe questions)

Interview Schedule - PHN staff

PhD Project Title: Primary Health Networks: organisational capacity for evidence-informed, equity-focussed primary health care planning

Regional Primary Health Care Organisations: Population health planning, participation, equity and the extent to which initiatives are comprehensive.

Thankyou

Outline aims

- *To understand the process of PHC planning in regional PHC organisations, and the factors that influence the use of evidence and consideration of equity;*
- *To identify opportunities to enhance organisational capacity for evidence-informed, equity focussed regional PHC planning.*

Research Overview:

- *Case studies of 5 PHNs across Australia comprising interviews with 6 stakeholders from each PHN, and analysis of internal documents.*
- *Analysis of all PHNs' Needs Assessments, Activity Work Plans and Annual Reports.*
- *Secondary analysis of data previously collected.*

The interview questions include a validated tool, ORACLe, developed by the Sax Institute, which only requires fairly short answers, so I'll let you know when we get to that bit, just to help us keep to time.

Audio recording

Interview Questions

1. Discussion topic: Planning process and influences

(*Continuing PHNs*)

We interviewed people from this PHN back in mid 2016, which was still early days for PHNs, and talked a bit about the process of health planning then. I'd like to know about where things are at now 2 years down the track.

(*For new PHNs*)

Preamble: First of all I'd like to understand the ***process*** *of planning at your PHN, and some of the factors that influence planning.*

(All PHNs)

1.1. Can you tell me about the primary health care health **planning process** in X PHN?
   - How are priorities selected?
   - **How are planning decisions made**? How do you arrive at what goes into your annual plan?
   - Is there a defined, systematic process, or is it more 'organic'?
   - How are strategies/programs developed?

1.2. I'm interested in the bigger picture of how planning takes place across the year, and also in the finer procedural detail of how decisions are made. Can you tell me about how planning decisions are discussed among the executive?

1.3. (*Continuing PHNs*) In what way has the planning and decision making process changed over the last 2 years?

1.4. **Who** are the various stakeholders that have input into the planning, and how do they have input?
   - Which stakeholders do you think have greater influence, who has less influence? Why is that? (no need to use names)

1.5. Can you think of any examples of particular interests/agendas of stakeholders that influence planning at your PHN?
   - I'm talking here about things like the politics of the local region, power games. Are there political no-go topics etc.
   - Which interests/agendas are most influential and why do you think that might be?

1.6. What sort of broader external influences or constraints does your PHN face with regard to what you can and can't do?

(*For continuing PHNs*)

1.7. In the previous interviews we talked a bit about PHNs consideration of equity in population health planning. (*Discuss briefly indications from previous findings.*)

1.8. Now that we are a bit further down the track, can you give me some examples of your PHN's plans/activities that seek to address health inequities?

(For new PHNs)

1.9. Can you give me some examples of your PHN's plans/activities that seek to address health inequities?

(All PHNs)

1.10. Has there been discussion about whether the services and programs commissioned by the PHN are universal, available to everyone, or limited eligibility?

1.11. To what extent are services and programs commissioned for specific ‘high need’ groups in the population?

1.12. Can you tell me about the culture and values of X PHN when it comes to equity, and addressing inequity?

- What factors have influenced that part of the culture?

2. Discussion topic: Use of evidence to inform planning

Preamble – in this section I’d like to get an idea of the use of evidence and research to inform planning.

2.1. First of all, I’d like to understand how you define ‘evidence’? What do you consider evidence to be?

2.2. For what **purposes** does your PHN use evidence, what types of questions do you use research/evidence to answer?

- (eg needs assessment, options analysis, effectiveness of an intervention, economic analysis, stakeholder acceptability etc)

2.3. What **sources** of evidence are used to answer those questions and inform planning?

- Internal eg your needs assessment data analysis, input from clinical and community councils and consultation feedback
- External eg grey literature, evaluation reports from other organisations/PHNs, peer reviewed journal articles, expert advice.
- What tends to be most used? Balance, ratio?

2.4. Are there other types of evidence that you think could be useful to PHNs?

Preamble: There are various models described in the literature of how evidence informs decision making – whether that be in policy making or health planning. There is no right and wrong way, and it will obviously vary depending on the context and the policy/planning issue in question.

2.5. How does the PHN executive engage with evidence? In what sort of form do you see evidence and how is it used?

2.6. Can you give me some examples of where the PHN’s plans have drawn on evidence?

- identifying/prioritising needs?
- supporting evidence for the approach/strategy/intervention you plan?

(*eg service/system integration strategies*?)

2.7. Can you give me an example that illustrates how the culture or leadership of your PHN supports or doesn’t support the use of evidence to inform planning?

3. Discussion topic: Organisational Capacity for Evidence-Informed Planning (ORACLe tool)

Preamble: So the next set of questions are from the ORACLe tool that I mentioned earlier, and they don’t really require a particularly detailed answer, so we can treat this a bit like a ‘quick fire’ round, to help us keep to time. I may probe for more detail if I need to. These questions are around PHNs organisational capacity for evidence-informed health planning.

3.1. Does your PHN have documented processes for how plans/programs should be developed?

- How are these processes documented? (Terms of reference, internal procedures etc?) NOTE!
- Are they detailed or fairly general? Are they directive procedures, or more broad guidelines and principles? (*Transparency*)
- Specific to your PHN?

3.2. Do these processes encourage or require staff to use research in planning or program development?

- If yes, explicit or implied?
- Are there documented criteria for identifying and using evidence to inform planning decisions? For example assessing the quality of evidence, or its appropriateness to the issue in question. How do you know you've got the best or most appropriate evidence?

3.3. Are programs available for leaders to improve their confidence or expertise in use of research in planning? (Leaders mean any level of executive or management, or anyone else with a formal or informal leadership role.)

- Specific to leaders, or open to most staff?
- How often? Yearly, ad hoc?

3.4. Do the position descriptions or performance management systems for senior managers in your PHN cover expertise in use of research in planning?

3.5. In the last year, have leaders of your PHN referred to research in their internal communication (e.g. newsletters, bulletins, updates, tweets, etc.)?

- How often?

3.6. Does your PHN provide access to training for staff in how to access research, appraise and apply research for planning/ program development?

- content specifically about research skills?
- actively offered to staff?
- on a regular basis?

3.7. Is participation in training on how to access research, appraise and apply research for program development or implementation considered in staff performance management?

3.8. In the last year, has relevant research (papers, reports, syntheses or summary bulletins) been disseminated within your PHN?

- How often?

3.9. Does your PHN have resources that provide guidance on how to access, appraise and apply research?

3.10. Does your PHN have staff with recognised expertise in accessing, appraising and applying research to program development or implementation?

- Is there a particular role that requires/involves such expertise?
- Can that expertise be readily accessed by staff?

3.11. Does your PHN have research resources such as:
  - Subscriptions to research journals? (e.g. …)
    - What journals?
  - Subscriptions to databases of research publications?
  - A library or an electronic library?
  - Licenses for reference management software (e.g. Endnote)

(Oracle Q 15) In the last year, has your PHN commissioned external research to support planning/ program development?

3.12. Does your PHN have established methods for commissioning reviews of existing research?

3.13. Does your PHN have systems for managing knowledge from research? (e.g. systems for retrieving, collating, storing and translating external and internal research)

3.14. In the last year, has your PHN undertaken internal research to support planning/ program development? (For example focus groups, satisfaction surveys)

- How often?
- Large, detailed pieces of work, or smaller activities?

3.15. (moved question up)

3.16. Does your PHN encourage or require that evaluation be built into program planning and development?

- Is that expectation explicitly documented anywhere?
- Is that required of all programs?

3.17. Does your PHN have documented processes for how programs should be evaluated?

- Detailed or general?
- Consistent, or on a case-by-case basis?

3.18. Are these evaluation processes and methods based on research?

- Has research been used to inform the process/method of evaluation?
- Are the processes/guidelines for evaluation based on research?

3.19. In the last year, has your PHN been represented at any research forums or conferences?

- How frequently?
- What sort of staff have been involved? Managers only, or a wider range?

3.20. Does your PHN have formal, contractual relationships with external research organisations?

3.21. Does your PHN have informal, collaborative relationships with external research organisations?

- Can you tell me more about any of those relationships – who with, what sort of level of engagement?

3.22. Do staff members of your PHN have joint or adjunct appointments in research organisations?

3.23. In the last year, have researchers participated in advisory committees (or similar) in your PHN?

- Have there been researchers actively involved in any co-design work by the PHN?
- How frequent, or just once-off?
- Systematic or more ad hoc?

4. Discussion topic: 'Good Governance' of evidence-informed health planning

Preamble: I'd like to go back a bit now to discuss in a little more detail the processes for planning, and particularly in understanding the ***mechanisms*** *that govern the planning and decision making process, the use of evidence, and consideration of equity*?

4.1. PHNs put a lot of resources and time into assessing the health needs of their populations, are there documented **criteria** for **prioritising** issues/needs? (*Appropriateness*)

4.2. And moving around the commissioning cycle from assessing need, to planning strategies, are there documented criteria for weighing up the various considerations and selecting the service or program to be commissioned?

- Are the criteria weighted?

4.3. In those documented processes that we talked about earlier, do they explicitly include consideration of health equity?

- Are there any criteria that relate to addressing inequity?
- What sort of weighting is given to equity?

4.4. Are there any other mechanisms for considering equity in primary health care planning?

4.5. When it comes to those meetings where decisions are made about priorities and plans, are the minutes of those meetings available to others – within the PHN, or the wider stakeholder base? Are there measures in place to disseminate minutes?

4.6. I'm aware that needs assessments and Activity Work Plans are up on all PHNs' websites, is there any other sort of feedback to stakeholder groups (or availability to the wider public) as to priorities and plans, and what informed those decisions?

4.7. Are there mechanisms for challenging the priorities and plans, and the evidence that may be used? Are there any sort of appeals procedures around planning decisions made by the PHN? (*Contestability*)

4.8. We have talked a lot about the processes and mechanisms of planning, and I understand that PHNs also need to be responsive to emerging issues – are there other ways in which planning decisions are made outside of the yearly planning cycle?

- To what extent are planning decisions made in these 'alternative' pathways?

4.9. And how are unsolicited proposals handled?

- Are there documented procedures/processes around assessing them?
- How is evidence used in the assessment of unsolicited proposals, and does the assessment include consideration of equity?

That comes to the end of my questions. Is there anything else you would like to say about the PHN's planning and activities in relation to health equity?

Would you like to review a copy of the interview transcript when that is available?

The next part of the case study research involves analysing the internal documents we have just been talking about, that guide the planning process, so I was wondering if you would be able to give me copies of those documents? Eg

- Internal policies/procedures/guidelines/ templates, unsolicited proposals
- Criteria
- Terms of reference – board subcommittee, clinical/community councils, staff working groups etc (not minutes)
- Commissioning Framework

Thankyou

Appendix G: Interview schedule for board/clinical council/community advisory committee (excludes ORACLe questions)

Thankyou

PhD Project Title: Primary Health Networks: organisational capacity for evidence-informed, equity-focussed primary health care planning

Regional Primary Health Care Organisations: Population health planning, participation, equity and the extent to which initiatives are comprehensive.

Outline aims

- To understand the process of PHC planning in regional PHC organisations, and the factors that influence the use of evidence and consideration of equity;
- To identify opportunities to enhance organisational capacity for evidence-informed, equity focussed regional PHC planning.

Research Overview

- *Case studies of 5 PHNs across Australia comprising interviews with 6 stakeholders from each PHN, and analysis of internal documents.*
- *Analysis of all PHNs' Needs Assessments, Activity Work Plans and Annual Reports.*
- *Secondary analysis of data previously collected.*

Audio recording

Interview Questions

4. Background

4.1. First of all, I wondered if you could tell me a bit about your background and how you came to be involved in the PHN board/ council?

Involvement with previous Medicare Local?

5. Discussion topic: Planning process and influences

Preamble: One of the main objectives of this research is to understand the ***process*** *of planning at PHNs, and some of the factors that influence planning.*

5.1. I appreciate that as a board/council member you're probably not immediately involved in the detailed planning process, but I'd like to gather your views on planning more broadly.

How are **planning decisions** made?

How are priorities selected?

How does the PHN arrive at what goes into the annual plan?

How are strategies/programs developed?

Is there a, systematic process, or is it more 'organic'?

5.2. And looking at the finer procedural detail of how decisions are made, can you tell me about how prioritising and planning decisions are discussed among the board/ clinical/community council?

5.3. Has that process changed much in the nearly 3 years since the PHN commenced?

5.4. **Who** are the various stakeholders that have input into the planning, and how do they have input?

Which stakeholders have greater influence, who has less influence? Why is that? (no need to use names)

5.5. Can you think of any examples of particular interests/agendas of stakeholders that influence planning at your PHN?

I'm talking here about things like the politics of the local region, power games. Are there political no-go topics etc.

Which interests/agendas are most influential and why do you think that might be?

(Community council): What are your views on the degree of input and influence of communities when it comes to PHNs' planning?

(Community council): How would you describe the balance between community and professional input?

5.6. What sort of broader external influences or constraints does your PHN face with regard to what you can and can't plan, what is and what isn't in scope?

(*For continuing PHNs*)

In the previous interviews we talked a bit about PHNs consideration of equity in population health planning. (*Discuss briefly indications from previous findings*.)

5.7. Now that we are a bit further down the track, can you give me some examples of your PHN's plans/activities that seek to address health inequities?

(For new PHNs)

5.8. Can you give me some examples of your PHN's plans/activities that seek to address health inequities?

(All PHNs)

5.9. Has there been discussion about whether the services and programs commissioned by the PHN are universal, available to everyone, or limited eligibility?

5.10. To what extent are services and programs commissioned for specific 'high need' groups in the population?

5.11. Can you tell me about the culture and values of the PHN when it comes to equity, and addressing inequity?

- What have been the factors that have influenced that aspect of the culture?

6. Discussion topic: Use of evidence to inform planning

Preamble – in this section I'd like to get an idea of the use of evidence and research to inform planning.

6.1. First of all, I'd like to understand how you define 'evidence'? What do you consider evidence to be?

6.2. For what **purposes** does your PHN use evidence, what types of questions do you use research/evidence to answer?

eg identifying needs, options analysis, effectiveness of an intervention, economic analysis, stakeholder acceptability etc

6.3. What **sources** of evidence are used to answer those questions and inform planning?

Internal eg your needs assessment data analysis, input from clinical and community councils and consultation feedback

External eg grey literature, evaluation reports from other organisations/PHNs, peer reviewed journal articles, expert advice.

What tends to be most used? Balance, ratio?

6.4. Can you give me some examples of where the PHN's plans have drawn on evidence?

Identifying/prioritising needs?

Supporting evidence for the planned strategy? Eg system integration

6.5. (Clinical/community council) Do you feel that the input from the clinical/community council is itself a source of evidence used by the PHN?

6.6. Are there other types of evidence that you think could be useful to PHNs?

Preamble: There are various models described in the literature of how evidence informs decision making – whether that be in policy making or health planning. There is no right and wrong way, and it will obviously vary depending on the context and the policy/planning issue in question.

6.7. How does the Board/ clinical/community council engage with evidence?

- In what sort of form do you see evidence, does relevant evidence (papers, reports, syntheses or summary bulletins) get disseminated among the Board/clinical/community council?
- How often?
- How is evidence used? Is it actively, explicitly discussed as part of the agenda, or is it general background information?
- Is there any discussion of the quality of evidence, or its appropriateness to the issue in question?

6.8. Can you give me an example that illustrates how the culture or leadership of your PHN supports or doesn't support the use of evidence to inform planning?

7. Discussion topic: Organisational Capacity for Evidence-informed Planning and Good Governance

*Preamble: Now I'd like to talk about some aspects of PHNs' organisational capacity for evidence-informed health planning, and understand the **mechanisms** that govern the planning and decision making process.*

7.1. As far as you're aware, does your PHN have documented processes for how plans/programs should be developed?

- How are these processes documented? (Terms of reference, internal procedures etc?)
- Are they detailed or fairly general? Are they directive procedures, or more broad guidelines and principles? (*Transparency*)
- Does that include the role of the board/clinical/community council – or are the documented processes more relevant to the operational level?

7.2. Do these processes encourage or require the use of evidence in planning or program development?

7.3. PHNs put a lot of resources and time into assessing the health needs of their populations, are there documented criteria for **prioritising** issues/needs? (Appropriateness)

7.4. And moving around the commissioning cycle from assessing need, to planning strategies, are there documented criteria for weighing up the various considerations and selecting the service or program to be commissioned/ implemented to address needs?

- Are the criteria weighted?

7.5. Does the planning and priority setting processes explicitly include consideration of health equity?

- Are there any criteria for addressing inequity, either in terms of prioritising needs, assessing options or planning implementation?
- What sort of weighting is given to equity?

7.6. Are there any other mechanisms for considering and addressing equity in health planning?

7.7. When it comes to those meetings where decisions are made about priorities and plans, are the minutes of those meetings available to others – within the PHN, or the wider stakeholder base? Are there measures in place to disseminate minutes?

7.8. I'm aware that needs assessments and Activity Work Plans are up on all PHNs' websites, is there any other sort of feedback to stakeholder groups (or availability to the wider public) as to priorities and plans, and what evidence was used to inform them? Any sort of public accountability mechanism? (Accountability)

7.9. Are there mechanisms for challenging the priorities and plans, and the evidence that may be used? Are there any sort of appeals procedures around planning decisions made by the PHN? (Contestability)

7.10. Does your PHN encourage or require that evaluation be built into program planning and development?

- Is that required of all programs? Example?
- Is the board/clinical/community council informed of program evaluation outcomes?

7.11. I understand that PHNs need to be responsive to emerging issues - are there other ways in which planning decisions are made outside of the yearly planning cycle that board/ clinical/ community council members are involved in?

- Eg 'unsolicited proposals'
- Are there documented procedures/processes around assessing them?
- How is evidence used in the assessment of unsolicited proposals, and does the assessment include consideration of equity?

7.12. Do any members of the board/clinical/community council at your PHN have joint or adjunct appointments in research organisations? A background in research/academia?

7.13. Was there anything else you wanted to say about the PHNs planning and activities in relation to health equity?

Transcript review?

Thankyou

Appendix H: Public Document Analysis Coding Framework

Codes	Examples	What am I interested in?	Rationale	Reason it's important to code (Research Q)
Evidence purpose (assumed, as it was rarely explicitly stated by the authors) • Identify the problem • Understand the cause of the problem • Indication of effectiveness of an intervention • Targeting • Stakeholder acceptability • Establish cost-effectiveness • Indication of implementation strategies • Design/development of the program/service	Eg immunisation data to indicate areas to focus on	At what 'stages' of planning is evidence used more/less? For what purposes is evidence used more/less? How much goes into understanding the 'problem'? Or does the PHN apply its own 'problematization' – this influences what options might address the problem. (*Hypothesis – evidence is used a lot in identifying problems, to a lesser extent in understanding problems, and to a negligible extent for the other 3 purposes*)	While there is no defined 'Evidence purpose' typology in the literature, this node was developed based on broader discussion of evidence use in policy and planning in the literature, as well as from preliminary scanning of PHN documents.	2. To what extent is PHC planning informed by evidence? 2a. What types of evidence do PHNs use, for what purposes in the planning process?
Type of data/information • Demographic • Epidemiology • Service utilisation • Service capacity mapping	AEDI, STI/BBV notifs MBS, PBS, PIP, ED Number/ratio of services, health workforce data	Which types of evidence are used more/less? (*Hypothesis – epi data used most*)	Population health planning principles (ref Eagar book) and guidance provided to PHNs (and their predecessor Medicare Locals). (ref ML or PHN needs assessment guide)	2a. What types of evidence do PHNs use?
Evidence source • Reference to PHN Needs Assessment (non-specific) • Consultation: ○ Community ○ Service providers ○ Experts ○ Researchers ○ Others? ○ Stakeholders unspecified	Uni	Which types of evidence, categorised by source, are used more/less? The types of data most used indicate how the 'problems' are represented – medical/SDH? (*Hypothesis – community consultation and epidemiologic data are used more than other sources. Not much use of evaluations or grey lit, very little*	Developed based on preliminary scan of several documents, and types of evidence identified generally in the literature	2. To what extent is PHC planning informed by evidence? 2a. What types of evidence do PHNs use?

Codes	Examples	What am I interested in?	Rationale	Reason it's important to code (Research Q)

• Specific study (2' analysis for local implications)
• Data sources other than PHIDU/DoH
  ○ Cwlth Govt data
  ○ GP records extracts
  ○ State bodies
  ○ Hospital data
  ○ Local organisations
• Explicit mention of 'anecdotal' evidence
• Expert staff
• Evaluation report
  ○ By PHN
  ○ By other organisation
  ○ Unknown author
• Grey literature (other than evaluation)
• Published academic lit
  ○ Reference not provided
  ○ Reference provided
• Mention of being based on a current program/service model
	45 and up
	ED presentations
	Safe injecting centre
	academic advisor
	Plans, reports, reviews
		use of academic research either published or commissioned)
		Path dependency?		

Evidence type • Data • Information • Knowledge • Wisdom	Raw stats with no comparison Data is compared and interpreted Evaluations, grey lit consultation, academic research Experts	Are PHNs using raw data and doing their own analysis and interpretation (capacity?), or are they using information that others have analysed and interpreted? Or are they drawing on richer, more complex, experiential knowledge and wisdom, from whom?	Drawn from the typology outlined by Ackoff (1989), using the following definitions: • Data: symbols that represent properties of objects, events (populations). From observation. • Information: descriptions – who, what, when, how many. Has purpose, meaning, can be understood by the recipient	2a. What types of evidence do PHNs use?

Codes	Examples	What am I interested in?	Rationale	Reason it's important to code (Research Q)
		(*Hypothesis – data on epi and service mapping, stakeholder knowledge*)	• Knowledge: knowledge, from experience or instruction. Tacit or explicit. • Wisdom: ability to increase effectiveness, requires judgement, including values (Ackoff, 1989) While Ackoff adds to this typology 'Understanding: appreciation of why', for this research I have opted to use the simpler typology, and indications of 'understanding' are categorised as 'knowledge', as these two concepts are very similar and for the coder to distinguish between the two based on brief mentions within a document would be artificial.	
Recognition/mention of inequity • Explicit • Implicit	Explicit: "address health disparities", "The prevalence of diabetes in Aboriginal and Torres Strait Islander people in this region is x%, whereas in the wider population it is y%". Implicit – "focus on areas with highest prevalence"	Is much attention/priority given to addressing inequity? Is it an explicit priority? What sort of rhetoric is there regarding equity? (*Hypothesis – I don't really know*)	A piece of text was considered explicitly about inequity if it used the word equity/inequity, equality/inequality, or if it explicitly described a difference between a section of the population and the general population.	5. Does PHN planning have an equity focus, as implied in their objectives?
Approaches to inequity: • Goal (general) • Objective (specific) • Strategy (action)	longer term, general overall outcomes shorter term, more specific outcomes, a particular improvement specific activities/action	Where they occur, are approaches to inequity posed as broad goals, more specific objectives, and/or are specific strategies for action outlined? (*Hypothesis – a mix)*	Indications of intentions to address inequity (which could be implicit or explicit), (*might need a reference here*).	5. Does PHN planning have an equity focus, as implied in their objectives?

Codes	**Examples**	**What am I interested in?**	**Rationale**	**Reason it’s important to code (Research Q)**
Framing of inequity mention • Access to services • Health literacy • Social determinants • Health outcomes • Quality of care • Population groups who experience disadvantage • General acknowledgement of inequity	Survey data of GP access, rural/remote access Explicitly mention health literacy Transport, poverty/financial hardship, violence, food, housing, education Inequity in health outcomes (not status) Cultural safety ATSI, CALD, refugees, LGBTIQ	Is much attention/priority given to addressing inequity? How is this framed or conceptualised? How are ‘problems’ represented? Likely to vary depending on the demographics of the area, but that’s not the only explanation of differences between PHNs. (*Hypothesis – mostly about access to services, also health literacy/ individual capacity building, and ‘disadvantage’ groups, not much on the other areas*)	Drawn from the coding framework for the RPHCO project and preliminary analysis of several documents. ‘Population groups who experience disadvantage’ included Aboriginal and Torres Strait Islander people, people from culturally and linguistically diverse backgrounds (CALD), refugees, people with disabilities, and people who identify as lesbian, gay, bi-sexual, transgender or queer (LGBTIQ). Does not include older people and younger people /children - these groups represent life stages rather than distinct groups, and these life stages do not inherently determine disadvantage. Does not include people living in rural/remote locations - discussions relating to disadvantage faced by people in rural/remote regions was coded as ‘access to services’.	5. Does PHN planning have an equity focus, as implied in their objectives?
Explicit mention of ‘evidence based’ intervention	“evidence-based best practice interventions”	Is ‘evidence-base’ part of the rationale for a planned activity? Are PHNs ‘talking the talk’ of evidence base?		2. To what extent is PHC planning informed by evidence? 3. Does the organisational culture place importance on using evidence and/or addressing inequity?
Values: Explicit statement of organisational values	Leadership, collaboration,	Are evidence and/or equity represented in the values (culture) of the organisation?		3. Does the organisational culture place importance on

Codes	Examples	What am I interested in?	Rationale	Reason it’s important to code (Research Q)
	knowledge, innovation, accountability	A proxy indicator, stating the value doesn’t necessarily mean that actions reflect it. (*Hypothesis – there might be a few instances, but less than half of PHNs. ‘Innovation’ gets more prominence than ‘evidence’ or ‘knowledge’*)		using evidence and/or addressing inequity?
Other mentions of evidence:		Leaving the gate open for unexpected observations		2. To what extent is PHC planning informed by evidence? 3. Does the organisational culture place importance on using evidence and/or addressing inequity?
Intended use of evidence to inform planning	Referring to how initiatives will be co-designed with stakeholders Intention to review initiatives to inform the future design of services	Capturing intentions to use evidence to inform planning, even if it has not actually happened yet	From the preliminary scan of documents, it appeared that there were occasional mentions of future intended activities to gather and use evidence to inform planning, so this node was added to capture those intentions.	2. To what extent is PHC planning informed by evidence? 3. Does the organisational culture place importance on using evidence and/or addressing inequity?
Planning Process	Criteria for prioritising needs, description of decision-making process	How the planning process is carried out.		1. What does the PHN planning ‘environment’ look like and how do PHNs undertake the process of PHC planning? 4. What are the organisational capacity/ structural factors that affect the use of evidence in planning?

Codes	Examples	What am I interested in?	Rationale	Reason it's important to code (Research Q)
Approaches/strategies planned* • Clinical • Population health/ systemic/SDH • Individualistic/ behavioural • Other	Approaches that seek to improve the quality of or access to clinical health care services Approaches that seek to change the health related knowledge, skills or behaviour of individual community members	What types of strategies PHNs are planning/employing to address their identified health needs?	Based on preliminary scan of documents. 'Clinical' was considered to be any strategy that aimed to improve the availability, capacity or integration of clinical health care services, such as 'Health Pathways' referral systems, or supporting general practice with recall and reminder systems. 'Individualistic' was any strategy that aimed to influence the behaviour, skills or knowledge of individual members of the community, for example a marketing campaign to promote physical activity. 'Population health' was regarded as any strategy that served to address an underlying social determinant of health, for example by providing/commissioning transport services for underserved communities or implementing a 'dementia friendly' environment project. 'Other' was anything that didn't fit under the above categories, and tended to be more the 'operational' or organisational capacity components of the plan that couldn't be directly linked to a health intervention as such, for example facilitating a stakeholder network.	RQ 5. Does PHN planning have an equity focus, as implied in their objectives?
Equity Actions* (as per Freeman et al 2018 framework) • access to local PHC services		What types of actions are PHNs planning to address inequity, if at all?		

Codes	Examples	What am I interested in?	Rationale	Reason it's important to code (Research Q)
• access to other health and social service • address equity in quality of care • individual behaviour • upstream local intersectoral action • Broader advocacy on social, political and cultural determinants of health • Non equity-oriented approach • Can't tell • Other				

* These nodes were only used for coding text in Activity Work Plans

Appendix I: Case study Coding Framework

(Secondary Analysis of existing data, 2018 Interviews and Internal PHN documents)

Research questions:

1. What does the PHN planning environment look like in terms of context, influences and actors?
2. How do PHNs undertake the process of PHC planning and decision-making?
3. What types of evidence do PHNs use, for what purposes in the planning process?
4. Do PHNs have strong organisational capacity for evidence-informed planning?
5. Do PHN activities have an equity focus consistent with comprehensive PHC, and what influences the equity-orientation of planned activities?

Codes

Codes (OQ = ORACLe question)	**Examples**	**What am I interested in?**	**Reason it's important to code** RQ = research question IQ = interview question
Equity considerations/focus • Examples of approaches to address inequity o Goal o Objective o Strategy • Type of strategy that are discussed o Clinical service o Population health/ systemic o Individualistic/ behavioural		To what extent the PHN has a focus on equity. Some concrete examples of approaches to address inequity, to indicate what equity work they are doing. Are they talking about equity and acknowledging it, are they actively doing anything to address inequity?	RQ5 RQ5 RQ5 RQ5
Type of inequity mention • General acknowledgement of inequity • Access to services • Health literacy (deficit frame) • Social determinants • Health outcomes • Quality of care • 'Disadvantage' equity groups		How equity is 'framed'/ conceived by the PHN. Which 'types' of equity issues get attention and why/why not.	RQ5

Codes (OQ = ORACLe question)	**Examples**	**What am I interested in?**	**Reason it's important to code** RQ = research question IQ = interview question
Equity • Barriers • Enablers ○ Systematic mechanisms	Eg systematic mechanisms, criteria etc to facilitate equity considerations	The why/why not? What enables or hinders an evidence-informed equity focus? Whether the PHN has equity embedded in their planning process	RQ5
Universality of equity approaches • Universal • Targeted/limited		If and when PHNs have objectives/strategies to reduce inequity, are they employing universalist or levelling-up approaches?	
Planning system/environment • Actors, organisations • Corporate Governance structure/mechanisms • PHN functions ○ Research priority setting ○ Knowledge generation/ dissemination ▪ Internal research?(OQ14) ○ Evidence filtering/amplification ○ Planning/ decision making process ▪ Engagement with evidence ▪ Ad hoc? ▪ Unsolicited proposals	Eg not just planning, but in generating evidence as well etc Evaluation is a form of generating evidence	What the PHNs planning system/environment looks like Who is involved? What structures are in place, how does it work? What is the broader scope of PHNs' role in the planning system, what else do they do? How the planning process works How do decision makers engage with evidence?	RQ1 RQ1 RQ1 RQ1 RQ2 IQ 2.5 IQ4.8 IQ4.9
Context • Internal/organisational ○ Culture/ values ▪ evidence ▪ equity ▪ general org culture ○ Institutional influences • ML transition – simple or difficult? • External		What aspects of the context within the PHN influence planning? Indicative statements to suggest culture/values, or more explicit statements.	RQ1 RQ1 RQ5 IQ2.7 RQ1

Codes (OQ = ORACLe question)	**Examples**	**What am I interested in?**	**Reason it's important to code** RQ = research question IQ = interview question
o The Commonwealth Department o Scope limitation, inflexibility of funding ▪ Geographic scope/size o Legislation Time constraints/pressures imposed externally	Dept delays in releasing information Eg limiting PHF involvement	What are the fixed/uncontrollable, external context factors that influence planning?	
Influences on decision making • Ideology/values • Ability to use evidence • Personal or professional experience and intuition • Interests/agendas (local political) • External influences o Politics	Eg an interviewee stating a particular focus/concern Where national politics influence PHNs, as opposed to local political influences on the decision making within PHNs	What influences act on planning decision making, which are the more common, which are more influential	RQ1
Organisational capacity: • Leadership o Tools/programs to support leaders capacity (OQ3) o Position description requirement? (OQ4) o Internal communications (OQ5) • Governance of planning o Documented processes ▪ Existence of (OQ1) ▪ Encourage/require research use (OQ2) ▪ For commissioning reviews (OQ12)	Eg training/education, PD/performance mgmt system (Governance of the planning process, not corporate governance)	What are the organisational capacity factor that influence the use of evidence/consideration of equity? (promoting and hindering) Oracle Domain 2 - Tools and programs to assist leaders Oracle Domain 1 – Documented processes that encourage/mandate use of research	RQ4 RQ4 IQ 3.1

Codes (OQ = ORACLe question)	**Examples**	**What am I interested in?**	**Reason it's important to code** RQ = research question IQ = interview question
○ Appropriateness		Are explicit decisions made about how appropriate evidence is, other than just its methodological quality?	(Good Governance framework)
○ Accountability		Are decision makers accountable to the community members and other stakeholders who are affected by the planning decision?	
○ Transparency		Are decision makers explicit about how evidence is considered and used (or not) in the policy making process?	
○ Contestability		Are decisions and interpretation of evidence able to be contested by policy actors and community members?	
Organisational Capacity: • Resources ○ PHN Workforce capacity (Numbers, skills, experience) ▪ Staff with expertise (OQ10) ▪ training/development (OQ6) ▪ PD requirement (OQ7) ▪ Guidance resources(OQ9) ○ Availability of evidence ▪ Dissemination within PHN (OQ8) ▪ Subscriptions, Endnote (OQ11) ▪ Commissioned research (OQ15) ○ Resources/systems to facilitate the analysis/use of evidence eg software ▪ Knowledge mgmt. system (OQ13) ○ Budget constraint	Eg Reduced staff after transition Eg NVivo	What resource limitations/availability influence capacity for planning? Oracle Domain 3 – staff training, & Domain 4 – skilled staff as a resource to others ORACLe Domain 4 – supports and tools to enable access to research (Time is potentially a resource, but I have captured time under the 'external context' node, as generally time limitations are imposed by external factors)	RQ4

Codes (OQ = ORACLe question)	**Examples**	**What am I interested in?**	**Reason it's important to code** RQ = research question IQ = interview question

Organisational Capacity:
- Communication and networks
  - 'two communities' - relationships with researchers
    - Researcher participation in advisory committee (OQ23)
  - Collaboration with other PHNs
  - Collaboration with other local stakeholders
  - Mechanisms
    - Participation in forums/conferences? (OQ19)
    - Formal contractual relationships? (OQ 20)
    - Informal relationships (OQ 21)
    - Adjunct appointments? (OQ22)
	Eg PHN working with a university to do needs assessment	What relationships exist (or not) between PHNs and researchers, and others? What relationships do PHNs have with other actors to enable/hinder evidence informed planning
		ORACLe Domain 7 – mechanisms to facilitate relationships with researchers
			RQ4

Organisational Capacity:
- Capacity for generating new evidence to support PHN work
- Evaluation
    - Evaluation required? (OQ 16)
    - Documented processes for evaluation? (OQ 17)
    - Based on research? (OQ18)
	This node is distinctly about PHNs' *capacity* for evidence generation, rather than simply acknowledging that generating evidence is a function of PHNs - captured under 'PHN Functions'	ORACLe Domain 5 – Systems/methods to generate new research evidence
		ORACLe Domain 6 – methods for evidence-informed evaluation
			RQ4

Uncertainty of expectations/purpose	A clinical council needing to ascertain what their purpose was and what the requirements were for work plans	(Not sure where to fit this – is it an internal or external context limitation relating to transition, or an organisational capacity (leadership) limitation?) Uncertainty can hinder progress, and if the purpose is not clear, the use of evidence in achieving the purpose is likely to be hindered. Important to capture the phenomenon at least, and then work out how to explain it.	RQ1, RQ4?

Codes (OQ = ORACLe question)	**Examples**	**What am I interested in?**	**Reason it's important to code** RQ = research question IQ = interview question
Conception of evidence		How is evidence conceived by the PHN, what do they consider evidence to be and not be?	RQ3 IQ2.1
Evidence-based/ evidence-informed planning • Types of evidence o Purpose ▪ Identify the problem ▪ Understand the cause of the problem ▪ Indicate effectiveness of an intervention ▪ Targeting ▪ Stakeholder acceptability ▪ Establish cost-effectiveness ▪ Indicate implementation strategies o Source ▪ Consultation: • Community • Service providers • Experts • Researchers • Others? ▪ PHN analysis of data (specific) • Demographic • Epidemiology • Service utilisation • Service capacity mapping ▪ External Data sources • Cwlth Govt data • GP records extracts • State bodies		Interviewees perceptions of evidence purposes and sources use in planning At what 'stages' of planning is evidence used more/less? For what purposes is evidence used more/less? How much goes into understanding the 'problem'? Or does the PHN apply its own 'problematization' – this influences what options might address the problem. (*Hypothesis – evidence is used a lot in identifying problems, to lesser extent in understanding problems, and to a negligible extent for the other 3 purposes*) Which types of evidence, categorised by source, are used more/less? The types of data most used indicate how the 'problems' are represented – medical/SDH? (*Hypothesis – community consultation and epidemiologic data are used more than other sources. Not much use of evaluations or grey lit, very little use of academic research either published or commissioned*)	RQ3 IQ 2.2 IQ 2.3

Codes (OQ = ORACLe question)	**Examples**	**What am I interested in?**	**Reason it's important to code** RQ = research question IQ = interview question
• Hospital data • Local organisations ▪ Explicit mention of 'anecdotal' evidence ▪ Expert staff ▪ Evaluation report ▪ Grey literature (other than evaluation) ▪ Published literature ▪ Mention of being based on a current program/service model ○ Explicit mention of "evidence"		Path dependency?	
Further sources of evidence		Are there other types of evidence that would be useful that PHNs don't have access to?	IQ 2.4
Examples of drawing on evidence	Eg Indication of using a model that has been demonstrated in British Columbia	What are some examples of where the PHNs plans have drawn on evidence? (also contributes data to the 'types of evidence' nodes)	IQ 2.6
Memorable quotes		A direct quote that illustrates a point well	

Appendix J: Complete Coding Framework (NVivo codebook extract)

Nodes\\1. Environment

The broad environment/system in which planning takes place, both external and internal

Name	Description
1.1 PHN Planning environment	Characteristics of the PHN and the external context
1.1.1 Actors	Individual or organisational actors who have direct or indirect influence in planning/decision making
Degree of influence	
1.1.2 Functions	Functions of the PHN
1.1.2.1 Filtering	Where the PHN plays a role in filtering or amplifying knowledge/evidence
1.1.2.2 Generation	Knowledge/evidence generation or dissemination
1.1.2.2.1 Internal research (OQ14)	
1.1.2.3 Planning Process	Indications of how the PHN goes about planning and decision making
1.1.2.3.1 Systematic or ad hoc process	
1.1.2.3.2 Unsolicited proposals process	
1.1.2.3.3 Engaging with evidence (process)	
1.1.2.3.4 Needs Asst answer to planning Question	Examples of where an interviewee responds to my questions about planning process, with a description of needs assessment.
1.1.2.4 Research priority setting	Where the PHN set the research agenda
1.1.3 External context and influences	External contextual factors, beyond the control of the PHN eg Political and Governance systems Economic and social conditions Educational levels and supply of graduates External political stuff that impacts on what the scope or funding of the PHN is, eg being in a marginal seat. While it is a political influence, it is on the PHN, rather than within the PHN on what the PHN is planning. regulations and legislation Basic research infrastructure
1.1.3.1 Commonwealth Dept of Health	Factors imposed by the Commonwealth Dept of Health through their funding contracts
1.1.3.2 Legislation	Limitations imposed by legislation
1.1.3.3 Scope	Limitations of scope, inflexibility of funding
Funding volumes limit scope	
Geography	Size or boundaries of the region
1.1.3.4 Time	Time limitations/constraints imposed by external bodies to meet deadlines
1.1.3.5 Other external influences	
1.1.4 Internal context	Contextual factors within the PHN, that are potentially modifiable
1.1.4.1 Culture	Indications of the culture or vibe of an organisation

Name	Description
1.1.4.1.1 Equity culture	Indications of organisational culture for/against equity
1.1.4.1.2 Evidence culture	Indication of organisational culture for/against evidence use
1.1.4.1.3 General culture	Discussion of organisational culture generally
1.1.4.2 Values	Explicit mentions of organisational values
all PHNs values	
1.1.5 PHN structure and governance	Structures/ mechanisms of the organisation, including corporate governance structures and bodies
1.1.6 Transition	The history of the PHNs transition from ML(s)
1.1.7 Uncertainty	Where the PHN (or parts of) are uncertain about expectations or purpose eg a clinical council being uncertain of what their purpose was
1.2 Influences on planning	Influences on planning and/or decision making. Direct or indirect. More specifically related to planning rather than the broader PHN or external context. Influences within the PHN planning scope eg a vested interest on a committee, rather than influences that on that scope eg a politician's self-interest in allocating and announcing something for the PHN, that the PHN has no control over whether they get it or not.
1.2.1 Ability	ability to use evidence
1.2.2 Ideology	ideology and values of actors
1.2.3 Interests	interests and agendas of actors
1.2.4 Experience	personal experience and intuition of actors
1.2.5 Institutional forces	
1.1.3.6.1 Regulative	The regulative element deals with policies, rule-setting and legal obligations with coercive mechanisms acting as the key driving force for action, meaning ‘organisations act in a certain way because they have to’.
1.1.3.6.2 Cultural cognitive	The cultural-cognitive element stresses conceptions of the nature of social reality and the frames through which meaning is made.
1.1.3.6.3 Normative	The normative element is concerned with values and norms which define goals or objectives, in other words ‘assumptions and expectations about what ought to happen’
1.2.6 Ideas	Ideas are defined as ‘knowledge or beliefs about what is (evidence-base), what ought to be (values) or a combination of the two’ and are closely linked with the normative pillar

Nodes\\2. Capacity

PHNs' capacity elements/domains

Name	Description
2.1 Resources	Physical and human resources for evidence informed planning
2.1.1 Workforce	PHN workforce capacity - numbers, skills, experience, training/development. Ie existing staff capacity or efforts to build staff capacity
2.1.1.1 Staff OQ10	

Name	Description
2.1.1.2 Training and development OQ6	
2.1.1.3 PD requirement for staff OQ7	
2.1.1.4 Guidance resources OQ9	
2.1.2 Access to evidence	Access to evidence - eg lack of available evidence/research
2.1.2.1 Dissemination within PHN OQ8	
2.1.2.2 Commissioned research OQ15	
2.1.2.3 Journal or Endnote subscriptions OQ11	
2.1.3 Budget	budget/monetary constraints
2.1.4 Facilitators	Resources/systems to facilitate the analysis/use of evidence eg software, data/document management system
2.1.4.1 Knowledge management system OQ13	
2.2 Planning Governance	Indications of governance capacity supporting/hindering EIP. Governance of the planning process, not corporate governance.
2.2.1 Accountability	Mechanism to ensure clear links back to the public to ensure principles of democratic accountability. Oversight mechanisms.
2.2.2 Appropriateness	Mechanism to assess the appropriateness of evidence for planning. Decision criteria and /or criteria for quality of evidence
2.2.3 Contestability	mechanisms to challenge the evidence used to inform a policy decision, to question the appropriateness of the evidence
2.2.4 Transparency	How the relevant evidence base for a given policy decision was identified and deployed, and which social, political and economic considerations were prioritised in arriving at these decisions must, therefore, be clearly visible and open to public scrutiny.
2.2.5 Documented processes	Domain 1: Documented processes to develop policy/plans that encourage or mandate the use of research
2.2.5.1 Existence of documented processes OQ1	OQ1
2.2.5.2 Encourage or require research use OQ2	OQ2
2.2.5.3 For commissioning reviews OQ12	OQ12
2.3 Leadership	Indications of leadership capacity supporting/hindering evidence informed planning
2.3.1 Internal communications OQ5	Have leaders of the organisation referred to research in their internal communication (e.g. newsletters, bulletins, updates, tweets, etc.)?
2.3.2 Tools or programs for leaders OQ3	Domain 2: Tools and programs to assist leaders of the organisation to actively support the use of research in policy and program development
2.3.3 PD requirement OQ4	OQ 4
2.4 Communication and Networks	Indications of relationships within or beyond the PHN that support or hinder evidence informed planning

Name	Description
2.4.1 Collaboration	Collaboration with stakeholders that hinders/enables EIP
2.4.1.1 Other stakeholders	Collaboration with other stakeholders that hinders/enables EIP
2.4.1.2 Other PHNs	Collaboration with other PHNs
2.4.1.3 With researchers	Indications of connection or disconnection with researchers
2.4.1.3.1 Benefits of relationships	Real or potential benefits of relationships between PHNs and researchers
2.4.1.3.2 Risks or problems with relationships	
2.4.2 Mechanisms for collaboration	ORACLe Domain 7 – mechanisms to facilitate relationships with researchers (and other stakeholders)
2.4.2.1 Forum or conference participation OQ19	
2.4.2.2 Formal or informal relationships OQ20 and 21	
2.4.2.3 Adjunct appointments OQ22	
2.4.2.4 Researchers on advisory committees OQ23	
2.4.2.5 Mechanisms for collaboration with non-researchers	Collaboration mechanisms that are not specifically about connecting PHN and researchers
2.5 Generating evidence capacity	Domain 5: Presence of systems/methods to generate new research evidence to inform the organisation's work. This node is about the capacity for evidence generation, rather than simply acknowledging that generating evidence is a function of PHNs. This is captured under 'PHN functions'.
2.6 Evaluation capacity	Domain 6: Clear methods to allow adequate, evidence informed evaluations of the organisations' policies and programs
2.6.1 Evaluation required OQ16	
2.6.2 Documented processes for evaluation OQ17	
2.6.3 Eval process based on research OQ18	
2.6.4 Evaluation sub themes	Further thematic analysis of notes made on evaluation node data
Challenges or barriers to evaluation	
Enablers to evaluation	
Evaluation other	
Progress and intentions in evaluation capacity development	
What they have or do	
2.7 Other Capacity	Other mentions of organisational capacity (not necessarily in relation to evidence informed planning)

Nodes\\3. Evidence

Use of evidence in planning, various typologies

Name	Description
3.1 Evidence purpose	The (assumed) purpose for which evidence is used
3.1.1 Identify the problem	Evidence to show that a population health need exists
3.1.2 Targeting	Use of evidence to inform decisions about which areas/population groups to target eg using immunisation data to identify which regions to focus on
3.1.3 Understand the problem	Evidence to understand the cause of the problem, or the factors contributing
3.1.4 Program or service design	Input/advice/evidence to inform the design of a program or service, as distinct from strategies to implement the program/service
Co-design	Where Co-design approaches are mentioned
3.1.5 Intervention effectiveness	Evidence to indicate that the planned intervention is effective
3.1.6 Cost effectiveness	Health economic evidence to show the value for money of an intervention
3.1.7 Acceptability	Evidence that an intervention is acceptable to stakeholders/community members
3.1.8 Implementation strategies	Evidence as to the strategy/approach for implementing an intervention
3.1.9 Other evidence purpose	
3.2 Evidence source	Where has the evidence been drawn from?
3.2.1 Consultation	consultation/engagement with PHN stakeholders
3.2.1.1 Community	
3.2.1.3 Service providers	People who provide health services, eg doctors, allied health pharmacists, nurses etc
3.2.1.4 Experts	Expert stakeholders eg Cancer Council
3.2.1.5 Researchers	academic researchers
3.2.1.6 Stakeholders unspecified	
3.2.1.7 Other	Any stakeholder consultation that does not fit within any of the above categories
3.2.2 External data sources	Analysis of data from other external sources, other than the standard data provided by PHIDU
3.2.2.1 Commonwealth Government data	Data sourced from the Commonwealth Government, including via PHIDU. eg Census, AIHW (but not reports), SEIA etc
3.2.2.2 State Government data	Data sourced from a State/Territory government, either directly, or via a website.
3.2.2.3 Local hospital data	Data provided by a local hospital, not through PHIDU or a State Government source
3.2.2.4 Local organisations	eg safe injecting centre, NGO
3.2.2.5 GP clinical records extracts	
3.2.3 Grey literature	Evidence sourced from grey literature (other than evaluation reports) eg plans, reports, reviews. Where there has been

Name	Description
	analysis and interpretation of data by the authors rather than the PHN.
3.2.4 Published academic literature	Incl journal articles, books
3.2.4.1 Reference provided	
3.2.4.2 No reference	
3.2.5 Evaluation report	Evidence obtained from an evaluation report
3.2.5.1 Evaluation by the PHN	Evaluation report from within the same PHN
3.2.5.2 Evaluation by another organisation	Evaluation report by another organisation, may be another PHN
3.2.5.3 Evaluation by unknown author	Evaluation report from an unknown source/author
3.2.6 PHN needs assessment (unspecified)	A non-specific reference to the PHN's needs assessment
3.2.7 Anecdotal evidence	Explicit mentions of 'anecdotal' evidence
3.2.8 Existing model	Mention of being based on a current service/ program model, or a continuation of existing
3.2.9 Expert staff	A staff member with expertise, eg an academic advisor, as opposed to engagement with external experts
3.2.9 Secondary analysis	Secondary analysis of data from an external study, for the purposes of the PHN eg National Mental Health Survey, North West Adelaide Area Health Survey
3.3 Evidence type	Where the PHN have conducted analysis of raw quantitative data, to form their own conclusions and interpretations
3.3.1 Demographic	Non-modifiable characteristics eg SES, CADL, ATSI. Excludes modifiable risk factors such as smoking etc
3.3.2 Epidemiologic	eg health status, prevalence, incidence, outcomes. Includes health risk factors eg smoking, obesity, physical activity etc
3.3.3 Service capacity	eg GP workforce ratios, geographic distribution of services etc
3.3.4 Service utilisation	eg MBS data, PBS data, PIP, referrals, hospitalisations rates etc
3.4 DIKW	What 'level' of evidence is it?
3.4.1 Data	symbols that represent properties of objects, events (populations). From observation
3.4.2 Information	descriptions – who, what, when, how many. Has purpose, meaning, can be understood by the recipient
3.4.3 Knowledge	knowledge, from experience or instruction. Tacit or explicit
3.4.4 Wisdom	ability to increases effectiveness, requires judgement, including values
3.5 Explicit reference to 'evidence' in docs	Where explicit mention is made of the evidence-base, or that evidence has informed something
EB planning	Reference to evidence based planning by the PHN (not evidence based practice by clinicians)
EB practice	Reference to evidence based clinical practice by clinicians, rather than evidence based planning by the PHN
3.6 Intended evidence informed planning	Where intentions to use evidence to inform planning are stated
3.7 Other evidence	Other mentions of evidence that don't fit other categories eg intention to conduct research to inform planning

Name	Description
3.8 Interviewee descriptions of evidence in planning	Indications of evidence use in planning
3.9 Conception of evidence IQ2.1	
Evidence wishlist IQ2.4	IQ2.4 Other types of evidence that would be useful that PHNs don't have access to?

Nodes\\4. Equity

Data relating to equity

Name	Description
4.1 Inequity mention	
4.1.1 Explicit	eg 'address health disparities'
4.1.2 Implicit	eg focus on area with highest prevalence
4.2 Addressing inequity	Where they occur, are approaches to inequity posed as broad goals, more specific objectives, and/or are specific strategies for action outlined?
4.2.1 Goal	Broad, long term outcomes, motherhood statements
4.2.2 Objective	More specific statement of an intended short- medium term outcome/output from a PHN initiative
4.2.3 Strategy	Actions that the PHN is intending to implement in order to achieve and equity objective
4.3 Type of inequity mention	How is inequity framed/ conceived? What aspects of inequity do PHNs focus on?
4.3.1 Access to services	
4.3.2 Disadvantage groups	mentions of disadvantaged groups within the community eg CALD, ATSI, low SES etc
4.3.3 Health literacy	Reference to health literacy as a health equity 'problem'
4.3.4 Outcomes	Inequity of health outcomes (following an intervention)
4.3.5 Quality of care	
4.3.6 Social determinants	Reference to the social determinants of health, explicit or implicit. Acknowledgement of, doesn't need to be actual plans for addressing SDH
culture and religion	
discrimination and racism	
education attainment	
employment	
family relationships	
food	
General SDH mention	
housing and homelessness	
SDH Action	Examples of action on the SDH
SDH inability	Interview data about PHNs lack of ability to act on SDH
SDH recognition	Where interviewees acknowledge or recognise SDH issues
social isolation	
socioeconomic, poverty	

Name	Description
transport	
trauma	
violence and safety	
4.3.7 General acknowledgement of inequity	
4.4 Equity barriers and enablers	
4.4.1 Equity Barriers	
4.4.2 Equity Enablers	
4.4.2.1 Systematic mechanisms	
4.5 Universality	
4.5.1 Targeted	Strategies that are specifically targeted or are of limited eligibility
4.5.2 Universal	
4.6 Equity other	
4.7 AWP equity approaches	Data from AWP activity sections, recoded according to the RPHCO framework for health inequity actions
4.7.1 access to local PHC services	
Can't tell	
Equity hindering	
Equity promoting	
4.7.2 access to other health and social services	
Can't tell	
Equity hindering	
Equity promoting	
4.7.3 address equity in quality of care	
Can't tell	
Equity hindering	
Equity promoting	
4.7.4 individual behaviour	
Can't tell	
Equity hindering or insensitive	
Equity promoting or sensitive	
4.7.5 upstream local intersectoral action	on living and working conditions
4.7.6 Broader advocacy on social, political and cultural determinants of health	
4.7.7 Non equity-oriented approach	
Can't tell	
Other	
Equity and evidence connection	

Name	Description
Recognition that needs based planning is equity oriented	

Appendix K: PHN values list

Name of PHN	**Stated values** (source: PHN website, annual report or strategic plan)
Central and Eastern Sydney	learning and growth integrity collaboration
Northern Sydney	innovation collaboration accountability respect excellence
Western Sydney	respect excellence leadership equity creativity
Nepean Blue Mountains	respect ethical practice quality collaboration continuous improvement
South Western Sydney	trust empathy courage fairness integrity optimism
South Eastern New South Wales	evidence-based innovation collaboration and participation clinical engagement and leadership efficiency and value for money accountability and transparency
Western New South Wales	integrity collaboration professionalism respect innovation
Hunter New England and Central Coast	respect innovation accountability integrity cooperation recognition
North Coast	fairness and integrity learning and innovation openness and transparency enthusiasm and optimism care and compassion
Murrumbidgee	work together be honest value everyone learn from others aim to inspire
North Western Melbourne	equity respect collaboration innovation
Eastern Melbourne	leadership understanding

	collaboration outcomes
South Eastern Melbourne	collaboration community focused accountability respect excellence solution focused
Gippsland	community-centred ethical and respectful innovative accountable quality a long-term, whole system perspective performance, efficiency and value leading innovation and evidence-based practice collaborative local leadership equitable access consumer self-determination and empowerment
Murray	leadership collaboration knowledge innovation accountability
Western Victoria	respect listen value respond connect engage collaborate empower lead question innovate pioneer
Brisbane North	community focused, through strong and productive relationships embracing diversity and striving for equity demonstrating passion to innovate and achieve outcomes acting with integrity and accountability to our community
Brisbane South	courage respect integrity synergy purpose
Gold Coast	sustainable (efficient, effective, viable) collaborative (partnerships, integrated, engaged) innovative (flexible, pioneering, evolutionary) influential (visible, valued, courageous) evidence-based (research, documenting, transparent) accountable (respect, responsible, outcomes)
Darling Downs and West Moreton	collaboration integrity accountability innovation transparency respect
Western Queensland	collaboration fairness innovation integrity respect responsiveness participation
Central Queensland and Sunshine Coast	respect innovation courage diversity collaboration excellence

Northern Queensland	people cultural competency engagement evidence and data innovation integrity
Adelaide	communication commitment respect quality transparency equity accountability trust
Country South Australia	valuing the individual respect equity knowledge collaboration
WAPHA (Perth North, Perth South, Country Western Australia)	courage humility respect wisdom integrity
Tasmania	respect collaboration results professionalism
Northern Territory	relationships equity responsiveness innovation results
Australian Capital Territory	accountability collaboration integrity respect

Appendix L: ORACLe score details, by question and domain

			PHN					
Domain	**Question**	**Max domain score**	**Metro North**	**Metro South**	**Rural North**	**Remote**	**Rural South**	**Average Domain score**
1	**1**		2.5	2.5	2.5	2.5	3	
1	**2**		3	3	2	1	3	
Domain 1 average			2.75	2.75	2.25	1.75	3	2.50
2	**3**		2	1	2	2	2	
2	**4**		3	1.5	3	3	3	
2	**5**		3	2.5	3	1	2	
Domain 2 average			2.67	1.67	2.67	2.00	2.33	2.27
3	**6**		2	2.5	2	2	2	
3	**7**		2	2	1	2	2	
Domain 3 average			2	2.25	1.5	2	2	1.95
4	**8**		2	3	2	3	2	
4	**9**		1	1	1	1	1	
4	**10**		3	3	3	2	3	
4	**11.1**		3	3	1	1	3	
	11.2		3	3	1	1	1	
	11.3		2.5	1.5	1.5	1.5	1.5	
	11.4		1	1	2	1	2	
	11 avg		2.38	2.13	1.38	1.13	1.88	
4	**12**		1	3	1	2	3	
4	**13**		2	2	2	1	2	
Domain 4 average			1.90	2.35	1.73	1.69	2.15	1.96
5	**14**		3	3	2	3	3	
5	**15**		3	3	3	3	2	
Domain 5 average			3	3	2.5	3	2.5	2.80
6	**16**		3	3	2	2	2	
6	**17**		2	1	2	1	2	
6	**18**		2	1	2	1	2	
Domain 6 average			2.33	1.67	2.00	1.33	2.00	1.87
7	**19**		3	3	3	3	3	
7	**20**		2	2	3	3	3	
7	**21**		3	3	3	3	3	
7	**22**		2	1	1	1.5	2.5	
7	**23**		3	2	1	3	3	
Domain 7 average			2.6	2.2	2.2	2.7	2.9	2.52
Raw, unweighted total score		69	54.88	51.13	47.88	47.13	55.38	
Raw, unweighted average score/3			2.39	2.22	2.08	2.05	2.41	
Adjusted weighted total ORACLe score/9			8.887	8.341	7.839	8.410	8.728	
Adjusted weighted total ORACLe score/3			2.962	2.780	2.613	2.803	2.909	

Windle *et al. Health Res Policy Sys (2021) 19:25*
https://doi.org/10.1186/s12961-021-00682-5

Health Research Policy and Systems

RESEARCH Open Access

Assessing organisational capacity for evidence-informed health policy and planning: an adaptation of the ORACLe tool for Australian primary health care organizations

Alice Windle[1*], Sara Javanparast[2], Toby Freeman[1] and Fran Baum[1]

Abstract

Background: Many nations have established primary health care (PHC) organizations that conduct PHC planning for defined geographical areas. The Australian Government established Primary Health Networks (PHNs) in 2015 to develop and commission PHC strategies to address local needs. There has been little written about the capacity of such organizations for evidence-informed planning, and no tools have been developed to assess this capacity, despite their potential to contribute to a comprehensive effective and efficient PHC sector.

Methods: We adapted the ORACLe tool, originally designed to examine evidence-informed policy-making capacity, to examine organizational capacity for evidence-informed planning in meso-level PHC organizations, using PHNs as an example. Semi-structured interviews were conducted with 14 participants from five PHNs, using the ORACLe tool, and scores assigned to responses, in seven domains of capacity.

Results: There was considerable variation between PHNs and capacity domains. Generally, higher capacity was demonstrated in regard to mechanisms which could inform planning through research, and support relationships with researchers. PHNs showed lower capacity for evaluating initiatives, tools and support for staff, and staff training.

Discussion and conclusions: We critique the importance of weightings and scope of some capacity domains in the ORACLe tool. Despite this, with some minor modifications, we conclude the ORACLe tool can identify capacity strengths and limitations in meso-level PHC organizations. Well-targeted capacity development enables PHC organizations' strategies to be better informed by evidence, for optimal impact on PHC and population health outcomes.

Keywords: Evidence-informed health planning, Policy-making, Organizational capacity, Primary health care, Oracle tool

Background

The importance of using evidence to inform health policy and planning decisions is well recognized. These decisions are also influenced by practical, political and ideological factors. Much research has sought to identify key barriers to the 'push' and 'pull' of evidence for use in health policy-making [1], which can be broadly categorized as follows: decision-makers lack access to appropriate evidence; or the need to balance a complex range of political, ideological or other influences, with evidence [2–4]. Following earlier calls to increase capacity to use evidence in decision-making [5], further similar calls have been made in recent years [6–10] and has led to the development of various tools to assess health policy agencies' organizational capacity for using research. The most

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*Correspondence: alice.windle@flinders.edu.au
[1] College of Medicine and Public Health, Southgate Institute for Health Society and Equity, Flinders University, Adelaide, SA, Australia
Full list of author information is available at the end of the article

recent of these, building on lessons from earlier tools, is the ORACLe interview tool which examines seven domains of organizational capacity, and was developed by the Sax Institute in Australia, within a suite of tools and services to help policy agencies improve evidence-informed policy-making [8, 11, 12]. One such tool is the SAGE tool, which is based on qualitative assessment of research use in policy development, and has been used alongside the ORACLe tool [12]. The ORACLe tool has been assessed as methodologically sound [13], and has been applied to policy agencies in Australia [7].

Extensive literature on the use of evidence in decision-making spans a broad range of disciplines, and health policy-making and clinical practice are areas that feature prominently. In between these realms of broad population-based approaches implemented by governments, and individual services delivered by health care professionals is the meso level of health planning, which involves devolved, relatively autonomous regional decision-making for a geographically defined population. While not strictly 'policy-making', it similarly involves making decisions and allocating public money to interventions designed to improve population health, amidst a complex range of competing influences. Devolved decision-making, as with that of 'higher' levels of government, is likely to be most useful and least harmful when informed by the systematic and transparent use of a range of different types of evidence [14, 15], yet there is a paucity of literature exploring the use of evidence in this context.

Meso-level, regional primary health care organizations (PHCOs) feature in the health systems of numerous high-income countries, including the United Kingdom [16], New Zealand (Primary Health Organizations, [17]) and Scotland (local authorities and Integrated Joint Boards, [18]). In Australia, there are 31 Primary Health Networks (PHNs), funded by the Australian Government, with responsibility for allocating hundreds of millions of (public) dollars to primary health care initiatives to improve health outcomes and access. However their capacity to achieve these goals has been queried [19] and so examination of their capacity for evidence-informed planning is warranted.

This paper provides a reflective critique of the use of a slightly adapted version of the ORACLe tool to assess the organizational capacity of meso-level PHCOs for evidence-informed health planning critically, and presents the findings of applying the tool to Australian PHNs.

Methods

Research context

This research extends on a larger National Health and Medical Research Council-funded mixed-methods research programme that ran from 2014 to 2018, and examined various aspects of Australian PHCOs (PHNs and their predecessors, Medicare Locals): governance, health equity, comprehensive PHC approaches, population health planning, evidence use in planning and more. The research has employed a range of methods; however, the principal approach drawn on in this paper has been case studies of five PHNs. A purposive sample of PHNs were recruited, ensuring a range of metropolitan and rural/remote PHNs from different states/territories. Four of the PHNs had participated in earlier stages of the research, and another was recruited on the basis of similarities with a discontinuing PHN. Two of the five PHNs were in metropolitan areas, one was in a rural area, and two covered both metropolitan and rural areas. To ensure anonymity, participating PHNs are referred to as Metro North, Metro South, Rural North, Rural South, and Remote.

This paper focusses on data drawn from 14 semi-structured interviews with employees from participating PHNs, conducted in 2018 specifically for this component of the research. The interviews also included a range of questions on other factors relevant to evidence-informed planning. Analysis of internal policy documents supplemented the interview analysis. Qualitative analysis of all interviews was conducted alongside ORACLe tool analysis.

ORACLe tool: adaptation and interview protocols

The ORACLe tool is an interview schedule of 23 questions, designed to examine organizational capacity for evidence-informed policy-making in health policy agencies. (For a detailed description of the development and validation of the ORACLe tool, see Makkar et al. [8].)

The tool examines capacity across seven domains, each weighted for their relative importance:

1. Documented processes to develop policy and plans that encourage or mandate the use of research (11.88%)
2. Tools and programmes to assist leaders of the organization to actively support the use of research in policy and programme development (19.48%)
3. Availability of programmes to provide staff with training in using evidence from research in policy and in maintaining these skills (20.53%)
4. Availability of support and tools to help staff access and apply research findings (17.57%)
5. Presence of systems/methods to generate new research evidence to inform the organization's work (8.74%)

6. Clear methods to allow adequate, evidence-informed evaluations of the organizations' policies and programmes (10.96%)
7. Mechanisms that help strengthen staff relationships with researchers (10.84%) [8]

The ORACLe tool questions were incorporated into a semi-structured interview schedule that addressed a range of issues related to evidence-informed, equity-focussed health planning, including organizational capacity.

In order to maintain the established validity of the tool, little change was made to the content and intent of the questions, other than to adapt some wording to reflect PHN planning, rather than government policy-making. For example, questions that originally specified 'in the last 6 months' were changed to '12 months' to reflect the annual commissioning cycle of PHNs. In preparing the ORACLe-based interview schedule, the scoring guide was consulted to help ensure that further 'probe' questions were included so that sufficient detail could be obtained for scoring. Given that interviews were semi-structured, there was some variation as to the use of further probing questions, as necessary, and sometimes in the ordering of questions, in response to the 'flow' of the more conversational style of interviews. The interview schedule was piloted with two interviewees from a non-participating PHN.

Participating PHNs were invited to nominate interview participants, representing three different levels of involvement in planning and programme development—CEO (or deputy), and a senior manager and staff member involved in planning. One PHN nominated only two participants because they only had a small team to draw from. None of the invited interviewees declined. All interviewees gave informed consent to participate in the research, and none dropped out. Of the 14 interviews, 13 were conducted face-to-face at the respective PHN, and one was conducted via telephone. Interview duration ranged from approximately 60 to 80 min. There were no non-participants present in interviews. Interviews were conducted between May and September 2018, and there were no repeat interviews. Interviews were conducted by AW, a female PhD candidate who has experience in qualitative interviewing, and has worked for PHCOs in planning. Two of the interviewees had prior professional peer interactions with the interviewer, and the rest had only a preliminary introduction to the research and interviewer prior to participation. At the beginning of each interview, the interviewer introduced herself and provided a summary of her experience in PHCOs and the research aims. All interviews were digitally recorded and professionally transcribed. Field notes were also made during and after each interview. All interviewees were offered the opportunity to review their transcript prior to analysis.

Ethics approval was granted by the Flinders University Social and Behavioural Research Ethics Committee (Approval #6376), and all participants gave informed consent to participate.

ORACLe tool analysis and scoring

Transcripts were coded using NVivo qualitative analysis software (QSR, Doncaster, Victoria), using a coding framework of key research themes drawn from a conceptual framework of evidence-informed health policy-making [5], and the specific ORACLe tool questions.

The original application of the ORACLe tool involved only one CEO interview per organization, which made for simple allocation of a score based on the responses from one person. As recognized in the open peer review of the ORACLe paper [20], and by others [21], perceptions can differ between individuals within the same organization, so our research drew on 2–3 interviewees from each organization.

Once coded to relevant nodes, ORACLe data were extracted from NVivo into a MS Word table, with responses organized by question for each PHN. The approach to scoring each question involved first consulting the scoring guide for the respective question [8], and then doing a 'familiarisation' read through all relevant responses. A second closer reading of each response was then conducted, and a preliminary score allocated to each individual's response. Responses were then re-read, to check for consistency within the PHN. A corresponding 'consensus score' for the question, for the PHN was assigned. Where scores were consistent, this became the consensus score, and where there were inconsistent responses between interviewees, judgment on the most valid response was made, on the basis of being more detailed, or a more relevant perspective. For example, the planning manager was deemed to be best placed to know whether their position description covered expertise in use of research in planning (Question 4). Throughout this process, there was frequent comparison and checking between PHNs, to ensure a consistent approach. The rationale for assigning the consensus score was noted in the table. Qualitative thematic analysis of data was also conducted alongside ORACLe scoring, the detailed findings of which will be reported elsewhere.

While the original ORACLe tool involved scores of only whole numbers (1, 2 or 3), this application of the tool allowed for increments of 1.5 and 2.5 where the response was greater than the lower score, but did not qualify for the higher score, according to the scoring guide. Intermediate scores have been used in other applications of the tool [7]. Intermediate scores were assigned for only 14 of the 130 responses. The ORACLe tool paper recommended that scoring be conducted by an independent person, who had not conducted interviews [8]. In this research, AW conducted, coded and scored the interviews. A scoring validity check on responses from one PHN was conducted by a member of the research team (TF), which indicated a satisfactory degree of consistency. Differences were discussed until agreement was reached.

Once consensus scores had been assigned for all questions and PHNs, scores were entered into a MS Excel spreadsheet. Total and average question consensus scores within capacity domains were calculated. Total weighted scores for each PHN were also calculated using the conditional logit model outlined in Additional File 1 of the ORACLe paper [8].

Internal document analysis

Thirty internal policy or guidance documents were sourced. Twenty-six were provided by PHNs and four were downloaded from their websites. These documents were examined for documented planning processes/procedures. This evidence was then triangulated with interview responses regarding documented processes, from Domain 1 of the ORACLe tool. While this aspect was not specified in the original ORACLe procedure, we collected these data to add rigour.

ORACLe tool critique

Before using the ORACLe tool in this research, a theoretical critique was conducted to examine its alignment with key theory in the international literature on evidence-informed health policy-making and to consider its appropriateness for application to PHCOs. This critique is examined in the "Discussion" section of this paper. While some concerns were identified, it was decided that the tool was acceptable to use.

A practical critique of the ORACLe was based on the reflections of the first author's experience in piloting the tool, using it in interviews and subsequently coding data and assigning scores. This drew on the field notes taken during and after interviews, and a methodology journal kept during the process of data coding and analysis.

Results

PHN scores and capacity

Application of the ORACLe tool identified variation between PHNs and between capacity domains. On the basis of unweighted, average domain scores, no one PHN consistently scored higher or lower than others (Fig. 1).

PHNs generally demonstrated moderate to high capacity, based on average domain scores ranging from 1.9 to 2.8 (out of 3).

Strongest capacity was demonstrated in generating new research, through frequent, recent internal research such as focus groups, surveys, and data analysis, or through externally commissioned research projects (Domain 5).

Several PHNs demonstrated moderately strong capacity through the reported existence of documented processes that provide detailed guidance on planning/programme development, and explicitly encourage or require evidence use (Domain 1). PHNs also demonstrated moderate to strong capacity in terms of mechanisms for relationships with researchers, by virtue of having both formal and informal relationships and participation at conferences, and to lesser extents, researcher

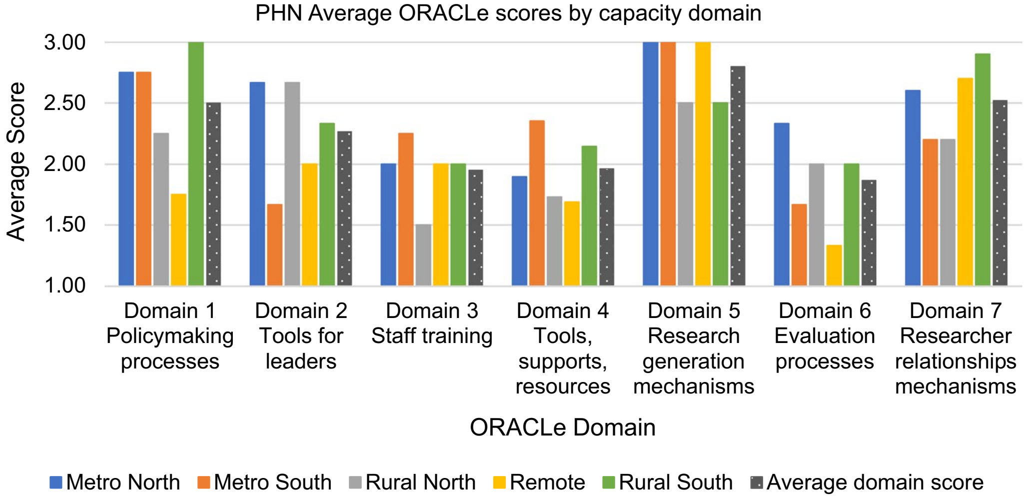

Fig. 1 PHN average scores by capacity domain

participation in advisory groups, and joint appointments with research organizations (Domain 7).

Moderate capacity was demonstrated in relation to leadership supports for the use of evidence, in that for most PHNs, leaders' position descriptions explicitly covered expertise in use of research, and generally there was relevant professional development available for leaders. There was variation in the extent to which leaders reported mentioning research/evidence in their internal communications (Domain 2).

There were three capacity domains for which average scores sat below the midpoint of 2, indicating relatively lower capacity. Training for staff was generally available and considered in performance management, although mainly not specifically regarding evidence use, and was ad hoc (Domain 3). PHNs' supports for accessing and applying research evidence varied considerably. Staff with such expertise were relatively common, but there was variation in the extent to which relevant research was internally disseminated, or there were subscriptions to research journals and databases, or documented methods to commission reviews. There was generally low capacity in terms of knowledge management systems, libraries, reference management software, and particularly resources to guide the use of research evidence (Domain 4). While PHNs generally encouraged evaluation to be built into programme development, either implicitly or explicitly, capacity was lower in terms of documented, evidence-informed processes for conducting evaluation (Domain 6).

PHNs' scores tended to be lower in the domains with high importance weightings (2, 3 and 4) and higher in the lower weighted domains (1, 5 and 7).

When recommended weightings were applied and domain scores totalled [8], there was less variation between PHNs, and all PHNs scored highly, indicating strong capacity (range 7.8–8.9 /9) (Fig. 2).

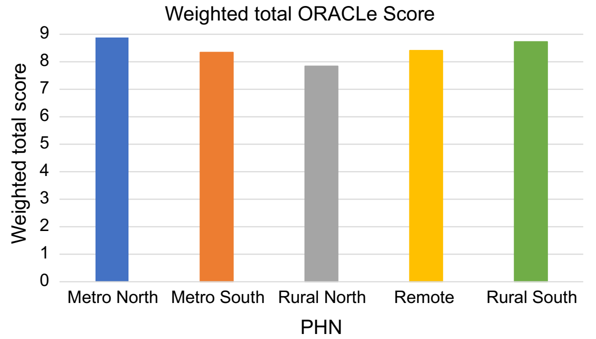

Fig. 2 Weighted total ORACLe scores

Assessment of ORACLe tool

Key strengths and limitations of the usability and value of the ORACLe tool, in meso-level PHC planning are outlined below.

Strengths

The decision to allocate scores on the basis of several interviews including the CEO was warranted, as there were indications in several instances where the CEO was not best placed to respond, for example:

> *"Probably [manager] would be better able to inform you as to what happens with that stuff [various evidence sources/materials] when I send it through to them. I have to say I don't know what happens to an awful lot of the stuff that I push down" (Senior Executive, Rural South PHN).*

An assessment of all interviews and questions suggests there were six responses for which there was insufficient data to allocate a score for one of the respondents. In these cases, it was valuable to have other responses to refer to. There was complete agreement between responses from all participants within a PHN on around half of the questions. There was also a degree of disagreement, which partly reflected the varying detail of responses, as well as the different perspectives and knowledge of interviewees.

Examination of PHN internal documents supported the favourable interview data regarding documented processes that encourage or require evidence use (Domain 1). The various documents examined tended to include broad guidelines for planning, such as overviews of the general commissioning cycle, and very few included specific procedures for programme planning, as the ORACLe tool sought. The documents did not include any prompts or mechanisms by which to critique the appropriateness or transferability of evidence for the issue under consideration. The most relevant documents were comprehensive commissioning toolkits or manuals (three PHNs), and templates for activity or programme plans (three PHNs). There was much to indicate that use of evidence was encouraged, but only a few examples of an evidence base or rationale being documented.

When there were several criteria involved in scoring a response, it was more difficult to allocate a score, and the ability to allocate an intermediate score (1.5 or 2.5) was helpful. For example, four PHNs were allocated a score of 2.5 on the question of whether the PHN has documented processes for how plans/programmes should be developed (Question 1, Domain 1). To achieve the full score of 3, there had to be detailed, organization-specific written guidance. In each of these PHNs interviewees were not confident in the degree of detail, so while there were documents, developed by that PHN, the full score was not warranted because of documentation lacking detail.

Our inclusion of additional 'probe' questions into the interview schedule proved to be essential to obtain sufficient detail for allocating scores to the responses.

Challenges

The existence of documented processes that encourage the use of evidence is a positive and important aspect of organizational capacity. However, the value of such documents relies on how well the guidance is applied or the processes adhered to. Despite high scores in this domain (1), it was reported by interviewees (from a high scoring PHN) that documented processes were not consistently followed because they were too detailed, and their use was not actively encouraged. Some inconsistency between interview responses within this PHN suggests that while documented processes exist (and a high score is warranted), they are not consistently used.

Our application of the ORACLe tool raised some general issues concerning its structure, flow and wording. For example, there was some overlap of questions and concepts between different domains, which made some aspects of the interview seem repetitious and disjointed. For example, there were two nonconsecutive questions about training for leaders (Domain 2) and training for staff (Domain 3), yet interviewees tended to talk about them all together. However, using NVivo, responses could be coded (and scored) to the relevant domain regardless of which question was being answered.

Some questions were commonly misinterpreted by interviewees, suggesting they may need to be worded differently. For example, Question 5 (Domain 2) asked about leaders *referring* to research/evidence in their internal communications, whereas four interviewees responded about *using* evidence in planning/programme development. Several questions may have benefitted from a preamble statement or preliminary question to clarify the focus.

Some questions, as worded, were not appropriate to the PHCO context. For example, Question 11.3 asked about having a library, which while reasonable in a large government department, is unlikely in a small organization. Subtly changing the question to ask about *access to* a library may have been appropriate. Some interviewees' responses implied that they perceived certain questions as unrealistic: *"Um, goodness me…"* (Senior Executive, Rural South PHN).

In some domains, the scores for certain questions were dependent on responses to other questions. For example, if 1 was scored for Question 17 (documented processes for evaluation), 1 was the only possible score for Question 18 (evaluation processes based on research) which potentially skewed results in this domain, which had the lowest average domain score, and considerable range (1.33–2.33).

In Questions 20 and 21 (formal and informal relationships respectively), the score was based on the number of relationships, which seems a somewhat crude way to measure engagement with researchers, and does not examine mechanisms to facilitate relationships.

Deeper probing for detail may have been beneficial in some questions. Many of the questions, as written in the original interview schedule, did not include sufficient probes to obtain the level of detail required by the scoring guide. Better interviewer technique to pursue the appropriate level of detail may also have helped; however, this can be challenging in a semi-structured interview where the order of questions can vary. Maintaining rapport with the interviewee and not being too assertive in asking critical questions is also an important consideration.

A criticism of the original tool was the use of the term 'research', and in practice, wording was sometimes adapted to reflect the broader concept of 'evidence'. Some interview participants' responses also explicitly distinguished between 'research' and 'evidence':

> *"Evidence yes. Research hmm?!" (Manager, Metro South),*
> *"Aah, I don't know if it's the use of research, it's about being evidence-based" (Manager, Remote)*

Although not recommended in the original ORACLe tool, qualitative analysis of ORACLe and additional interview data added to the ORACLe results provided a richer understanding of planning processes and influences on capacity. This analysis also identified ongoing strategies to improve aspects of capacity that did not yet strictly qualify the organization for a higher score. For example, one PHN was in the process of developing an evaluation framework, but did not yet have a documented guide for evaluating programmes. Qualitative analysis also identified a broad range of relationships between PHNs and other organizations, and various direct and indirect influences these have in evidence-informed planning. For example, strong relationships with state/territory government health departments enabled access to hospital and other data, which were an important evidence source for PHNs.

Discussion and conclusions

Our application of the ORACLe tool demonstrated it could be used to identify strengths and weaknesses in PHCOs' organizational capacity for evidence-informed planning. This section will discuss the utility of the tool for this purpose, explain some modifications we made, and explore criticisms we identified, reflecting on some key theoretical considerations regarding capacity elements and hierarchy.

Application to meso-level organization

Our research indicates that the ORACLe tool, while developed for state or national health policy-making, can be applied to examine organizational capacity for evidence-informed decision-making in meso-level health planning organizations. Within organizations it can help to identify certain aspects of capacity that may benefit from further development. It also offers value in potentially identifying common capacity limitations across like organizations, which may be addressed by broader capacity development strategies.

Our findings suggest that PHNs' capacity, based on adjusted weighted domain scores, is comparable, if not slightly stronger than that of government policy agencies [7]. PHNs generally demonstrated stronger capacity in Domain 2 (tools for leaders), and Domain 5 (research-generating mechanisms), and somewhat lower capacity in Domain 4 (tools, supports, resources). Any comparison between different types of policy agencies should be undertaken with caution, however, as they are subject to different contextual influences on their capacity, particularly autonomy and funding volumes. Our application of the ORACLe tool also identified some wording and content aspects of questions that meant they were potentially less relevant to regional health planning organizations than the 'higher' policy level for which the tool was designed. It is important to interpret capacity findings relative to the context in question.

Modifications of ORACLe tool employed in this research

While this research indicates that ORACLe is valuable in examining capacity strengths and weaknesses, it does not allow for a qualitative understanding of why capacity might be limited, or progress in developing capacity. We found that qualitative analysis can complement ORACLe findings in these respects, as well as allowing a broader exploration of related themes.

We also undertook some document analysis to complement the ORACLe tool which was helpful in corroborating Domain 1 findings. Further document analysis (e.g. position descriptions) may have helped to validate responses to other relevant questions. While the ORACLe tool examines the existence and content of documents, it does not allow for examination of the extent to which documents are used or reflect practice. It also does not go to the detail of examining if/how evidence is appraised and applied. A more comprehensive 'audit'-type process may yield more valid findings about organizational capacity and process.

This research was strengthened by administering the ORACLe tool with several participants from each organization, instead of only the CEO. It helped to overcome some paucity of data, either through insufficient probing or interviewee knowledge gaps. If detail was lacking from one interview, it could be obtained from another. It did complicate the scoring in some instances, where responses differed and judgement was required; however, we consider this made for a more accurate result. We also found that inconsistent responses within an organization can indicate issues with internal policy implementation, in that documented guidance, while it existed, was not necessarily followed.

Our inclusion of additional 'probe' questions was essential to obtain sufficient detail to allocate scores to responses. That these additional questions are not necessarily consistent in other applications of the tool is a further reason for exercising caution when comparing PHN capacity findings from this research, with capacity studies of other organizations.

Interview question terminology and adjustments

Our experience highlighted one concern with the ORACLe tool in the use of the term 'research', which reflects, and potentially constrains responses to a narrow conception of evidence. While much of the evidence-informed policy literature focusses on research evidence generated by academics and published in peer-reviewed journals, it is frequently recognized that decision-makers' conceptions of evidence will differ from those of academic researchers [3]. A wide variety of academic and non-academic information sources from a range of disciplines inform policy-making and planning [22]. The types of information used in health planning fall into six broad categories: demographic, epidemiologic, health services activity, health economic, stakeholders' qualitative data and intervention evidence ('what works') [15]. Conceptions and use of evidence differ depending on the context or policy 'level' in which decisions are made. Locally appropriate evidence such as stakeholder consultation and local service utilisation data is more likely to be used in meso-level regional planning. The focus of the ORACLe tool on 'research' and the inconsistent substitution with the term 'evidence' is potentially a limitation of the current version of the tool. One possible strategy would be to provide a definition of a broad conception of evidence at the beginning of the tool, and then use consistent terminology throughout.

We suggest that the order and interpretation of questions may benefit from some rearranging, or a preamble, to clarify the focus of some questions. Some interdependence between questions for allocating scores was identified and may need to be addressed, such as the questions regarding evaluation processes, as outlined above. Some questions may also benefit from minor wording changes, to make them more applicable to small–medium, meso-level organizations with annual planning cycles, rather than large government agencies.

Narrow examination of network capacity

Domain 7 of the ORACLe tool examines capacity regarding staff relationships with researchers. Our broader qualitative analysis identified a range of important relationships in addition to those with researchers, indicating that this domain of the ORACLe tool is potentially too narrow. While this domain of the ORACLe tool is based on a wealth of sound evidence that relationships with researchers facilitate evidence use [8], an expanded examination of 'communication and networks' with a range of stakeholders may provide a more comprehensive assessment of this component of organizational capacity than the narrower focus on relationships with researchers. The focus on relationships with researchers strongly reflects the 'two communities' theory [23] that use of evidence in policy-making is hindered by researchers and policy-makers being two distinct communities, with different 'norms' and drivers for their actions and priorities. The 'two communities' theory has been increasingly criticized as overly simplistic, and the complex relationships or networks between researchers, policy-makers and other actors are influential in the policy environment, more richly explained by the 'advocacy coalition framework' [24]. A further criticism in this regard is that the Domain 7 questions tend to focus on the existence of relationships (in a given time period), and less so on the existence of mechanisms or structures to establish or maintain those relationships. There is also no examination of the quality of relationships, or the degree of influence of external stakeholders on evidence-informed planning. Just as research is one of many sources of evidence for policy/planning, our research indicated other relationships are also important enablers of evidence-informed decision-making particularly in regional planning, and a broader examination of this capacity would strengthen the ORACLe tool.

What about governance capacity?

Governance is recognized as an element of organizational capacity for evidence-informed policy/planning [5] yet was given relatively little attention in the ORACLe tool. 'Good governance' identifies and manages what political science theory explains as the range of competing 'political' interests, values and other influences on policy. Hawkins and Parkhurst [2] recommend a 'good governance' framework that examines the *process* of evidence-informed policy-making as opposed to the *outcomes* of policy-making, against the principles of appropriateness, transparency, accountability and contestability.

While Domain 1 partly addresses governance by examining the existence and detail of 'documented processes', the assessment of governance capacity for evidence-informed decision-making in the ORACLe could be strengthened by more detailed examination of systems to embed key governance principles. In particular, appraisal of the appropriateness or transferability of evidence is important in meso-level regional health planning, to ensure that the strategies for which evidence is considered are appropriate for the region or community in question. A hypothetical example might be where a strategy to enhance the cultural safety of services for Aboriginal and Torres Strait Islander people has been favourably evaluated in X region—can it then be confidently assumed that the same strategy would be culturally safe in Y region (acknowledging the distinct cultural beliefs and practices of different Aboriginal communities across Australia)?

Importance weightings of capacity domains

A further issue with the ORACLe tool relates to the importance weightings of capacity domains. Domain weightings (as detailed in the "Methods" section of this paper) were developed on the basis of interviews with senior national and state health policy-makers [8], rather than meso-level planning actors, who potentially rate capacity priorities differently. For example, Domain 5 (presence of systems/methods to generate new research evidence to inform the organization's work) had the lowest importance weighting, yet this research found that PHNs invest considerable effort and resources into locally appropriate research and stakeholder consultation, which suggests they believe this is of high importance.

We found a generally inverse relationship between domain weightings and capacity scores in this research. An example of this in our research was in relation to the low weighted Domains 5 and 6, which examined organizations' ability to generate evidence through research and evaluation respectively. While these domains may not appear to be directly linked to capacity to use evidence, it has been argued that analysis performed by bureaucrats within policy organizations is more likely to influence policy than academic research [25], recognising that generation and use of evidence does not occur in distinct organizations [5]. These domains also possibly indirectly indicate the culture and skill base within an organization. If there are staff and processes for generating research and evaluation evidence, there is likely to be 'research literacy' within the organization and a culture that values and supports evidence utilisation. In meso-level health planning organizations, where peer-reviewed research literature is less likely to be directly relevant, the capacity of organizations to generate evidence that is contextually relevant and appropriate is likely to be more important. Decision-makers in meso-level organizations may have given these domains a higher importance weighting, and PHNs would likely have achieved stronger results from the ORACLe tool.

Because the weighting may be less valid, the combined weighted capacity scores may also be less valid at the meso-level health planning context than they would be for 'higher'-level policy agencies.

As well as concerns with the change in context, we also had general theoretical concerns with the weightings specified by the tool. For example, weightings tended to favour support for individual capacity within an organization, with lower weighting assigned to those domains which incorporate systematic or mechanistic approaches to organizational (social) structures and systems. This echoes a key challenge in public health: the persistent adoption of individualistic, behavioural health promotion strategies, rather than more effective population-based, systemic approaches to improve public health [26]. Green and Bennett [5] advocate a 'systems approach' to capacity development that attends to organizational processes and the enabling environment, not only skills. In contrast, domain weightings in the ORACLe tool are considerably higher for the domains that reflect a focus on individuals' skills and tools (Domains 2, 3 and 4), and lower on the domains that address organizational systems and mechanisms (1, 5, 6 and 7). For example, Domain 2 addresses the important attribute of leadership, but examines the individual capacity of leaders being built through tools and programmes. If the examination of 'tools and programmes to assist leaders' meant decision matrices or criteria for decision-making this would positively reflect systems to lead evidence-informed planning. However, the questions focus on mechanisms to encourage and develop the "confidence and expertise" of individual leaders in research use. While it is important that leaders have relevant technical knowledge, the capacity of leaders to drive evidence-informed decision-making processes, potentially through systems or governance, may be a better indicator of organizational leadership capacity for evidence-informed planning. Leadership is a broad concept, and can also encompass 'invisible' elements within an organization, such as a clear vision and organizational 'attitude' [5]. Such intangibles may be loosely inferred from the examination of leaders' internal research dissemination, but this aspect of leadership capacity is otherwise somewhat neglected. We would argue that rather than disseminating research/evidence within an organization, the responsibility of a leader would be to employ leadership strategies that encourage or require use of research in planning.

It is recognized that development of systems and structures in an organization is more difficult and time consuming than developing individual skills or tools. Potter and Brough [27] argue that capacity building that addresses systems and structures is more important, yet more complex and abstract, with a sociocultural basis. Capacity building that addresses skills and tools is more tangible, measurable and quick, with a technical basis. As such, examinations of capacity can tend to drift away from holistic analysis of a system, towards a simpler focus on individuals [27].

An alternate weighting system, informed by theory, and/or appropriate to the meso-level planning context would likely produce a more valid assessment of PHNs' capacity for evidence-informed health planning. As it stands, it would not be valid to use the ORACLe tool to compare organizations from different decision-making contexts. However, comparison of unweighted domain scores can be useful to indicate capacity shortcomings within an organization, and also between similar organizations. We would argue against weighting the different domains as to their overall importance, and instead focus on the applicability of the tool to identify specific areas for capacity development within organizations.

Limitations of this research

The developers of the ORACLe tool recommend that data coding and scoring not be done by the same person who conducts interviews [8]. One of the limitations of this study was that the interviewing and coding/scoring was conducted by the same researcher, in contrast to the conduct of the ORACLe tool. As this was part of a PhD research project, limited resources and capacity prevented having multiple people involved in these core components of the research. However, we note that the cross-checking by a supervisor (TF) helped to mitigate any bias that this may introduce.

Another limitation of this research was that there was no participant checking of the ORACLe scores and findings; however, we feel this was mitigated by drawing on responses from multiple interviewees in assigning scores.

The ORACLe tool was developed and intended to be used alongside the SAGE tool [12] which examines how evidence is used to inform policy. Use of the SAGE tool alongside the ORACLe tool may have helped overcome some of our criticisms of it, and provided a more comprehensive understanding of PHNs' evidence informed planning and capacity therefor. We did not use the SAGE tool, as to do so would have greatly increased the scope of the research project, for which we had limited resources and capacity.

The approach taken in this research did not allow for direct comparison between the 'standard' ORACLe methodology as described by its creators [8] and the adapted approach we employed—to do so may have compromised the comparability of capacity findings between PHNs. However, we do recognize this limitation in the ability to draw comparisons between the standard and adapted tool within this context.

Conclusion

Competence in policy and planning decision-making is just as important at the meso level as it is at higher levels of government, and capacity for evidence-informed decision-making is a key aspect of such competence.

Through this research, we have demonstrated that the ORACLe tool can be useful to examine aspects of organizational capacity for evidence-informed planning in meso-level PHC organizations. Our application of ORACLe has identified some opportunities to refine or complement the tool, which are outlined in Box 1. While caution should be exercised in comparing capacity between different types of organizations, this tool can potentially be applied within organizations to identify areas for capacity development, or to identify common capacity limitations across like organizations, to inform broader capacity development strategies. Such use of the tool would enable meso-level PHC organizations' decisions to be better informed by evidence, and maximize the effectiveness and efficiency of strategies and their impact on PHC and population health outcomes.

Box 1

Recommendations to enhance the ORACLe tool:

- Collect data from several individuals within the same organization, to improve the validity of findings.
- Include additional questions to probe for detail.
- Undertake qualitative analysis of broader interview data to provide deeper understanding of capacity limitations.
- Examine relationships and networks more broadly than those with researchers.
- Include additional interview questions and document analysis to examine capacity for leadership and governance of the decision-making process.
- Analyse internal organizational documents to triangulate interview findings.
- Look at a 'higher' level of capacity—at the 'systems and structures' rather than tools and skills, and if weightings are to be used, they should reflect this.

To improve the appropriateness of the tool for meso-level planning:

- Adopt and make explicit a broad definition of 'evidence' that includes material from non-academic sources, rather than 'research', and use this terminology consistently.
- Include some examination of mechanisms to assess the appropriateness of evidence to the context in question.
- Adjust wording slightly to make some questions more relevant (for example, is there *access to* a library?).

Abbreviations

PHCO: Primary health care organization; PHC: Primary health care; PHN: Primary Health Network.

Acknowledgements

Not applicable

Authors' contributions

AW wrote the first and subsequent drafts of the manuscript, with comments from SJ, TF and FB. AW conceptualised the study, with input from SJ, TF and FB. AW, SJ, TF and FB designed the study. AW conducted data collection, analysis and interpretation, with contributions from SJ, TF and FB. All authors read and approved the final manuscript.

Funding

This research was partially funded by the National Health and Medical Research Council (NHMRC Application number 1064194). The funding body played no role in the design of the study or collection, analysis, and interpretation of data or in writing the manuscript.

Availability of data and materials

Deidentified data can be obtained from the corresponding author on request.

Ethics approval and consent to participate

Ethics approval was granted by the Flinders University Social and Behavioural Research Ethics Committee (Approval #6376), and all participants gave informed consent to participate.Adherence to national and international regulations: Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

Author details

[1] College of Medicine and Public Health, Southgate Institute for Health Society and Equity, Flinders University, Adelaide, SA, Australia. [2] Discipline of General Practice, College of Medicine and Public Health, Flinders University, Adelaide, SA, Australia.

Received: 25 June 2020 Accepted: 24 January 2021

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