WORKING AND LEARNING TOGETHER IN RURAL HOSPITALS: ENGAGING ACROSS BOUNDARIES TO ENHANCE COLLABORATIVE PRACTICE

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List of Abbreviations

CP	Collaborative Practice
CPD	Continuing Professional Development
EN	Enrolled Nurse
FN	Field Notes
GP	General Practitioner
H1	Hospital 1 (Hillside Hospital)
H2	Hospital 2 (Valley View Hospital)
H3	Hospital 3 (Farmville)
IPE	Interprofessional Education
IPL	Interprofessional Learning
PCA	Personal Care Attendant
RN	Registered Nurse
WHO	World Health Organization

Glossary

Allied Health Professional	*Health professionals distinct from nursing, medicine and pharmacy who work autonomously, as part of multidisciplinary teams. Allied health professionals are vital to the delivery of safe and effective health services, and ensuring the community has access to 'the right practitioner in the right place at the right time'. Allied Health Professions Australia (AHPA, 2013)*
Appreciative Inquiry (AI)	*A collaborative discovery method of group brainstorming in organizations, where problems can be raised and discussed with a view to resolution/s and change. (Cooperrider & Srivastas, 1987; Mohr, 2001)*
Career Ambulance Station	*Ambulance station with professional (non-volunteer) staff. (SA Ambulance Service, 2016)*
Collaborative Practice	*Health professionals working together in partnership to deliver high quality care. They cooperate with each other through shared responsibility and accountability for patient care. (Miller & Keane, 2003; World Health Organization, 2010)*
Continuing Professional Development (CPD)	*A structured approach to learning whereby the continuous acquisition of new knowledge, skills and attitudes can enable competent practice. Development includes managerial, social and personal skills and the multidisciplinary context of patient care. (Peck, McCall, McLaren, & Rotem, 2000)*
Discipline	*An academic or clinical discipline, such as psychology, biology, nursing and midwifery and subspecialties within professions, for example the disciplines of anaesthesia or radiology within the profession of medicine. (World Health Organization Study Group on Interprofessional Education and Collaborative Practice, 2008)*
Hotel staff	*Hospital assistants who are responsible for the preparation and delivery of food services for patients and staff, cleaning and servicing, linen distribution and waste collection.*

Health Professional	*Professionals who maintain health in humans through the application of the principles and procedures of evidence-based medicine and caring (Transformative Education for Health Professionals, 2013). Health professionals include medical practitioners, nursing professionals, dental practitioners, pharmacists, physiotherapists and podiatrists. (Australian Institute of Health and Welfare, 2015)*
Interdisciplinary	*When two different disciplines come together and combine their different perspectives to work or learn jointly. Adapted from (Choi & Pak, 2006)*
Interprofessional	*A group of individuals from different professions learning, working and communicating with each other whilst recognizing the importance of each profession. Adapted from Hammick, Freeth, Copperman, and Goodsman (2009)*
Interprofessional Education (IPE)	*Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care. (CAIPE, 1997 p. 19)*
Interprofessional Learning (IPL)	*Learning which enhances interprofessional knowledge and competence during IPE. It can also occur informally or spontaneously in educational or practice settings. (Barr & Coyle, 2013)*
Multidisciplinary	*Members from different disciplines working or learning independently, in parallel and staying within the boundaries of their own fields. Adapted from Choi and Pak (2006)*
Multiprofessional education	*When members (or students) of two or more professions learn alongside one another: in other words, parallel rather than interactive learning (Freeth, Hammick, Reeves, Koppel, & Barr, 2005).*
Personal care attendants (PCAs)	*Staff employed to provide care for patients in relation to activities of daily living such as personal needs, therapeutic care and assisting with mobility. (Open Universities Australia, 2016)*
Profession	*A disciplined group of individuals who adhere to high ethical standards and hold themselves to, and are accepted by, the public as possessing special knowledge and skills in a widely recognised, organised body of learning derived from education and training at a high level, and who are prepared to exercise this knowledge and these skills in the interests of others. (Professions Australia, 2015)*

Professional Role	*The alliance to the profession within which the team member has been socialized and the capacity to understand another professional's socialization within a situation that requires allegiance to both one's own profession and the interdisciplinary team. (Kilgore & Langford, 2009 p. 87)*
Teamwork	*The process whereby a group of people, with a common goal, work together, often but not necessarily, to increase the efficiency of the task in hand. They see themselves as a team and meet regularly to achieve and evaluate those goals. Regular communication, coordination, distinctive roles, interdependent tasks and shared norms are important features. (World Health Organization Study Group on Interprofessional Education and Collaborative Practice, 2008)*

Summary

The aim of this thesis is to establish how interprofessional education (IPE) can promote interprofessional learning (IPL) and enhance collaborative practice in rural health settings. Furthermore, it examines five different types of IPE activities to find out how IPE or IPL might promote or influence collaborative practice in rural hospitals. Rural practice was the main focus because the research has been conducted by an experienced rural clinician. The literature review in Chapter 2 is an integrative review which previews IPE interventions as well as provides the theoretical and conceptual literature. The review highlights some of the issues associated with drawing conclusions from IPE activities. Unique barriers to collaborative practice in rural health services are highlighted, such as power imbalance and organizational boundaries.

The research approach is qualitative and reflects a social constructivist perspective. Chapter 3 explains why case study methodology was chosen and details the three types of data collection used. In order to answer the question—*How does work-based interprofessional education promote interprofessional learning and influence collaborative practice in three rural hospitals in South Australia?*—the research was completed in three phases. Phase One established baseline data for each rural hospital setting by exploring everyday practice and perceptions of health professionals working there. The findings for Phase One informed Phase Two which focused on the planning and implementation of practice-based IPE activities. Phase Three determined whether there was any impact of the activities on collaborative practice.

Chapter 4 provides contextual information to inform the reader about the rural environments in which data collection took place. Additionally, background information about each of the IPE activities is specified, and precedes the research findings.

The analysis explores the relationships between the health professionals in each hospital and contextual factors—communication, interprofessional relations and the environment—with the purpose of being able to contribute to IPE theory. The findings are presented in three chapters. Chapter 5, addressing Phase One, introduces the reader to the groups of health professionals, managers, administrative staff and hotel service workers in

the study and reveals the current challenges of rural practice in South Australia. The professional silos that existed in the health system created silos that perpetuated significant barriers to collaborative practice. Case Three was found to have some differences to Cases One and Two; practice was more collaborative, and professionals and health workers were prepared to work beyond or out of their own scope of practice or job descriptions.

Chapter 6, addressing Phase Two, presents five interventions, all in the form of work-based IPE sessions. Each intervention is discussed under the following headings: venue and seating, attendees and their engagement with the session, scenarios/case studies, IPL, and reactions to the session. Having five different types of IPE interventions allowed for comparison and highlights the learning theories which can be useful for the promotion of IPL.

Chapter 7 presents the findings from Phase Three, where the collaborative nature of the workplace is examined in more detail and reveals a change of atmosphere due to workforce changes being imposed. Whilst it was difficult to analyse the impacts of IPL on collaborative practice, insights revealed that health professionals would like to improve their interprofessional relationships.

In Chapter 8 the cross-case analysis reveals four themes in an attempt to explore the elements of collaborative practice in relation to rural work. The dominance of profession-based communities of practices was found to exist within the rural health setting and hindered the IPE–IPL–collaborative practice nexus. This chapter reveals that collaborative practice is impacted by the rural environment, work models, physical structures and power imbalances.

Chapter 9 examines the implications of the findings along with the cross-case analysis. The notion that multiple discipline-based communities of practice were found to exist within rural health settings and that they may have been responsible for hindering the IPE–IPL–collaboration nexus is further explored. Social learning and community of practice theories are used to consider the link between IPE, IPL and collaborative practice. Finally, implications for practice, policy and research, and limitations of the study are discussed.

Declaration by Author

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

14/11/2016

Lyn Gum Date

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Chapter 1 Introduction

The time has come for us to stop tuning separate instruments and, together, create a symphony.

— Anonymous

This chapter outlines the Australian health care system, the nuances of South Australian rural health and the development of the health professions working together in the health system in Australia. The terms used in the context of interprofessional health care—including interprofessional education (IPE), interprofessional learning (IPL) and collaborative practice—are defined, explored and differentiated with a particular emphasis on rural health care. This chapter therefore sets the context for the study, and positions the importance of collaborative practice.

1.1 Background

The requirement for health professionals to provide patient-centred care has strengthened the need for what is variously termed 'interprofessional' or 'collaborative' practice in the twenty-first century, with the suggestion that highly bureaucratic forms of organization shift to networked forms of organization (Laing & Bacevice, 2013). This shift in the delivery of care requires an understanding of the cultural changes that are necessary to embed such practice as a core component of health professional practice standards (Matthews et al., 2011). Recognition of the need to work 'with' patients and to adopt a more patient-centred approach has coincided with the current global view about building a socially accountable health care system (Jarvis-Selinger et al., 2008). This thesis seeks, first, to investigate whether IPE can lead to IPL in the rural context. Second, it explores how IPL can lead to collaborative practice.

Chronic medical conditions in Australia are the leading cause of illness, death and disability and the incidence of chronic disease is increasing due to an ageing population (Australian Government, 2016). Chronic disease self-management is possible when patients learn strategies from interprofessional teams (Wagner et al., 2005). Interprofessional teams in primary care settings, that can link with specialist services and/or the acute sector, are examples of best practice for the management of chronic conditions (Beswick et al., 2015).

Correspondingly, infrastructure and training of health care providers must be addressed in order for these providers to work in teams and develop effective collaborative practice (Australian Government, 2010). There is recognition that IPL should be considered as part of Commonwealth health education training programs (Australian Government, 2013).

In response to the need for an effective and sustainable Australian health system, there are current moves towards building a national approach for IPE development (The Interprofessional Curriculum Renewal Consortium, 2013). At least 12 countries have attempted initiatives to introduce IPE (WHO, 2010), with Australia, Sweden and Canada leading developments at the undergraduate level, and the United Kingdom and the United States primarily introducing developments in the post-registration setting (Barr, 2013). According to the World Health Organization (WHO) (2010), achieving a collaborative practice-ready workforce is complex and is influenced by the working culture and how local health care is delivered. The WHO (2010) in its framework (see Figure 1.1) suggests that creating a collaborative practice-ready workforce will strengthen health systems. This has further relevance in rural contexts where there are fewer clinicians who have an imperative to practise collaboratively.

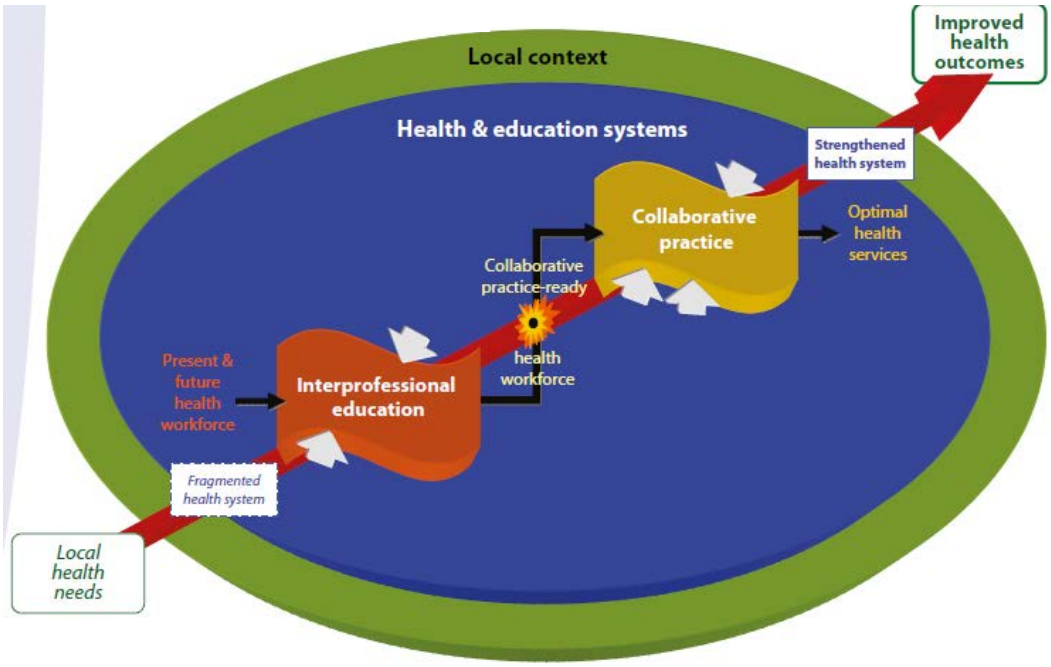

Figure 1-1. Health and education systems

Source: WHO, 2010, p. 9

1.2 The Australian health care context

Australia's health care system has 'complex, fragmented and often uncoordinated delivery systems, with implications for the services individuals receive, how they pay for them, and how care providers interact and provide care' (Commonwealth of Australia, 2009). All government levels share responsibilities for health, resulting in no single overarching health system. For example, the Commonwealth is responsible for primary health care, including general practitioners (GPs) and while the States and Territories are mostly responsible for public hospitals, ambulance and community health services (Australian Government, 2014).

Over time, the complexity of health care and the development of health professionals as both separate and independent practitioners have inadvertently helped to erect barriers to successful collaborative care (Littlechild & Smith, 2013). There were very few public hospitals that employed full-time salaried medical or clinical staff before the introduction of Medibank,[1] the first universal health system in Australia, in 1974 (Evans, 2005). Most doctors were working as 'honorary' medical staff whilst managing their own private businesses in order to maintain their independence and professional status (Evans, 2005). The introduction of specialisation and salaried medical officers into hospitals meant that medical officers were put in charge of managing all clinical services in separate clinical departments (Evans, 2005). Prior attempts to introduce a publicly funded national health service had been strongly opposed by the Australian Medical Association (AMA) due to the requirement for doctors to be salaried or have their income capped (Willis, Reynolds, & Keleher, 2016). Moving forward into the twenty-first century, these separate clinical departments continued to operate without any necessary understanding of or co-operation with other departments (Dichter, 2003).

The Commonwealth Government introduced Divisions of General Practice in the 1990s to support the role of GPs (Australian Government, 2014). Divisions of General Practice

[1] Medibank is now known as 'Medicare' in Australia.

consist of mostly GPs along with practice nurses, allied health professionals and medical specialists. These bodies served to focus on health promotion, early intervention, chronic disease, medical education and workforce support in designated catchment areas (Davies, 2010).

Contractual and managerial arrangements began to change in Australian public hospitals in the early twentieth century as the Commonwealth Government gained more control. Health which had previously been the responsibility of the States and Territories, became an important issue to Australians with the Commonwealth Government stepping in to improve equity and access (Australian Government, 2014). The introduction of a Community Health Program in Australia in 1973 resulted in further segmentation of health services, with no national strategy to guide its delivery (Commonwealth of Australia, 2009). According to Boyce (2006), before the 1990s there was no allied health management structure, which meant that predominantly medical specialists were in charge of non-medical departments. In a hospital setting the allied health workforce primarily deliver inpatient health services and may also provide outpatient services. The assumption that all allied health professionals such as physiotherapists, occupational therapists and social workers have a similar profile creates difficulties when they are identified as a collective (Boyce, 2006; Parliament of Australia, 2012). According to Allied Health Professions Australia (AHPA, 2013), allied health professionals and doctors both have similar workforce numbers and can provide either public or private health care.

Nurses and midwives represent the largest proportion of the health workforce with the unique role of providing the essential link between many users of the health system (Parliament of Australia, 2012). In the early twenty-first century, some nurses began to operate in independent and specialised roles such as ‘community health nurses’ in primary health care settings and ‘practice nurses’ in general practices (Willis et al., 2016), as well as advanced practice nursing roles in acute care settings. The emergence of the ‘nurse practitioner’ role has recently been introduced to areas of workforce shortage such as rural practice where nurses are able to work independently and collaboratively (Australian College of Nurse Practitioners, 2013).

The South Australian Ambulance Service (SAAS) is responsible for out-of-hospital emergency care as well as non-emergency patient transport. SAAS was transferred to SA

Health under the *Health Care Act 2008* (SA Ambulance Service, 2016). Consistent with incorporated hospitals, SAAS is an identifiable incorporated entity, and is managed by a Chief Executive Officer (SA Ambulance Service, 2016). Therefore, SAAS is recognized as a separate organization but under the auspices of SA Health.

Medicare Locals were established in 2011–12 to improve coordination and integration of General Practice and primary care services in local communities (Government of South Australia, 2012). Medicare Locals evolved from Divisions of General Practice, which at the time of data collection for this study, were still in operation in South Australia.

Whether or not collaborative practice can take place is dependent on the diversity of perceptions of individuals and how well it can be supported by initiatives and policy directives (Pollard, Thomas, & Miers, 2010). The Australian health workforce is currently under scrutiny with claims that initiatives for education and training are 'piecemeal' (Australian Government, 2013). In South Australia, health reform has resulted in the implementation of Delivering Transforming Health, a multi-faceted project which involves major system and service changes (Government of South Australia, 2015a). With significant development going on, such as the redistribution of care, resources and costs, the need for collaborative practice where interprofessional relationships are mutually respectful, is imperative, especially for the patient (Australian Government, 2013). Different levels of expertise, power and authority amongst professionals result in tensions between them (Pollard et al., 2010). For example, the role of the nurse practitioner extends the scope of nursing practice, but this creates tensions where nurse practitioners' tasks and rights overlap with those of medical professionals (Kunic & Jackson, 2013; Willis et al., 2016). The growth of existing health professions, such as physiotherapy and social work, and the emergence of new professions, such as paramedic practitioners, has created role blurring and confusion about the responsibilities of the various health professionals (Littlechild & Smith, 2013; Willis et al., 2016).

Working practices of health professionals in any health care context is influenced by professional 'turf' boundaries (Herbert, 2005; Iliadi, 2010; Villeneau, 2001). Around the same time that medical models began to change in Australia, nurses and midwives declared that they wanted to have more autonomy and independence as professionals (Pietroni, 1994). When nursing and midwifery were declared as professions, they gained

some degree of autonomy (Kelly, 1981) rather than being completely subordinate to medicine (Fahy, 2006). Consequently, nurses and doctors can find it difficult to work together because of differing perceptions of who they are (Dombeck, 1997).

In Australia, hospitals as organizations have not been supportive of the participation of health professionals in corporate decision making (Boyce, 2006). The restructuring of public hospital management in the 1990s was responsible for the shaping of a professional identity for the health professions, both in Australia and elsewhere (Boyce, 2006). Traditionally, so-called allied health professionals were understood to be 'allied to medicine', however, in order to reduce their marginalisation their preference is to be a collective of individual professions who are 'allied to each other' (Boyce, 2006). Boyce (2006) argued that their recent recognition as a *division of allied health* fosters an identity at the management level. Boyce (2006) further argued that this was fundamental for re-negotiating interprofessional relations within hospitals. Therefore, the history of the professions can impact on interprofessional relationships in the health care setting (Dombeck, 1997).

1.3 The Australian *rural* health context

The rural health context can be diverse, both spatially and socially (Williams & Cutchin, 2002). The range of professions with varying skill levels and the patient profiles can affect the professional context and culture of rural care provision (Bourke et al., 2004; Williams & Cutchin, 2002). However, rural areas have been identified as providing opportunities for collaborative practice and social interaction (Croker & Hudson, 2015). Reasons given include the interprofessional nature of rural practice, sharing of workplace facilities, increased social interactions outside of work and low turnover of staff (Croker & Hudson, 2015). Rural practice is often promoted as a positive context for observing and experiencing collaborative clinical practice (Albert, Dalton, Spencer, Dunn, & Walker, 2004; Dalton et al., 2003; Hays, 2008). However, in contrast to this view, despite rural hospitals being smaller and having fewer departments, achieving collaborative practice can be difficult due to fragmented health services and the presence of fewer health workers across fewer professions (Mu & Chao, 2004; Parker et al., 2013). Accordingly, the National Health and Hospitals Reform Commission (2009) reported that rural health care can be constrained by the poor workforce distribution of health professionals. It may also be

marked by poorer health outcomes (Australian Institute of Health and Welfare, 2008), reduced access to services (National Rural Health Alliance Inc, 2009), older clinicians and recruitment and retention issues (Humphreys, McGrail, Joyce, Scott, & Kalb, 2012).

Primary health care settings such as those in rural and remote locations usually necessitate health professionals coming together as a team to meet the needs of the local community (Mu & Chao, 2004). However, this does not necessarily mean that having health professionals working alongside each other will necessarily result in collaborative practice (Bourke et al., 2004). For example, collaborative practice is less likely to occur when health professionals work in a silo format without much interaction (Angelini, 2011). Nolan and Hewison (2008) suggest that there is often an assumption that the integration of health and social services into teams will automatically result in effective teamwork. This, however, is not always the case.

The National Academy of Sciences (National Academy of Sciences, 2005) suggests that rural communities' access to health care services varies widely, sometimes requiring health professionals to broaden their scope of practice to accommodate unique needs. Health professionals who work in rural practice need to be multi-skilled and often have less well-defined professional boundaries (Parker et al., 2013). In rural settings, in contrast to metropolitan settings, there are fewer health professionals working in hospitals with limited opportunities for efficient ways to share information. Couper (2002) argues that the struggle to organise continuing professional development in rural hospitals is due to a lack of imagination and an inability to place value on the usefulness of involving all members of the health care team. Croker and Hudson (2015) questioned the silence surrounding relationships among rural educators and suggested that there is scope for making the nature of collaborative relationships among interprofessional educators more explicit. Most rural communities struggle to retain workforce capacity, thereby increasing the need for models of care which foster stronger collaborative relationships (National Academy of Sciences, 2005).

Currently, in rural and remote health in Australia, there is no single point of entry for patients and no single national funder to allow for the size, dispersion and remoteness of rural communities (Humphreys & Wakerman, 2008). There are three main areas of expenditure in the Australian health system. In order of size of current expenditure these

are: hospitals (both public and private); primary health care; and other recurrent spending for services not paid for by hospitals but not delivered through the primary health sector, such as GP services and patient transport (Australian Institute of Health and Welfare, 2014b). Responsibility for public hospitals lies with the State and Territory Governments, but the funding is from the Australian Commonwealth Government. Public hospital services are delivered by Local Hospital Networks (LHNs) which are funded by State Governments under a joint arrangement with the Commonwealth. LHNs are small groups of local hospitals, or single hospitals which focus on local service integration within a region or specialist networks across the State (Australian Institute of Health and Welfare, 2014b; Government of South Australia, 2012). In South Australia, responsibility for hospital management is devolved to LHNs as determined by the State Government (Government of South Australia, 2012) and this helps to increase local autonomy and flexibility so that services are more responsive to local needs (Australian Institute of Health and Welfare, 2014b). The Country Health South Australian LHN delivers health services to over 470,000 people, from more than 65 locations in an area spanning nearly one million square kilometres (Government of South Australia, 2015b). Whilst activity-based funding is being adopted for most public hospitals in South Australia, some smaller country hospitals only receive block funding which is only a set contribution (Government of South Australia, 2012). Primary health care involves care delivered in the community, such as by GPs, allied health professionals, dentists and pharmacists, and public health initiatives and medications not provided through hospital funding (Australian Institute of Health and Welfare, 2014b).

In Australia, models of funding for health professionals are partly responsible for the barriers to practising in non-metropolitan areas. General practice is based on a model of fee-for-service and GPs are able to choose where they work (Parliament of Australia, 2012). A recent survey (Australian Medical Association, 2014) found the majority of GPs are remunerated based on a proportion of billings (88%) as opposed to an hourly payment (12%). In addition, GPs receive on-call payments and provide in-patient consultations in larger hospitals, as well as small rural hospital settings in Australia (Australian Medical Association, 2014). In small rural centres there are very few resident specialists, with GPs having admitting rights to hospitals.

In Australia, allied health services are essential for primary, sub-acute and tertiary health care and these services are impacted by activity-based funding with block funding being provided for services to low volume country hospitals (SA Health, 2015). Therefore, the type of allied health services delivered reflects funding allocation across individual rural sites in South Australia. Funding models are unsupportive of allied health professionals working outside of metropolitan areas due to limited access to Medicare rebates in rural areas, short-term funding cycles and in some cases the complexity of working under different funding streams for the same employer (Parliament of Australia, 2012). In rural sites, the allied health workforce either operates as a team or solo; whilst some might have their offices based in hospitals, others may be co-located in a community health centre, doctors' offices or in their own premises.

Australian rural nurses are recognized as an asset in delivering services within rural communities and play a key role in the rural and regional health care system (Mahnken, 2001). Nurses are salaried and contracted by both private and public hospitals. Whilst some rural incentives are paid to nurses and midwives on a State-by-State basis, these are much lower than those paid to doctors (Nurse Uncut, 2010). Whilst the nursing workforce is reasonably distributed throughout rural and regional Australia, there is a maldistribution of allied health professionals and medical practitioners (Parliament of Australia, 2012). In rural areas 75% of allied health professionals work in the public system (Atkinson & Dymmott, 2008). Tracking the movements of GPs geographically is challenging (McGrail & Humphreys, 2015); for example, data sources do not account for those GPs who are not in clinical practice (Parliament of Australia, 2012). However, the medical workforce distribution is skewed heavily towards major cities. A snapshot of the number of employed medical practitioners revealed that South Australia is one of the worst affected States (Australian Medical Association, 2012). Whilst the SA Ambulance Service paramedics are salaried, some rural areas also rely on volunteers, with more than 1400 volunteers supporting 70 rural volunteer teams.

Causal factors common to all the health profession's workforce shortages include: lack of access and support to attend continuing professional development activities, inadequate remuneration and professional isolation (Parliament of Australia, 2012). Therefore, there are few incentives which support interprofessional teams to practise in rural areas in South Australia. It has been suggested that rural hospitals are the nucleus of health planning,

activity and resources in rural communities (Charney, 2006 p. 341). Given that each of the health professions mentioned above have frequent encounters with patients and other health professionals in, on or near to a rural hospital, the rural hospital setting was chosen as a useful central point for researching collaborative practice in this study.

1.4 Defining key terms

A further source of complexity in this study is the imprecision of key terms. Historically the terms used in this thesis—IPE, IPL and collaborative practice—have lacked clear definition or are used interchangeably in the literature. The terms used in the literature indicate that there are many different definitions and descriptions of IPE that occurs in practice after the gaining of an initial qualification. The concept of IPE has been commonly described using the terms 'interdisciplinary', 'multidisciplinary', 'multi-professional', 'shared' and 'common' (Cooper, Carlisle, Gibbs, & Watkins, 2001). Without clear and agreed definitions it becomes difficult to draw conclusions about the models and interventions for IPE (Hasan, 2005; Reeves et al., 2009b).

The most commonly adopted and widely used definition of IPE is that developed by the Centre for the Advancement in Interprofessional Education (CAIPE, 1997 p. 19):

> *Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care.*

CAIPE is a UK based and international voice for IPE, which aims to improve collaborative practice and thereby the quality of health care, through professions learning and working together (CAIPE, 2014). CAIPE (2014) point out that IPE is representative of 'all such learning in academic and work based settings before and after qualification, adopting an inclusive view of "professional".

IPL is defined as the processes which take place for the learning to occur between two or more health professionals (Colyer, Helme, & Jones, 2005; Reeves, 2009). Facilitating IPL requires skills to support learning in complex and diverse groups of professionals (Howkins & Bray, 2008 p. 17). The processes involved with IPL, for example, will create opportunities for health professionals to communicate and interact with each other, which increases

their ability to value each other's contributions (Braithwaite & Travaglia, 2005). In the rural context where there is potential for lack of communication among health professionals it would be important to ensure that IPE leads to IPL in order to inform collaboration. IPE is primarily formal and structured, however IPL can occur either as a result of IPE or spontaneously in educational or practice settings (Barr, Koppel, Reeves, Hammick, & Freeth, 2005). Whilst the Australasian Interprofessional Practice and Education Network (AIPPEN, 2009) endorses IPL as a method of learning, the organization claims it to be an overarching expression which describes a philosophical approach that supports health professionals to work collaboratively. Wilcock, Janes, and Chambers (2009 p. 86) in their attempt to explain the differences between IPE and IPL have suggested that IPL is viewed as an approach where learning is active and occurs 'for, at, and through work'. Conversely, Howkins and Bray (2008) use the term IPL to describe the process of professionals learning with each other. For the purposes of this research IPL is defined as:

> *Occurring between [students or] members of two or more professions to enhance knowledge and competence during interprofessional education, or, informally in educational or practice settings. (Barr & Low, 2013 p. 4)*

The term 'collaborative practice', while widely used in the literature, is not well defined. It has been used as an *approach* towards health care as well as a *technique* of practising with others. Other terms used to describe collaborative practice included multidisciplinary, interdisciplinary and transdisciplinary practice (Gascoigne, 2008; Ogletree, Bull, Drew, & Lunnen, 2001) as well as interprofessional cooperation (Kapp, 1987). Barr and Low (2013) defined collaborative practice simply as different professions or organizations working in partnership. The World Health Organization (WHO, 2010, p. 7) suggests that collaborative practice occurs when:

> *Multiple health workers from different professional backgrounds work together with patients, families, carers and communities to deliver the highest quality of care. It allows health workers to engage any individual whose skills can help achieve local health goals.*

The WHO commissioned a worldwide study to further explore the common themes of collaborative practice (Mickan, Hoffman, & Nasmith, 2010). The WHO Framework for Action on Interprofessional Education and Collaborative Practice (2010) reported on the

necessary interprofessional learning domains for collaborative practice as being teamwork, roles and responsibilities, communication, learning and critical reflection, relationship with, and recognizing the needs of, the patient and ethical practice. These are further examined in Table 1.1. The elements describe what is needed in order to develop collaborative practice and guide IPE.

Table 1:1. IPL domains for collaborative practice

IPL domains to develop collaborative practice	Descriptor
Teamwork	Being able to be both team leader and team member
Roles and responsibilities	Understanding one's own roles, responsibilities and expertise, and those of other types of health workers
Communication	Expressing one's opinions competently to colleagues Listening to team members
Learning and critical reflection	Reflecting critically on one's own relationship within a team Transferring IPL to the work setting
Relationship with, and recognizing the needs of, the patient	Working collaboratively in the best interests of the patient Engaging with patients, their families, carers and communities as partners in care management
Ethical practice	Understanding the stereotypical views of other health workers held by self and others Acknowledging that individual health workers' views are equally valid and important

Source: WHO, 2010 p. 26

Collaborative practice skills are described as being able to demonstrate respect, understand others' roles and communicate effectively with other professions as well as being able to resolve conflict and share goals (Lingard et al., 2012; Sargeant, 2009; Suter et al., 2009). Competency in these skills is required as 'effective collaborative practice requires strong leadership and the proactive engagement of professionals who have a shared understanding of the benefits of collaborative practice and mutually complementary skills' (Australian Government, 2010 p. 4). Within this rurally-based study, collaborative practice is defined as practice whereby health care team members collaborate in decision-making, trust in self and others, and communicate openly and actively with respect (Kilgore & Langford, 2009).

The advantages of IPE derive from the opportunities it can provide for health professionals to enhance their understanding of others' roles and responsibilities and to develop their teamwork skills (Barr et al., 2005). Added benefits include fostering respect (World Health Organization, 2010) and reducing stereotyping (Lindqvist, Duncan, Shepstone, Watts, & Pearce, 2005). IPE can be implicit or explicit during daily work, or it can be university-based or work-based in educational institutions or the participants' workplace (Barr et al., 2005). IPE which occurs in the workplace is known as work-based IPE (Barr et al., 2005) and may take the form of continuing education IPE (Kaufman et al., 2001) and be built into health professionals' continuing professional development (CPD) (Barr & Low, 2013). The aim is to provide opportunities for health professionals to train together and/or interact for the purpose of fostering IPL and improving collaborative practice, and the quality of care.

Work-based learning is a concept which emphasises that learning is practitioner centred with a focus on individual choice and motivation (Cameron, Rutherford, & Mountain, 2012). Work-based IPE recognizes that professional groups from the same workplace can be upskilled together whilst being able to compare perspectives and responsibilities. The term 'work-based IPE' has been used for this study and is defined as planned activities where two or more professions learn with, from and about each other in the workplace.

IPE, IPL and collaborative practice are complex concepts and can be defined in different ways. For the purposes of this study, the research will focus on collaborative practice as an outcome of IPL which is linked to IPE at the practice level. Further study on continuing IPE as a tool and the impact of IPE work-based activities on health care teams and the quality of care is needed (Altin, Tebest, Kautz-Freimuth, Redaelli, & Stock, 2014; Kaufman et al., 2001). Reeves et al. (2012) suggest that whilst the intent of IPE is to promote collaborative practice, further research is required to explore its impact and sustainability in the clinical context.

1.5 Outline of thesis

Rural practice in Australia has its own unique workforce problems with a growing need to provide team-based care and collaborative practice. As a registered nurse and midwife who had worked in a rural hospital, the researcher had her own concerns about the silos in which each profession seemingly practised and wondered why those who worked together

were not training together. Three rural hospitals were thus chosen as a context for the study of the relationships between IPE, IPL and collaborative practice. Hence, the research question for the thesis has been defined as:

> *How does work-based interprofessional education promote interprofessional learning and influence collaborative practice in three rural hospitals in South Australia?*

The thesis has nine chapters. This first chapter provides an introduction to the Australian and rural health care system and how the development of the health professions has impacted working together in the health system in Australia. The definitions of IPE, IPL and collaborative practice are explored. Chapter 2 is the literature review, which examines the concept and theoretical aspects of IPE, IPL and collaborative practice as well as a review of IPE interventions and their impacts on collaborative practice. Chapter 3 explains the research design including the research approach and methods used for the study. Chapter 4 describes the study context, providing an insight into the health services used in the study. Chapter 5 conveys the findings from Phase One of the study. Phase Two, which is the intervention phase of the study, is described along with its findings in Chapter 6. Chapter 7 introduces the reader to the final phase of the study—Phase Three—and its findings. A cross-case analysis is provided in Chapter 8. In the final chapter, Chapter 9, the findings and interpretations are discussed in relation to current literature as well as the limitations, implications and recommendations and conclusion of the study.

Chapter 2 Literature Review

Frankly, if we are not conscientious about the ways in which interprofessional learning is conceptualized, we may be re-producing, with a vengeance, the very professional behaviours which IPE was designed to break down.

(Borduas et al., 2006 p. 13)

2.1 Scope of literature review

This thesis seeks to understand how work-based IPE can promote IPL and subsequently promote collaborative practice in the rural hospital environment. In order to succinctly summarise the literature, an integrative literature review was undertaken. The integrative review aimed to summarise previous and current IPE literature and make conclusions about IPE interventions in the clinical or work-based setting (Coughlan, Cronin, & Ryan, 2013). An integrative review was chosen to allow for the examination of IPE more broadly so as not to be limited only to empirical studies (Coughlan et al., 2013). Integrative reviews also place importance on the theoretical and conceptual literature (Coughlan et al., 2013). This chapter presents a summation of the integrative review.

For the purposes of this literature review, the main research question was broken down into two sub-questions:

- *What are the impacts of IPE interventions in the clinical or work-based setting?*
- *How does work-based IPE contribute to IPL and collaborative practice?*

2.2 Search methods

A comprehensive literature search was conducted, commencing with the identification of appropriate databases and term selection. The electronic databases used were as follows: The Cochrane Library, Ovid Medline, Scopus, ProQuest and Cinahl. Additional sources were located from websites about IPE, reports about IPE, and books and reference lists within located studies, in a process known as the snowball technique (Coughlan et al., 2013). The

search was limited to English language publications and included the following terms (* represents truncated):

1. interprofession* OR inter-profession* OR interdisciplin* OR inter-disciplin* OR multiprofession* OR multi-profession* OR multidisciplin* OR multi-disciplin* OR team
2. education* OR learn* OR train* OR course
3. collaboration OR cooperative behaviour
4. professional roles OR health occupations
5. postgraduate OR continuing education

Combinations of single and grouped terms were used. These varied due to the database platform searching processes. For example, Cinahl specifically required terms to be Medical Subject Headings (MeSH) terms. A separate modified search was made using their MeSH terms such as “interprofessional relations” or “interdisciplinary education” or “collaboration” and combined with a search for “education, nursing continuing” or “education, medical, continuing” or “staff development”.

Following the initial identification of possible records, a screening process was applied. Records remained in the review if they had an abstract available, had been peer-reviewed, included IPE interventions with participants in health care setting(s), were systematic reviews which focused on IPE interventions or were those which contributed to answering the literature search questions previously outlined. No year limits were placed on the search. Records were excluded from the review if they were duplicate records, focused on undergraduate students or higher education settings, or were located in student settings. For the second screening process, each abstract was closely examined using the same inclusion and exclusion criteria. Records that were found to be irrelevant were removed. As the intention of this project was to deliver only face-to-face IPE, those records where IPE was delivered online or web-based were excluded as this did not relate to the research being studied.

After completion of the first two screening processes, the full texts of the remaining articles were retrieved. Records were divided into two groups: 1) studies that discussed the use of an IPE intervention and/or evaluation, and 2) papers discussing IPE, IPL or collaborative practice in health care. All papers were read in full and again exposed to the inclusion and exclusion criteria. Within group one, papers which had no evidence-based

outcomes for IPE, were classroom-based, were interventions with a mix of students and clinicians or only involved one profession were removed. In group two, 78 further exclusions were due to: being more about simulation than IPE, being based on health professional education rather than IPE, being based on the development on survey tools for IPE, or having been missed in the second screening and pertaining to students or online IPE. Additionally, a further 10 articles were identified using the snowball technique and were included as they met all selection criteria. The entire search process is presented in the Prisma diagram (Moher, Liberati, Tetzlaff, & Altman, 2009) in Figure 2.1 below.

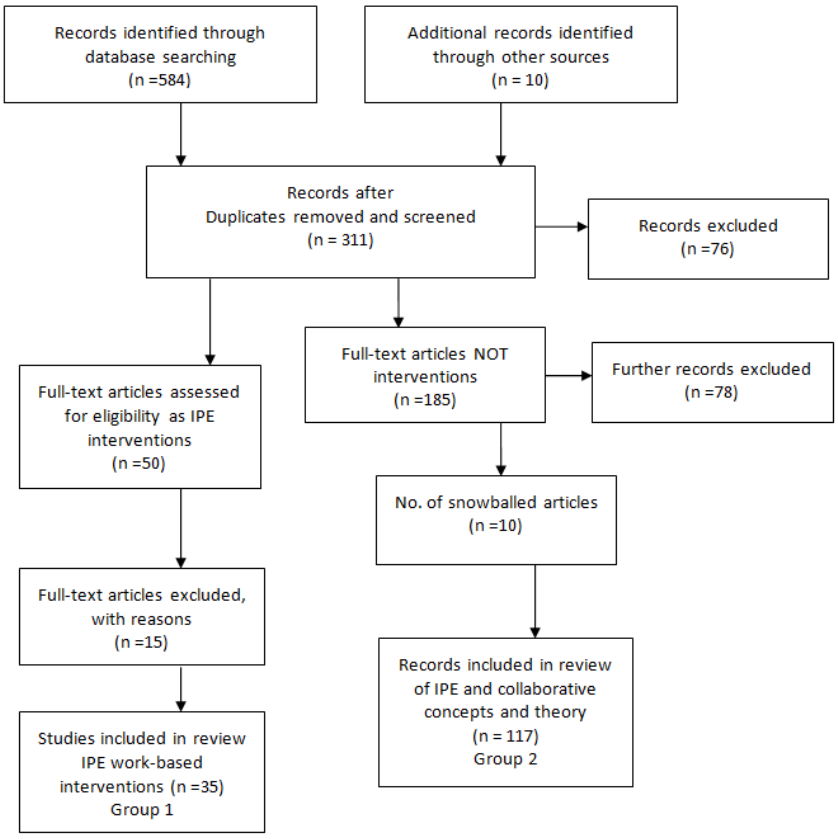

Figure 2-1. Prisma flow diagram – Search outcomes

2.3 Synthesising the literature

The comprehensive search identified 35 articles relating to work-based IPE interventions and 168 articles that discussed factors relevant to this review. The 35 papers in group one were firstly summarised in a table using the following format: intervention type, IPE pedagogy, targeted intervention outcome(s) classification, target group (n) and JET

outcome level (see Appendix 1). Each intervention article was assessed against the JET classification system which classifies studies by strength of outcomes. The JET system was previously expanded from Kirkpatrick's (1967) four-point typology of research outcomes into a six-point typology (see Table 2.1) (Barr et al., 2005). The JET classification system is designed to capture all possible outcomes from IPE and consists of six levels that can be measured (Barr et al., 2005).

Table 2:1. The JET classification of IPE outcomes

Level	Outcomes
Level 1- Reaction	Learners' views on the learning experience and its interprofessional nature.
Level 2a- Modification of attitudes/perceptions	Changes in reciprocal attitudes or perceptions between participant groups. Changes in perception or attitudes towards the value and/or use of team approaches to caring for a specific client group.
Level 2b- Acquisition of knowledge/skills	Including knowledge and skills linked to interprofessional collaboration
Level 3- Behavioural change	Identifies individuals' transfer of interprofessional learning to their practice setting and their changed professional practice.
Level 4a- Change to organizational practice	Wider changes in organization and delivery of care.
Level 4b- Benefits to patients/clients	Improvements in health or wellbeing of patients/clients

Source: Barr et al. (2005 p. 43)

Each study was examined to determine the context or setting and the duration of the IPE activity (see Table 2.2). A further analysis of the pedagogical approach assessed whether each intervention targeted its outcomes at 1) education-based (individual), 2) practice-based or 3) organization-based changes (Goldman, Zwarenstein, Bhattacharya, & Reeves, 2009) (see Table 2.3). The IPE pedagogy used was determined in order to closely examine the use of educational frameworks, teaching methods and strategies used to achieve IPL (see Table 2.5). Extracts from the table in Appendix 1 have been used to inform the analysis of these 35 papers in section 2.4.1.

All 152 eligible records in the integrative review (groups one and two) were then subjected to a thematic analysis in order to synthesise the literature. This is the most appropriate method to synthesise mixed qualitative and quantitative literature (Coughlan et al., 2013). Each piece of literature was examined and coded to identify themes which would provide information about the two review questions. In order to achieve this, groups of similar codes were labelled and used to describe and evaluate the literature. These codes were grouped into categories and evolved into five themes: exposure to health professional differences, interprofessional relationships, developing collaborative practice, IPE as a catalyst, and organizational influences. Each theme is discussed in the second section of the results.

2.4 Literature review results

The results are presented in two parts; the first presents the findings of the analysis of group one intervention records in order to answer the first review question: *What are the impacts of IPE interventions in the clinical or work-based setting?* The second part of the study addresses the second review question: *How does IPE contribute to IPL and to collaborative practice?* using thematic analysis.

2.4.1 Intervention studies (Group one)

The 35 intervention papers (Appendix 1) were based on a variety of qualitative, quantitative and mixed methods research and therefore it was not possible to make any definitive conclusions about their combined level of evidence. The year of publication of these papers ranged from 1988 to 2015.

The duration of the IPE activities varied greatly from one or two short sessions, to programs which took place over the course of a year (see Table 2.2). The most commonly reported duration of IPE activities were those programs which were aimed at health professionals meeting on a regular basis to achieve a task (n=15). All studies involved many types of health professionals in IPE contexts with some including a range of other professions such as teachers, therapists, administrative staff, managers, medical secretaries, nursing assistants and an ultrasonographer. Four studies included rural sites in their sample (Bleakley, Boyden, Hobbs, Walsh, & Allard, 2006; Choi & Seng, 2015; Heath et

al., 2015; McKiel, Lockyer, & Pechiulis, 1988). Ten studies took place in the hospital setting (Bleakley et al., 2006; Jeffs et al., 2013; Leppäkoski, Flinck, & Paavilainen, 2015; Monaghan & Duarri, 2001; Nørgaard, Ammentorp, Kyvik, Kristiansen, & Kofoed, 2011; Reeves, 2000; Rice et al., 2010; Watters et al., 2015; Weeks, Counsell, & Guin, 1994; Zwarenstein, Bryant, & Reeves, 2003). Several studies incorporated whole health regions or services (Andrew & Taylor, 2012; Braithwaite et al., 2012; Heath et al., 2015; Hjalmarson & Strandmark, 2012; Meyer & Lees, 2013; Miller, Combes, Brown, & Harwood, 2014; Paquette-Warren et al., 2014; Slater, Lawton, Armitage, Bibby, & Wright, 2012; Toner, Ferguson, & Sokal, 2009). The remaining studies were located within primary health or community health locations.

Table 2:2. Duration of IPE activities

Duration of IPE activities	Total*
Short session(s) or meeting(s)	4
Regularly for number of weeks or months	15
One week course	1
One, two or three-day course or program	7
Program scheduled over one year or more	6
Total	33

Two papers not included in the above Table 2.2* were the two meta-analysis studies (Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013; Zwarenstein, Goldman, & Reeves, 2009); where both papers combined together reported on a total of 20 studies.

Table 2:3. Targeted IPE outcomes

Targeted IPE outcomes	Number of studies
Individual (education) based	21
Practice-based	31
Organizational-based	16

Many studies targeted more than one type of outcome, incorporating two or all three types of outcomes (individual, practice and organizational). IPE activities were evenly targeted for each outcome type: individual (education)-based (n=21), practice-based (n=31) and organizational-based (n=16). The most dominant targeted outcome was practice-based IPE (see Table 2.3). Individual-based interventions were those which were work-based educational interventions such as courses and workshops which were aimed at increasing the knowledge, skills and attitudes of individuals (Goldman et al., 2009). Practice-based

processes included reviewing work processes and routines, and teamwork (Goldman et al., 2009). Organization-based outcome examples were those interventions which targeted organizational culture, policies, space and human resources (Goldman et al., 2009).

Table 2:4. Studies by JET classification level

JET classification level	Number of studies
Level 1- Reaction	16
Level 2a- Modification of attitudes/perceptions	16
Level 2b- Acquisition of knowledge/skills	9
Level 3- Behavioural change	8
Level 4a- Change to organizational practice	8
Level 4b- Benefits to patients/clients	7

The most commonly addressed levels of the JET classification system in the group one intervention-based records were: level 1 – reaction (n=16), and level 2a – modifications of attitudes/perceptions (n=16) (see Table 2.4). The least addressed level was 4b – benefits to patients/clients (n=7). Comparing these results to Barr et al.'s (2005) survey indicates there may be an increase in the number of level 2a outcomes and a decrease in the number of level 2b and 3 focused studies. More recently, Gillan, Lovrics, Halpern, Wiljer, and Harnett (2011) revealed that most IPE survey instruments did not address all of the JET classification levels. For example the majority of items (n=338, 73%) were classified as measuring the modification of attitudes towards IPE, with only 2% (n= 7) measuring acquisition of knowledge and or skills, 0.5% (n=2) measuring change in organizational practice and none measuring benefits to patients.

Most of the intervention studies in group one (n=35) were reportedly well received; many however, cited several challenges. Leppäkoski et al. (2015) reported on an IPE training program where not all participants who enrolled attended, and suggested that poor commitment was due to lack of administrative, management and stakeholder support. Fiscal challenges were reported, such as lack of financial support and appropriate resources to undertake IPE activities (Reeves et al., 2006). Differences between professions were found to influence outcomes. For example there was a notable lack of doctor input in one study (Jeffs et al., 2013) and in another, the doctors declared they preferred a different

teaching approach to the other professions (Nørgaard et al., 2011). Foy, Tidy, and Hollis (2002) found that those teams that were led by doctors during the IPE interventions negotiated obstacles more easily. Zwarenstein et al. (2009) assessed the impact of practice-based interventions designed to change collaborative practice; similarly, a later study by Reeves et al. (2013) looked at IPE effectiveness. However, both studies were unable to draw any generalisable inferences.

The use of frameworks and theories in the planning of IPE varied (see Table 2.5). Being explicit about the pedagogic processes used for IPE assists with the correlation of IPE outcomes (Payler, Meyer, & Humphris, 2008). The learning strategies used consisted of team-based approaches and a combination of individual and small group activities. The most commonly cited learning theory was experiential learning. This implies that learning was interactive with the provision of experiences which were patient-centred and self-directed (Howkins & Bray, 2008). Interactive learning was claimed to be most important for IPE (Hall, Weaver, & Grassau, 2013). Other theories revolved around social learning theories and community or group based theories. Not all papers included frameworks or made reference to theories for learning. Using IPE frameworks may assist with identifying factors which contribute to effective IPL (Payler, Meyer, & Humphris, 2007). The learning tasks varied, with most fostering interactive participation as opposed to individual activities. The learning strategies were centred on ways of bringing people together in groups such as teams, small groups and pairs, with the most commonly cited IPE strategy being small group interactive learning. The number of IPE quality improvement strategies seems to have increased over time, with more of these appearing after 2012.

Table 2:5. IPE pedagogy for the reported IPE interventions (n=33)

Frameworks or theories used	No. of studies	Specific IPE-related task(s)	No. of studies	Learning strategies used	No. of studies
Experiential Learning	7	QI improvement projects	5	Small group work (interactive)	11
Didactic combined with other methods	4	Action Plan	5	Project teams	9
Reflective Learning	2	Participation in interprofessional meeting or discussion	6	Practical activities	5
Simulation Learning	1	Skill development	3	Case studies	3
Activity Theory	1	Tool construction	1	Role-play	3
Sociocultural theory framework	1	Practice teamwork for new system in the department	4	Facilitated discussion	3
Participant-driven	1	Problem-solving	1	Online learning in addition to face-to-face	2
Peer collaboration	1	Participate in simulation scenario and debrief	1	Self-review	2
PRECEDE framework (predisposing, enabling and reinforcing factors)	1	Reflective journaling	1	Work in pairs	1
Social identity theory	1	Participation in interprofessional round	3	Videoconferencing or 'telehealth'	1
Community of Practice theory	1	Research workshops	1	Watch simulated scenarios and discuss	1

The methodologies used in the reviewed studies varied widely. Nine studies used a mixed methods approach (see Table 2.6) which was recently recommended by the Institute of Medicine (2015 p. 58) to explore 'both the "what" and "how" of an IPE intervention and its outcomes'. Mixed methods generally consisted of one or more surveys and either focus groups or interviews. One study also asked participants to self-assess against competencies in addition to a pre-post survey and followed up the focus groups with additional individual interviews six months later (Miller et al., 2014). The most common methods for IPE research were pre and post surveys, interviews and focus groups.

Randomised control trials (RCT) were used in the two meta-analyses where RCT was part of the inclusion criteria. For example, Zwarenstein et al. (2009) located five studies that were RCTs and, later, Reeves et al. (2013) found eight interventions studies which were RCTs; both reviews implied they needed to be more rigorous. Only seven studies indicated they used observation methods; three of those observed health professional interactions (Bleakley et al., 2006; Rice et al., 2010; Zwarenstein et al., 2003) and four observed IPE sessions such as case-based IPE, workshops and quality improvement activities (Mann et al., 1996; Paquette-Warren et al., 2014; Reeves, 2000; Reeves et al., 2006). Studies which followed up participants varied from one month later (Thompson et al., 2008), three months (Reeves, 2000), six months (Curran, Sargeant, & Hollett, 2007) to one year later (Jeffs et al., 2013).

Table 2:6. Research methods used

Method used	Number of Studies
Mixed methods	9
Pre and post	11
Quasi-experimental	3
Randomised control	2 reviews
Interviews	13
Focus groups	10
Survey(s)	10
Observation	7
Documentation	3
Written reflection	2
Followed up	4

One study indicated they had involved real patients in the IPE intervention, suggesting that patients served as a catalyst for collaborative behaviour change (Carr, Worswick, Wilcock, Campion-Smith, & Hettinga, 2012). Some studies determined that IPE was a catalyst for new collaborations through dialogue (Curran et al., 2007; Heath et al., 2015; Mann et al., 1996; Reeves et al., 2013). Several studies showed that organizational support had a major influence on whether or not IPE was successful (Andrew & Taylor, 2012; Bleakley et al., 2006; Curran et al., 2007; Leppäkoski et al., 2015; Miller et al., 2014; Monaghan & Duarri, 2001; Owen et al., 2014; Paquette-Warren et al., 2014; Reeves et al., 2013). A majority of studies indicated that IPE resulted in increased confidence in communication, leadership and teamwork skills (Bajnok, Puddester, MacDonald, Archibald, & Kuhl, 2012; Curran et al., 2007; Nørgaard et al., 2011; Owen et al., 2014; Reeves et al., 2006; Reeves et

al., 2013; Slater et al., 2012; Thompson et al., 2008; Watters et al., 2015). A major limitation identified in a number of studies was poor attendance or commitment of participants (Jeffs et al., 2013; Leppäkoski et al., 2015; Meyer & Lees, 2013; Miller et al., 2014; Weeks et al., 1994) and taking time away from clinical work (Meyer & Lees, 2013; Paquette-Warren et al., 2014; Rice et al., 2010; Weeks et al., 1994).

2.4.2 Summary: Group one intervention studies

The first part of this review revealed that most studies demonstrated outcomes for IPE at the lower levels of the JET IPE outcomes classification system, in particular levels 1 and 2a. Two meta-analyses assessed the impact and effectiveness of IPE interventions at the higher levels of the IPE outcomes classification system (levels 3, 4a and 4b) (Reeves et al., 2013; Zwarenstein et al., 2009). Nevertheless, the review of intervention studies showed a potential reduction in the numbers of studies reporting on level 2b and level 3 outcomes. Researchers such as Gillan et al. (2011) have commented that measuring changes in behaviour is problematic. As the outcome levels increase, it becomes more difficult to gather trustworthy data related to IPE (Hammick, Freeth, Koppel, Reeves, & Barr, 2007). In relation to level 4a and 4b outcomes there is an added complexity associated with differentiating the intermediate learning outcomes from the final health and system outcomes (Institute of Medicine, 2015). The lack of studies reporting level 2b outcomes may be linked to teaching and learning strategies used in the interventions. Freeth et al. (2009) found that being able to witness peers working, through observation, workplace shadowing or simulated learning helped to produce changes at level 2b, but there were few studies of this kind.

Various types of IPE frameworks were outlined. These included: W(E) Learn (Bajnok et al., 2012); PRECEDE, which incorporates predisposing, enabling and reinforcing factors (Mann et al., 1996); Activity Theory (Meyer & Lees, 2013); Presage-Process-Product (Miller et al., 2014); and Quality Improvement (Slater et al., 2012). Whilst experiential learning was a commonly cited learning strategy, there were few studies using specific conceptual frameworks. There was no single or consistent theory to guide the IPE interventions. According to Sargeant (2009) there are many theories that address professionalism and stereotyping, such as communities of practice, reflective learning and transformative learning. These were not evident in the studies, however.

The first part of this integrative review explored the question: *What are the impacts of IPE interventions in the clinical or work-based setting?* Most of the IPE interventions were limited by their heterogeneity, making it difficult to draw generalisable inferences for the effects of IPE. The integrative review of sources from group one has highlighted that, while all studies cited positive outcomes resulting from IPE, there were numerous challenges. The most common approach to work-based IPE was through team-based activities; however, there were problems reported regarding unequal participation from different professions. This review found a lack of explanation of IPE frameworks, which can impede further development of IPE (Payler et al., 2008). Additionally, the diversity of interventions and research approaches made it difficult to draw conclusions. The Institute of Medicine (2015) recommended that more details should be provided about IPE implementation factors such as timing, content, format, length and instructor and learner preparation. Therefore, more research is needed to find out what makes an IPE intervention effective. However, Reeves, Lewin, Espin, and Zwarenstein (2010) caution that IPE research can be highly political, with some granting organizations stopping interventions or disagreeing with interpretations due to competing priorities.

2.4.3 Thematic analysis of all records reviewed

In order to determine *How does IPE contribute to IPL and to collaborative practice?* all 152 records (groups one and two) were re-read with the purpose of determining those themes which could provide an insight to particular influences of IPE on IPL and collaborative practice, and if so in what way. Five themes are presented below. Each theme is discussed drawing on key references from the literature.

2.4.4 IPE provides exposure to differences

It was evident within the literature that IPE provides the opportunity to be exposed to differences and similarities across professions (Barr, 2009; Dickinson & Carpenter, 2005; Lees & Meyer, 2011; Nørgaard et al., 2011; Phelan, Barlow, & Iversen, 2006; Pullon, McKinlay, & Dew, 2009; Tame, 2013; Thompson et al., 2008). Qualls and Czirr (1988) explained that professionals who are aware of each other's conceptual models will function more effectively as team members. In order to encourage awareness about other health professions, Dickinson and Carpenter (2005) suggested that IPE should be based on an intergroup model and be highly interpersonal. IPE must expose differences (Borduas et al.,

2006), and as Bleakley et al. (2006) point out, it is also important to respect difference in order to encourage healthy debate. Health professionals might worry that misunderstandings will turn into personal conflicts (Qualls & Czirr, 1988). For example, Rice et al. (2010) posited that interprofessional hierarchies and different bodies of knowledge impeded the uptake of their IPE intervention. Whereas differences can help to generate discussion, multiple views can improve patient care (Croker, Trede, & Higgs, 2012; Matziou et al., 2014; Newhouse, 2009; Politi et al., 2011; Pullon, 2008; Weaver, McMurtry, Conklin, Brajtman, & Hall, 2011; Xyrichis & Lowton, 2008). Meyer and Lees (2013) found in their continuing development program that exposure to views, perspectives and opinions brought differences to the surface. Moreover, Meyer and Lees (Meyer & Lees, 2013) emphasised the importance of group processes in bringing out contradictions and emotions. They suggested that addressing the concepts of 'community' and 'division of labour' seemed to strongly influence the extent to which collaborative working translates from IPL to practice (Meyer & Lees, 2013 p. 680).

Differences are demonstrated through sociological concepts such as gender and social class which influence the process and therefore the outcomes of IPE. Early work by Stein described a dominant–submissive relationship between doctors and nurses, where those who did not 'play the game' would disturb the fixed hierarchy (Stein, 1967). Later work by Miller et al. (2008) has shown the doctor−nurse game was found to exist in corridors and hallways of the hospitals, maintaining gender and social class tensions. Gender issues also impact the distribution of power in the workplace (Martin, 2006). One purpose of IPE is to create a power-neutral workplace or lessen the power imbalance across professions (Collin, Paloniemi, & Mecklin, 2010). However, recent research on IPE interventions and/or attitudes has shown these differences remain problematic (Braithwaite et al., 2012, 2013; Monaghan & Duarri, 2001; Rice et al., 2010). For example, Zhou and Nunes (2012) looked at knowledge-sharing barriers between two types of health professionals working in the same hospital. They found there was a lack of interprofessional common ground which reinforced rigid professional boundaries, and inequalities in status and power within the hospital, all of which create philosophical and professional tensions. These tensions prevented interprofessional interactions and subsequently maintained asymmetry in positional power (Zhou & Nunes, 2012).

The professional boundaries created through gender and social class issues and stereotyping were found to be disruptive to collaborative practice (Baxter & Brumfitt, 2008; Curran, Sharpe, Forristall, & Flynn, 2008; Dombeck, 1997; Hall, 2005; Krogstad, Hofoss, & Hjortdahl, 2004; Lloyd, Schneider, Scales, Bailey, & Jones, 2011; Makaram, 1995; Urban, 2014; Wackerhausen, 2009). Kitto, Gruen, and Smith (2009) suggested further unpacking of historical cultures which are embedded in practice in order to inform IPE. According to Phelan et al. (2006 p. 422), changing deeply held assumptions and beliefs requires interprofessional conversations which can expose 'the inadequacies of existing or inherited understandings and assumptions'. Concepts of community and division of labour in IPE were found to allow diverse groups to examine their differences, which helps transfer to practice (Mann et al., 1996; Meyer & Lees, 2013; Thompson et al., 2008). Consequently, IPE can expose health professions to their differences with an aim of modifying or changing behaviour (HealthForceOntario, 2010). However, Barr et al. (2005) point out there is complexity in dealing with the relationship between behaviour and attitudes; members of each profession in the practice setting will need to have a similar disposition towards each other for transfer of learning to occur. This notion brings us to the next theme, the importance of interprofessional relationships.

2.4.5 Interprofessional relationships

There is a significant body of work that has demonstrated the importance of interprofessional relationships in fostering the trust and respect required for collaborative practice (Cunningham et al., 2012; D'Amour, Ferrada-Videla, Rodriguez, & Beaulieu, 2005; Dieleman et al., 2004; Jones & Jones, 2011; Newhouse, 2009; Pullon, 2008; Rose, 2011; Sargeant, Loney, & Murphy, 2008; Sheehan, Robertson, & Ormond, 2007; Whyte et al., 2009; Wolf, Ekman, & Dellenborg, 2012; Zarezadeh, Pearson, & Dickinson, 2009). This importance is highlighted through the power differentials amongst professions, as studies have shown the negative consequences when asymmetrical positional power exists in the absence of effective interprofessional relationships (Collin et al., 2010; Gardezi et al., 2009; Nugus, Greenfield, Travaglia, Westbrook, & Braithwaite, 2010; Reeves & Lewin, 2004; Reeves et al., 2009a; Zhou & Nunes, 2012). Svensson (1996) explained that interprofessional relations between doctors and nurses could be further examined as a negotiated order in a specific context or setting. For example, in the acute care setting, Reeves and Lewin (2004) found that the nature of collaboration was not cohesive; instead,

interactions between health professionals were short and unstructured, and dependent on who was around at the time. They described how nurses had a less formal role in decision-making compared to other health professionals. This work showed that, during busy periods in an established, medically-led environment, doctors and nurses reverted to their own professional stereotypes in order to get the job done (Reeves & Lewin, 2004). Furthermore, they found that the nurses and other health professionals were less rushed and friendlier than doctors, allowing for more in-depth discussions of patient care (Reeves & Lewin, 2004). Consequently, there was evidence of cohesiveness, higher levels of team work and more social interactions when doctors were not involved (Reeves & Lewin, 2004). However, doctors were seen as 'crucial to decision-making'; for example, meetings were often cancelled if doctors were unable to attend (Reeves & Lewin, 2004).

In a subsequent study that explored the nature of interprofessional interactions, Reeves et al. (2009a) found that a 'non-negotiated' order existed between medical and other professions. For example, interactions between doctors and other health professionals were unidirectional (Reeves et al., 2009a). Reeves et al. (2009a) found that physicians rarely engaged in discussion about patient care with other professionals. Furthermore, they found that the negotiated order, in other words the social order (Marshall, 1998), of the interactions between the nurses and allied health staff were richer, more in-depth and more likely to contain a mixture of clinical and social content than were the interactions with physicians (Reeves et al., 2009a). Studies have examined the communication and behavioural elements between health professionals (Atwal & Caldwell, 2002; Atwal & Caldwell, 2005; Nurok et al.; Oandasan et al., 2009). Atwal and Caldwell (2005) found key differences between occupational therapists, physiotherapists, social workers, nurses and the medical profession, in relation to voicing their opinions and participating in team meetings. Mian, Koren, and Rukholm (2012) examined collaborative practice by analysing patient referral patterns between nurse practitioners and other health professionals. They found a significant difference between who referred patients to whom across the professions, revealing more about collaborative relationships (Mian et al., 2012). They found that trust, respect and proximity influenced the type of referral, meaning whether the collaboration was formal or informal (Mian et al., 2012). This highlights the importance of socialization of all members of the team for effective interpersonal relationships.

Interprofessional relationships are reliant on trust and respect in order to promote collaborative practice (Ales, Rodrigues, Snyder, & Conklin, 2011; Bajnok et al., 2012; MacNaughton, Chreim, & Bourgeault, 2013; Mian et al., 2012; Phelan et al., 2006; Way, Jones, & Busing, 2000). Looking at the relationships between general practitioners and allied health professionals in a variety of rural settings in Australia, a study by McDonald, Jayasuriya, and Harris (2012) found that power dynamics were responsible for variations in levels of collaboration, trust and mutual decision-making. In particular, in the relationship between general practice and public sector community health workers, levels of trust were determined to influence whether health professionals collaborated, with whom and to what degree, directly influencing patient experiences (McDonald et al., 2012).

It has been argued that the role of IPE is to provide shared learning opportunities which are likely to lead to more positive interactions between health professionals (McCallin, 2005; Meyer & Lees, 2013; Pearson & Pandya, 2006; Sommerfeldt, Barton, Stayko, Patterson, & Pimlott, 2011). IPE can enhance interprofessional relationships through socialization and teambuilding, by increasing participants' understanding of scope of practice, by linking services in the community, and by building trust and respect (Bajnok et al., 2012; Heath et al., 2015; Jeffs et al., 2013; Weeks et al., 1994). The next theme develops the interprofessional relationships further, and focuses on developing collaborative practice.

2.4.6 Developing collaborative practice

One of the aims of IPE and IPL is to improve the interaction process between health professionals to promote collaborative practice (Barr et al., 2005). First, it is important to understand how IPE and IPL can cultivate collaborative practice. Reeves and Lewin (2004) found the meaning of 'collaboration' was constructed differently by different professions, and that this restricted the nature of interprofessional relations in the workplace. According to Croker, Higgs, and Trede (2009), conceptualising collaboration is required in order to use it in specific contexts, such as in research, education and practice. Factors which are associated with poor collaborative practice include power differentials and lack of common interprofessional ground (Bajnok et al., 2012; Lees & Meyer, 2011; Zhou & Nunes, 2012).

It has been acknowledged that the interprofessional perspective of collaboration is about the parties having defined roles, participating in decision-making and having an equal amount of respect for each other (Collin et al., 2010; D'Amour et al., 2005; Firth-Cozens, 2004; Herbert, 2005; Nancarrow et al., 2013; O'Brien, Martin, Heyworth, & Meyer, 2009; Sinclair, Lingard, & Mohabeer, 2009). Kitto et al. (2009) questioned the need for team members to have equal status for effective collaborative practice. For example, from a surgeon's perspective, they argued that some form of hierarchy is required in the interest of patient safety in the operating theatre (Kitto et al., 2009). Jones and Jones (2011) revealed that expertise and autonomy in interprofessional teams were valued. Sinclair et al. (2009) highlighted the delicate balance between shared decision-making and shared power in collaborative practice. Therefore, if IPE is to engage with all health professionals, the role of leadership in the health profession hierarchy needs to be considered.

IPE planning must be contextual, for example understanding whether leadership can be shared or how power may be distributed to more than one person (D'Amour, Goulet, Labadie, Martín-Rodriguez, & Pineault, 2008; Jäppinen, Leclerc, & Tubin, 2015). For example, Haward et al. (2003) determined that in a multidisciplinary team setting, the most effective model of team leadership occurred when the style of leadership was a shared one. Similarly, shared leadership and shared responsibilities have been deemed as important qualities for collaborative practice in rural interprofessional palliative care teams (Hall, Weaver, Handfield-Jones, & Bouvette, 2008) and in intensive care units (Rose, 2011). Yun, Faraj, and Sims Jr (2005) found that an empowering leader engaged in consultation, joint decision-making and delegation, and this promoted a positive learning environment. Contextual factors for planning work-based IPE, then, include consideration for work setting types, and environments where trust can be built (Borduas et al., 2006; D'Amour et al., 2005). Ginsburg and Tregunno (2005) recommended that experimentation with different forms of IPE and collaborative practice initiatives will help to develop shared leadership.

Several studies have examined the nature of collaboration in practice (Greenfield, Nugus, Travaglia, & Braithwaite, 2010; Kramer & Schmalenberg, 2003; Leever et al., 2010; McDonald et al., 2012; Messmer, 2008; O'Brien et al., 2009; Orchard, 2010; Pullon, 2008; Pullon et al., 2009; Zwarenstein et al., 2007). Atwal and Caldwell (2005) and Nugus et al. (2010) observed that different professions participated unequally in multidisciplinary team

interactions. Zwarenstein et al. (2007) found the interactions between all staff—clinical and administrative—were lacking in the key elements of collaborative communication, such as introducing oneself, explaining professional roles and seeking input from other professionals in the decision-making process. Greenfield et al. (2010) revealed that professionals were constantly negotiating roles and boundaries as part of teamwork, in both structured and unstructured interactions (Greenfield et al., 2010). The participants indicated that they preferred to work cooperatively, and without any profession being subservient to any other (Greenfield et al., 2010). Pullon et al. (2009) studied nurses and doctors working in primary health care and found that the key to fully collaborative practice was placing priority on uninterrupted time for meetings and open communication. Similarly, Oandasan et al. (2009) revealed that health professionals would benefit from substantial daily formal interprofessional interactions as opposed to 'ad hoc' or spontaneous and informal conversations. IPL gives health professionals the confidence and competence to undertake interprofessional interactions (Heath et al., 2013).

The benefits of IPL include improving confidence in communication, leadership and teamwork to assist in the development of collaborative practice (Bajnok et al., 2012; Curran et al., 2007; Nørgaard et al., 2011; Owen et al., 2014; Reeves, 2000; Reeves et al., 2013; Slater et al., 2012; Thompson et al., 2008; Watters et al., 2015). IPL aims to reduce the negative factors influencing collaborative practice which helps to prevent adverse events and medical errors (Matziou et al., 2014; O'Daniel & Rosenstein, 2008). Communicating effectively, as well as understanding and appreciating professional roles, are the two most important core competencies for collaborative practice (Suter et al., 2009).

Barr et al. (2005) argued that IPL should focus on how to encourage different professionals to interact with each other. Ways to achieve this include using direct, concise, emotion-free communication and clarifying expectations (Apker, Propp, & Zabava Ford, 2005), giving opportunities to build trusting and respectful relationships (McDonald et al., 2012), and having a professional voice (Brown, Crawford, & Darongkamas, 2000; Long, Forsyth, Iedema, & Carroll, 2006). However, there is less evidence of how IPL improves mutual trust (Barr et al., 2005). Trust can be difficult to measure as it influences how group members will interpret each other's behaviour and may need time to develop (Salas, Sims, & Burke, 2005). Therefore, increasing mutual trust in IPL means exposing the learner to concepts

such as ‘acknowledging differences, dispelling prejudice and rivalry, and confronting misconceptions and stereotypes’ and is a ‘test-bed’ for collaborative practice (Hughes, 2007 p. 27). There is a lack of findings in the literature on how to adopt evidence-informed collaborative practice (Tremblay et al., 2010). Therefore, a gap remains in the literature about how IPE and subsequent IPL will effectively promote, support and translate to capable collaborative practice. However, IPE is recognized as a valuable tool for improving collaborative practice, and work is underway to improve IPE teaching methods (Bainbridge, 2010). This leads to the next theme which explores how IPE and/or IPL can be catalysts for collaborative practice.

2.4.7 IPE and IPL as catalysts for collaborative practice

In order to promote collaborative practice, IPE aims to facilitate strategies to assist health professionals to be capable and competent in working together (Bajnok et al., 2012; Heath et al., 2013; Jeffs et al., 2013; McLaney, 2015; Milburn & Colyer, 2008; Zwarenstein et al., 2009). Thus IPL should be directed towards improving confidence and competence in communication, teamwork and collaboration skills. Croker et al. (2009 p. 36) explained collaborative practice as ‘working to create shared understandings’, an ongoing process for which health professionals require certain tools and skills. Provision of knowledge and skills through IPE and IPL does not necessarily mean that health professionals will then be able to work collaboratively. The role of work-based IPE is to promote collaborative practice in the workplace. IPL equips health professionals with increased knowledge, a common language and collaborative skills to enable collaborative practice in the workplace.

Studies found that having a shared language was a reason that health professionals considered changing practice behaviours or practice following IPL (Bajnok et al., 2012; Curran et al., 2007; Heath et al., 2013; Meyer & Lees, 2013; Nørgaard et al., 2011; Owen et al., 2014; Reeves et al., 2006; Reeves et al., 2013; Slater et al., 2012; Thompson et al., 2008; Watters et al., 2015). Health professional discourse carries with it assumptions of power and hierarchy which can create interprofessional conflict (Jabbar, 2011). Reflecting on the use of language within the health professions can assist in examining assumptions and underlying perspectives (Jabbar, 2011; Nisbet & Thistlethwaite, 2007). Consequently, promotion of a shared common language through IPL may enable health professionals to

contribute to a shared model of working (Thompson et al., 2008) and to develop collaborative practice (Zarezadeh et al., 2009).

IPE can serve as a catalyst to collaborative practice by committing participants to demonstrate specific IPL collaborative behaviours (Owen et al., 2014) and giving them the tools to improve (Bajnok et al., 2012). For example, giving participants ownership and responsibility during the process of IPL was found to motivate health professionals to undertake relevant projects (Bajnok et al., 2012; Bleakley et al., 2006; Curran et al., 2007; Hjalmarson & Strandmark, 2012; Jeffs et al., 2013; Owen et al., 2014; Toner et al., 2009; Zwarenstein et al., 2009). Reeves (2000) demonstrated that IPL, through task sharing and discussion, enabled health professionals to offer assistance to and interact more with others. Similarly, Bajnok et al. (2012) found that it was through taking the time to get to know one another that health professionals could build on each other's strengths in clinical practice. Hjalmarson and Strandmark (2012) studied participant driven IPL, finding that this was a useful motivator for improving interprofessional interactions.

IPE and IPL served as catalysts for new collaborations through dialogue which led to new ideas and partnerships (Curran et al., 2007; Heath et al., 2015; Mann et al., 1996; Reeves et al., 2013; Watts, Lindqvist, Pearce, Drachler, & Richardson, 2007). The aim of IPE is to create a safe space for IPL with opportunities to reflect on and share norms and values (Ravet, 2012). Miller et al. (2014) implemented a continuing IPE program and found that a team's success in a task was dependent on collegial trust and the ability to mediate differences. Hjalmarson and Strandmark (2012) demonstrated that IPL facilitated community competence by allowing health professionals to reach consensus on goals and strategies. The opportunity to engage in problem-solving together generated a collective sense of power (Hjalmarson & Strandmark, 2012). Dunworth and Kirwan (2012) found that values do not always differ, and instead can provide a commonality between professions. IPL can lead to new ideas about how to improve outcomes for clients and/or job satisfaction (Heath et al., 2015) or provide the impetus to work on new strategies together (Jones & Jones, 2011; Mann et al., 1996). Dunworth and Kirwan (2012) suggested health professionals should engage in discussion about assumptions and values in ethical practice to promote collaborative practice. Dialogue has been determined as key for effective collaborative practice, however it can be impeded by inflexible professional boundaries in health care organizations (McCallin, 2001; Smith, 2003; Walshe, Caress, Chew-Graham, &

Todd, 2007). The next theme explores the influence of organizations on IPE, IPL and collaborative practice.

2.4.8 Organizational influence

In work-based IPE, an important aim is to promote changes in organizational practice and/or delivery of care (Barr et al., 2005; Barr & Low, 2013). Changes at this level can be difficult to achieve due to each organization having its own culture and structure (Alvesson & Sveningsson, 2008; Meek, 1994; Walshe et al., 2007). The WHO report, Framework for Action on Interprofessional Education and Collaborative Practice, maintains that collaborative practice is shaped by institutional supports, working culture and environmental mechanisms (WHO, 2010). The organization and its structures and systems influence whether or not collaborative practice takes place. For example, Brown et al. (2000) found that health professionals working in the area of rural community health, experienced role confusion and deepening of professional boundaries due to inadequate internal organizational structure. Each health institution is unique and differing management styles impact on effective restructuring for successful change (Seren & Baykal, 2007).

Leggat and Dwyer (2004) suggest that whilst organizational culture limits quality and safety, the most important influences are teamwork, performance management and training and development opportunities. The receptiveness of an organization to IPE could be influenced by how compatible it is with organizational funding goals and vision. For example, Miller et al. (2014) revealed that teams that did not achieve organizational change through a continuing interprofessional development program had not received any support or direction from their organizations. Similarly, Paquette-Warren et al. (2014) reported that the challenges for multiple teams coming together for IPE work-based activities were partly due to a lack of organizational/leadership buy-in as well as lack of time and resources. Bajnok et al. (2012) determined that health professionals believed that hospital managers should be more educated about collaborative practice. Mian et al. (2012) found that collaborative practice was improved when interprofessional collaboration was a part of the organizational philosophy.

The design of space and facilities can negatively or positively influence collaborative practice (Gum, Prideaux, Sweet, & Greenhill, 2012; World Health Organization, 2010). For example, Oandasan et al. (2009) found that the physical layout of clinical space and the temporal organization of clinical practice influenced teamwork. The factors identified as key temporal and spatial components of interprofessional observation were team composition, team size, duration of time working together, frequency of team meetings, opportunities to interact interprofessionally and the co-location of team members (Oandasan et al., 2009). Workplace culture can influence the social elements of communication. Reeves and Lewin (2004) found that work tasks and competence were regarded as more important than social rapport and small talk because the wards in the hospital were so busy. Staff tended to maintain roles that were 'representative' of their professional stereotypes, and this had the potential to de-value teamwork (Reeves & Lewin, 2004 p. 222). Time pressures were a common factor influencing patterns of communication between health professionals (Gotlib Conn et al., 2009; Oandasan et al., 2009; Rice et al., 2010; Whyte et al., 2009). Gum et al. (2012) determined that poor workplace design affected the quality of communication between health professionals.

Organizational support has a major influence on whether or not IPE will be successful (Andrew & Taylor, 2012; Bleakley et al., 2006; Curran et al., 2007; Leppäkoski et al., 2015; Miller et al., 2014; Monaghan & Duarri, 2001; Owen et al., 2014; Paquette-Warren et al., 2014; Reeves et al., 2013). The organization must deem the learning opportunity to be relevant to the workplace (Miller et al., 2014), just as the participants must find IPL to be helpful when dealing with issues in the workplace (Bajnok et al., 2012). Several studies in this review used work-based IPL to promote continuous service improvement (Braithwaite et al., 2012; Jeffs et al., 2013; Paquette-Warren et al., 2014; Slater et al., 2012). By working and learning together health professionals improved care and work processes in their units (Jeffs et al., 2013). In particular, the focus of learning and working becomes centred on the patient's needs which is essential for collaborative practice (Wilcock et al., 2009). Slater et al. (2012) found that time was the main problem with team-based quality improvement and suggested aligning IPE with professional continuing education. Work-based IPE also adds value to the organization. For example IPE projects increased the efficiency referrals, expanded sources of referrals between health professionals, increased their understanding of roles and services (Curran et al., 2007), and addressed real work issues (Wilcock et al., 2009).

Notably, the WHO report (2010) argues that sustained commitment is required to advance collaborative practice in the workplace. Management support has been identified as the bedrock of collaboration along with teamwork and effective leadership (Hughes, 2007). Support from management at all levels of the organization is therefore critical for sustaining work-based team development and work-based IPE (Bajnok et al., 2012; Curran et al., 2007; Freeth et al., 2009; Hollenberg et al., 2009; Reeves, Abramovich, Rice, & Goldman, 2008a; Reeves et al., 2006; Simmons & Wagner, 2009).

2.5 Discussion and conclusion

In the second part of the integrative review, five themes were analysed and used to examine the relationship between IPE, IPL and collaborative practice. Important concepts were determined for the transfer of IPE to collaborative practice including: 1) the interpersonal nature of IPE, meaning that examination of differences is required, 2) that interprofessional relationships are fluid and dependent on individuals, the perception of their roles and the organizations in which they work, 3) that successful interprofessional relationships are based on trust and respect, and 4) that when planning work-based IPE, the context must be taken into account, such as current health profession hierarchies and availability of health professionals.

In addressing the second question, *How does work-based IPE contribute to IPL and collaborative practice?* this review revealed several barriers to the provision of education in the workplace such as power imbalance and organizational boundaries. The review findings placed importance on organizations providing health professionals with dedicated time, space and motivation to commit to IPE. Additionally, it was revealed that unequal input into team interactions in the workplace contributed to poor collaborative practice. Successful IPE must also be aligned with organizational goals. The Institute of Medicine (2015 p. 3) recently suggested that observation of actual changes in behaviour will provide stronger evidence to link IPE to changes in practice and in collaborative behaviour across a range of practice settings. Reeves et al. (2010 p. 142) suggest that to further understand collaborative practice there needs to be greater exploration of interprofessional teams in action using qualitative observation methods. Therefore, this study intends to further explore the association between IPE and collaborative behaviour, and in particular the impact and effectiveness of IPE in the rural practice context.

Chapter 3 Research Design

3.1 Introduction

This chapter outlines the research design for this study, including the research approach and methods used. The research aims and questions are presented and linked with three phases of the research. The theoretical perspectives used to guide the researcher and the research processes are discussed. Details of the background, context and participants in the study are presented. Finally, the analysis, interpretations and trustworthiness of the study are addressed.

3.2 Research approach

This research used *case study* design to guide its logic, data collection techniques and approach to data analysis (Yin, 2009). Case study is a method of empirical enquiry that 'investigates a contemporary phenomenon in depth and within its real life context' and relies on multiple sources of evidence (Yin, 2009). The ontological viewpoint underlying this research is that reality is socially constructed and ever changing (Goodrick, 2010). What is knowable is seamlessly linked to the social actors within it, resulting in multiple realities and differing perspectives (Goodrick, 2010). A constructivist approach was used to explore human interactions and behaviours within a specific context. Consequently, there was an attempt to understand 'how phenomena are socially constructed in terms of the meanings people bring to them' (Denzin & Lincoln, 1994 p. 2). The approach in this case was qualitative and inductive for the purpose of attempting to further understand IPE and IPL, and to build on these concepts in relation to collaborative practice.

A key reason for using *qualitative* methodology for this study was the aspiration to collect a large data set to study health professionals in their own settings. The research question—*How does work-based IPE promote IPL and influence collaborative practice in three rural hospitals in South Australia?*—implies the need to find out 'how' or 'why' and requires in-depth exploration. The question aligned well with case study research methods such as focusing on the phenomenon of collaboration and the opportunity to explore the experiences of those bound within it. Whilst Stone (2006) recommends a blending of methods for the evaluation of IPE as opposed to single method or controlled or

randomised studies, qualitative methods allow for more detail in the analysis of change or the process of change (Kohlbacher, 2006). This research aimed to explore how IPE in a rural environment impacts on interprofessional interactions and relations during learning, and subsequently how this learning might assist health professionals to engage across boundaries in their everyday practice. Therefore, three qualitative methods were combined for the purposes of the study: observation, interviews and researcher reflections. These are further explained in Section 3.7. The overall aim was to comprehensively explore the complex nature of IPE, IPL and collaborative practice using case study to enable cross-case generalisation.

3.3 Research aim and questions

The intention of the research was to implement work-based IPE experiences and determine its influences on health professionals in rural hospital settings. Therefore, the type of IPE considered for this research was confined to the area of continuing or 'on the job' professional development such as in-service education, local workshops and training sessions. Consequently, this research aimed to explore both the impact of work-based IPE in the rural hospital setting and whether this initiative fostered IPL and in turn led to improved collaborative practice.

The overall research question—*How does work-based IPE promote IPL and influence collaborative practice in three rural hospitals in South Australia?*—was divided into two questions:

- *How does work-based IPE promote IPL in the rural hospital context?*
- *How does IPL promote collaborative practice in the rural hospital context?*

The research took place in three phases (see Table 3.1). The purpose of Phase One was to establish baseline data for each rural hospital setting, specifically to assess whether elements of collaborative practice were evident. The findings from Phase One were used to inform Phase Two, which was directed at the planning and implementation of work-based IPE activities and whether they promoted IPL. Phase Three was organised to follow on from Phase Two to determine the impact of IPL on collaborative practice in the rural setting.

Table 3:1. Phases of the research

	Phase One	Phase Two	Phase Three
Context	Health professionals and relevant health staff in three rural hospitals in South Australia *Is there evidence of collaborative practice?*	IPE interventions: activities that promote IPL with input from the participants to suit their current needs. Implement IPE activities to meet and suit the needs of each organization and determine whether they result in IPL.	Look for any influences resulting from IPL. Review organizational and individual perceptions. *Is there any impact of IPL on collaborative practice?*
Process	Gather baseline data to explore current perceptions of IPE, IPL and evidence of collaborative practice.	Phase One findings to direct type of IPE activities. Design and implement IPE activities in partnership with each organization.	Follow-up at least 6 months following the IPE interventions to allow for transferability of learning over time.
What the literature review reveals in relation to this phase	There is no 'one' tool to evaluate all of the above. There is a need for longitudinal studies.	Explore the IPE, its influence on IPL and impact post-intervention. Categorise the type of intervention. Provide details about the IPE intervention. Ensure that IPE is contextual and relevant.	There are varying attitudes towards communication, teamwork and collaboration. There is a lack of evidence for IPE such as how it affects changes in health care processes and patient care.
Methods applied	Qualitative: Field observation Semi-structured interviews Researcher reflections	Observe, evaluate and compare each IPE session and its effects on IPL.	Repeat of Phase One, with assessment of any positive or negative influences or changes re collaborative practice.

3.4 Theoretical perspectives

Case studies should add to existing knowledge such as already established theory, or build new theory (Runeson & Höst, 2009). The study of IPE has lacked definitive theoretical underpinnings (Barr, 2002; Barr et al., 2005; Carpenter & Dickinson, 2008; Clark, 2006; Sargeant, 2009). Numerous educational and theoretical perspectives have been reported to guide IPE (Barr et al., 2005; Bluteau & Jackson, 2009; Carpenter & Dickinson, 2008; Clark, 2006; Colyer et al., 2005), however Barr et al. (Barr et al., 2005 p. 138) argue that 'no single theory will suffice'. According to Sargeant (Sargeant, 2009), social psychology and complexity theory recognize both the social and experiential nature of IPL as well as the complexity of the health care environment. Adult learning principles, based on Knowles' andragogy model (1980), present a useful approach to IPL due to its emphasis on the learner's need to be actively engaged. Using a learner-centred approach increases the potential for high-quality interactions to take place between learners (Freeth et al., 2005).

Recent work (Howkins & Bray, 2008; Newell-Jones, 2005) suggests the use of Illeris' Tension Triangle (Illeris, 2002) to allow for the complexity of IPE and to help position the different theoretical learning approaches. The Illeris framework (Illeris, 2002, 2003) is based on a constructivist approach, which implies the integration of an external interaction process between the learner and his or her social, cultural or material environment with an internal psychological process of acquisition and elaboration. These processes are represented in Illeris' Triangle under three dimensions (see Figure 3.1). The cognitive dimension is associated with an individual's acquisition of knowledge and skills and is where most traditional health and social care education is situated (Howkins & Bray, 2008). The emotive or psychodynamic dimension encompasses mental energy, feelings and motivations. The societal dimension is associated with communication and interaction and serves to assist the individual's integration in communities and society, building up the sociality of the learner. Importantly, the societal dimension is the central aspect of IPE (Howkins & Bray, 2008). It is however, important when planning for IPE to consider all three dimensions.

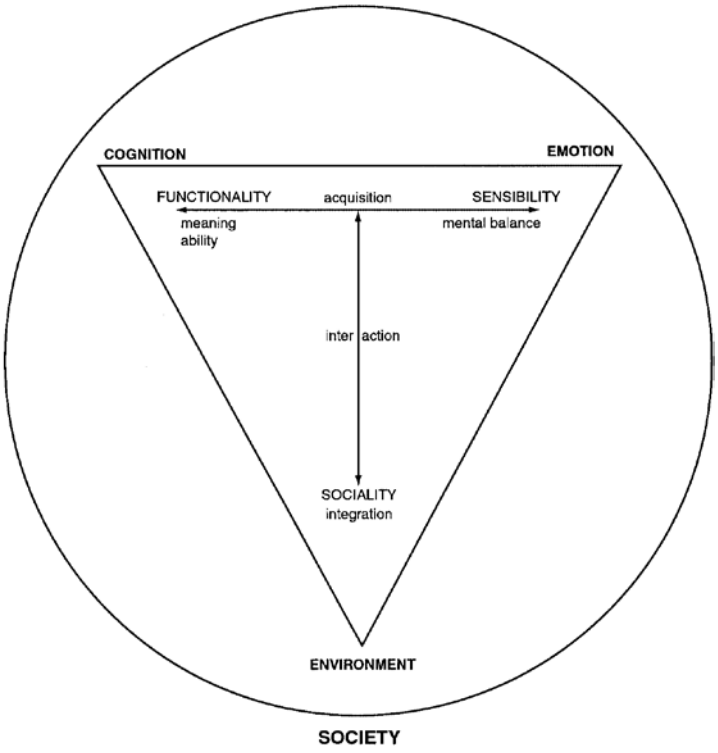

Figure 3-1. Tension Triangle

Source: Illeris (2003)

The Tension Triangle can inform approaches to learning by positioning the intended learning outcomes for a specific learning event, or set of events, within the triangle and adopting a learning approach located in that dimension (Newell-Jones, 2005). Illeris maps some of the major theoretical models of learning into the framework: those of Piaget, Kolb and Mezirow in the cognitive corner, Freud and Rogers in the psychodynamic corner and Marx and Bruner in the societal corner (Illeris, 2002). Wenger's (1998) social theory of learning is placed centrally in the Tension Triangle and therefore has potential as an underpinning theory for IPL (Newell-Jones, 2005). Building on the concept of situated learning (Lave & Wenger, 1991), communities of practice can provide an ideal environment for learning in relation to four aspects: meaning, identity, community and practice (Newell-Jones, 2005). Newell-Jones (2005 p. 65) suggests that 'meaning' links with the cognitive dimension, 'identity' links with the emotive dimension and 'community' and 'practice' focus on the social dimension of learning.

The Illeris (2003) framework is useful to underpin preparation for IPL. By taking into account diverse learners who have already formed stereotypes of their own and others'

professional identities (Howkins & Bray, 2008), Illeris' Triangle emphasizes the importance of the learners interacting with each other in order to gain insight into the work practices of different health professionals. Contact theory (Allport, 1954) also supports the importance of interaction. In such a theory it argues that under appropriate conditions, interpersonal contact is one of the most effective ways to reduce prejudice and appreciate different points of view. Bourdieu, a French sociologist, has written extensively about social capital theory, social space and symbolic power (Bourdieu, 1985, 1987, 1989, 1990). In his theory, Bourdieu (1990) describes the concept of habitus to show how professional identities are secured and give rise to certain behaviours and values within each discipline. This sense of professional belonging can lead to professional silos and strengthen professional boundaries (Langton, 2009). Over two decades of research, Hewstone and Brown (1986) have extended contact theory with their view that promoting positive contact can assist members of a group, such as members of a health profession, to learn more about each other and improve attitudes. The process of disclosing personal experiences to each other helps to develop interpersonal relationships (Brown & Hewstone, 2005). Additionally, self-disclosure provides insight into how health professionals can see and understand each other and can lead to a revision of ideas (Dickinson & Carpenter, 2005). The relevance of contact theory to IPE has been proven over the last decade (Carpenter & Dickinson, 2008).

Constructivist learning theory incorporates the idea that learners construct knowledge individually and socially (Langton, 2009). Vygotsky's theory of social development (Vygotsky, 1978) incorporates constructivism and focuses on connections between people and the sociocultural context for learning. Therefore, in relation to Illeris' Triangle, this incorporates the cognitive and social dimensions of learning (Illeris, 2003). Cognitive constructivism concentrates on the process of learning, such as problem-solving, whereas social constructivism involves learning with assistance from others (Hean, Craddock, & O'Halloran, 2009). Consequently, this research placed importance on the contact and societal aspect of learning. IPE sessions were required to consider how all participants would be given the opportunity to interact with each other and to reflect on the experience (see Table 3.2).

Table 3:2. IPE planning – Considerations and underpinning theories

Aims of IPE strategy/ intervention	Considerations	Underpinning theories
IPE as an approach to professional practice	Shared understanding of IPE/IPL. Safe environment. Clear learning objectives. Relevant to everyday practice. Understand the impact of power dimensions. Equal group numbers.	Contact theory Adult learning theory Social capital theory
Modelling IPE in a variety of contexts: both educational and practice based	Learners to be actively engaged. Allow for diverse needs of the group. Commitment to collaborative learning. Process of learning is as important as the content. Skilled facilitator. Interactive learning methods. Use of clinical simulation.	Adult learning theory Illeris Triangle Situated learning theory and communities of practice Constructivist learning theory
Opportunities to reflect on the challenges of IPE	Evaluation and assessment of sessions. Identify IPL. Identify barriers to IPE/IPL. Issues relating to power and hierarchy in the IPE/IPL context.	Contact theory Social capital theory

Source: Adapted from Howkins and Bray (2008)

3.5 Ethics

This research project was submitted to two ethics committees. Permission was granted by both the Social and Behavioural Research Ethics Committee, Flinders University, South Australia (no. 4754) and the Human Research Ethics Committee, South Australian Health, Government of South Australia (ref. 345.02.2013). The research study was conducted with honesty and openness. Free and informed consent was obtained for all research-related

activities (Appendix 2). Information was provided about why the study was being undertaken, why participants were selected, the research methods used, associated benefits and that there was minimal risk of harm (Appendices 2 and 3). Participants were given guarantees that all information was retrieved and stored in a non-identified form in order to maintain confidentiality and anonymity. Participants were able to withdraw at any time and were not subject to any coercion or influences during the course of the study. (Appendices 2 and 3)

3.6 Sample

A *rural* hospital focus was chosen due to the current emphasis on rural health professionals being required to collaborate and provide a team approach to health care with limited services (National Rural Health Alliance Inc, 2009), with limited professional development opportunities in rural hospitals (Couper, 2002) and with issues of maintaining an adequate rural workforce (National Health Workforce Taskforce, 2009). Convenience sampling was used to choose two hospitals initially, with the aim to find two that were similar in nature with one of them being more remotely located than the other, whilst located at a distance that was practical for the researcher. Soon after permission was granted for the study in the first hospital, the Director of Nursing revealed that she was responsible for two hospitals. The other hospital was located in an adjacent town and very similar in size to the smaller, more remotely located hospital. The decision was made to include a third hospital due to the potential of being able to compare two similar rurally located sites to another more remotely located site.

For the purposes of this study there was emphasis placed on selecting 'a sample from which the most can be learned' (Merriam, 1998 p. 12). Convenience sampling enabled the researcher to choose three information-rich cases which were focused on the central issues of the research (Patton, 2002). The three hospitals chosen were considered to be information rich as they were representative of the 'typical' rural hospital in the South Australian setting. They all provided generalist health care services to meet the needs of their communities. More information about the study context can be found in Chapter 4.

3.6.1 Participants

Participants included any staff member employed or visiting, in a work capacity, at any of the three rural hospitals. Working staff included nurses, personal care attendants (PCAs), midwives, physiotherapists, receptionists (also known as ward clerks), administrative staff, managers, domestic staff (also known as hotel services staff) and maintenance staff. Visiting professionals included allied and community health professionals, visiting specialists, general practitioners (GPs) and paramedics. Health professional *students* were not invited to be in the study due to its focus on employed health professionals. Participants also included staff working at the local Community Health Centre or aged care facilities. Participants included anyone who attended an IPE session implemented through the research project.

3.7 Methods

The purpose of each research phase guided the choice of tools and methods used for data collection. Each phase involved three methods: marginal participant observations, semi-structured interviews and researcher reflections. A rigorous qualitative and iterative design meant that the researcher used the data analysis and conceptual literature to inform each phase of the project (Srivastava & Hopwood, 2009). Data collection was emergent and recursive; the methods built upon each other (Ravitch & Mittenfelner Carl, 2016). Once completed, each phase led into the next phase (see Figure 3.2). Recruited participants were invited to:

(a) Be subject to observation in their everyday practice in the hospital setting, (5-6 hours per day for 2–3 days) during Phases One and Three of the study, excluding times of direct patient contact. This occurred in blocks of several hours as negotiated with the Directors of Nursing. Participants were informed that they may be asked to clarify some information immediately or soon after an 'observation', either individually or in a group.

(b) Undertake a semi-structured interview before, during and/or after an IPE intervention, up to 6 months following the intervention.

(c) Be observed during the IPE sessions in Phase Two.

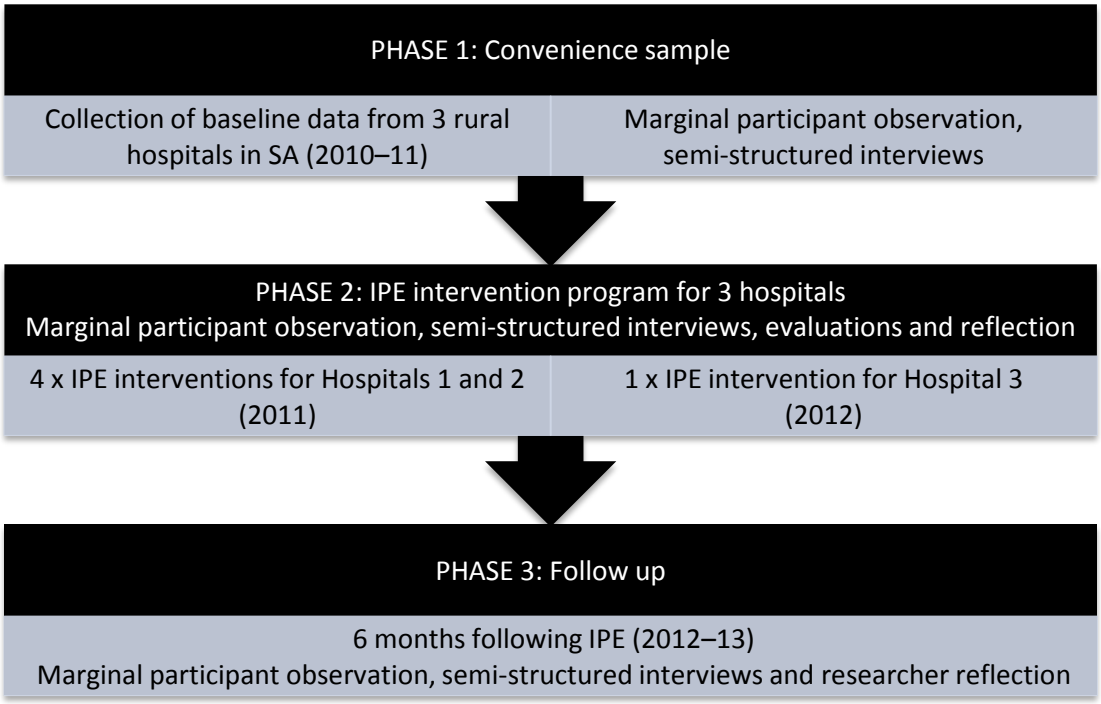

Figure 3-2. Methods and timeline for data collection

The researcher reflections were either hand written or voice recorded by the researcher intermittently throughout the study. The marginal participant observation and interview methods are described in more detail below.

3.7.1 Marginal participant observation

A case study is required to be undertaken in its own natural setting. The advantage of being able to observe participants has been likened to gaining backstage access to the behaviours, intentions, situations and events as understood by participants (deMunck & Sobo, 1998 p. 43). In the role of the marginal participant observer, the researcher should be acknowledged as being open about the purpose of the study and engage with individuals in the setting (Goodrick, 2010). He/she may ask clarifying questions of the participants, if required. Therefore, the intention was to observe participants during all three phases of the project; details are provided of each phase in later chapters.

During observations, participants were identified in field notes by their professional or occupational roles; no names or other identifiers were used. The collective term “allied health professional” was sometimes used for data reporting to assist the anonymity of the

limited number of allied health professionals within the study. Participants were guaranteed, via a letter of introduction, that all information from the interviews would be interpreted and stored in a non-identified form in order to maintain confidentiality and anonymity (Appendix 2). All those individuals observed signed consent forms (Appendix 4). The clinical spaces where observations took place included corridors, nurses' stations, areas outside patients' rooms and store rooms. Tea rooms and dining areas where staff sometimes congregated were excluded, in order to give staff a break from being observed. Patients' rooms were excluded, as including these would have added an unnecessary layer of complexity and more complex ethical considerations to the study. A limitation of participant observation in this study was that achieving broad coverage was challenging with only one observer; however, one strength was the ability of the researcher to support the context of each case being studied and to do this in 'real-time' (Yin, 2009 p. 102).

3.7.2 Field notes

As the researcher was alone in collecting the data, it was decided to use pre-determined categories as a guide for recording the observations. An observation tool was developed for the observational fieldwork (Appendix 5). The tool consisted of six categories: 'frequency and duration', 'setting', 'roles', 'activities and interactions', 'communication' and 'collaboration and teamwork'. The tool was based on Merriam's (1998) observation tips, deemed as useful to record in field notes. Merriam (1998) argued that using a list of elements aids the researcher by deciding ahead of time what to concentrate on as well as guiding what to observe. The categories in the observation tool consisted of some of Merriam's fundamentals: the physical environment, the participants and their activities and interactions, the frequency and duration of the activities and interactions, nonverbal communication and guidance on how to observe a conversation (Kawulich, 2005; Merriam, 1998). For example, for '*the participants'* Merriam (1998 p. 97) asks: *'Who is in the scene and what are their roles and what brings them together?'* This term was labelled as number two in the tool and entitled "roles" with cues about what the researcher would be looking for. Continuing with the Merriam (1998) theme of providing structure to the observations, it was noted that a pre-determined category should also influence the choice of what to observe. Therefore, in addition to the ideas provided by Merriam (1998), a final and fifth section was added, "collaboration and teamwork", to afford a special focus on these concepts to suit the purpose of the study. What to observe in the "collaboration and

teamwork" category was decided using examples from the literature, such as respect, teamwork, considering all views, managing conflict and tension and the role of group dynamics, all of which contribute to collaboration and teamwork (Barr et al., 2005; CIHC, 2010; Greenfield et al., 2010; Hall, 2005; Mickan et al., 2010; World Health Organization, 2010). Notes were recorded freehand to a journal using the pre-determined categories, thereby assisting to provide data that were especially relevant to the study.

3.7.3 The role of the researcher

According to Kawulich (2005), the level of involvement by a researcher can affect the amount and the type of data collected. While in the hospital setting, the researcher was an observer who was not a member of the workforce, but could interact with the health professionals as a means of conducting better observation to generate a detailed understanding of the interactions in each case (Kawulich, 2005). It was also deemed important that the researcher, upon meeting the hospital and visiting staff, should inform them of the purpose of the observation, and share information with them about the research so that their questions about the research and the researcher's presence could be addressed (Kawulich, 2005 p 31). This placed the researcher in a delicate relationship, using an 'ethnographic eye' and taking care about what to report and what not to report (Goodwin, Pope, Mort, & Smith, 2003).

The researcher was also aware that her professional identity as a nurse meant that she had a familiarity with a hospital environment and the terminology used. This made developing rapport with the staff easier and reduced the need for enculturation (Dewalt, Dewalt, & Wayland, 1998), however, it was potentially a limiting factor. Goodwin et al. (2003 p. 571) rightly point out that if the routines and practices are familiar to the researcher, the researcher's interpretations will not be the same as those of an outsider. Therefore, careful consideration was given to the stance of writing field notes from a purely descriptive viewpoint rather than an interpretive standpoint, at the time.

A challenge for the participant observer is the depth of the data revealed by participants, which can be dependent on whether the participants are willing to provide information that they perceive as confidential. This was important to consider in the hospital setting, especially in relation to patient care which had legal and ethical implications, for example if

the observer was witness to illegal or unsafe behaviour. The researcher was cognisant of ensuring that staff members understood that, whilst she was observing in a clinical setting, she would comply with the need to follow hospital protocol if unexpected events arose. This was communicated in the Information Sheet (Appendix 3) and at face-to-face staff meetings prior to the data collection. The researcher explained that she would be guided by the staff. If requested to leave a room or area, then she would do so, without question.

3.7.4 Semi-structured interviews

Interviews are an important source of information for case studies (Yin, 2009) and they were a major component of the data collection in this study. The aim of using semi-structured interviews was to employ a conversational line of inquiry while pursuing relevant information (Yin, 2009). For example, when directly observing people, a researcher cannot observe their thoughts, feelings and intentions (Merriam, 1998). Therefore, the purpose of the interviews included determining attitudes, challenges and barriers toward collaborative practice as well as previous experiences with IPE and IPL. It was deemed important to explore participants' views about their own inteprofessional relationships, opportunities for IPL and current collaborative practice, as the study emphasised how IPE may or may not influence these concepts. Questions were intially drafted for the purpose of the ethics applications. Following this, over several months leading up to data collection, questions were discussed with three research supervisors and a final group of interview questions was finalised and agreed. There were eight primary interview questions in Phase One and six questions in total in Phases Two and Three (Appendix 6). During the course of the interviews, the researcher added a question to the primary interview questions asking the participants if they were familiar with the term 'interprofessional learning' before asking questions 5–8, as it was found that many participants did not understand this term.

For the entirety of the project, the Directors of Nursing from each hospital gave staff permission to undertake the interviews during work time. GPs offered to be interviewed in their lunch breaks, and other visiting health professionals were happy to be interviewed following their 'rounds' or at their place of work, by appointment. Interviewees were required to sign a consent form prior to the interview (Appendix 7). Interviews took place when participants could fit them into their busy schedules. Interviews were approximately

30 minutes in duration and conducted at a time and place of the participants' choosing. A copy of the interview questions without the prompts was provided to participants to assist with the line of questioning.

3.8 Recruitment

Letters of permission were provided from each hospital, which gave consent to the researcher to have access to the hospital in the research project. These have not been included in the appendices to maintain the anonymity of the hospitals. All participants were advised through the letter of introduction that the information provided would be treated in the strictest confidence. However, due to the small number of participants, they were also advised that while every effort would be made to protect their anonymity, that may not always be possible. They were also advised that they would be able to discontinue participation at any time and/or decline to answer particular questions. For each phase the information sheet was updated (Appendix 8).

When on site, each participant was approached personally, in an effort to overcome the challenges associated with observational research (Yin, 2009). Reflexivity was deemed important to be able to explain the motives behind the use of the observation method and to allow the potential participants to ask questions. The researcher had also visited the sites prior to any data collection taking place, meeting first with the Directors of Nursing, senior community health staff and then with any health professionals who were able to attend, in the hospital setting. Emails were sent to the general practices after speaking with the practice managers who had deemed email as the best form of contact for the GPs. The participants were assured that all raw data would be treated confidentially. The researcher also informed participants that if they decided not to participate in the research, this would be honoured by the researcher and would not result in any discrimination or any other penalty to them.

3.9 Data collection

3.9.1 Phase One

The observations were undertaken in periods of 2–3 hours at a time. The researcher arrived at morning clinical handover time and introduced herself to the morning shift working staff, such as nurses and kitchen and administration staff. Clinical handover is where patient information is transferred from one nursing shift to the next. As people arrived in the facility, including visiting staff, anyone that was going to be observed was provided with an information sheet and a 'consent to be observed' form to sign. The researcher gave a brief explanation of the research and why the participants were being observed. Importantly, people were advised that they were able to opt out if they wished. Potential participants were asked to complete the consent to be observed form before the researcher commenced recording of field notes. The researcher used the coffee and meal breaks to interact further with staff to involve them with the project. The best vantage point to take field notes was found to be in a corner of the nurses' station in all three hospitals as this was central to most of the interactions. It was during the periods of observation in the nurses' station and occasionally in the corridors and dining room, that interview times were booked with participants. For example, following introductions or following a short conversation about the research, they were invited to partake in a single private interview and informed that these would be recorded. Participants volunteered to be interviewed during their breaks, such as lunch times, or were able to nominate a time and private place that suited them. Staff nominated a quiet place to be interviewed, such as unused patient rooms or outside. For example, some GPs requested their interview to be held at the nearby medical centre and community health staff invited the researcher to a private room in their own building. A paramedic offered for all of the paramedics to be interviewed together, so a group interview was held at the ambulance station later that evening. All interviewees signed a consent form before the interviews commenced.

3.9.2 Phase Two

Phase Two involved the planning and implementation of IPE activities. It was seen as important to involve key stakeholders in the planning phase due to the need to be reflexive, with the nature of the research being within an iterative framework (Srivastava &

Hopwood, 2009). The role of iteration in qualitative research requires the researcher to be reflective, not just to collect data (Ravitch & Mittenfelner Carl, 2016). The researcher engaged with stakeholders in planning the sessions to ensure that they would be interprofessional in nature and meet local need. Facilitators and managers were followed up for verbal feedback following the sessions.

Appropriate senior managers and health professionals were asked if they wished to volunteer as part of the planning process for the education sessions and in order to gain their input and engage them with IPE. Most importantly, for IPE sessions to be relevant to each of the organizations, suggestions were made by participants during the on-site visits and at the interviews in Phase One and consequently utilised in the planning for Phase Two (see Table 3.3).

Table 3:3. Outline of the steps in planning for Phase Two

Step	Description
1	Provide suggestions for possible content/topics to the Director of Nursing and other key stakeholders
2	Make contact with possible facilitators by telephone or email
3	Set dates and finalise topic, target audience and type of session
4	Develop flyers for distribution by the clinical nurse managers
5	Arrange visits or follow-up phone calls to each health department (community health, medical practices, hospitals and ambulance station) prior to the sessions, to encourage attendance
6	Develop sessions with input from facilitators and stakeholders
7	Advise participants that the researcher will be present as an observer and consent will be required

The researcher aimed for all sessions to meet the definition of IPE, to follow the strategies and underpinning theories identified in Table 3.2 and to focus on the values of IPE (see Table 3.4).

Table 3:4. Values of IPE

Values
Focus on the patients' needs to improve their quality of care, health outcomes and wellbeing
Keep best practice central throughout all teaching and learning
Acknowledge, but set aside, differences in power and status between professions
Respect individuality, difference and diversity within and between the professions and all with whom they learn and work
Promote parity between professions in the learning environment

Source: Adapted from CAIPE (2011)

The IPE sessions were provided to participants as part of their ongoing education and aimed to include participants from at least two different professions. The education facilitators were informed about the principles and values of IPE and requested to include them as part of the aims and objectives of the sessions.

Observation field notes and reflection notes were handwritten by the researcher during planning and during and after each of the IPE sessions. The purpose of the data collection in Phase Two was to:

- highlight and gain further knowledge about planning and implementing IPE sessions
- experience and record whether and how IPL takes place.

Having different types of IPE interventions taking place within the study, also presented an opportunity to examine the effects of each one and to compare them.

Participants who attended the planned IPE sessions were advised using the information sheet, in person and/or by email, that the researcher would be introducing IPE as an intervention into their region as part of the research project. The type of information noted included: the time and length of the sessions, number of attendees and their role/profession, the environment and seating arrangements, descriptions of what was presented and comments that seemed relevant to the research. Key points were noted in conversations between the facilitator and the researcher, between the participants and the

researcher, and between participants and facilitators, sometimes verbatim. Of key relevance was how the different professions interacted with each other during the sessions. Therefore, details about where participants sat, their body language and what content they discussed were all observed and noted. Researcher reflections included what went well and what did not, how the researcher experienced the session, how much IPL took place in the session, and finally what could have improved the session.

Whilst the Phase Three data collection aimed to follow-up IPE interventions from Phase Two, a funding opportunity resulted in being able to undertake extra interviews in the Case Three IPE intervention. This funding was provided by a Rural Health Continuing Education Stream Two grant administered by the National Rural Health Alliance on behalf of the Department of Health and Ageing (2011) for 12 months. The grant was applied for in partnership with the Director of Nursing in Hospital Three (H3). Semi-structured interviews were undertaken as part of the data collection in Phase Two, Case Three only. Each participant who attended the workshop was interviewed on two occasions: one week after the workshop and again, two to three months later. Participants were invited, at the end of the workshop to leave their contact details for a follow-up 10–15 minute interview approximately one week later. Following the workshop, telephone interviews were held at a time that was convenient to participants. Interview questions for the first round of interviews were open-ended and designed by the researcher to elicit information about participants' attitudes to the workshop, their view of the teaching methods, what they liked and/or found difficult about it, what they learned as a result and how they might apply this learning to their practice (see Appendix 9). The questions were jointly agreed by the Director of Nursing (H3) and the researcher. The same participants were then invited to participate in a second telephone interview approximately two months following the workshop (see Appendix 10). All participants received information sheets and signed consents forms prior to the interviews being undertaken.

3.9.3 Phase Three

Phase Three commenced after the intervention phase of the study (Phase Two). Based on recommendations in the literature, the researcher waited for at least six months following any IPE sessions, before commencing the data collection in this final phase of the project (Reeves, Tassone, Parker, Wagner, & Simmons, 2012; Zwarenstein et al., 2009). The

researcher followed the same processes as in Phase One. The information sheets explained that this was a follow-up of the IPE interventions which had taken place six to eight months earlier. All participants were invited to be observed and interviewed and were provided with consent forms, during the on-site visits.

Case Three in Phase Three was not undertaken due to the fact that only one funded IPE intervention had taken place. The Director of Nursing had been unable to source financial support for the nursing staff or any of the other employees of the hospital to take part in any further IPE sessions. She indicated that it would not be possible to undertake any further IPE sessions. In discussion with the Director of Nursing, it was decided not to pursue Phase Three in this hospital. It was determined that this could be partially offset by the data obtained from the additional grant-funded interviews as outlined in the previous section. Nevertheless, no further data were collected for Phase Three, Case Three, which is acknowledged as a limitation of the study.

3.10 Analysis and interpretation

All field notes taken using a Livescribe Pulse™ smartpen were saved as files on the researcher's personal computer and then converted to digital text using MyScript for Livescribe software. The digital texts were saved and filed as documents labelled as field notes with the relevant date and stored in NVivo 8 (QSR International Pty Ltd, 2012). This software was used to store, categorise and analyse the data and was updated as required, concluding with NVivo 10 (QSR International Pty Ltd, 2012). Field notes were labelled with the relevant phase (One, Two or Three), the date and hospital (H1, H2 or H3).

The Livescribe Pulse™ smartpen was also used to audio-record the interviews, the recordings then being transferred to the computer and saved as audio files. The audio files were labelled with the participant-type, date, length of audio and H1, H2 or H3 depending on the hospital in which the interview was conducted. Later, to help with the provision of quotations, the researcher gave each interviewee a number ranging from one upwards, organised according to the time and date of the interview.

3.10.1 Transcription

Phase One interviews were transcribed by the researcher. There is a growing body of evidence regarding the role of transcription in qualitative research as being selective or partial, representative or interpretive (Davidson, 2009). Using the selective method, audio files were played and selective text was typed into a Microsoft Word document. This was done in order to gather the answers given to the questions by the participants and to include laughter or pauses only when they seemed relevant. The advantage to the researcher of transcribing the data was to become fully immersed in it to increase familiarity, despite the process being very time intensive (Pope, Ziebland, & Mays, 2000). By listening closely to the audio, the researcher could gather more detailed information from the speaker such as emphasis, speed, tone and pauses which can shape and help to interpret data (Bailey, 2008). However, for Phases Two and Three, the interviews were transcribed by a professional transcription company to allow more time for data analysis. The conversations between the researcher and the interviewee were included, as were pauses and laughter. Each transcript was proof read by the researcher whilst listening to the original audio file to check for accuracy. Participants who were interviewed were informed that they could check the transcripts of their interviews if they desired. No interviewees took up this offer. The participants were also offered the opportunity to read interpretations prior to the final report. The final draft report was made available to the hospitals before submission of the thesis.

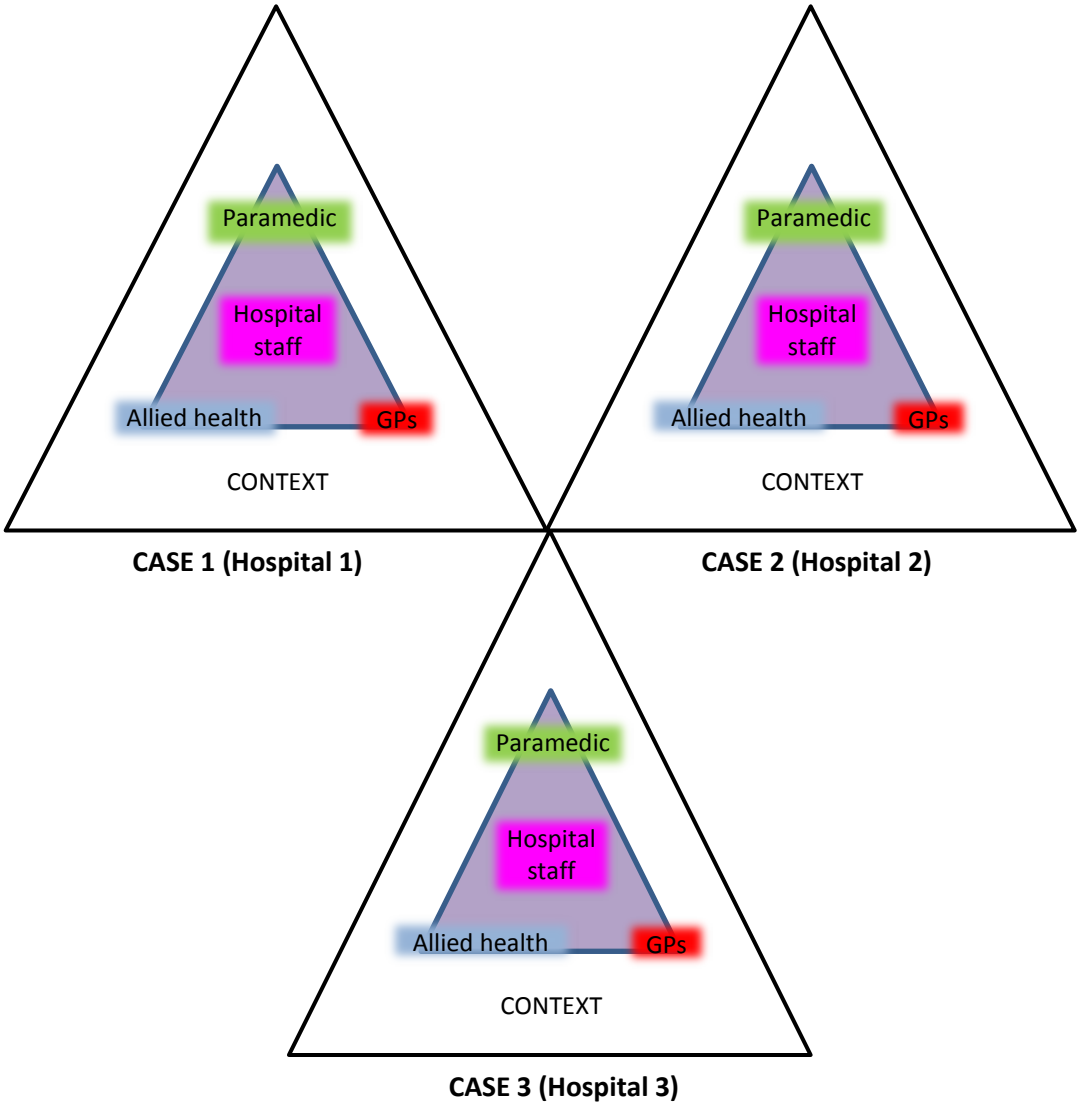

Figure 3-3. Multiple case study

3.10.2 Analysis

According to Yin (2009), case study analysis should follow a general analytic strategy. For the purposes of this research, each hospital was viewed as a separate unit of analysis (or case), with analysis being undertaken individually and then collectively (see Figure 3.3). In Figure 3.3, each case is depicted with the hospital as being central to the research. The hospital includes all those who work within it as well as the Community Health Services. Other health professionals linked with the hospital included in the study were paramedics, GPs and allied health professionals.

Case study analysis is conducted through the researcher's attempts to understand and interpret each case thoroughly in its own unique context (Mills, Durepos, & Wiebe, 2010). Importantly, case study is a research strategy which focuses on the interrelationships in a specific context (Mills et al., 2010). Exploring each case individually and strategically allowed the researcher to explore and link the data within and between each case iteratively (Yin, 2009). The most desirable technique for case study analysis is pattern-matching logic (Yin, 2009). This logic compares empirically-based patterns with predicted or alternative ones. Yin (2009) also emphasises the importance of being able to 'play' with the data; this includes using the theoretical proposition and comparing this to any contrasting perspectives of the participants or stakeholders. Being aware of this throughout the project meant that the researcher was able to look for evidence that built on any patterns identified during each data collection period which could help to explain any rival conditions or descriptions (Yin, 2009). The strategic exploration of data assisted with the research approach of focusing on the 'why' and 'how'. The researcher used questioning by posing relevant questions as part of the analysis when exploring the patterns found in the data. For example, when reading through the data the researcher asked: '*Why do the participants have seemingly limited views of what working collaboratively means?*' This enabled further searching for evidence in the data.

An inductive process was used to examine data in relation to subtleties, processes and consistencies in order to make generalisations (Mills et al., 2010). In conjunction with the use of NVivo to categorise the data, the researcher used manual methods of coding. Initially, sorting the *field notes* involved using colour-coding from the observation tool. For example, pink was used for 'roles', green for 'activities and interactions' and orange for 'collaboration and teamwork'. This was done because the observation tool used was a guide only and notes were not written in any particular order. The field notes were used to further inform the interview data, so further levels of coding took place using colour-coding as required. For example, red was used for 'conflict', blue for 'systems' and yellow for 'physical environment'. Following this, other groupings were identified, such as 'physical environment' which was further categorised into 'the nurses' station', 'quality' and 'safety and privacy'.

Qualitative content analysis was used for 'the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes'

(Hseih & Shannon, 2005 p. 1278). Interview data were categorised within NVivo software with three levels of coding taking place. The first level of coding involved a direct approach using predetermined categories which were similar to the observation tool used to take field notes. These were labelled 'collaboration and teamwork', 'communication', 'IPL' and 'roles and setting'. This level of coding can be defined as a deductive method of coding as the researcher was using already determined theoretical constructs, or an *a priori* template of codes, to inform the analytic process (Fereday & Muir-Cochrane, 2006).

The second level of coding was the more conventional method of using inductive category development where the researcher became immersed in the data to allow new insights to emerge from it (Hseih & Shannon, 2005). Using the NVivo software, the researcher highlighted exact words from the texts to represent key thoughts and concepts and used these to create labels or nodes which were reflective of more than one key thought (Hseih & Shannon, 2005). In Phase One, emergent categories (see Appendix 11a) were used to organise and group the second-level codes into meaningful clusters (Patton, 2002). In Phase Three, the first-level coding was slightly adjusted in order to focus on expanding the findings from Phases One and Two (Appendices 11b). Following this, a third level of coding took place to sort the large number of labels into smaller categories and make further sense of the data (Hseih & Shannon, 2005). The labels were sorted into further categories by the researcher to investigate each concept in more detail (see Appendices 12a and 12b).

Naturalistic generalisations or categories for each hospital were developed from the data following identification of the key issues in field notes and in comparison with the interview data. This process involved paraphrasing and/or summarising the key themes (Fereday & Muir-Cochrane, 2006). Each step of the findings was discussed and supported by the research supervisors. These discussions prompted further exploration of the data to look for explanations and relationships between categories. A qualitative and iterative design meant that the researcher used the data analysis and conceptual literature to inform each phase of the project (Srivastava & Hopwood, 2009). The researcher consulted the literature as required throughout the entire analysis process to assist with the development of rival explanations.

Once the cases were analysed, the similarities and differences between them were explored. In the iterative process of content analysis, the codes and nodes were revised to

help build a detailed descriptive case (Mills et al., 2010). The researcher searched for a descriptive framework to assist with the writing up of the findings. For example, the four concepts of collaboration—sharing, partnership, interdependency and power (D'Amour et al., 2005) —were used to re-examine the data. Each concept was defined and interpretations were made about how the themes supported the type of collaborative culture that existed in each case. However, this was found to be limited in displaying any overarching patterns and connections between the cases. Instead, the WHO Framework for Action on Interprofessional Education and Collaborative Practice (WHO, 2010 p. 26) was used. The elements required for collaborative practice, via IPL at the practice level were presented in Table 1.2 in Chapter One. These domains consisted of teamwork, roles and responsibilities, communication, learning and critical reflection, relationship with, and recognizing the needs of the patient, and ethical practice (WHO, 2010 p. 26). The WHO framework (2010) was used to present the findings of the study in Phases One and Three in Chapters 5 and 7, and this assisted with the cross-case analysis in Chapter 8.

In Phase Two, observation field notes and reflection notes were handwritten during the IPE sessions. This information was then coded manually under the headings 'venue', 'atmosphere and body language', 'statements made during discussion' and 'reactions to the session'. To choose these headings the researcher asked herself W*hat do I want to know and how can the observations inform IPL?* For Phase Two interviews, in the first level of coding, data were placed under the headings matched by the questions, for example 'impact on practice' or 'learning outcomes'. The second level of coding involved the researcher going through the information in each code and then categorising the data based on the common themes and patterns; for example, in 'learning outcomes' a subtheme stemmed from this entitled 'what was actually learnt', and in 'teaching methods' a subtheme developed entitled 'experiential learning'. Following this, a third level of coding took place which involved probing deeper into the subthemes in an attempt to make further meaning from the data. For example, 'experiential learning' was broken down into three further categories titled 'discomfort', 'having to think' and 'making mistakes'. Final coding sorted all data into four categories which represented an overview of both the participants' and facilitators' perceptions of the sessions: 'engagement', 'scenarios/case studies', 'IPL' and 'reactions to the session'.

Phase Two, Case Three telephone interviews were held at a time and place that was convenient to participants. Seven participants were interviewed by telephone on two occasions at their convenience: once after the workshop and again three months later. The interviews were transcribed verbatim by a private company. All interviews were given an interview number and labelled and stored by initials only for anonymity and to enable the researcher to match up each round of the participant interviews. The participants were described as Participant 1 (P1) and ensuing numbers, to provide anonymity to a small group of rural participants. Once transcribed, interviews were entered into software NVivo 9 (which upgraded to 10 during this process). The first level of coding was done by placing data under the headings matched by the questions; for example, data were placed under 'impact on practice', 'learning outcomes' or other such headings. The second level of coding involved the researcher going through the information in a code and then categorizing the data based on the common themes and patterns; for example, in 'learning outcomes' a subtheme from this included 'what was actually learnt'. Following this, a third level of coding took place which involved probing deeper into the subthemes in an attempt to make further meaning of the data. Finally, data were arranged into key themes to represent participants' perceptions: learning culture, interprofessional learning, and rural continuing professional development. Member checking took place; the final report was reviewed by the Director of Nursing and the workshop participants in Case Three, before being reported back to the funding body.

3.11 Trustworthiness of the study

The key strengths of a case study are its flexibility, potential to cope with the complex and dynamic characteristics of real world phenomena, and that conclusions are based on a clear chain of evidence in a planned and consistent manner (Runeson & Höst, 2009). Table 3.5 presents the chain of evidence for this study.

Table 3:5. Chain of evidence used for the study

Chain of evidence for the study	
1.	Direct approach using a prior template. Tool was created by researcher using evidence-based information (Merriam, 1998) and based on ethical guidance (Kawulich, 2005)
2.	Transcriptions by the researcher (selective) and then by a transcription service
3.	Field notes: 3 levels of coding (using colour codes)
4.	NVivo software used for 3 levels of coding of interviews. Similar headings to commence nodes using the observation tool headings with the additional node called 'IPL'
5.	Inductive category development using NVivo. Use of case study tactics by Yin (2009)
6.	Questions posed by researcher and supervisors and further sorted into smaller categories to look for explanations and evidence. Consultation of the literature. Field notes added to NVivo
7.	Naturalistic generalisations using a framework (see Table 1.2) to interpret and review data
8.	Cross-case analysis using framework. Use of case study tactics such as pattern matching to produce categories

It is also the richness and 'thickness' of the descriptions that help to convince a reader of research trustworthiness (Merriam, 1998). Thickness refers to the extent to which the descriptions of the social relationships and the cultural context are explicit in how they depict their meaning (Holloway, 1997; Lincoln & Guba, 1985). In the 1980s, the concept of 'trustworthiness' was conceived by Guba and Lincoln (1981) to replace the quantitative research terms 'reliability' and 'validity'. Social research in the form of qualitative research becomes more difficult to objectify than quantitative research and therefore it is important to appreciate the subjectivity and the complexities that shape human interaction (Ezzy, 2013; Gubrium, 1997).

Trustworthiness can be tested using four constructs: confirmability, credibility, transferability and dependability (Lincoln & Guba, 1985). According to Shenton (2004), these constructs can be contrasted with the positivist researcher view as follows: confirmability in preference to objectivity; credibility in preference to internal validity; transferability in preference to external validity/generalisability; and dependability in preference to reliability. These are now discussed in view of the research undertaken in this thesis and follow Yin's approach of defining case study 'tactics' (Table 3.6).

Table 3:6. Four constructs to ensure trustworthiness of case study research

TESTS	Case study tactic	Phase occurred	Applied by researcher
CONFIRMABILITY (Construct Validity)	Use multiple sources of evidence Supervisors to review evidence Triangulation Feedback to participants	Data collection x 3 phases Writing up of findings of all phases	Observation Interviews Physical environment Researcher reflections Monthly meetings Participants could ask questions about any interpretations or view any written reports before dissemination
CREDIBILITY (Internal Validity)	Pattern matching Explanation building Use logic model Address rival explanations	Data analysis	Content analysis A. Deductive B. Inductive Three levels of coding Iterative coding Questions posed by researcher to find explanations Use of theoretical framework Compared findings/interpretations to current literature
TRANSFERABILITY (External Validity)	Use replication logic in multiple case studies	Research design	Production of natural and theoretical generalisations
DEPENDABILITY (Reliability)	Use case study protocol	Data collection	Presentation of a chain of evidence Establish findings which are meaningful and interesting

Source: Adapted from Reksoatmodjo, Hargo Utomo, and Com (2012); Yin (2009)

3.11.1 Confirmability

The role of confirmability is to reduce the effect of investigator bias. Confirmability involves triangulation which encourages the use of several methods to minimise bias (Seale, 1999). For work that is located in the interpretivist paradigm, such as this study, Seale (1999) suggests that triangulation adds depth and scope and can be achieved by member checking or sharing research findings with participants, accounting for any

negative instances and using analytic induction and reflexivity, while Yin (2009) emphasises the well-written case study. Importantly, it is necessary to demonstrate that the work's findings are the result of the experiences and ideas of the participants and not the preferences of the researcher (Shenton, 2004).

A detailed methodological description has been provided to enable the reader 'to determine how far the data and constructs emerging from it may be accepted' (Shenton, 2004 p. 72). Yin (2009) suggests other tactics such as the use of multiple sources of evidence to ensure that all perspectives are represented and having case study reports that are reviewed by other key stakeholders. The three supervisors of the project played a major role in reviewing the findings and had regular discussions with the researcher in order to cross-check across the multiple data sources. These sources included direct quotations and sections drawn from the field notes when making interpretations about data, as well as evaluations from the IPE sessions. The researcher encouraged the senior managers and Directors of Nursing to ask for feedback during the project. Regular dialogue enabled the researcher to build a rapport with management and this assisted in particular with Phase Two of the project. Written information such as reports and material were disseminated by the managers in the departments, prior to publishing or distribution (Gum, 2012; Gum et al., 2012).

3.11.2 Credibility

The criteria for credibility are related to the congruence and accuracy of the findings (Merriam, 1998; Shenton, 2004). To ensure that the findings were believable, the researcher followed the advice of Yin (2009) by pattern matching and explanation building through addressing rival explanations and using logic models. Inductive methods were used. For example, while the observation tool and elements of collaboration assisted in determining the initial deductive categories, the next two levels of coding for field notes and the interviews were inductive. Interpretations were considered and congruence was achieved through discussions with the three research supervisors, along with a review of current literature. Lincoln and Guba (1985) suggest the use of member checks; these were undertaken by the Directors of Nursing who were provided with initial interpretations during their interviews and regular conversations with the researcher. They were able to validate the findings. They were also provided with the opportunity to read through the

final draft of the thesis. Whilst other participants were advised that they could view transcripts or interim reports, no-one contacted the researcher to request his/her transcript or provide feedback on the reports. One of the limitations in this study was that the coding was performed by one researcher (Thomas, 2006).

3.11.3 Transferability

Transferability relates to whether a study's findings are generalisable to other studies or contexts. This is usually the type of measure that is determined by statistical analysis. In qualitative research, analytic generalisations are more concerned with the application to a broader theory (Yin, 2009). Replication logic (Yin, 2009) was used to assist with the generalisations and thus three separate case studies were undertaken. According to Yin (2009), having at least two case studies rather than one is more powerful because the analytic conclusions are derived independently from each case. Exploring differences between the cases generated a search for congruence with the four concepts of collaboration: sharing, partnership, interdependency and power (D'Amour et al., 2005). Cross-case analysis triggered further examination of the coding across the cases to discern patterns common to all cases. Dialogue with the supervisors took place and data were further examined to look for explanations about participants' perceptions and behaviours in order to further understand the relationships in the rural context. The researcher consulted the literature to assist with understanding the data and this helped to form naturalistic generalisations. Each setting was similar in terms of hospital size and services provided. Two hospitals were similar in their rural location. The third hospital, which was more remote, offered a disparity in the cases to be studied. This assisted with theoretical generalisations.

3.11.4 Dependability

The fourth construct, dependability (equivalent to reliability), implies that reproducing the study would result in similar conclusions and findings (Yin, 2009). However, with qualitative research, the position of the researcher as a part of the research process has an impact in some way upon the findings (Reksoatmodjo et al., 2012). Importantly, the study is based on the participants' own experiences and viewpoints in a certain situation and context and this means that, if repeated, the research would not necessarily deliver the same findings (Shenton, 2004). Therefore, dependability is best determined by giving

researchers access to the methods and planning used (Shenton, 2004). An 'audit trail' illustrating how the data were processed is an important component as it allows anyone to re-trace the steps of the research (Shenton, 2004) and establishes a chain of evidence (Yin, 2009). This accountability also includes the transcription process (Davidson, 2009). Yin's (2009) suggestion is to operationalise a case study protocol using the same approach as if one were being audited. The case study protocol for this research is presented in Table 3.7.

Therefore, this study has provided a chain of evidence as well as a case study protocol to assist with any audit trail. Data have been stored in computer files and organised using the NVivo software to store all field notes, interview and researcher reflection transcriptions, audio files and the final two levels of coding. Manually coded field notes and researcher notes from research meetings in hard copy format have been stored and locked in a filing cabinet for a specified time, according to the ethics committees' protocols.

Table 3:7. Case study protocol

Activities	Description
Context	South Australian rural hospitals
Research question	The guiding question is: How does IPL influence collaborative practice in rural hospitals? More specifically, however, the study aimed to determine whether IPE can lead to IPL in this setting and if so, whether it can increase collaborative practice.
Boundary of the study	The interactions between the rural hospital setting and the collaborative nature of practice within it and its associated departments. Includes those who worked there and those who were moving in and out of the environment. Patients were not included in this study.
Unit of analysis	Each hospital was considered as a separate or holistic unit of analysis. (See Figure 3.3)
The cases	Three rural hospitals participated in this study, including medical centres, community health and allied health departments where staff had visiting rights or provided a service to the hospital. Cases were inclusive of paramedics, hospital service and administration staff.
Replication logic	The study aimed to compare three cases, each similar in size and settings. However, each IPE intervention was different and based on the needs of each hospital. Cross-case analysis took place to further inform or modify any theoretical generalisations.
Data collection strategies	Triangulation was used. Primary data sources were semi-structured interviews, marginal participant observation field notes and researcher reflections notes from meetings and relevant documents. Data collected until saturation achieved.
Data analysis and chain of evidence	General inductive approach. Content analysis and case study tactics. Chain of evidence. (See Table 3.2)
Interpretation of findings	Insights were validated using direct quotes and thick descriptions by the researcher. With references to actual incidents, findings were validated by key informants such as the directors of nursing and peer reviewed by researcher's supervisors.

3.11.5 Saturation

Finally, it is important to demonstrate in qualitative research that any conclusions are grounded in the data. Therefore, direct quotations were used to demonstrate that all

interpretations were rooted in the data including references to actual instances during the study. Additionally, when data saturation was reached (that is when no new information was being achieved), data collection was closed for Cases One and Two (Mason, 2010). In qualitative research it can be argued that the quality of the research should be less about sample size and more about the quality of the data collected (Guest, Bunce, & Johnson, 2006; Mason, 2010). Therefore, in this study, saturation was reached when the ability to obtain new information was completed, for example there were no new themes and further coding was no longer feasible (Fusch & Ness, 2015; Guest et al., 2006). Unfortunately, constraints within Case Three meant that the researcher settled for less than developed theoretical data (Mason, 2010) and was therefore unable to claim saturation in the final phase. While this limitation may have a negative impact on the validity of the research, saturation was achieved for Phase One and Two.

3.12 Limitations

Limitations of the methods used have been discussed throughout this chapter where relevant. Researcher observations were limited to that of the hospital corridors and nurses' station and did not include the patient bedside. Including the patient voice would have provided further evidence and a different view of collaborative practice. For example, observing instances of communication between health professionals and patients may have provided more data. However, including patients in the study may have proven more difficult in terms of access and may have disrupted the work patterns being observed. Phase Two, the intervention phase, was limited through having to be reliant on the goodwill of the managers to support and plan for IPE in their health unit. Case Three findings were limited due to Phase Three being incomplete.

3.13 Summary

In summary, this chapter has outlined the methodological approach used in this study, which reflects an interpretivist perspective and a rigorous qualitative methodology. Reasons for undertaking the case study method to guide the study and how it can contribute to being able to find an answer to the overall question have been examined. Theoretical underpinnings have been discussed in relation to the research approach and its

framework. Finally, the research steps have been outlined in detail to assist with ensuring the trustworthiness of the study.

The next chapter entitled “Study Context” provides a description of the three rural hospitals, each as a separate case. This chapter also provides contextual information for each of the interventions in Phase Two of the study.

Chapter 4 Study Context

4.1 Introduction

This chapter presents contextual information about the three cases in the study. Descriptions are provided of the context and profiles of the three rural hospitals in South Australia that were studied. Each hospital is represented as a separate case, bound by its geography, those who worked there and the community it serves. The hospital wards, where patients are admitted for care, will be referred to as 'acute' services, while care that is provided by the community health centre will be referred to as 'community' services. The physical layout of each hospital ward is described, and drawings that were gathered during the data collection phase are provided. These descriptions are presented here rather than in Chapter 5 ('Findings: Phase One'), in order to provide the reader with a contextual understanding of each case. All information provided is deemed relevant to the study due to the importance that case study research places on social context. The hospital managers requested that the hospitals within this study remain anonymous; therefore, the hospitals, regions and staff interviewed were given pseudonyms (Thomson, Bzdel, Golden-Biddle, Reay, & Estabrooks, 2005).

The rural health services in South Australia at the time of the study were divided into health clusters based on geographical location. Two hospitals in this study (Case One and Case Two) were classified as *RA2-Inner Regional* according to the Remoteness Area Classification system (RA) (Australian Bureau of Statistics, 2010). They were part of the same Health Cluster and together serviced around 10,000 people (see Table 4.1). The more remote hospital (Case Three) was classified as *RA4-Remote* on the Australian Standard Geographical Classification - Remoteness Area (ASGC-RA) of the Australian Bureau of Statistics. At the time of the study, Case Three serviced a population of around 600. It is part of a region of 3,000 people with services provided by two other hospitals. Each hospital in the study operated under a GP service, where all patients are admitted and managed by GPs who were visiting medical officers, as opposed to being salaried by the public health sector. Several medical specialists visited the inner regional area on a fortnightly basis with access to radiology services, with the more remote area having only a physician and a geriatrician visiting bi-monthly and a weekly sonographer. Table 4.1 also presents demographic information for each hospital. For the purposes of the study, the

Case One hospital is named Hillside Hospital (H1) and the Case Two hospital is named Valley View Hospital (H2). They belong in the same health cluster which has been named Lake Trout. The Case Three hospital is known as Farmville Hospital (H3) in the health cluster of Lake Salmon.

Table 4:1. Demographic profile: Case 1, 2 and 3

Hospital	Health cluster	Distance from Adelaide	Beds	Services provided
Case One – Hillside Hospital (town population 6,000)	Lake Trout (population 22,500)	80 km	26	Medical, surgical, and 24-hour accident and emergency service Community health centre Ambulance station 3 x GP medical centres
Case Two – Valley View Hospital (town population 4,500)	Lake Trout (population 22,500)	70 km	23	Medical, surgical, obstetric and 24-hour accident and emergency service 3 x GP medical centres
Case Three – Farmville Hospital (Population 600 people - includes outlying towns)	Lake Salmon (population 3,000)	200 km	19	Medical and 24-hour emergency service Community health centre Residential aged care facility Ambulance station 1 x GP medical centre

4.2 Background and demographics of each case

4.2.1 Rural Region One – Lake Trout

Lake Trout is the pseudonym for the region containing the two Inner Regional hospitals. Lake Trout is an economically secure rural region with a steadily increasing population.

According the Australian Bureau of Statistics (Australian Bureau of Statistics, 2013), as of 30 June 2011, the area serviced a population of around 22,500 people covering approximately 900 square kilometres. Located 80 kilometres from Adelaide, the capital city of South Australia, the region has above-average proportions of school-aged and younger children (0 to 14 years) and people aged 45 to 64 years, compared to the average for South Australia. It has a predominantly young population profile with the largest proportion being parents and homebuilders [sic] who were aged between 35 and 49 years (Australian Bureau of Statistics, 2013). Lake Trout has only a small proportion of Aboriginal and Torres Strait Islander peoples (0.7%). The region's main industries are sheep and cattle grazing, crop and fruit growing, viticulture and tourism, with the largest industry being manufacturing.

There are three major towns in the Lake Trout region; each one is located within 8 to 16 minutes' drive from the others. For the purposes of the study, these three towns are referred to as Hillside, Middletown and Valley View. Lake Trout's health services consist of two public hospitals (Hillside Hospital and Valley View Hospital), a community health centre, a career ambulance station and three General Practice medical centres. Each medical centre consists of GPs in private practice, some of whom are practice partners. Others are employed by the medical centre. Each practice employs administrative staff and practice nurses. Ambulance stations differ in country health in South Australia. Some towns contain an ambulance with paid professional staff on site (career stations), and others are mostly staffed by volunteers (volunteer stations).

During the research period, Lake Trout became part of a larger health network spanning five public hospitals, one community health centre, eight GP medical centres, two career ambulance stations and five volunteer ambulance stations, as a result of the introduction of a new management structure at Country Health South Australia from 1 December 2012.

4.2.1.1 Hospital One (Case One) – HILLSIDE HOSPITAL

Hillside Hospital is located within one of the major towns in the Lake Trout region. The region's community health centre and a career ambulance station are only a few minutes' drive from the hospital. The town itself and its outlying district have a population of just fewer than 6000 people (Australian Bureau of Statistics, 2013). The hospital is a 26-bed

public hospital offering inpatient medical, surgical and 24-hour accident and emergency services. On arrival to the accident and emergency department, patients are seen by the duty nurse for triage. In a medical emergency, residents of Hillside are asked not to go directly to the hospital but to call for an ambulance. All patients in the accident and emergency service are treated as private patients once they have been seen by a doctor and their treatment incurs a fee. Hillside Hospital, like all three hospitals in this study, operates under a GP service, which is located in the main street. All patients are admitted and managed by GPs, who are called Visiting Medical Officers. Fortnightly visiting medical specialists utilise consulting rooms in the hospital but do not have admitting rights. Hillside Hospital was built in 1910, and over the last 15 years questions have been raised about the physical standard of this health facility. In the last decade, a business case was drawn up for a new health facility for the region of Lake Trout, but this was not pursued by government.

Hillside Hospital is co-located with the community health centre which services the Lake Trout area. The types of services provided included social worker, occupational therapy and physiotherapy. The community clinical nursing services provide wound care, medication management and general nursing care, both in the home and at the health centre. The region has access to mental health services. Fortnightly services are provided by a continence nurse and a diabetes educator.

Inside the hospital, the area where the researcher spent the most time was in the nurses' station. The nurses' station was central to the layout and the activities in the hospital (see Figure 4.1). The nurses' desk was in the open and the counter was high on the outside with a raised platform on the staff side. There was one large clinical room, the Close Observation Room, opposite the nurses' station and desk, which was an area used for planned and unplanned consultations with outpatients and for close monitoring of high-risk patients. The researcher was advised by the nurses that the Close Observation Room was often used in preference to the emergency department as the latter was quite some distance away and not staffed unless there was an emergency which required full-time nursing or team care. In this situation, extra nursing staff would need to be called in. There was only one doorway to get into the nurses' station and desk area (see Figure 4.2).

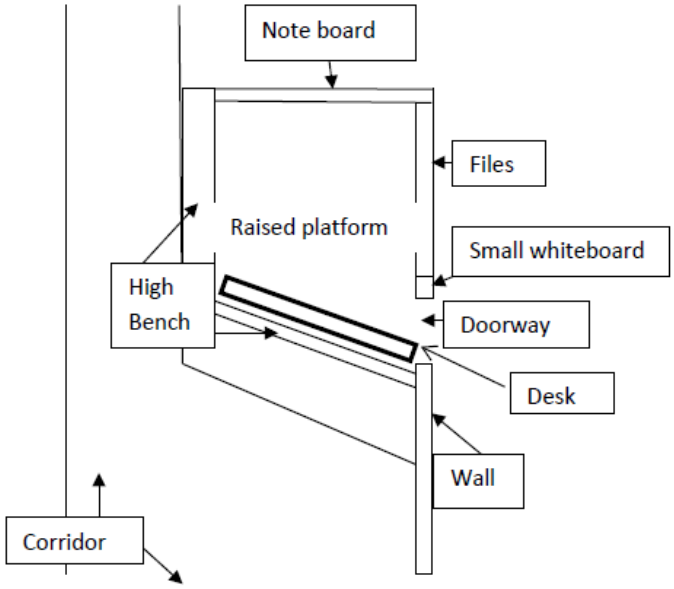

Figure 4-1. Hillside Hospital (H1) – Nurses' station

Source: Gum et al. (2012)

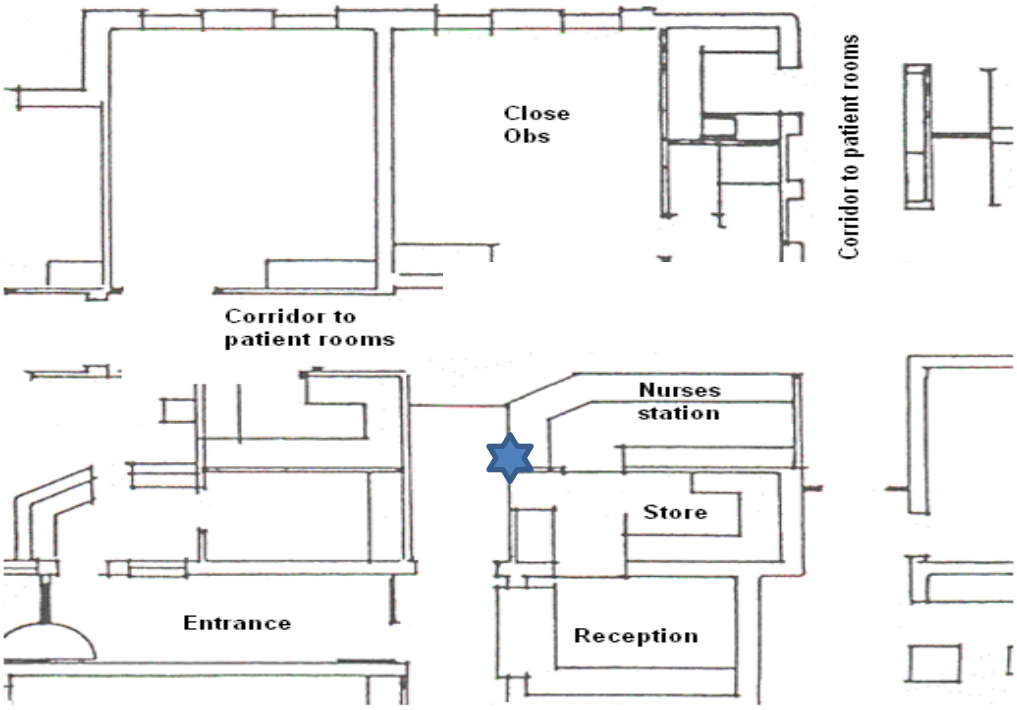

Figure 4-2. Hillside Hospital (H1) – Nurses' station and corridors

The entrance to the nurses' station also led to a small, enclosed room behind the desk area where medications and consumable items such as syringes and needles were stored. It was known as the store room. This room had no door and immediately faced the doorway entrance to the nurses' desk to the right and administration area to the left. This layout was seen not to be conducive to the degree of privacy often necessary for conversations between health professionals. It was in the area between the doorways to the nurses' station, the store room, the receptionist area and the main corridor that most conversations between hospital staff and visiting health professionals took place (see the star in Figure 4.2).

4.2.1.2 Hospital Two (Case Two) – VALLEY VIEW HOSPITAL

Valley View Hospital is located within Valley View, another of the major towns in the Lake Trout region. A GP medical practice is located across the road from the hospital. All patients admitted at the Valley View Hospital are managed by GPs from this medical practice as well as the other two GP medical centres in Lake Trout. Like Hillside Hospital, in Valley View Hospital there is also space within the hospital for fortnightly visiting medical specialists for consultations. They are able to use the operating theatre but do not have admitting rights. The town itself has a population of 4500 people (Australian Bureau of Statistics, 2013). The hospital is a 23-bed public hospital offering inpatient medical, surgical, obstetric and 24-hour accident and emergency services which operate in the same way as those at Hillside Hospital. Valley View Hospital was opened in 1955, and like the nearby Hillside Hospital there has been much political debate about its future. The hospital provides maternity care for pregnant women residing in Lake Trout. The number of births at this hospital lies in the category of 100 to 450 births per annum. The maternity services remain under strain, with a larger regional hospital being some 30 minutes' drive away. The hospital has an operating theatre where GPs and medical specialists have set theatre days.

On the ground of Valley View Hospital and next door to the hospital building is a small building housing an Early Childhood Intervention Team consisting of allied health professionals who specialise in providing family-centre services to children, adults and families. For example, on certain days consultations are undertaken by a paediatric speech pathologist, occupational therapist, dietitian and physiotherapist. These health

professionals are employed by Country Health South Australia and practise separately to those employed in the region's Community Health Centre, located next to the Hillside Hospital.

The corridors at Valley View Hospital were notably wider than those at Hillside Hospital. The corridors led to all the patients' rooms with the nurses' station anchored in the middle (see Figure 4.3).

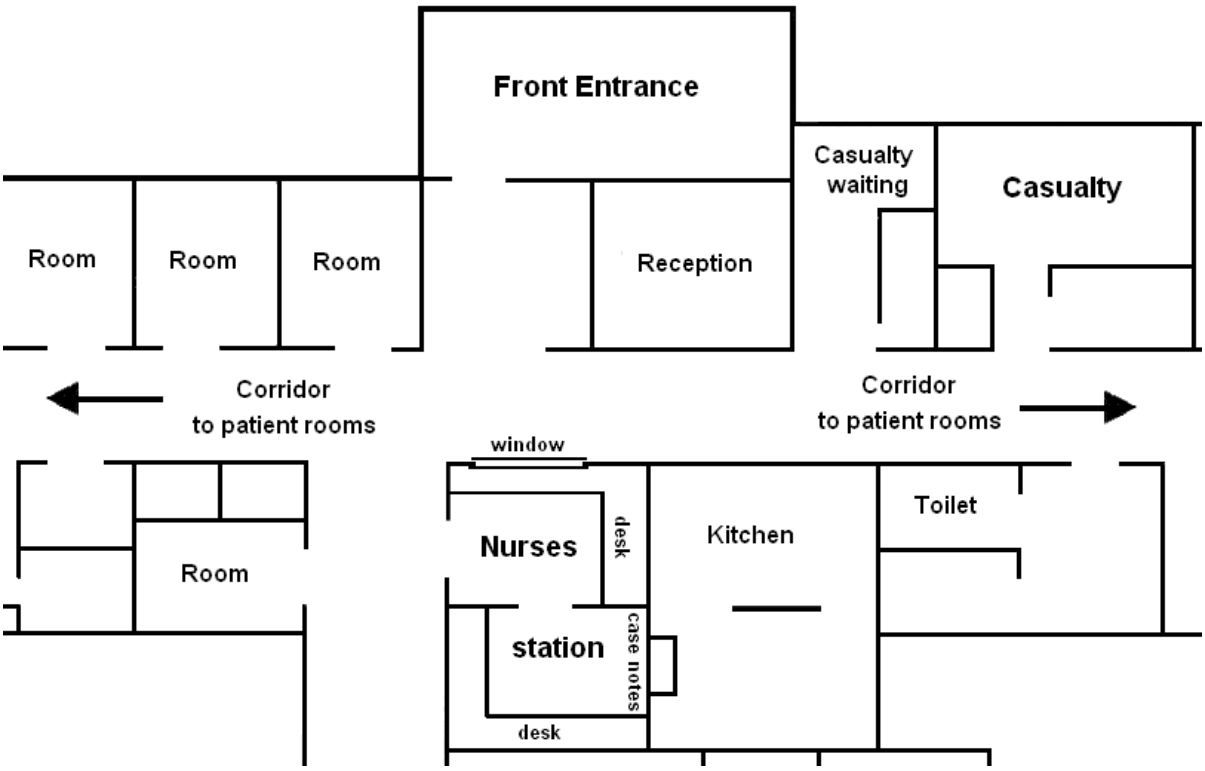

Figure 4-3. Valley View Hospital (H2) – Nurses' station and corridors

The nurses' station was directly opposite the front entrance of the building. It was enclosed by windows and had a doorway around the corner. The nurses' station had been renovated 12 months previously, which resulted in the desk area being almost completely enclosed with glass windows. There was only one small whiteboard in this area, but there were power leads running across it from the security camera, which covered up some of the written information. The patients' case notes were stored away from public view. The room directly behind the station had been recently enlarged and secured to make it more private, and was observed to be very conducive to private conversations. There was plenty

of space for desks for writing, which resulted in most conversations occurring in this room as opposed to the corridors. (See Figure 4.4)

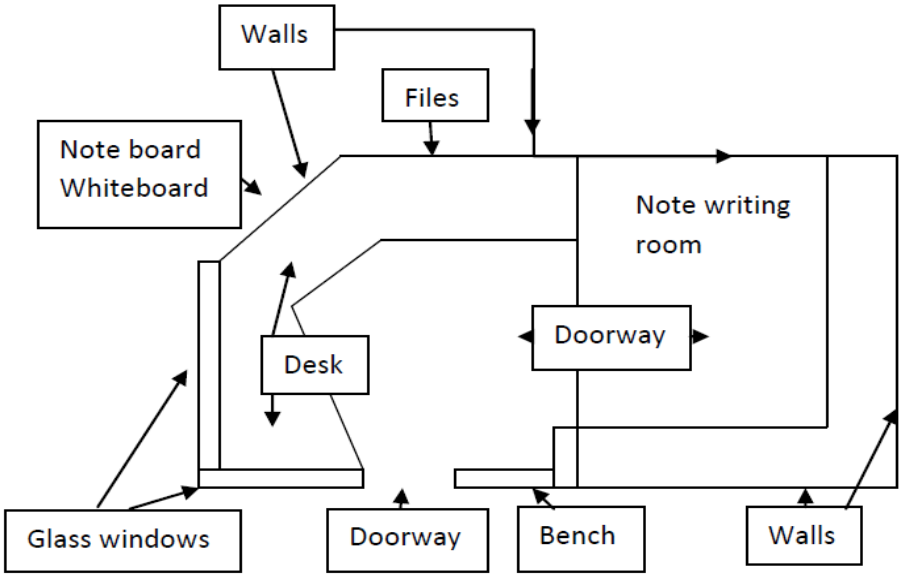

Figure 4-4. Valley View Hospital (H2) – Nurses' station

Source: Gum et al. (2012)

The midwifery unit was located down one of the main corridors and next to the operating theatre. There was a small office/station located in this area with a telephone and bench for use by the midwives and GP obstetricians.

4.2.2 Rural Region Two – Lake Salmon

Located approximately two hours' drive from Adelaide, the region of Lake Salmon comprises nearly 6000 square kilometres and is predominantly made up of farming and horticulture enterprises. Its population has slightly decreased in recent years and at the time of the study serviced a population of around 3000 people (Australian Bureau of Statistics, 2013). The region consists of two major towns complemented by rural community townships. Lake Salmon has above-average proportions of school-aged and younger children (0 to 14 years) and people aged 45 to 64 years, compared to the average for South Australia. The largest age group in the region is aged 0 to 14 years, followed by the group aged 55 to 64 years (Australian Bureau of Statistics, 2013). There are only a small proportion of Aboriginal and Torres Strait Islander peoples (1.6%). The landscape has

changed over the last 20 years to irrigated horticulture due to an extended drought. As a result the district now produces a large amount of vegetables. Lake Salmon's health service consists of three public hospitals. The third hospital studied in this research (Farmville Hospital) is one of these.

4.2.2.1 Hospital Three (Case Three) – FARMVILLE HOSPITAL

Farmville Hospital consists of a 19-bed general hospital with an accident and emergency department. It provides medical services to adults, children and the aged, as well as outpatient services. Within the hospital complex there is a medical practice, a nursing home and a former nurses' home which provides office space for community health staff. Across the road is a volunteer ambulance station, which is mainly used for training purposes. Lake Salmon during the course of the project became part of a very extensive country health network which included 12 public hospitals, five community health centres, 12 medical centres, six career ambulance stations and nine volunteer ambulance stations.

Farmville Hospital was built in 1912 and has since been enlarged. On the premises there is a stand-alone low-level aged care facility which opened in the early 1980s. The nearest ambulance station relies on volunteer staff in order to remain active. For the duration of the research project, the hospital's Director of Nursing held dual roles, being a nurse and also a volunteer ambulance officer. Over the last decade, the region has struggled to retain and recruit a medical workforce. At the time of this study, the two-doctor medical practice was being run by two part-time GPs who did not reside in the region. Towards the end of the study, the medical practice had recruited another part-time GP. The GPs were contractors, not employees, of the hospital. The practice was assisted by another medical practice in a town located 90 minutes away which sent a GP once a week to help with the patient consultations as well as to supplement the on-call roster.

Community health service provision included weekly visits by diabetes educators, podiatrists, mental health nurses and psychologists. The community services provided both in the home and at the health centre were mostly attended by home helpers (non-professionals) and personal care attendants, with only a couple of nurses to oversee clinical care. Personal care attendants (also known as PCAs) are care givers who are non-professionals employed to assist with activities of daily living. Other community health

services were jointly provided by the Lake Salmon community health services. At the time of the research, the hospital had access to a visiting social worker and physiotherapist who were directly employed by Country Health South Australia.

The nurses' station was located just past the reception and administration area where two wide corridors intersected (see Figure 4.5).

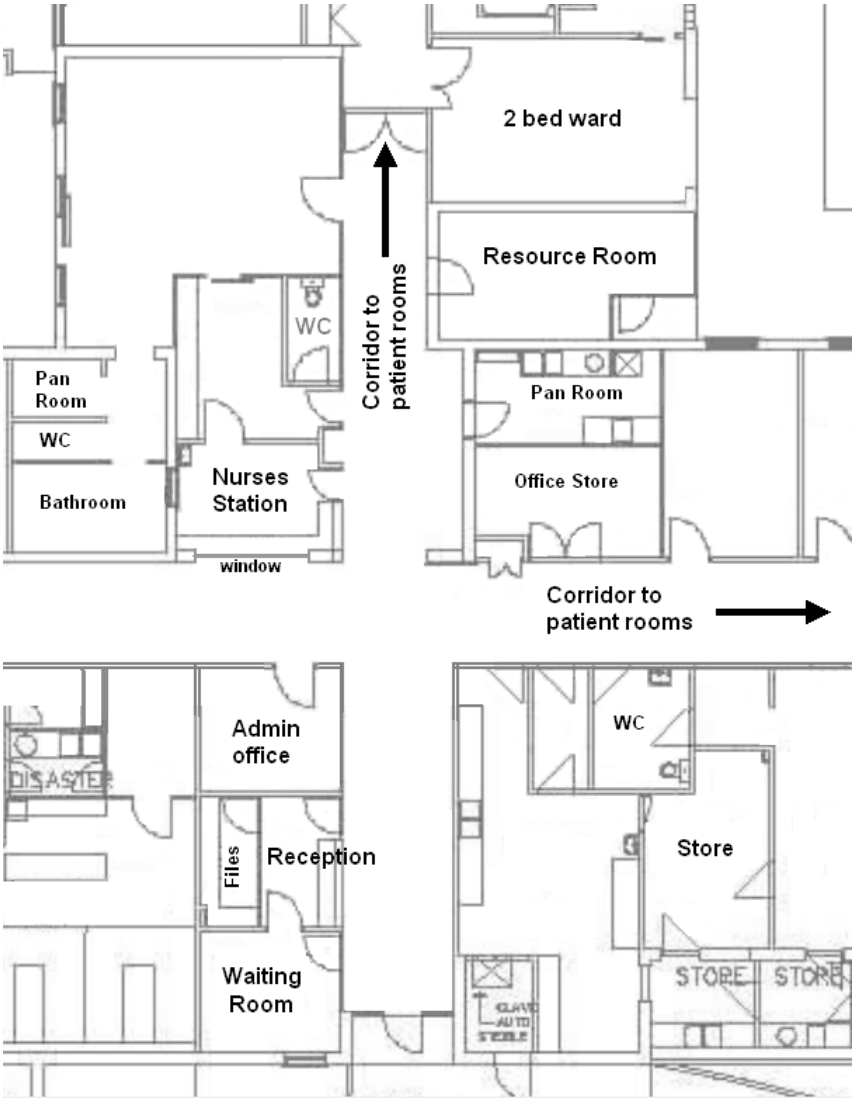

Figure 4-5. Farmville Hospital (H3) – Nurses' station and corridors

At the time of the study, building maintenance projects were ongoing; they included projects such as repairs, changing rooms around and moving doors to improve the building use. The nurses' station was neat and tidy, but small and cramped. The nurses' station had noticeboards stretching along the back wall, which were full of notices (see Figure 4.6).

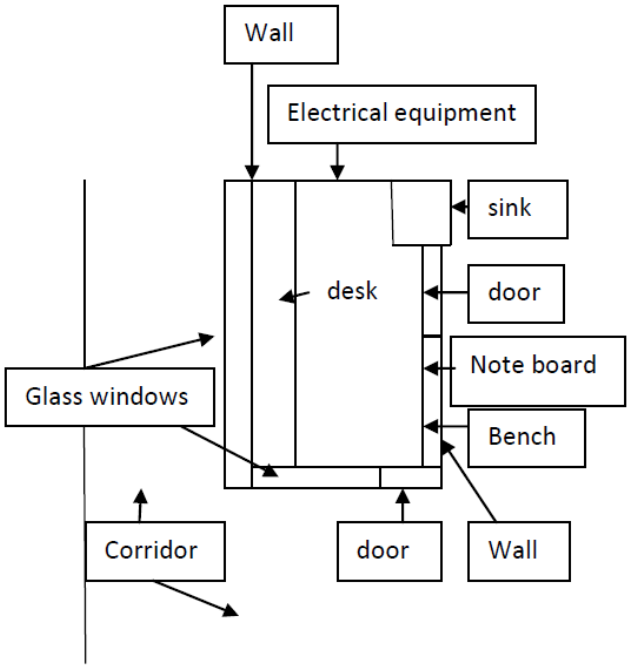

Figure 4-6. Farmville Hospital (H3) – Nurses' station

Source: Gum et al. (2012)

Piles of case notes were visible through the window, stored at the bottom of a shelf against the wall. There were notes stuck up along the top of the desk, lists of tasks to be done, lists for labels, faxes to be sent, notes from nurse to nurse for the next shift and notes to doctors. There was no whiteboard. There were two doors leading in and out of the area; however, these did not prevent the difficulty of getting in and out of the room without walking through people's conversations. The photocopier in the corridor was just outside the nurses' station and was used by both health professional and administrative staff. Its corridor position meant that this area was popular for spontaneous and opportunistic conversations.

4.3 Context for IPE interventions

4.3.1 Description of IPE interventions

The contexts for each of the IPE interventions are presented in this chapter. It is acknowledged that the information provided here was derived as part of the data collection process and precedes Chapter 6 ('Phase Two (Interventions)'). However, the purpose is to enhance the context for the reader by describing the background, planning, educational theory and implementation for each intervention. The interventions evolved through the iterative nature of the research; sessions were selected through discussions with senior nurse managers, the Directors of Nursing, the Division of General Practice and the paramedic focus group. The outcome was five different types of IPE interventions (see Table 4.2). Each IPE intervention was chosen by the participants in the study. The interventions were perceived to be relevant to their organizations at the time. Senior management in particular were influential in the decision-making, emphasising that IPE interventions needed to be useful for both the organization and their staff.

Table 4:2. Title and location of IPE interventions

IPE intervention and location
A. Introduction to TeamSTEPPS (H1 and H2)
B. Understanding Suicide (H1 and H2)
C. Appreciative Inquiry (H1 and H2)
D. Working with Paramedics (H1 and H2)
E. Falls Prevention and Management (H3)

4.3.2 Intervention A – Introduction to TeamSTEPPS (H1 and H2)

4.3.2.1 Background

TeamSTEPPS is an evidence-based teamwork and communication training system developed and piloted by the Department of Defense (US) and the Agency for Health Care Research and Quality (US) in 2005. The name stands for Team Strategies and Tools to Enhance Performance and Patient Safety. The system focuses on skills that promote team performance principles. The TeamSTEPPS program was piloted in South Australia in 2008.

In 2010, the US program was contextualised to the Australian health care setting. For it to be fully implemented, there is a requirement that all parties involved in the health care team must agree to undertake the program. TeamSTEPPS involves the delivery of a resource kit and teaches strategies to health professionals to enhance teamwork skills, requiring 'doctors, nurses and allied health professional to coordinate their actions' (Baker, Amodeo, Krokos, Slonim, & Herrera, 2010 p. 1). It also includes instruction on how to change organizational culture, through action planning, to improve team performance (Baker et al., 2010).

4.3.2.2 Educational theory

This learning session was based on adult learning theory (Knowles, 1980) and contact theory (Allport, 1954; Hewstone & Brown, 1986) with an aim to actively engage the learners. The view of the planning team was that promoting positive contact would assist with building interprofessional relationships within teams.

4.3.2.3 Planning and implementation

The region of Lake Trout had previously considered TeamSTEPPS, but according to the Director of Nursing there had been no agreement by the medical practices in the region to undertake the program. A simulation manager from Flinders University volunteered her time to facilitate and assist with the development of a TeamSTEPPS session. The researcher met with a planning group comprising hospital staff, the Director of Nursing and a clinical nurse manager (senior nurse) from each hospital (Hillside and Valley View) to discuss the TeamSTEPPS approach to managing the prevention of errors and miscommunication. Following this the group liaised with the clinical simulation manager to complete the planning and implementation phase for the session.

Whilst the advertisement described the session as an information session, it was designed to be a one-hour concise, practical session, relevant to all staff, demonstrating the use and effectiveness of TeamSTEPPS. Once the background and formalities were delivered, videotapes were played to demonstrate how patient safety is impacted by communication errors. A scenario was used to demonstrate how different the outcomes would have been if TeamSTEPPS tools and strategies had been used. Following discussion of this scenario,

the participants were divided into mixed groups to tackle another scenario themselves. To finish the session, each group's answers were presented to the main group and discussed.

4.3.3 Intervention B – Understanding Suicide (H1 and H2)

4.3.3.1 Background

One of the GPs interviewed in Phase One of the study suggested that the researcher contact the Division of General Practice in Lake Trout to see whether they were interested in delivering an IPE session. In response, the program manager of the Division of General Practice advised that they were about to commence planning for a consultant psychiatrist to provide education sessions on the prevention and management of patients at risk of suicide. Their intention was to invite a wide audience of around 30 people working in Lake Trout. The GP believed this would be an appropriate topic to suit many and that it could be opened up to include a variety of local health professionals. An introductory meeting was organised between the researcher, the psychiatrist (who will be mentioned as Dr A and was the facilitator), the program manager and a mental health nurse, both from the Division of General Practice.

4.3.3.2 Educational theory

The theories used to guide these sessions were adult learning theory (Knowles, 1980), situated learning (Lave & Wenger, 1991) and contact theory (Hewstone & Brown, 1986). Adult learning was used when participants were expected to actively participate in the learning as opposed to listening. In a non-clinical setting, situated learning involves making the learning authentic and encouraging social interaction and collaboration (Lave & Wenger, 1991). Contact theory was used in order to promote further interaction between participants (Hewstone & Brown, 1986).

4.3.3.3 Planning and implementation

It was decided at the meeting that there would be two sessions (Part One and Part Two) of three hours each, run two weeks apart and delivered in the evening. The venue chosen was a well-known function centre in the Lake Trout region. A two-course meal would be served and paid for by the Division of General Practice for the GPs and by the individual

attendee for non-GP attendees. The GPs would be awarded professional development points for attending, participating and completing the evaluation forms. Whilst the planning team were content for the workshop to be 'interprofessional' in nature, this was quite restricted by the criteria and objectives they had set. The aims of the workshop were primarily to assist GPs to: identify factors that increase the risk of suicide, complete a competent suicide risk assessment, know how to complete such assessments in the future, and formulate an emergency management plan. The researcher was advised that any IPL objectives were to be secondary in nature. While the organisers expressed interest in increasing the numbers and the types of professionals who could attend this event in order to facilitate an interprofessional approach, at the same time they reminded the researcher that the GP numbers were to take precedence. The researcher asked if at least one clinical nurse manager from each of the two hospitals in the study could be invited. The use of an 'icebreaker' was suggested for the purpose of reducing tension between participants and to build collaboration. Here is a short extract of the response:

> *I have tentatively booked a venue that is more than adequate for a large group ... As such, we will include the discharge planning nurse and the clinical nurse manager on our invitation list, but there will be a cost to them should they wish to attend. When we have the chance we will also consider whether to include other allied health and representatives from schools. There will also be a cost to them should they wish to attend. The icebreaker will not be included in the event format ... I can easily include the researcher's critical evaluation questions within our evaluation form.*
>
> *Source: Email with permission from the note taker (2011)*

Through regular correspondence with the researcher, Dr A became aware that an interprofessional approach would require less didactic teaching and more dialogue and interaction between participants, and so he took this into consideration in planning the sessions. The program manager took detailed notes and proceeded to outline each section of the workshop with the time allocation (see Table 4.3).

Table 4:3. Intervention B – Extract from lesson plan

Length	Methods	Content
20 mins	Didactic	Introduction to suicide Definitions of terms (self-harm, attempted, deliberate, completed) Suicide statistics Theory of suicide (social, psychological, biological)
30 mins	Activity	Attendees split into small working groups (3–4) A common case study will be given to all groups Dr A will provide the case study and any other supporting information required Each group will be allocated a theory (social, psychological, biological) and discuss the case using their theory as the focus

Following the first workshop, the planning team along with the researcher and GP advisor had a short debriefing discussion. The planning team and the researcher had noticed that there was little interaction between professions. Together, they decided how they could make the next session more IPE focused. It was decided to use a coloured dot system to ensure a mix of health professions at each table. This led to further discussion about how the session could be more interactive, with the mental health nurse suggesting that a role-play would be useful. There was some debate about whether a role-play would be suitable for GPs:

> *Mental health nurse: "Perhaps a role-play?"*
>
> *Program manager: "But who will do it?" The mental health nurse offers to.*
>
> *Program manager: "I don't think GPs would do role-play."*
>
> *They decide: the mental health nurse will play the role of the patient and the GP advisor offers to play the doctor.*
>
> *(Phase 2, Intervention B, FN, Part 1)*

However, two days prior to the second session being held, the planning team received an email from the program manager:

> *Dr A has decided against the role-play but thanks [the mental health nurse] for being willing to help out!*
>
> *(Phase 2, Intervention B, Email correspondence)*

The role-play may have been outside the scope of this particular facilitator, and therefore the only changes planned for the next workshop were the introduction of the coloured dots.

4.3.4 Intervention C – Appreciative Inquiry (H1 and H2)

4.3.4.1 Background

Appreciative inquiry is a theoretical framework used to bring about transformative change in practice. David Cooperrider created the appreciative inquiry process through his research into organizational life in the 1980s (Cooperrider & Srivastas, 1987). Appreciative inquiry relies on collaboration to gather information for the purposes of learning and changing (Mohr, 2001). It is based on the simple notion that organizational members are capable of learning from their own experiences and from those of others (Mohr, 2001), a notion which has parallels with the premise of IPL. Appreciative inquiry advocates collective inquiry through the expression of positive stories, images and interactions and through asking for explanations about 'what is' and 'what could be' (Prince, 2010). Senior staff expressed an interest in being able to engage staff to look at how they can work better together. The researcher suggested to the Hillside and Valley View Hospital clinical nurse managers that appreciative inquiry would be useful to engage team members on all levels in the process of improving patient care. By focusing on positive experiences, rather than assuming that something is problematic, appreciative inquiry attempts to build rapport between team members (Mohr, 2001). It provides an opportunity for different disciplines to engage in dialogue about common goals, values and experiences in delivering best practice care (Prince, 2010). The three main stages of the appreciative inquiry process used for the intervention are set out in Table 4.4.

Table 4:4. Appreciative inquiry process

Three stages of appreciative inquiry	Process / steps to achieve each stage
Discovery	Reflecting on experiences of best practice, when care was at its best and most effective, when work was most rewarding. What are the secret ingredients, or 'roots for success' revealed in these stories?
Dream	Identifying what the practice might look and feel like in the future if the experiences and examples of care described happened more often. This is about identifying the 'ideal practices' already existing and looking for a shared vision and themes
Design	Planning for this to occur in practical, concrete steps.

Source: Prince (2010)

4.3.4.2 Educational theory

An educational theory which can be applied to appreciative inquiry is reflective practice theory (Schön, 1983), as the participants are expected to use reflection on past experiences and then review these to promote change. In this session participants were expected to not only generate discussion about 'what is', but also to explore past assumptions and question underlying views to consider alternative actions, a process also known as double-loop learning (Argyris & Schön, 1978). Therefore, the focus is on the individual to participate in 'action learning' to apply new insights directed towards organizational goals (Law & Chuah, 2015). Appreciative inquiry as an approach to IPE has been used by other researchers to enable change through interprofessional problem-solving (Gotlib Conn, Oandasan, Creede, Jakubovicz, & Wilson, 2010).

4.3.4.3 Planning and implementation

During the interview process in Phase One, the inpatient physiotherapist had expressed interest in helping to facilitate any IPE interventions. Several months later, the researcher sent an email via the hospital management requesting assistance. The physiotherapist worked across both sites (Hillside Hospital and Valley View Hospital), and volunteered that she could fit the role of facilitator into her one day of work per week. During initial planning, the physiotherapist (Gillian, a pseudonym) asked a nurse (Tess, a pseudonym) from the hospital if she would be interested in co-facilitating two planned IPE sessions.

Together, Gillian and Tess decided upon the dates and venue, and organised brochures to be made up. Hospital management (H1) sent brochures to all health care providers across the two sites of Hillside Hospital and Valley View Hospital.

The background reading materials provided to participants during the first of the two sessions included a discussion of the idea that health professionals who work in small rural communities often deal with segmented services and have different working priorities and roles (Bourke, Coffin, Taylor, & Fuller, 2010). To close the gap between 'best practice' and 'current practice', all health professionals needed an 'equal voice' (Mohr, 2001; Prince, 2010). Participants were advised that the aims of the sessions were to promote the type of dialogue between health professionals that encouraged questioning, listening and sharing, recognizing the roles and expertise of other team members, giving a voice to all members of the health care team and exploring the challenges of interprofessional care (McCallin, 2006). More specific objectives of the sessions included: to improve interprofessional team functioning, to collaboratively identify what works well within the health care provided at Hillside and Valley View Hospitals, and to collaboratively identify key challenges to the implementation of interprofessional care. The sessions were designed to enable participants to plan practical steps to improve collaborative practice. Each session was divided into two parts and ran for two hours. The time of 1300–1500 hours was chosen, as previous data collection (Phase One) indicated this would suit most health professionals.

At the first session, the intention was to form small groups of two or three participants with representatives from at least two disciplines or roles in each group. One person would be designated as the interviewee, one as the interviewer and one as the scribe. A period of 10 minutes was allocated for each interview and participants would be asked to alternate roles. The notes taken by the scribe would be collected by the researcher at the end of the session. These notes would be used to inform the second and final session.

The researcher's role during the first session was to identify key themes around what currently made the team effective; what team members perceived to be the secrets to success; their core values, images, stories, key changes, challenges and relevant questions; and their hopes and ideas for the future. These were to be presented at the second session. The interview questions were designed to use the appreciative inquiry process, encouraging the paired participants to talk about their current roles. Thinking about

interprofessional team experiences, interviewees would be asked to describe a high point as well as any ideas about delivering interprofessional or team-based care.

In the second session, the summary of responses would be presented to the participants in the form of a table. Participants would choose relevant items from the summary to discuss further, with the aim being to motivate participants to brainstorm actions that might address one or more of the issues presented.

4.3.5 Intervention D – Working with Paramedics (H1 and 2)

4.3.5.1 Background

Following the focus group held with the paramedics at the ambulance station near Hillside Hospital (during Phase One), a paramedic, Tim (a pseudonym), indicated that he was very keen to use this opportunity to undertake a joint session with the hospital staff. He suggested a short session in which he could present the role of the paramedic to others. An expression of interest in holding sessions to find out about other professional roles, such as the paramedics, had also been discussed in session two of intervention C. The paramedic offered to present in either of the two hospitals as opposed to the ambulance centre located at Hillside, to increase attendance by the nursing staff. An advertising brochure was written and distributed to all departments, including general practices, community health, radiology and administration, inviting staff to attend. The overall aim was communicated in the brochure, namely to demonstrate the role of the paramedic in pre-hospital care in an interactive session. The learning outcome was described as follows:

> *[For health staff] to better understand the role of the paramedic and how this relates to health professionals in the rural clinical context.*
>
> *Source: Advertising brochure*

4.3.5.2 Educational theory

The theory that guided this session was contact theory (Hewstone & Brown, 1986) due to the aim that health professionals be exposed to each other's practice. The use of constructivist learning theory (Vygotsky, 1978) placed importance on social interaction between the facilitator, who was from one profession, assisting the attendees (other

health professionals) to construct meaning through their interactions with him and their peers.

4.3.5.3 Planning and implementation

The time allocated for the session was 90 minutes. The venue chosen was Hillside Hospital, as it was close to the ambulance station. The time of 1300–1430 was chosen as this was 'double staff time' due to overlapping nursing shifts. There was also a possibility that GPs would be able to attend prior to afternoon consulting. The format for the session is described in Table 4.5.

Table 4:5. Intervention D – Lesson plan

Method	Description
1. PowerPoint slides (whole group)	Descriptions of different levels of paramedics, the difference in uniforms, level of training, type of handover, drugs that can be administered, where paramedics operated within the region, rosters, night call and use of vehicles, and the future role of the paramedic (e.g. Extended Care Paramedics)
2. Scenarios (in pairs)	Two scenarios. Participants to pair up and decide together how they would manage each one. Scenario one is a bank hold up (with injuries) and scenario two a caravan fire. The task is to prioritise who should be received at the hospital first.

4.3.6 Intervention E – Simulation Workshop (H3)

In Case Three, only one intervention took place and this was in the form of a funded one-day workshop. In partnership with the Director of Nursing, a decision was made to run a full-day workshop focusing on falls prevention and management, and to integrate this with an opportunity to experience interprofessional simulation education. The drivers for this decision, based on the requirements of the funding body and the hospital, were to: address the current gap in knowledge of post-fall care management, model how different sites and different health professionals can train together, and focus on improving teamwork and communication skills in practice.

4.3.6.1 Background

A large proportion of clients in the Lake Salmon region were aged care clients and they relied on the care provided by small, interdependent teams. Therefore, it was deemed vital for patient safety that the health staff train and practise teamwork together. At the time of the workshop, there had been little opportunity for local health professionals to experience IPE or simulation as a learning tool. The South Australian Department of Health had adopted the ISBAR (Identify, Situation, Background, Assessment, and Recommendation) tool for use in clinical handovers. This tool was adapted from the structured communication tool known as SBAR (Haig, Sutton, & Whittington, 2006), which has since been widely used internationally. One of the aims was to include this tool in the simulation exercises.

The preparation for this workshop was extensive and took place in stages over several months leading up to the event (see Table 4.6). Input was sought from the Director of Nursing and the clinical nurse manager of Farmville Hospital. The researcher recruited the assistance of a simulation manager based at Flinders University and a simulation assistant who was a nurse.

Table 4:6. Intervention E – Stages in planning

Stages	Content	Length of time
Stage One	Develop content and scenarios for workshop Confirm presenters/co-facilitators	Aug–Nov 2011
Stage Two	Recruit attendees Prepare evaluation material Prepare resources for workshop	Dec 2011–Jan 2012
Stage Three	Deliver program Collect data for evaluation	Feb–Aug 2012

An advertising brochure was developed by the simulation staff and checked by the Director of Nursing, who also helped to distribute it to surrounding health services in all three major towns in the Lake Salmon region. Invitees included staff working in aged care and community health and at the medical practices and each of the three local hospitals (including Farmville Hospital) in the region.

4.3.6.2 Educational theory

Mezirow's (2003) transformative learning theory is a useful guide for simulation learning as it can assist with the examination of assumptions and reflection (Gum, Greenhill, & Dix, 2011). The workshop was to incorporate interactive learning activities and so educational theories used in planning were experiential learning (role-play) and reflective practice theory (debriefing) which both incorporate learning from experience (Sargeant, 2009).

4.3.6.3 Planning and implementation

The participants were given a Falls Prevention Resource Pack, which included current information from the South Australian Department of Health. The workshop material complemented similar programs run in many Australian States, which aimed to reduce preventable fall-related harm. The learning objectives included: to increase confidence, teamwork and collaboration in the management of post-fall events in a rural environment; to understand the principles of teamwork and become confident using the ISBAR communication tool in a safe environment; to update knowledge and skills in fall-related injury assessment, monitoring and prevention of fall recurrence; and to experience IPL and simulation learning. Attendees were provided with certificates of participation to assist with record keeping for CPD points.

4.3.6.4 Icebreaker and reflective questions

An 'icebreaker' exercise was used to promote a relaxed atmosphere and assist participants to meet everyone in the room. Reflective questions were then used in an activity designed to get participants thinking and to generate dialogue at their tables. The objectives of the activity were to refresh general knowledge of the topic of falls prevention and for participants to learn more about each other's roles and contributions to the health care team.

4.3.6.5 Case study

Following the icebreaker, a case study was undertaken in mixed groups of four. Each group was given markers and butchers paper on which to write their answers or ideas. Members

of the small groups then displayed their answers to provide feedback to the larger group. The case study exercise was designed to encourage team building within the groups and to enable participants to reflect further on falls and management, to critically analyse the situation, to prioritise actions and to build on interprofessional knowledge or better understand each other's roles, knowledge base and skills.

4.3.6.6 Role-play

Participants were asked to volunteer to take part in a role-play activity aimed at gaining a deeper understanding of other professional roles and scopes of practice while better understanding the social implications of falls and patient placement. Seven participants were required to volunteer for roles. The roles were a patient, son, daughter, dietician, doctor, physiotherapist and nurse. Each person who played a part was given a case summary, information about the role he or she was undertaking and a script guide. A debriefing session followed in which the facilitators guided a discussion around teamwork, communication, the patient and family perspective, the course of action that might be taken, and the role of interprofessional collaboration. Each person in the role-play was given the opportunity to contribute to the debriefing process.

4.3.6.7 Simulation exercises

The role-play was followed by two simulation exercises in the afternoon. These involved two scenarios: a fall that occurred in a client's home, and a fall that occurred in the hospital setting. The objectives for the simulation session included all of the program objectives. A staff member from Flinders University volunteered to act as the simulated patient for each scenario. Makeup for wounds and appropriate clothing were used to enhance the fidelity of the scenario. Props were used to depict each scene (the client's home, and a hospital room). Other aids included the ambulance stretcher, case notes, oxygen tubing, bells, bedside table, rug, lamp and blood pressure machine. All participants were provided with a briefing before the scenario commenced. This involved becoming familiar with the equipment, environment, scripts and roles. Participants were advised to use the structured communication tool, ISBAR.

Simulation one ('Mrs Robertson') required participants to undertake the following roles: two community health nurses, two paramedics and one hospital nurse. The scenario focused on a client who had a fall at home and was found by two community health workers 32 hours after the fall. The patient was dehydrated, in pain, bleeding, undernourished and had a fractured hip. Simulation two ('Mrs Dawson') required the following roles: one personal care attendant, one enrolled nurse, one registered nurse who was in charge of the ward, and one doctor. The scenario involved an inpatient who had fallen over unobserved by staff and had got up by herself, and who was discovered rubbing the gash on her head by a personal care attendant. The simulation expert facilitated the guided debriefing and encouraged discussion by all participants, including those who observed as well as the simulated patient. A whole group discussion ended the session, focusing on teamwork, communication, patient and family perspectives and the appropriate courses of action. The group were guided to reflect on the day and how it would help them in future practice.

4.4 Conclusion

This chapter presented the context for the study in relation to geography, health service provision, type of participants and the rural hospital environment. Each hospital profile was described including the layout of the inside of the hospital and other buildings on or nearby. Details were given of each intervention, including the planning processes leading up to their implementation. Reasons were provided for how each intervention was chosen by the participants and who facilitated them and why. The next three chapters provide the results for each phase of the study.

Chapter 5 Findings: Phase One

5.1 Introduction

The aim of Phase One was to provide the background and context for each case, prior to the IPE sessions being rolled out in Phase Two of the project. In this chapter, findings from the three cases are presented in relation to the six elements of collaboration: teamwork, roles and responsibilities, communication, learning and critical reflection, relationship with and recognizing the needs of the patient, and ethical practice (World Health Organization, 2010). A table reporting the number of hours of observation and interviews undertaken for each case in Phase One can be found in Appendix 13.

5.2 Case One

The interpretations of each of the data type, including interviews, field notes and researcher notes, are now presented for Case One under the six elements of collaboration. Case One was located in Hillside Hospital which has been designated as Hospital One (H1) in this chapter.

5.2.1 Teamwork

Teamwork can be influenced by organizational factors such as culture, support and space as well as each member's perception of his or her role. Teamwork is just one aspect of collaboration (Reeves et al., 2010). Participants in H1 described their perceptions of teamwork and collaboration in their workplace at a superficial level. They claimed that people in their organization worked reasonably well together. Teamwork was perceived as being the main element of collaborative practice which resonates with the literature, where it has been described as the most focused of activities within interprofessional work (Reeves et al., 2010). For example, one of the nurses described collaborative practice as:

> *Working together as a part of a team, functioning as a good team, and striving to be working together.*
>
> *(Phase 1, H1, Interview 6, Nurse)*

Those interviewed perceived that good teamwork meant working well together, however they did indicate that they were constrained by their environment. In the day-to-day running of the health service, most staff practised solely within their own departments or settings, despite the small size of the health service. One nurse explained the reasons for this as being task-driven:

> *We stayed again in those cliquey [sic] little groups and silos instead of coming together. There is no time to chat and ask about how someone's grandma is doing. It just gets lost. We are tunnel vision focused on the work that we have to do and making those connections is less of a priority.*
>
> *(Phase 1, H1, Interview 7, Nurse)*

The participants alluded to the fluidity associated with being a team member and belonging to more than one team. For example, there were different teams operating within the organization. A large number of visiting health professionals such as specialists, surgeons and allied health professionals moved in and out of the hospital, which meant that permanent staff found themselves moving in and out of transient teams. An administrative staff member mentioned that from her observation point: '*Some teams work better together than others'* (Phase 1, H1, Interview 1, Administration), thus reinforcing the fact that there were multiple teams operating within a small organization.

The staff in the Hillside Medical Centre regarded the hospital as a separate entity or team to their own. For example, one GP described the medical centre as his 'second family' and emphasised how the staff there supported each other. In the following statement he implied that he was disconnected from what was occurring in the hospital:

> *Not quite as happy a situation up there [the hospital]. And I am not really sure what the actual issue is up there ... I don't think the nurses are particularly happy.*
>
> *(Phase 1, H1/H2, Interview 8, General Practitioner)*

The allied health workforce, although formally a part of the hospital team, practised mostly in isolation, attributing this to reduced hours with limited time. These limitations explained their inability to operate as part of a team, and they suggested this was a result of the

patient being the main focus of their work. They and other health professionals saw their isolation as a barrier to teamwork and collaborative practice.

Sometimes the Hillside Hospital nursing staff were called in to help the Valley View Hospital (H2) staff during busy periods. This was often due to Valley View having midwifery patients, making it hard to predict the staffing allocation. There was conflict between the staff of the two hospitals. One nurse explained:

> *I don't think the two sites work well together. There's a mentality—"there's them and there's us". And vice versa. Here, they think "there's us and there's them".*
>
> *(Phase 1, H1, Interview 6, Nurse)*

One nurse explained that she did not like working at Valley View and remarked that the IPE intervention might be useful to increase Hillside Hospital staff's understanding about those working in Valley View, including 'what they do and why they do it' (Phase 1, H1, Interview 4, Nurse). The nursing staff at Hillside Hospital believed that different levels of nursing staff worked well together as a team. For example, an enrolled nurse (EN) is less qualified than a registered nurse (RN) and here this nurse alluded to the fact that they are often required to share responsibility during a shift:

> *I think here the role of the EN/RN isn't as defined as a lot of other organizations. We have a lot of shared responsibility; to me it is a good team environment.*
>
> *(Phase 1, H1, Interview 5, Nurse)*

The hospital receptionist explained that she was until recently employed on a full time basis, however, management changes in the cluster had resulted in her hours being cut back, with another staff member being brought in to do the job on the days she wasn't there. She explained that administration support and supervision was now reduced and that she was getting used to a different way of working (Phase 1, H1, Interview 1, Administration). The receptionist demonstrated that there was some consideration for the nursing staff in her role:

We take the phone to lunch with us, this is out of consideration for the nursing staff especially if they are busy and we have got into a habit of doing, cos [sic] otherwise they have to run backwards and forwards to answer the phone.

(Phase 1, H1, Interview 1, Administration)

Although the receptionist's desk was right next to the nurses' station, the phone at the nurses' desk rang frequently. Often, there was nobody at hand to answer the phone on the nurses' desk. Whilst the nurses had the opportunity to take hand-held phones with them when they left the nurses' station, it was noted that this was not always done. In summary, it appeared that working in the health services within Hillside Hospital meant working with multiple, fluid, task-oriented teams rather than as part of a larger team where everyone was working together for one organization or the same purpose.

5.2.2 Roles and responsibilities

In each of the health settings in the town, there were perceived misunderstandings and confusion about the roles and responsibilities of others, not only between members of different professions but also within professional groups. One example related to paramedics. The paramedics claimed that the hospital staff did not understand the paramedics' roles well enough to value them as professionals. The reasons given were systemic and included administrative and structural issues:

I still don't believe that hospital staff are aware of our role, within the health department. Whilst yes we are under the banner of health, I think that banner merely sits at the top as the administrative controller, finance for that particular arm and then your arm comes out to that ambulance service and other multi-d groups that come under that banner. They don't mix and I think that to try to pull them in together to do joint educational services is very difficult.

(Phase 1, H1/H2, Focus group, Paramedic)

Systemic issues were acknowledged by the South Australian Ambulance Service (SAAS) in a recent report that stated: 'SAAS will cement its position as the emergency arm of the health service, not the health arm of the emergency services' (SA Ambulance Service, 2008 p. 2). The paramedics stated that they were aware of how IPE could help to improve

collaborative practice and how it may help with increasing the recognition of their roles, commencing at the beginning of the patient journey from pre-hospital care onwards. The paramedics admitted to grappling with understanding the roles of others. Perhaps not wanting to admit to shortcomings of this group, one paramedic tried to use humour to downplay the situation:

> *Like our perceptions are probably really poor of those on the wards as well, the same reversed. They still have matrons don't they! [laugh].*
>
> *(Phase 1, H1/H2, Focus group, Paramedic)*

The paramedics suggested that having a 'common language' could lead to role clarity. One example referred to their role title and the difference between a 'paramedic' and an ambulance driver:

> *I have had nursing staff here say, what is it like being an ambulance driver? We are not ambulance drivers anymore. Well, no, I am not an ambulance driver. I am a professional now.*
>
> *(Phase 1, H1/H2, Focus group, Paramedic)*

The allied health team, based in the Hillside community health centre, perceived there were difficulties between themselves and hospital staff and some of the GPs. This divide related to having some staff working under the umbrella of 'acute' services in the hospital ward and other staff located or working under the auspices of 'community health'. They perceived that there was a lack of awareness of each other's roles:

> *There is a divide between community and acute and people don't see how their roles fit together. Not all of them know who they can refer to. The acute sector doesn't know if they don't know what they can get from us.*
>
> *(Phase 1, H1/H2, Interview 17, Community Health Physiotherapist)*

Allied health team members claimed the issues with role clarity and collaborative practice were directly linked to the numbers of patient-related referrals they would receive. The issue of patient referrals was something that the members of the allied health team stated that they had worked on quite recently:

We tried really hard to communicate well with GPs by adopting an approach which meant giving them more feedback and patient outcomes.

(Phase 1, H1/H2, Interview 17)

Referral patterns between health professionals have been linked to collaborative practice. For example, Mian et al. (2012) found that referring patients to other health professionals could be influenced by trust and respect. The allied health professional interviewed claimed that patient referrals required all health professionals to be on the same wavelength, because the consequences of not communicating well are that referrals can be missed:

Kids who need referring or need follow up might be missed. There is not always a trigger that they need referring or follow up. It is lack of knowledge and until someone needs it, then it makes sense.

(Phase 1, H1/H2, Interview 17)

The GPs perceived that the poor collaborative practice with the allied health team was related to the high turnover of allied health professionals in the rural environment. For example, one GP explained that it was more difficult to have good communication with the allied health team because so many members were employed in part-time positions. He attributed the high turnover, with some positions changing as often as every two to six months, to allied health professionals being attracted to go where there was full-time work. The inpatient physiotherapist worked in a part-time role, and visited Hillside and Valley View Hospital as well as having a private practice at a different location. The nursing staff revealed that the inpatient physiotherapist position had been previously occupied by a number of different people. The fluidity of the inpatient physiotherapy position therefore made it difficult to build rapport.

Hillside and Valley View Hospitals had recently introduced a role of a discharge planning nurse, who was shared evenly between them. All participants saw this as a positive step towards collaborative care for the patients. Interviewees were very positive about this role. Discharge planning meetings were held twice a week in each hospital. However, during the observation period such meetings were cancelled because the ward was deemed to be 'too busy'. Instead the discharge planning nurse assisted the ward staff with

patient care. Staff explained that due to the shortage of nurses this was unavoidable. A GP suggested that the role of the discharge planning nurse was really valued by the medical staff. Despite this, further questioning with the nurse interviewees revealed that medical input to or presence at the discharge planning meetings was rare:

> *Unfortunately not the doctors, they would be more than welcome to come to the meeting but I know that from talking to others that just does not happen and I know the timing of them is not great.*
>
> *(Phase 1, H1/H2, Interview 7, Nurse)*

This finding of unequal participation within the multidisciplinary team also resonates in other studies (Atwal & Caldwell, 2005; Nugus et al., 2010). Repercussions include reduced respect and cohesiveness within the interprofessional team (Jones & Jones, 2011). In particular, doctors who are seen to have an important role in decision-making (Reeves & Lewin, 2004) but who are not having equal input into decisions, increases the potential for conflict and tension within interprofessional practice (Wagner, Liston, & Miller, 2011) .

Many who were interviewed indicated they would have preferred to know and tell each other more about their roles. A sonographer summed up why being able to explain her role was important for her:

> *I think it is good for other professionals to know what some of our examinations entail and what we put the patients through sometimes; we need people to know preparations, for someone to come to us.*
>
> *(Phase 1, H1, Interview 20, Sonographer)*

In summary, findings revealed a lack of understanding and appreciation of professional roles, which is one of the most important competencies for collaborative practice (Suter et al., 2009).

5.2.3 Communication

The most frequently observed communication was verbal dialogue between the nurses and the doctors. Due to the busy day-to-day activities on the ward, there was little time for social conversations in and around the hospital. Similar findings have been reported in

other studies (Oandasan et al., 2009; Reeves & Lewin, 2004). During observations there was little interaction between the nurses and the receptionists, kitchen staff or cleaning staff. The corridor to the kitchen led past the nurses' station. Kitchen staff visited the nurses' station prior to meal times to update their patient list. Apart from this, often the only communication between the nurses and the kitchen staff was a friendly 'good morning'.

The layout of the nurses' station, out in the open with a high desk, meant that there were many conversations between staff at the desk and people in the corridors nearby. Whilst the original purpose of this nurses' station was to position it so that patients could be easily observed (Gum et al., 2012), its position meant that those within it could be easily distracted. One health professional explained that she preferred the Hillside Hospital layout:

> *I can yell out to the nurses at the station because they don't have the glass covers and it is a bit more open to people.*
>
> *(Phase 1, H1, Interview 9, Allied Health)*

Most of the dialogue at the nurses' station was very brief, consisting of clarifications usually undertaken while bent over doing paperwork at the desk or in a corridor. In less than ideal surroundings, when conversations between health professionals occurred at the nurses' station, they were usually interrupted by the telephone, patient bells or alarms and other people arriving or leaving. When time permitted there was opportunity for short conversations:

> *At the desk the nurses says to the doctor: "Do you want her monitored close or anything?" Doctor replies: "Check on the BP and make sure it comes up". Five minutes passes while they continue their paperwork. The doctor explains the diagnosis to the nurses and he defines the patient as "moderately ill". The nurse replies: "I didn't even think of septic arthritis". Doctor states: "That is okay, she has only gone downhill in the last hour". A nurse sees the monitor alarm flashing [on desk] and tries to listen to the doctor while turning the*

alarm off. Now a patient arrives with a broken arm and the doctor who was actually writing his notes from the other side of the desk [corridor-side], asks the nurses where they would like the patient. A nurse replies and the doctor assists the patient to the room.

(Phase 1, H1, 2010, FN, Day 1)

The on-call roster system for the GPs had recently been through some major changes between the two organizations (medical centre and the hospital) and appeared to impact on day-to-day decision-making on the ward. Quite soon after the commencement of observations, a nurse, unprompted, explained the tensions arising from the on-call system for the doctors. The nurse outlined the decision-making process required when calling for a doctor:

If a car accident happens in a different town, then we have to call the doctor from that town. If the patient happens to be a tourist but staying in another town in the region, then we still call the doctor from that town.

(Phase 1, H1, 2010, FN, Day 1)

The nurses encountered difficulties when dealing with the on-call roster system:

A nurse was on the telephone: "Who's coming in to see patient X?" The conversation that followed, focused on working out which doctor was listed for the day. "Let's try Dr X". The nurse followed this up with another phone call but was unable to find the answer she was looking for. The nurse manager intervened: "Let's wait until 0900 when some of the doctors come in".

(Phase 1, H1, 2010, adapted from FN, Day 1)

The researcher was told that only a few years previously, the patients used to have direct access to their individual doctor after hours. A GP explained that in their organization, the old system was a result of rivalry between the older doctors in the medical practices:

> *The older guys did not get on at all. There was very deep-seated inter-town and inter-practice rivalry, whereas the younger guys are all comrades, as it were. We help each other out if someone has got a difficult patient, and if they couldn't get someone from their own practice, they would ring somebody else.*
>
> *(Phase 1, H1/H2, Interview 8, GP)*

Therefore, the GPs were attempting to resolve their own organizational issues regarding the on-call processes, but this was impacting on the hospital and the nursing staff who were confused about who to ring regarding inpatient matters.

Over the last two years, the process of dealing with patients presenting on the phone or at the hospital had also changed to a new system, instigated by the doctors. The GPs provided 'triage' education for the nurses to give them confidence and skills for patient assessment in the emergency department and to help them with decision-making, for example about when to ring the doctor. However, according to one GP, the transition was not a smooth one for the two hospitals, for the ambulance service or for medical centre staff of the Lake Trout region (Phase 1, H1/H2, Interview 8, GP). This was another example of problems at the organizational level interfering with collaborative practice.

One nurse mentioned that the hospital needed a ward clerk. The nurses carried handheld telephones but they explained that this was 'not ideal as on a weekday the phone calls were put through to the desk' (Phase 1, H1, 2010, FN, Day 1). When not at the patient bedside, nurses spent a lot of time explaining, problem solving and clarifying events both on the telephone and face-to-face with visiting health professionals. In the short space of the first morning observation, the nurses encountered visits by four doctors, a physiotherapist, a radiographer, an Aged Care Assessment Team (ACAT) assessor and two paramedics bringing in an accident and emergency patient. The busy nature of the nurses' work was most likely due to their central role in the rural and regional health care system.

In summary, conversations in the nurses' station were short and often interrupted. The layout of the ward and the nurses' station diminished the privacy of any conversations. The lack of space also meant that many conversations were held in doorways or corridors, or in front of the nurses' desk. All areas were open to public eyes and ears and there was no space for staff to confer easily, especially in relation to visiting professionals such as

allied health, medical and other health personnel. Therefore, this space was less than ideal as a setting for collaborative practice.

5.2.4 Learning and critical reflection

The interviewees were all asked about their current situation in regard to time available for education and professional development and whether they knew about the term 'interprofessional learning'. Some of the health professionals associated with Hillside Hospital had heard of it and experienced it, while just as many had not heard the term but were eager to guess what it meant (see Table 4.2).

Table 5:1. Understanding IPL (Case One)

Have you heard of and do you understand the term 'interprofessional learning' (IPL)?			
Yes	**No/not sure**	**Profession type**	**Responses by participants**
4	1	Paramedic	I have been aware of it because I teach medical students. A couple of times a year we will grab medical students and do trauma blocks. (Paramedic focus group)
0	1	Ultrasonographer	No
1		Administration	Shared learning? – share knowledge you have with your co-workers. (Interview 1)
2	4	Nurse	Upgrading your personal skills? (prompt given inter) Sharing your professional skills? (Interview 6)
1	1	GP	Nurses have been to various update things and they say should we be doing this, and I say well I haven't heard of that. But that sounds like a good plan, and then we can learn from each other. (Interview 8)

Interviewees outlined the role of continuous professional development within their own organizations. Nurses expressed dissatisfaction with the hospital-based education program:

> *Education is majorly lacking, it is a huge let-down to not have anything. I feel like my skills are not updated and it feels like I am doing the same thing all the time. I think if I had better skills or knew some more about that [IPL] then I could get involved in it. If you're here to get us learning and more input for us to get training then anything you can do is going to be great.*
>
> *(Phase 1, H1, Interview 6, Nurse)*

The nurses alluded to the difficulty of planning and timing as well as being able to gain everybody's interest in IPL. The paramedics indicated that it had been many years since they had undertaken any education with the nursing staff. They were quite open to introducing some IPE and suggested they could swap roles with the nursing staff to improve mutual understanding:

> *You could do something. We are the staff in the hospital and they were the ambos in the back of the truck. We would understand each other's perspective better, wouldn't we? We could do a pulmonary oedema scenario.*
>
> *(Phase 1, H1/H2, Focus group, Paramedic)*

One GP spoke about the links the medical centre had with other health professionals. Reflecting on health professional education, he stated:

> *I reckon a lot of this is about ownership. It's about seeing that this is my area these are my doctors that I am looking after, or this is my patient and that I want to do the best for my patient, whether you are a doctor or a nurse whatever and these are my nurses and I want to look after my nurses and make sure they still work at my hospital. (Phase 1, H1/H2, Interview 8, GP)*

Wanting to do 'what is best for the patient' constitutes ethical principles. The provision of good practice can be the difference between moral and job responsibility (Dunworth & Kirwan, 2012). However, here the GP refers to the responsibility that an organization has in providing quality education for 'their own', and that perhaps this is the reason why there

is no focus on IPL within the rural health care system. The GP suggested that IPL did not just have to be a formal event, but could simply form part of communicating with each other:

> *Like ringing someone up or chatting. Like the lady the other day with the septic arthritis and I was talking to the nurses about where it had come from. That sort of stuff, you know, just casual like that, helps them to understand.*
>
> *(Phase 1, H1/H2, Interview 8, GP)*

Aside from the provision of the occasional clinical update and annual mandatory skills training, the culture of Hillside did not seem to focus much on learning or critical reflection. It is known that rural health professionals are not well supported in continuing professional development (Parliament of Australia, 2012). Once a year the nurses at Hillside Hospital filled in a needs analysis and this was used to plan any relevant training activities for the year. The main emphasis was on annual mandatory skills training. There had been a recent attempt to organise a twilight session on falls prevention in order to involve a range of health professions, but this was cancelled due to lack of interest. The medical centres often held education sessions organised by the Division of General Practice, which sometimes resulted in a drug company sponsoring the session. The Division would be restricted to inviting those whose professional role was relevant to the objectives of the session, as those attending would be provided with dinner at a restaurant. The hospital and the medical centre operated under diverse management systems with dissimilar approaches to ongoing education. This created a silo effect, where the focus was not on learning with or from each other. Any sessions which involved more than one professional were not targeted at IPL; for example, an allied health professional recalled a recent event where she had hosted an 'incontinence day' which turned into an IPL session by default:

> *A lot of people turned up—pharmacy, midwives, physiotherapists. It wasn't the point of the day, it just happened; we talked about things in groups.*
>
> *(Phase 1, H1/2, Interview 9, Allied Health Professional)*

One nurse explained that there used to be a social gathering at Christmas time, which involved all the health professionals including the doctors, nurses and the ambulance staff.

This had disappeared and now instead everyone 'did their own thing'. The nurse believed that having more social engagements would improve working relationships:

> *It would be really nice if … you can break down some of those barriers socially. If it is an informal sense and people were meeting and they go "ooh, that person is a nice person, they've got kids, all that sort of stuff", it makes it a lot easier. People don't just look at them and go "oh, you are just a pest, you are bringing me more work", and you have some kind of connection with people.*
>
> *(Phase 1, H1/H2, Interview 7, Nurse)*

Taking time to get to know each other has the potential to promote relationship-building and to identify strengths and weaknesses (Bajnok et al., 2012). However, it was evident that at Hillside there was a level of disconnection between health professionals.

In summary, continuing professional development from the perspective of being a member of a team or improving collaborative practice was not considered by the individual participants or from an organizational perspective. While critical reflection relies on being able to review practice, there appeared to be no consideration for this as a form of learning at Hillside Hospital.

5.2.5 Relationship with, and recognizing the needs of, the patient

According to Herbert (2005), patient-centred collaborative practice occurs when there is participation and valuing of input by all professionals, patients and caregivers. Placing the patient at the centre of care provision at Hillside Hospital created further tensions between the health professions. A brief incident occurred on Day 1 when a doctor complained to a nurse about bunches of flowers being too close to a patient and after visiting the patient the GP made a suggestion to the nurse. The nurse apologised. However, after the GP left the hospital, the nurse joked with the other nurses and doctors who happened to be in the nurses' station: 'We should put the flowers in another patient's room' (Phase 1, H1, 2010, FN, Day 1). Whilst recognizing that the patient's needs were the primary concern of the doctor, the nurse was clearly uncomfortable with this interaction and quite possibly because the doctor gave advice about the nursing management of a patient. This highlights that, although patient care was central to the work of both the nurses and the doctors, the approach to patient care was not always shared.

Professional autonomy was discussed by one GP who questioned the nurses' role in relation to ownership of the patient:

> *The thing that gets up my nose a bit is when the patient presents at the hospital and you get a phone call that says so and so is here come and see them, rather than their problem is this, I have had a look at them, I think this, I think we should do this. When the nurse actually owns the patient and sees them as their patient and what they can do ... that is a much better outcome and that is what I would see as about working collaboratively. (Phase 1, H1/H2, Interview 8, GP)*

Patient ownership refers to professional autonomy such as who has control over the treatment and care of patients (St-Pierre & Holmes, 2010). Traditionally, medicine has retained 'patient ownership' and here the GP refers to the nurses being able to challenge the power relations between them so they do not remain subordinate to medicine (St-Pierre & Holmes, 2010). The GP thus indicated that he preferred the nurses to take more of an assertive role for effective collaborative practice.

The paramedics alluded to their role in professional autonomy, describing that they would 'volunteer' information to help the doctors and nurses better understand the patient. Implying that they had control over what information they provided, paramedics explained that this information sharing was often 'informally done' rather than formally. A paramedic provided an example:

> *Often things like 'acopia' [unable to cope with activities of daily living] or what is happening at home can be hugely influential in terms of the outcome if we share that information. It is an insight that you just don't get when you see someone in the surgery, who has had their first shower for a fortnight because they have scrubbed up to go and see the doctor.*
>
> *(Phase 1, H1/H2, Focus Group, Paramedic)*

The roles and responsibilities of paramedics in the health care setting were further explored by those in the focus group. The paramedics spoke about wanting to have their own unique and exclusive body of knowledge:

What we need to do is to encourage people to start doing research so that we can establish ourselves as a profession with a body of knowledge that no-one else has got, which is what paramedic professionalism is really all about.

(Phase 1, H1/H2, Focus Group, Paramedic)

Paramedics, until recently, were considered as auxiliary healthcare providers and received their training on the job (Beebe & Myers, 2010). The field of 'paramedicine' is now becoming professionalised with its own national standards and competencies (Beebe & Myers, 2010). Recent discussions have focused on the need for less ad hoc education, expanded and well-defined health care roles and better utilisation of paramedics in rural and remote communities (Blacker, Pearson, & Walker, 2009). Therefore, the paramedics in the study wanted recognition by other health professions as having their own core values which complemented the provision of care.

The discharge planning nurse explained the importance of holding discharge planning meetings to be able to share patient information. She hoped this would solve some of the communication issues by keeping everyone up to date with changes in patient care:

I find that is a problem, getting a message to community health to let them know where that patient is up to or what is happening. If someone walks through and you see that person you think, "Oh, yes, I do have to let that person know." But without that trigger, it doesn't help, as you work across separate sites.

(Phase 1, H1/2, Interview 4, Nurse)

This statement indicates the difficulty associated with rural health professionals not being co-located in the same place, making it more problematic to keep one another informed. There was no system in place, operational or electronic, which kept all health professionals up to date about the patients on a daily basis, regardless of where they were situated at the time.

The discharge planning nurse described how the GPs who worked within Hillside Hospital were supportive of her new role, and how this was made easier through having already established rapport with them in her previous role as a registered nurse. However, she also described the complexity of working with the GPs who now had to allow her to take

the patient under her 'wing' with increased decision-making and autonomy, as she was required to collaborate with the doctors more about patient care. Some GPs had been receptive of this change while others had not. GPs also expressed concern that the nurses now had less time for quality patient care and spent too much time on administrative tasks. This was echoed by one of the nurses, but she was critical of some of the GPs' handling of patient care:

> *My bugbear is that you have to do everything, from beginning to end for the patient. Organise discharges, for all the elderly patients we organise the ACATS, the doctors say, "Oh no we are leaving them in the hospital for longer," the doctors not cooperating with the patients, the elderly patient who won't be assessed and goes home and then keeps coming back.*
>
> *(Phase 1, H1, Interview 4, Nurse)*

The health professionals working at Hillside Hospital demonstrated that the patient was central to their work, but perceptions differed about how this responsibility could be shared. Barriers to patient-centred care, and thus responsiveness to the needs of the patient, were geographical, technical and influenced by the differing views and assumptions of each health professional.

5.2.6 Ethical practice

Working within the constraints of a system reliant on an on-call GP service to the hospital sometimes left the health professionals questioning what might be in the best interest of the patient. For example, a nurse relayed how patients could become angry:

> *Patients present here [Hillside Hospital] and they get quite angry when we say the doctor will only see you there [Valley View Hospital], because they don't want to drive over. Which I can understand; when you are unwell, you don't want to be driving another 10–15 minutes.*
>
> *(Phase 1, H1, Interview 5, Nurse)*

On a more positive note, a paramedic recounted an instance when he was in transit with a patient to Valley View Hospital and was advised by radio to change his course to Hillside Hospital because the doctor who was 'on call' was a 'Valley View' doctor but happened to

be situated at Hillside Hospital at the time. Whilst the change of destination was inconvenient, he worked out that it was best for the patient:

> *I must confess I was thinking, well, that is a bit unfair on everybody involved, it is not really for us to be driving around in circles with limited resources for ambulances out here, but the reality was that if we did take the patient to Hillside Hospital then the patient would be seen within five mins because the doctor was already there. Even though it seemed inconvenient on the surface, at the end of the day it was really going to be the better thing for the patient.*
>
> *(Phase 1, H1/H2, Focus Group, Paramedic)*

Thus, deciding where a patient would be treated according to the on-call system proved to be problematic not only for those GPs and nurses who worked in both hospitals, but also for the paramedics transporting the patient.

There were difficulties associated with the doctors covering each other for call days 'off'. One GP became frustrated when her medical colleagues did not advise her that the in-patient she came in to treat had dementia. The GP was doing a favour for her colleague so he/she could have the day off. The nurses had been unable to access a vein to commence intravenous antibiotics. The GP came to the hospital carrying her child and this meant she was unable to treat the patient, stating that it would have to wait until she was 'on' duty next time. The GP pointed out to the nurses:

> *I am not going to be able to put an IV [intravenous] in Mr A with a baby in my arms so you'll have to try Dr [X].*
>
> *(Phase 1, H1, 2010, FN, Day 1)*

The GP then instructed the nurses to take a blood sample if they could. In the meantime, the GP's decision was to try oral antibiotics for the patient. As this was a Monday, this meant the patient may have had to wait until Wednesday to receive the intravenous antibiotics.

The health professionals explained how different it was working in Lake Trout in comparison to urban-based settings. One nurse explained how being in a rural area impacted on the type of work that was undertaken on a daily basis:

When I came here, in the first week I went home a couple of times crying and thinking: 'What have I done?' Because I came from an environment that was only patient care. I came from a large accident and emergency department and basically all you are doing is patients, you don't really deal with other issues, just purely patient care.

(Phase 1, H1, Interview 6, Nurse)

The nurse referred to her role as comprising 'only patient care' in the urban environment as compared to the extended role of a rural nurse. In rural Australia, nurses sometimes operate in the absence of sound clinical governance structures, such as medical support and supervision and are often required to extend or expand their scope of practice (Sullivan, Francis, & Hegney, 2008). Administering and supplying medications, being the first-responder for emergency care and counselling patients are examples of what are expected of rural nurses and this is not always formally acknowledged (Sullivan et al., 2008).

The same nurse commented on working within the limitations of rural practice, implying that perhaps this increased the resilience of the workers:

I think as a group they don't look to what they haven't got. They just work together and get things done, and it works well.

(Phase 1, H1, Interview 6, Nurse)

The nurses saw themselves as front-line workers needing to deal with anything that came through the front door. They relied on being well supported by the managers and having a good understanding of the resources that were available to them. As in any organization, the day-to-day business could also be dependent on colleagues, as this nurse explained:

It impacts when some don't work as hard as others, those who only do the minimum or [whose] time management is poor because they spend too much time talking and not doing their work. At the end of the day, everyone else is picking up their work.

(Phase 1, H1, Interview 4, Nurse)

The paramedics were very positive about working in a rural area. They believed that knowing some of their 'frequent' patients was advantageous and that the patients received better care than metropolitan-based patients did:

> *There is none of that, "Right, you are better, now you go home". People are looked after better here. And with GPs, because there is that close [proximity], GPs know their patients.*
>
> *(Phase 1, H1/2, Focus Group, Paramedic)*

The rural paramedics had experienced more opportunities for working with nurses compared to metropolitan-based work. One paramedic recounted one time he was invited to assist the nursing staff:

> *I was called back out of the ambulance where I was preparing the bed—could I come back in and assist—in that initial flush of action. That surprised me as, coming from metro, I was never invited to come back in and help.*
>
> *(Phase 1, H1/H2, Focus Group, Paramedic)*

In summary, ethical practice in the hospital was dependent on the systems, resources, perceptions and availability of health professionals. The GPs came across as not being flexible in relation to the on-call system and availability for their patients. Meanwhile the paramedics perceived themselves as needing to be flexible and adaptable to working in the rural environment. Nursing staff believed that rural nurses had an extended role which required some resilience on their part.

5.2.7 Summary of findings: Case One, Phase One

The health professionals in the study (Hillside Hospital) perceived that they worked well as a team, with the patient as their main focus. However, under the surface there was little evidence of collaborative practice. Multiple teams operated within the rural health environment but with most health professionals working in silos. There was no emphasis on critical reflection to assist with the development and improvement of professional practice. Health professionals relied on each other and perceived that they worked well together with limited resources.

In the day-to-day practice of the individuals in the study there was a perception that they all worked in small and separate teams, such as a team of nurses or an allied health team. As a result their work was task-driven as opposed to cooperative and team-driven. There was awareness by health professionals that they did not know enough about each other and their roles. They also understood the challenges associated with finding the time to get together professionally. At Hillside Hospital there was a high volume of part-time workers who were located in different buildings or towns and operating under different forms of management.

In the Lake Trout region, health professionals were required to be flexible and adaptive to changes in the workplace. Health professionals compared their own practice with that of their metropolitan counterparts, suggesting that rural practice was quite different. Each health organization in Lake Trout operated as a separate unit making it difficult to negotiate roles, navigate systemic changes, build interprofessional relationships or consider any joint education. Operating within different management systems meant there were difficulties in sharing responsibilities for the patient as well as patient information. There was no single system to keep everyone up to date with patient health care events. Struggles were evident between health professionals, including uncertainty about who was responsible for the patient, in a system where patients were looked after by staff in both private and public departments. The constraints found within the rural health system meant that health professionals in Case One were forced to work in silos which restricted their opportunities to build a collaborative environment.

5.3 Case Two

The findings from interviews, field notes and researcher notes are now presented for Case Two under the six elements of collaboration. Case Two was located in Valley View Hospital which has been designated as Hospital Two (H2).

5.3.1 Teamwork

Those working in and out of Valley View Hospital strived to work as a team but struggled to do this effectively. A nurse alluded to the value of including all of the staff in the hospital as part of the team:

> *Here the ENs [enrolled nurses] know bits; the RNs [registered nurses] know bits; even the hotel staff [e.g. cleaners and catering staff] know something. We rely on the hotel staff a lot more; they're not just in the background, like they are in the city. They have a really big role.*
>
> *(Phase 1, H2, Interview 10, Nurse)*

There was only one full-time receptionist, whose view of the team encompassed the administrative staff from each of the three medical centres. This broad view was inclusive of staff members working for different organizations but who were all working with one purpose:

> *I try to treat them as if we are all working together and all working for the same people. They might be employed by the Division of General Practice, and I might work for the health service, but we are all trying to do the same thing, [working] towards the same end, and trying to improve patient care. So we must try to work together in a meaningful way.*
>
> *(Phase 1, H2, Interview 12, Administration)*

However, the relationship between the hospital staff and the community health staff was not perceived in the same way. Others perceived community health staff as being difficult to connect with. Part of the isolation of the health centre and its staff was related to the fact that it was located outside of the hospital and that access to its services was not straightforward:

No-one is aware of it [community health service] and what goes on. It is a part of us but there is a tendency to ignore it, like a blind spot. You can't just call them up and say, could we have a dietician to come over and see someone. You have to do a referral through health links, so there's just another middleman or barrier that is in there.

(Phase 1, H2, Interview 12, Administration)

The GPs perceived that for effective teamwork and collaboration to take place between themselves and other health professionals, effective communication was required as well as respect for each other's roles. One GP stated that health professionals should bring information to each other for joint decision-making and then effectively deliver those decisions. He referred to the problems that are associated with policy implementation at the organizational level:

It's not too bad. Things have changed over time. My main interface is here with the nurses and the ward. This is a difficult work environment. It's the hospital struggles, with having to meet the modern standards and implement all sorts of stupid policies.

(Phase 1, H2, Interview 16, GP)

The GPs also believed teamwork was different in the rural system compared to the city-based system. They believed that some of the difficulties they experienced were due to GPs belonging to more than one heath care team, with their main focus being their own private practice:

GP: Rural is like working in a private system.

Researcher: It is different to working in the city?

GP: Yeah, you are part of a team but you are also part of another team outside and you have got to really balance it, and a lot of the staff really don't understand that the hospital is not the centre of the world.

(Phase 1, H1/H2, Interview 19, GP)

A clinical nurse manager blamed the difficult working environment on budgets being reduced by the South Australian Government and Country Health South Australia:

I think we have a great team here. It just gets frustratingly busy due to staff cutbacks. Country Health cutbacks make it challenging. We used to pride ourselves for excellent nursing care. The more cutbacks, the less well you can do your job. We are no longer able to provide the finesse that we used to.

(Phase 1, H2, Interview 13, Clinical Nurse Manager)

In summary, teamwork at Valley View Hospital was influenced by external factors such as the disconnection between policy makers, health professionals and divisions within the health services. Each of the health professionals recognized that all those involved in the care of the patient were part of a team, with some belonging to more than one team, and most implied that teamwork could be improved.

5.3.2 Roles and responsibilities

Whilst those in the study understood each other's roles in a general sense, the health professionals at Valley View indicated that they were often disenchanted with how their own roles were perceived by others. The doctors attributed some of their role conflicts with other health professionals to working in a private organization with patients who they also treated in the public system:

We are private doctors who just happen to provide a service to public patients in the hospital.

(Phase 1, H1/2, Interview 18, GP)

One GP reported his struggles about being a private GP obstetrician working with a team of midwives in a public hospital. He explained that there was often role conflict and differing opinions about maternity care between him and some of the midwives. He perceived these struggles to be partly systemic and partly due to misperceptions about who should be ultimately responsible for decision-making relating to patient care:

Somewhere in between we have got midwives; they don't see it as their personal terrain as much. Some midwives forget that the name at the end of the bed is who the buck stops with. I have already put in 8–9 months' work in the background and I have built up that relationship and that is what people can't understand. In our setting, it is more private obstetrics with a slightly public tinge, and people don't understand that.

(Phase 1, H2, Interview 19, GP)

One nurse midwife, who had a temporary position while the community midwife was on leave, described the small building next to the hospital which was used by the allied health professionals, as a venue to consult with their patients. She found it difficult to associate the role of the community midwife with the allied health professionals who worked with the community. Her comments reinforced a 'them and us' attitude between community health and acute care services:

As far as occupational therapists, speech pathologists and dieticians over there, we really don't have anything to do with them. If I was community midwife permanently I would not like to be over there. I see the role with new mothers and newborns as working over here with them not the OT [occupational therapist] and we don't necessarily deal with kids past 28 days. There is a lack of room and [I] would prefer to feel more 'in' with the hospital.

(Phase 1, H2, Interview 14, Nurse)

One of the allied health professionals, who worked at the above-mentioned venue, was quite excited by the prospect of being a part of some IPE for the reason that it could improve practice in situations where the roles of allied health and the midwife might intersect:

Knowing there is a community service there, I don't know how much that is top of mind, and I know that the community midwife is probably the link between the two. They could start thinking: maybe the physio could have a look. We could see them together. Often the mum goes to the midwife and back to us. Instead of [that], if they knew we were there, we could do that together with the family, build up a relationship with the family.

(Phase 1, H2, Interview 17, Community Health Physiotherapist)

In the nurses' station an interaction took place between a nurse and physiotherapist, where the physiotherapist was unsure about which patients to see. Additionally, the nurse questioned the physiotherapist about which days she visited the hospital patients:

> *The physiotherapist (PT) asks the Team Leader (nurse) if anyone needs to be seen. The nurse seems a little unsure. She goes through each patient (on the computer) and gives her opinion about each of them to the PT. They are interrupted by a GP who wants to know who is looking after his patient. Following this, the PT states: "I might just go and check on patient X". But before she leaves, the nurse asks: "Have you looked in the physio book?" "Yes, nothing in there." The nurse asks: "When are you here?" and the PT replies: "Mondays and Fridays".*
>
> *(Phase 1, H2, 2010, FN, Day 1)*

A short time later, a GP had a conversation with the physiotherapist about patients' coping mechanisms once they get home. However, the GP also requested clarification about the physiotherapist's hours of work and where she worked (Phase 1, H2, 2010, FN, Day 1). Both of these interactions above demonstrated that health professionals were not always sure about when they would be face-to-face with one another. Additionally, there was uncertainty about roles and responsibilities, for example, a question was raised during a discharge planning meeting about the need to escort a patient for a videoconference mental health consultation and whether this was a nursing responsibility or a mental health team responsibility. This was able to be clarified at the time:

> *The domiciliary physiotherapist asks: "Isn't it mental health's responsibility?" "No", says the nurse, "I will need to check the staffing".*
>
> *(Phase 1, H2, 2010, FN, Day 1)*

Members of the paramedic focus group outlined their roles in pre-hospital care and described an incident with a GP from Valley View Hospital. They had a disagreement with a GP regarding a course of action at the scene of a motor vehicle accident. The GP, arriving at the scene after the paramedic had already loaded the patients into the ambulance, wanted to assess them before they were transported to the hospital. The paramedic, however, stated he was uncomfortable with this request and perceived that it was due to GPs not having an understanding of the paramedics' roles during the patient journey to the

hospital:

> *I just said: "No, I'm going". I had a mother and two kids. I said to him: "Look, I am happy here and I am going to the hospital". So, although we are one, I don't think the GPs [pause] understand our role.*
>
> *(Phase 1, H1/2, Focus Group, Paramedic)*

Misunderstandings in relation to health professional roles and responsibilities are commonly reported barriers to collaborative practice (Cashman, Reidy, Cody, & Lemy, 2004). The visit to Valley View Hospital revealed role conflicts and role uncertainty between health professionals at the practice level.

5.3.3 Communication

The nurses' station was a busy hub with lots of conversations both on the telephone and face-to-face between staff and visiting health professionals. Often, when note writing took place in the back room, spontaneous conversations occurred in relation to patient care. One GP commented that there was a serious gap in the communication process for GPs coming in to visit their patients. He stated that there was no designated person to report to or to ask questions about the patient:

> *There is no system for me to find out who is looking after the patient. I have to interrupt someone to find out. There isn't something on the board. It is a simple answered thing, but the managers are too busy doing other things.*
>
> *(Phase 1, H2, Interview 16, GP)*

There was no formal system in place for GPs to hand over information or instructions to the nurses. In the following interaction, the GP was not expecting the nurse to be the person who was caring for his patient, but proceeded to give her his instructions for discharge regardless:

GP arrives, retrieves case notes and greets the nurse. He then says: "You're not looking after Mr X?" The nurse says "no" and gets the handover notes out of her pocket. The GP opens the case notes and gives discharge instructions to the nurse who then affirms this.

(Phase 1, H2, 2010, FN, Day 2)

Another GP complained that the hospital administrators were sending him too many emails. He explained that, due to time constraints, it would be preferable to receive one email which summarised all the information, sent on a weekly basis (Phase 1, H1/2, Interview 18, GP). The GP was therefore reflecting on how to improve communication between the two organizations, as a one-way asynchronous process.

At Valley View Hospital there were often issues centred on the telephoning of doctors. Doctors complained of being telephoned too often. There were nurses who wanted to ring the doctor straight away if they required clarification, and others who would plan to avoid telephoning unless really necessary. The researcher also observed that, when in face-to-face situations, the nurses asked more questions of the GPs and the GPs spent time having to clarify issues. The clinical nurse manager explained that she had spoken with the doctors recently about when nurses should phone them and attributed telephone issues to the confidence levels of the staff:

The doctors have talked to me about their concerns. Being rung when they don't really need to be rung, because the nursing staff aren't confident. They want some clarification about that sort of stuff. That is not needed.

(Phase 1, H2, Interview 13, Clinical Nurse Manager)

Therefore, the clinical nurse manager was supportive of the GPs and agreed they were phoned too often. The clinical nurse manager stated that it was through experience that nurses would improve their communication with the doctors. A junior nurse, however, implied that the GPs would respond poorly to phone calls they deemed as untimely or unnecessary:

Sometimes they [the GPs] have yelled at me for ringing them. It does make it hard and it makes one nervous the next time I see them. I'm like: 'Oh, he yelled at me'.

(Phase 1, H2, Interview 10, Nurse)

Therefore, the asymmetry of power between the GPs and the nurses (especially juniors) was not conducive to collaborative practice. There was no apparent system of communication for passing on information about the patients between health professions; nor was there evidence of effective communication between the doctors and the management of the hospital.

The nurses' station was conveniently located near the front entrance in the middle of the main corridors. Its layout was a lot more spacious compared to H1 with an additional private area. The private space was at the back of the nurses' station and promoted open dialogue between the hospital and visiting health professions and workers. For example, there were spontaneous opportunities observed for short debriefing between nurses, midwives and GPs. This was in evidence following a traumatic incident that had occurred overnight. A senior nurse was also present (from Hillside Hospital) and provided some leadership to help those present respond to the situation and suggested that there would need to be a more formal debrief process. Following this, the nurse stated that she wished they had a space 'like this' at Hillside Hospital (Phase 1, H2, 2010, FN, Day 3). This highlighted the use of space for encouraging collaboration.

5.3.4 Learning and critical reflection

Of those interviewed within Valley View Hospital, only one health professional had heard of the term 'interprofessional learning' and knew its meaning. However, there were several participants who managed to guess its definition. One of those was a receptionist (see Table 4.2).

Table 5:2. Understanding IPL (Case Two)

Have you heard of and do you understand the term 'interprofessional learning' (IPL)?			
Yes	**No/not sure**	**Profession type**	**Quotes by participants**
0	4	Nurses	Not really. Is it meaning education involving different parts of the health profession whether it's doctors and different levels of providers of healthcare? (Interview 11)
1	1	Allied health professional	Professionals learning together. Learning about what each other does. Community health are way more on board because that is what we do every day. (Interview 17)
0	1	Administration (receptionist)	It could mean learning from each other, learning from what other people do, but also learning about how to increase communication linkages, enable people to work better if there were difficulties, and let people work close together and more effectively. (Interview 12)
0	1	Case manager	No
0	3	GPs	Understanding what other people do? (Interview 18)

Once the interviewees were introduced to the meaning of IPL, they were able to relate to it as a method of learning. One nurse described how they had commenced midwife–doctor meetings about three years previously:

> *We called them meetings, but we actually discussed and presented case studies, or maybe a doctor would present something, or we would talk together about a workshop we had been to. It's really valuable; I would just like to do it more often.*
>
> *(Phase 1, H2, Interview 13, Clinical Nurse Manager)*

One GP, although wary, thought the concept of IPL was excellent once he understood the definition:

If IPL is another tool for advancing an academic nursing course, then I don't want to do it. On a practical level I will do it, but if it is associated with another agenda, well then I would be wary. [Here the researcher explains the IPL approach] That is an excellent ideal in which we should all operate. We should do that.

(Phase 1, H2, Interview 16, GP)

However, the GP was very protective of his time after hours and stated that he would only attend if it was incorporated into daily work hours. Another GP also mentioned that his availability was limited due to the need to allow for family time. All the participants had differing viewpoints about a suitable time of day when health professionals could meet together. Doctors were interested in breakfast meetings, while nurses and allied health staff preferred evenings. There was a general consensus about the difficulty of attending common meetings, and all participants agreed that it would be problematic for each professional group to attend the same education sessions. One GP spoke about his desire to use the team meetings he attended with the midwives as a way of promoting discussion, education and critical thinking about maternity practice. His desire was for the midwives to be more critical of their own practice:

The advantage of critical thinking subjects at university is that some think more. But on the other hand, the ones that trained the old way, they got to see a little bit more. Midwives, they have got a set of skills and they are specialists in that area, and so a little bit of knowledge is not necessarily dangerous. But if those who are average don't take the next step, they cannot extrapolate their information.

(Phase 1, H1/2, Interview 19, GP)

The same GP also determined that if midwives and doctors had the opportunity to appreciate each other's perspectives, that this would improve how they worked together:

That is a really interesting thing about obstetrics, where we have a different culture. I prefer to use the word 'paradigm'. We are coming from different perspectives in everything and collaboration is breaking through those barriers to appreciate the other perspectives.

(Phase 1, H1/2, Interview 19, GP)

Like those at Hillside Hospital, the nurses at Valley View only had an opportunity once a year to undertake a learning needs analysis where the main emphasis was on mandatory skills. Learning alongside other health professions was seen to be too difficult with regard to finding time to meet and achieving consensus about a meeting time that would suit everyone. There was consensus that relevance to one's own practice was the most important factor to attract people to attend:

> *The challenge is: people don't learn what they don't need to know, and finding some way to target training for people within our health service. For example, there will be some staff who don't know what early childhood does, but is that an issue? Is it relevant to their client type? Make it relevant.*
>
> *(Phase 1, H2, Interview 17, Community Health Physiotherapist)*

In summary, those interviewed in Valley View Hospital highlighted the difficulties of bringing all the health professions together for the purpose of IPL. Nonetheless, they could see the importance of this type of learning, how it would promote critical thinking and how it would provide an opportunity to learn more about each other.

5.3.5 Relationship with, and recognizing the needs of, the patient

The discharge planning meeting observed by the researcher was attended by a hospital ward nurse, the discharge planning nurse, a domiciliary physiotherapist and the clinical nurse manager from Valley View Hospital. The researcher noted that determining or questioning a patient's diagnosis frequently came up in the conversation and team members were not always sure of what was 'going on' with a patient, which affected some of the decision-making. To follow this up, the researcher took the opportunity to find out more about the ward nurses' roles and their views on the presence of other health professionals in the meetings. The nurse interviewed, whilst appreciating the input from other health professionals, concluded that having reduced medical input was inconvenient for everyone, including the patient:

The social worker gives different input, which is good because she knows other extra, little, nitty gritty stuff that is around. She is really good. I don't mind it that there is not a medical presence at the meetings, but from [the] community perspective I think it is inconvenient, to say the least. If we have to ring the doctor, that might take some time and they [the GPs] react badly, well that's just the way it is.

(Phase 1, H2, Interview 10, Nurse)

It was observed that the nurses in the meeting did not take many notes. For example, there was a suggestion that staff needed to be careful about the use of aspirin for a particular patient, but this was not noted on paper, only verbally (Phase 1, H2, 2010, FN, Day 1). There were others who questioned the doctor's role in understanding the needs of the patient. A case manager who worked in community health, whose role involved assisting people in the community to stay at home, explained later that community health was not always kept in the loop when it came to assessment of elderly patients. She perceived that doctors did not fully comprehend the situation in regard to patients who might need to undertake a transition to a nursing home:

A lot of doctors say once they get to a certain level they should all be put in a home. The homes don't take low-level people and all this type of stuff. Doctors don't seem to realise there is no low-level home that can take these people. In the middle, here, we can still take them home and give them more help. If it fails in the end then we know where we are at.

(Phase 1, H2, Interview 15, Case Manager)

Quality patient-centred care provision was linked to 'knowing the patient'. A nurse explained that while nurses aimed to provide holistic care, this was enhanced when they knew the patients and this related to working in a rural setting:

I know a lot of the people that come in or they know my grandparents, so there is already that level of comfort and familiarity between the patient and the nurse. If you know more, you can help them more.

(Phase 1, H2, Interview 10, Nurse)

At the medical centre, a GP suggested that the recent change in nurse autonomy meant that nurses in the medical centre had more input into patient care. The medical centre's goals were to build teams and to strive for patient-centred care:

> *We try to have a couple of social things twice a year to improve that team-building thing. Our goal is patient-centred care whilst keeping sane and not to kill ourselves in the process.*
>
> *(Phase 1, H1/H2, Interview 8, GP)*

Patient-centred care was perceived differently by the health professionals and was dependent on their own organizational goals, structure and processes. The complexity of providing patient-centred care as a shared process within and across different departments or organizations was clear from the data. It became evident that the GP's priorities were more centred on the patients at the medical centre and less on the hospital in-patients.

5.3.6 Ethical practice

When health professionals did not completely agree on treatment of patients, it impacted on decision-making and problem-solving for patient care. In the following field note entry, the nurse was concerned about pain medication for a patient; however, she did not overtly explain to the GP that she believed the patient needed a larger dose:

> *A nurse reports to the team leader that she is not happy with a patient's pain management and says, almost to herself: "He never gives them enough for pain". The nurse rings the doctor and explains the patient is in a lot of pain everywhere. The team leader listens to the medication order and then reminds the doctor that it is also to assist with transport. Silence while the doctor replies. Team leader asks: "Still just a half?" After hanging up, the first nurse says: "He is such a big man that is not going to touch him!" The team leader says: "He says he does not want him to stop breathing in the ambulance". Silence. They leave to get the medication.*
>
> *(Phase 1, H2, 2010, FN, Day 1)*

Whilst one nurse did not agree with the doctor's decision, she did not openly express her concerns to him. This dialogue demonstrates a nurse operating as a subordinate to the doctor rather than negotiating 'from a position of strength' (Lindeke & Sieckert, 2005 p. 5).

Here the nurse avoided contributing to any decision-making about the patient. Nurses are often silent in their contributions to avoid conflict (Roberts, Demarco, & Griffin, 2009). When nurses negotiate respectfully and remain confident, issues of hierarchy can become secondary to the sharing of knowledge (Lindeke & Sieckert, 2005).

Another nurse was observed to make a decision based on not only which doctor was treating the patient but on 'knowing' the needs of the doctor. Two nurses were discussing a patient in the nurses' station. One nurse spoke about a phone call she had taken from the wife of a patient. In her explanation to the other nurse about why she had told the wife that staff would not need to notify the GP, she advised the nurse: 'He is not the type of doctor that wants to know that' (Phase 1, H2, 2010, FN, Day 1). The nurse believed she understood the GP's perspective but did make assumptions about his input regarding the patient's wife. Collaborative practice values each profession's perspectives to promote creative solutions (Lindeke & Sieckert, 2005). However, it is difficult to know in this situation if this was helpful for the GP or the patient and his wife.

Nurses would joke with each other, at the expense of other health professionals, when they appeared dissatisfied with a situation. For example, the researcher observed that a nurse had to ring a doctor back after hanging up, as she had forgotten to ask another nurse to listen to the medication order as part of hospital procedure. The second nurse, an EN, appeared to be learning about the drug procedure. When the EN listened she double-checked the order:

> *The EN asked: "Was that 'mg' or 'mcg"? Following the phone call, the EN says: "So did I say the right thing to him?" The nurse replies: "Yes, not that he would realise, he would just say whatever". They laugh.*
>
> *(Phase 1, H2, 2010, FN, Day 3)*

Whilst the comment was said in jest, the nurse demonstrated negativity towards the doctor which could be counterproductive to collaborative practice.

The relationships between health professionals were further explored in the interviews. One nurse suggested that being mindful of each other would improve how doctors responded to them:

The better relationships you have got with people, the easier it is to communicate with them and the better outcomes there are for the patients. If you have got a grumpy, shitty doctor on the phone it doesn't … really it is not conducive to good outcomes for patients because you won't communicate things that are important and they won't take action when it is important.

(Phase 1, H1/2, Interview 8, Nurse)

Here the nurse indicated that she wanted to be accommodating to the doctors. However, being 'accommodating' could indicate difficulties with relinquishing issues (Valentine, 2001 p. 73). The nurse's desire for harmony and middle ground may have been due to perceived powerlessness which could result in not using conflict-management strategies (Valentine, 2001).

One junior nurse described how she was still attempting to grasp each doctor's communication preferences:

You learn pretty quick which doctors not to ring at certain times, or which doctors appreciate it to tell them to their face when they come in. Other doctors, you can just ring and leave a message. Some you would note it in the notes and just bring it up next time you see them. I haven't quite mastered the whole differentiating, picking which ones are which.

(Phase 1, H2, Interview 10, Nurse)

While the junior nurse wanted to learn from other nurses about how to best communicate with doctors, her perspective did little to build interprofessional relationships. Having to comply with doctors' needs did not create mutual understanding or respect. However, the clinical nurse manager perceived that a more experienced nurse would not necessarily treat each doctor differently and through experience had developed a 'more clever' approach to communication:

Treating people differently is not catering for them, it's communicating with them. For example, if you come on hot and strong, a doctor will immediately put up a block; whereas if you are more gentle in your approach, but still get across your point of view, then you get a much better reaction, than if you come on 'heavy'. So you just have to be a bit clever about that. It is certainly not moddycoddling [sic] them or anything like that, but others you can be more confident and they will appreciate that because they will think that you know what you are talking about.

(Phase 1, H2, Interview 13, Clinic Nurse Manager)

The nurse manager partly alluded to 'the doctor–nurse game' (Stein, 1967), where nurses try to avoid disagreement. However, social change has affected the doctor–nurse game and according to Stein, Watts, and Howell (1990) nurses' attitudes are changing; they want to be more collegial as opposed to subservient. Being an older and more experienced nurse may have been a contributing factor to the nurse manager's approach; her view acknowledged that conflict sometimes occurred:

You get cleverer at that the longer you have been in the game. To get what you want, everyone gets treated a little bit differently. Most of the time we work well together unless someone is really sticking up for what they believe, and the other person doesn't think that's good.

(Phase 1, H2, Interview 13, Clinical Nurse Manager)

Interprofessional relationships were also seen as being easier to navigate in the rural setting. For example, one nurse was new to rural practice and spoke about having to get used to the doctor–nurse relationship. She referred to the use of first names as opposed to the use of titles:

When I was at [Hospital X] it was very doctor, doctor, doctor and the way I was brought up is that you refer to a doctor as a doctor. But here, they are so social and work interlinks quite easily and quite a lot of the doctors and nurses are friends. It just makes approaching them a lot easier.

(Phase 1, H2, Interview 10, Nurse)

Use of first names is an effective way to balance power and authority (Lindeke & Sieckert, 2005). Another nurse explained she found rural doctors nicer to work with:

> *Working at [Hospital X] there is a different culture to working in a country hospital. There you deal with them on a different level, I think, and here [Valley View] they're not training and they do know what they are talking about. Working here with these guys is much nicer than working with the RMOs (resident medical officers).*
>
> *(Phase 1, H2, Interview 14, Nurse)*

The paramedics referred to the GPs' roles in rural practice as gatekeeping. They perceived that GPs might not always be willing to share information:

> *From a nursing point of view, I think that is one drawback with the country. In metro, when you get a patient admitted you get a great big screed of history, past history because it is a new patient. Whereas here, I think, you have got a GP looking after that patient for 20 odd years, what he gives you is very, very scant, so you don't actually have that background that you have in those metro notes.*
>
> *(Phase 1, H1/H2, Focus Group, Paramedic)*

Ethical practice in the hospital was influenced by the ability of the health professionals within it to share views, knowledge and perspectives. When this ability was observed to be lacking, decision-making and problem-solving appeared difficult or one-sided. Power differentials were responsible for how decisions were made for and about the patients. In particular the fragile nurse–doctor relationship meant that the patients' best interests may not have always been at the forefront of care.

5.3.7 Summary of findings: Case Two, Phase One

Whilst it seemed that the findings in Case Two were similar to those in Case One, there were some marked differences. In Case Two there was a different system for managing telephone calls and people coming into and out of the hospital. This was partly due to the reception desk being isolated and located at the main entrance to Valley View Hospital. This was different from Hillside Hospital, whose reception area was situated opposite the

main entrance and located next to the nurses' station. The telephones were switched over to the nurses' desk during the receptionist's breaks, whereas at Hillside they remained unchanged except at weekends. Unanswered telephone calls were much less frequent at Valley View Hospital. The physical layout of the nurses' station was more conducive to private conversations. Most conversations occurred in this area rather than in the corridors when compared to Hillside Hospital. This demonstrated the potential use of design to promote dialogue and collaboration, for example by meeting basic needs to converse with fewer interruptions and increased privacy.

Valley View Hospital provided slightly different services to Hillside Hospital. This included the midwifery unit, which added another dimension to the interprofessional relationships within the hospital. The midwifery unit was generally seen as quite separate from the rest of the acute ward. Staff also had their own small office area in the midwifery area itself. The impact of this was that some interactions between midwives and GP obstetricians took place away from the rest of the hospital. This often meant that the midwifery unit operated as a separate team, rather than part of a broader team with the nurses and doctors down the corridor. There was an asymmetry of power between the GPs and the nurses. The nurses saw themselves as 'harmonisers' in the relationship between themselves and the GPs. Rural practice was reported as having its own advantages and disadvantages for collaborative practice, such as health professionals being more approachable but there were not equal contributions to decision-making and information sharing.

Not everyone viewed teamwork as involving a combination of the health services. There was a perceived separateness of the hospital staff from community health staff. There was rarely any time, especially formally, for health professionals to spend time together to focus on appreciating each other's roles or views. Whilst there was an indication that, a few years before, meetings had been held at which health professionals could get together and discuss case studies, there was a general lack of understanding about what IPL really entailed. There was a perception by most that it was usually planned as a formal event and therefore the difficulties associated with getting health professionals together at the same time made it unachievable.

In conclusion, health professionals at Valley View Hospital were aware of the current work tensions within their organization. These tensions included systemic and operational issues with some staff working for different organizations, yet co-existing in the same work environment, with the 'patient' as the common thread. Health professionals were keen to make improvements, to connect better with each other and to share more of their knowledge.

5.4 Case Three

The findings from interviews, field notes and researcher notes are now presented for Case Three under the six elements of collaboration. Case Three was located in Farmville Hospital in the more remote region of Lake Salmon. Farmville Hospital has been designated as H3.

5.4.1 Teamwork

Current views about teamwork in Farmville Hospital were linked to a number of challenges that had been faced in the previous few years. One was the recent resignation of the local doctor who had operated a solo practice for approximately seven years. The Department of Community Health, located on the hospital grounds, had also undergone organizational changes and was currently working on a project with further changes in mind (H3, Interview 30, Community Health Manager). During the previous six months, a second part-time doctor had commenced job sharing with the current part-time GP and this assisted in providing 24-hour cover for the town. This also meant that the current GP could assist nearby towns with their medical requirements. This general practice model was flagged as an emerging new model for providing primary care to rural communities.

The full-time receptionist perceived the administrative staff to be a team but that they were also part of the hospital team. She explained that even in an emergency there were plenty of tasks that needed assistance and that working well together was necessary in a small organization:

I think teamwork is so important, especially in this profession; it's such a small community that it's crucial that we work together. I think this group of staff work very well together... It's just a matter of being there and helping each other out.

(Phase 1, H3, Interview 22, Administration)

On the first day, the researcher observed the hotel services manager assisting the GP by telling her the whereabouts of the nurses. One of the hospital cleaners worked in a dual role, also serving as a personal care attendant (PCA). PCAs provide assistance with patients' activities of daily living (also known as nursing assistants). This was a result of there being insufficient work to employ a PCA on a full-time basis. However, she did not completely feel part of the team:

Not really. I don't think that they see part of what I do, because I do what I do when they are busy. Like the little things, the little helping-out things that you do.

(Phase 1, H3, Interview 26, PCA/Cleaner)

There had been attempts to improve relationships between staff, such as joint Friday morning tea breaks with all staff on the hospital grounds. While these did include staff from the medical practice, the doctors generally were unable to attend and community health staff usually did not attend (Phase 1, H3, Interview 28, Director of Nursing).

From the hospital nurses' perspective, teamwork meant having a multidisciplinary approach to patient care. They believed that, because they often treated patients who were also under the banner of community health, they were required to have a better understanding of the care provision from a community health perspective:

It's a multi-d [multi-disciplinary] approach ... Community health is a good example of our collaborative approach because a lot of their clients will come in and be our acute clients. So if we don't have a handover and understanding from their care that they provide, it makes our job a lot harder, but also delivers mal [poor] quality care.

(Phase 1, H3, Interview 23, Clinical Nurse Manager)

In spite of this, community health was seen as a separate team or alliance from those who practised within the hospital. One nurse who worked in the hospital for a long time had recently moved to the community health setting. She described how it was important for her to continue to maintain links with the hospital roster, not only to assist with keeping up her clinical skills but also to be seen as working across both teams:

> *I don't know if there is a feeling from higher up that I have switched teams, alliances or loyalties, but [I] hope to dispel that. I have remained on the roster over there [the hospital].*
>
> *(Phase 1, H3, Interview 25, Nurse)*

Participants suggested that the location of community health in a different building from the hospital created a barrier that meant that community health professionals could sometimes be forgotten (Phase 1, H3, Interview 22, Administration). This was also partly due to community health being under a different organizational structure of the health care system, rather than being jointly managed with the hospital. For example, the residential care facility was formerly a separate facility but had become a part of the hospital:

> *They have become a lot more integrated; they used to be sort of separate. They are part of the hospital now, which makes them a lot more valued and supported. In the past, they have felt quite socially and educationally isolated, and we work really hard to ensure that they and their clients feel included.*
>
> *(Phase 1, H3, Interview 21, Nurse)*

The Director of Nursing pointed out, however, that there were issues associated with community health being a separate department. Thus, each department was managed separately. At one time, she had considered whether there was a possibility of all departments becoming one department. But then major organizational changes within community health took place:

Because we are minimally staffed we can't go and help community health anyway and they keep it very separate. At one stage, I was contemplating putting up the option of going to one, back to being campus-based, but now it is under a cluster community health approach and so now it will be even more separate.

(Phase 1, H3, Interview 29, Director of Nursing)

The GP who was interviewed felt comfortable and supported in her role of part-time doctor for the town. She also believed that teamwork had its benefits for her GP role:

I enjoy working in a team. For me, I will get more out of the nursing staff and more cooperation and help if we get on well together ... I think there is genuine affection and genuine respect. I think that is what we have achieved here and it works very well.

(Phase 1, H3, Interview 28, GP)

The nurses were also very supportive of the medical staff. They perceived the GPs to be more oriented towards team-based care, but indicated there was still some fine-tuning to be done:

Now we are more settled with the doctors doing the regular thing every week. The only problem is with acute patients. It is fine, because one doctor hands over to the other one and they take over and they will be discharged. But with aged care permanent residents, if one [doctor] is responsible but you want something done when the other one is supposed to be responsible, and you have to wait 'til they get back and you have to handball, it is less smooth. We are still working on ways around that.

(Phase 1, H3, Interview 27, Nurse)

In summary, everyone interviewed placed valued on the importance of teamwork within their health care setting. They were aware of the barriers and demonstrated eagerness to improve teamwork within the limitations of their setting.

5.4.2 Roles and responsibilities

The staff at Farmville Hospital relied on occasional medical assistance from visiting doctors. This had implications for the on-call system, as a GP was not always able to come immediately to the hospital. As a result, the nurses' role was perceived as one of increased responsibility. One nurse described how the GPs relied on their good assessment skills:

> *The doctors rely heavily on our nursing assessment of the patient and will advise over the phone and we can fax that information to them. They can write the medication order and fax it back. So they go quite a lot on what we assess the patient as needing or requiring. Or then, if there is anything more urgent, we will organise a transfer ourselves.*
>
> *(Phase 1, H3, Interview 27, Nurse)*

Consequently, the nurses at all levels undertook extra courses to help with their added role responsibility; for example, courses in plastering, suturing and advanced life support. The ENs and PCAs also had credentials to prescribe certain medications.

The community health manager had an office, based in the grounds of Farmville Hospital, where there was sharing of allied health staff with two other sites in the region. She explained that community health used to be co-located with the medical practice. She perceived that their relationship with the medical centre since the move had remained strong and this was attributed to the medical centre being privately run. She believed that most of their business was centred on the GP:

> *We have a really good relationship with the medical centre because of the nature of our business ... That is general across the three sites and I think that is the beauty of owning the practices. It [the relationship] hasn't changed. We have got diabetes educators, they work with the doctors; podiatry and physiotherapy work with the medical centres in most sites, and in mental health if there's enough rooms.*
>
> *(Phase 1, H3, Interview 30, Community Health Manager)*

However, the community health manager alluded to further change, with indefinite plans to centralise community health in the future:

I am involved in a focus group looking at centralising one community health across the cluster, a new process to me, whether we want that to happen, there is a sense of control about how that happens ...

(Phase 1, H3, Interview 30, Community Health Manager)

The staff in the medical practice, while seen as central to community health, perceived that their roles were appreciated by the hospital. The GPs indicated that having more control of the on-call roster gave them more ownership not only of the practice but also of the hospital itself:

There is an appreciation of the role that is fulfilled here, and we have noticed that more, this year in particular. It's been more stable, with our hours gelling together and once we went through all the politics of saying we want to do call again, and we picked up the after-hours work again, that gave us a lot more ownership of the practice and of the hospital.

(Phase 1, H3, Interview 28, GP)

The GP's comment about ownership is most likely due to historical reasons, whereby the retention of a medical workforce was seen as a priority for this community. Community ownership of some or all of general practices' infrastructure can provide a sense of continuity when GPs are moving in and out of a practice (Fleming, McRae, & Tegen, 2001). Community stakeholders can include the medical staff, general practice staff, hospital boards and local government and those who may have identified medical workforce issues in their community (Fleming et al., 2001). The sense of community partnership between general practice and the community could explain why it was important to this GP to feel appreciated.

The GP was aware of the doctor's position within the realms of the hospital and the rural health care system. The GP spoke about the positional power of doctors who practise in small country towns:

The doctor has an exultant [sic] position. I have never walked into an emergency room or a bed in the hospital or dealt with community health staff and have the: "Oh God, are you here?" Instead, it is: "Thank God, you are here". There is [sic] lots of reasons for that, it's not just the doctor is "God", I don't think that is the issue, I think they are acutely aware that without the doctors there is no hospital, and without the hospital there is no job, and they are acutely aware of that.

(Phase 1, H3, Interview 28, GP)

Community health staff professed that, because hospital-based nurses had not experienced working in the area of community health, they lacked understanding about the role of community health nurses and the services they provided. It was suggested this was more apparent in smaller organizations such as Farmville Hospital:

People make a lot of assumptions about what community health is without knowing, and vice versa. So I guess it is not as one-sided from our perspective as what it can be from the hospital, and it is purely because they haven't worked in it and don't have an understanding. This has been challenged a lot now because of the changing environment ... but I would say in the smaller places that aren't exposed to a lot of things, it would still be a lot more evident.

(Phase 1, H3, Interview 34, Community Health Manager)

One nurse who had recently commenced working with community health after moving over from the acute section suggested that she was aware of how being more understanding of the role could assist with collaborative practice. She had plans at the start that she might be able to reduce the divide between the two organizations:

Working in the hospital for such a long time, there has always been this feeling of an "us and them" situation, and I had this vision that when I started in community health that I would be able to draw the two of them together. I guess working across the two sites I am not one or the other.

(Phase 1, H3, Interview 25, Nurse)

While most participants at Farmville Hospital were clear about how their roles intersected in a changing environment, there was an awareness of the need to further understand each other's roles in moving forward to better collaboration.

5.4.3 Communication

The conversations between health professionals were noted to be a mixture of social and professional communication. However, there was a sense of ensuring that each of these was dealt with separately. For example, the researcher observed an interaction between a doctor and the nurse in the nurses' station:

> *On greeting each other they have a conversation about horse-riding yesterday. Then the doctor says: "Now, [pause] the patient". And they begin talking about patient medications.*
>
> *(Phase 1, H3, 2010, FN, Day 1)*

On another occasion, a nurse from community health came over to visit one of the staff members on a social basis. They started the conversation as a professional one, speaking in the doorway of the nurses' station and once this had finished, they began their social conversation (Phase 1, H3, 2010, FN, Day 2).

The nurses' station was neat and tidy, but small and cramped. Many conversations took place just outside the door where there was a photocopy machine against the wall of the corridor. Often the door was left open to the nurses' station, as were the glass windows that led across the front. The desk faced the glass windows and this is where note writing was done and conversations mostly occurred between a doctor and a nurse. If the window was open, patients would come up to it and chat. The staff were very tolerant of this. The nurses would wait for patients to say what they needed and then go back to their conversations about patient care. This action did not always include shutting the glass window in front of them, and therefore those waiting at the window overheard some conversations. The small size of the office also forced some people out into the corridor to converse. The researcher observed one occasion when a health professional backed into another at the nurses' station entrance.

The telephones were answered very promptly. All the nurses carried handheld phones. The advantage of this was seen when a nurse, who was talking on the telephone about a palliative care patient, was able to move into a more private area, the medication room, to continue the conversation. This room was located directly behind the nurses' station and there was a door that could separate the two rooms (Gum et al., 2012).

A humming noise came from one of the pieces of equipment stacked against the back wall of the front room. As a consequence, it seemed that people had to speak slightly louder than they normally would in such a confined area. When standing outside the room, the voices of those inside the nurses' station could be heard through the glass window. In an attempt in increase privacy, a sign was posted on the outside of the door saying: 'Nurses Station: This is a confidential area for medical staff only. Other staff members are to use the other door.'

The clinical nurse manager summed up what he thought communication was like at the hospital:

> *I think the nurses and the doctors communicate very well. We have got very good communication between the administration officer and the nursing staff in regards to what we need and she needs. Community health: we work quite close together. There are some failings there sometimes, but they usually get sorted out and resolved pretty quickly.*
>
> *(H3, Interview 23, Clinical Nurse Manager)*

The researcher noticed on the display board in the nurses' station some discussion notes from a recent meeting. This highlighted some of the communication problems that had occurred with GPs who were not known to the hospital staff. There was a request for staff to ensure that they identified themselves clearly on the telephone along with the hospital from which they were ringing.

In summary, the flow of communication between staff and health professionals at Farmville Hospital appeared efficient. There was also an acute awareness of the barriers that impeded good communication within and across each area such as lack of space and privacy for conversations.

5.4.4 Learning and critical reflection

Of those interviewed within Farmville Hospital, two health professionals had heard of the term 'interprofessional learning' but only one knew its meaning. The community health manager (Interview 30) admitted to not knowing much about it, but provided a rich description (see Table 4.6).

Table 5:3. Understanding IPL (Case Three)

Have you heard of and do you understand the term 'interprofessional learning' (IPL)?			
Yes	**No/not sure**	**Profession type**	**Quotes by participants**
0	4	Nurses	No, not heard of it before (Interview 25)
2	1	Nurse managers	I have used the term multi-disciplinary before and I have thought of it in that term. You could probably correct me, but I guess maybe it is a different term for the same meaning? (Interview 23) I would assume it's what I learn and share with others in the sense of some of it, and when I learn from what I do and also sharing that as well. (Interview 30)
0	1	Administration	No, not heard of it (Interview 22)
0	1	Day care coordinator	No (Interview)
0	1	GP	No. Only as a concept (Interview 28)
0	1	PCA/cleaner	No (Interview 26)

Once the researcher explained its meaning, most of the participants were able to relate to the concept of IPL. One nurse stated that they used to participate in scenarios with the previous doctor:

> *We used to have scenario sessions from the old doctor with the staff on duty and whoever else. Fifteen years ago, we used to have bigger ones, a scenario where we all used different groups to coordinate where scaffolding falls down or something.*
>
> *(Phase 1, H3, Interview 27, Nurse)*

The participants explained that all of the staff in the hospital attended mandatory training

together, but that this did not include the GPs. The receptionist explained how attending these annual sessions, which included basic life support and manual handling, assisted them in their work:

> *We do train together for mandatory procedures ... We are all made aware of everyone's positions and what it entitles, so we can help if need be.*
>
> *(Phase 1, H3, Interview 22, Administration)*

However, it was reported that annual training for the cleaners was done with PCAs and not with the nurses (Phase 1, H3, Interview 26, PCA/Cleaner). The participants had warmed to the idea of IPL. They were enthusiastic because they were not usually exposed to opportunities that could promote discussion and challenge their thinking. The community health manager explained that her department was currently undertaking a project with another community health centre and she could see the similarities. She expressed how IPL might assist to improve working relationships:

> *What works for us might not work there. For example, we think this way, here we have to be flexible and everyone does more than what their job role is; there [community health centre elsewhere] they sit in their own teams. These same issues ... could be challenged in that. For me, it's more around: "Do you know actually what we do? And if you want to know, you can come and ask." It is not a barrier and that is the sort of stuff that would be nice to challenge.*
>
> *(H3, Interview 30, Community Health Manager)*

However, in trying to make sense of what IPL meant, the community health manager was wary about being transparent with the sharing of information:

> *It's important to understand what other people do, but it is not always appropriate to share some knowledge that might not be applicable to roles and responsibilities. I have never thought about it.*
>
> *(H3, Interview 30, Community Health Manager)*

The clinical nurse manager was excited about the prospect of the research intervention. He suggested that IPL would be good for the nursing staff. He explained that his role

involved organising education for the staff, which was often ad hoc, and he saw an opportunity to focus on an area that was a concern for them:

> *I really hope you can get something together ... The point at which we [nurses and doctors] collaboratively work, a great deal is usually in an emergency situation and a focus on that area will be mutually beneficial. None of us see a lot of it, but when we do, we all have to work together and work it out. People just have a fear of getting something wrong in outpatients. Therefore, acute stuff might only be twenty per cent of our work, but it is probably a focus of eighty per cent of our education.*
>
> *(Phase 1, H3, Interview 23, Clinical Nurse Manager)*

However, there was also concern about how the doctors would find the time to be involved. The senior nurse pointed out that this was directly related to their positions as private practitioners:

> *I can see that getting the doctors involved may be difficult. You see, they are here not as employees but as private physicians, so their time is their money, not our money. Sometimes you can reluctantly get them there, dragging their feet, but we have a hard enough time just to get them to a meeting once a month to discuss generic clinical issues let alone other things.*
>
> *(Phase 1, H3, Interview 23, Clinical Nurse Manager)*

Interestingly, the GP who was interviewed did not reveal any issues with the ability to attend a session with the hospital staff and suggested that they could 'cut off' some time to arrange things, especially if it was on a day that there was a visiting doctor. If the session was held in the evening, there would be an issue with the doctor, depending on which part of the week it was, as well as the need to remain on-call (Phase 1, H3, Interview 28, GP).

Although the role of clinical nurse manager was to be responsible for staff education, there was not an understanding of the needs of the GP in relation to continuing medical education points for professional registration:

They [the doctors] have a responsibility to their own clinical improvement and performance, I suppose. Nurses; it is easy enough to get points and the way the new structure works we can allocate as we see fit. I don't know how the doctors work to get points. I'm not sure how it works.

(Phase 1, H3, Interview 23, Clinical Nurse Manager)

There were also staff who would have liked to attend any hospital-based education sessions, but were advised that they could not:

I would have liked to have known about that, dealing with clients that come in. It is important that I have more of an understanding [of the] professional side of things, I was told "no". I was disappointed with that.

(Phase 1, H3, Interview 24, Day Care Coordinator)

One nurse was critical of the fact that there were few opportunities for round-table discussions where staff could come together for learning and critical reflection:

All the doctors, everyone comes together and talks about it. It hasn't been done and that is what I like to do, that's bouncing the good ideas. I think the more we know, the more we are not frightened about each other.

(Phase 1, H3, Interview 31, Nurse)

Educationally, needs were being met by the staff at the hospital; however, there was enthusiasm and a potential to widen the lens and look at how staff might be able to come together for learning and critical reflection.

5.4.5 Relationship with, and recognizing the needs of, the patient

Conversations between the GP and nurses often involved making decisions about the patients together, and this was usually instigated by the GP. The GP was observed frequently using the term 'we' when making decisions and was thus inclusive of the nurses in these interactions. This extract from the field notes demonstrates the manner of the GP, which was observed on several occasions over the two days:

GP is looking down and writing: "I guess that's doing some good, we might up that to 15mg. [Pause] I don't think we'll bother about this one". RN [registered nurse] stands next to doctor and waits for drug chart. Doctor clarifies drug orders. Doctor asks: "When going from 'oral' to 'grasby' [pump to administer medications] should it be three times?" RN did not know, sits on desk. "I'll have to go and look it up", says the doctor. RN sits and waits. Doctor says: "She looks too sedated, I think we might wind it back". RN says: "Okay, [pause] we should put her in Room 5 then, shouldn't we"? Doctor replies: "Yes".

(Phase 1, H3, 2010, FN, Day 1)

In her interview, the GP compared herself to the previous doctor and explained the reasoning that guided her interactions with the staff. Her approach to her practice was collaborative in nature, which guided her to allow for questioning and joint decision-making:

I don't have the competence that the other doctor had, I am happy for some of them to question: "Are you sure you mean that?" I am happy for the chemist to ring me and say: "Mrs So and So is normally on 40 mg. You have said 20 mg." I think it is terribly important to have teamwork to protect ourselves and to feel comfortable to question, and say look this is a bit different, and people can only do that in a comfortable environment.

(Phase 1, H3, Interview 28, GP)

The nurses perceived that their good working relationships with the doctors meant that their joint care was centred on the patient. One nurse indicated that mutual respect was an important aspect of being able to sit down and discuss a patient together with the doctors:

If there is a problem, you should be able to talk it out. Which we have done in a way with two of our doctors over a cup of tea or just chatting about things and most of the conversation is around the client, trying to make something better without rubber stamping it, you see. Our doctors do have respect for the nursing staff, we are both dependent upon each other.

(Phase 1, H3, Interview 31, Nurse)

Therefore, mutual respect was required as a result of the doctors and nurses' co-dependent relationship in a small rural setting (Sullivan et al., 2008).

With Farmville being a small rural town, patients and health professionals relied on visiting allied health professionals on a weekly basis. This meant that sometimes patients would have to wait at least a week or more to be seen or would have to travel to see health professionals:

> *The infrequency of the visits by podiatry, optometrists and physiotherapists; the demand is higher than the hours they are here. For example, one of our patients needed a physiotherapist this week, but there were no appointments left. However, I am not sure where she comes from, but if a need is awkward the patient might have to travel.*
>
> *(Phase 1, H3, Interview 27, Nurse)*

The nurse therefore indicated that a collaborative relationship did not seem to exist between themselves and the above-mentioned visiting allied health professionals. The lack of integration of allied health professionals with the hospital staff could have been a result of their independent and specialised practice, as well as the diversity in the various professional disciplines that they represent (National Health Rural Alliance Inc, 2004).

There were definite advantages for patients living in a small town and 'knowing' the staff. The researcher observed a conversation between two nurses, a GP and the father of a patient. There was an issue with the patient being discharged but the medication not being available until 3:00pm when the pharmacist delivered it, as this service operated between two of the towns. One of the nurses offered to fill the script for him after work and then take it to his home before going home herself (Phase 1, H3, 2010, FN, Day 1). On Day 2, a patient left a dressing gown at the hospital. The nurse rang and asked him/her: *'Do you want me to leave it here for you, or at the shop in [Town C]'* (Phase 1, H3, 2010, FN, Day 2).

In summary, the nursing staff and the medical staff demonstrated that they recognized the needs of their patients and it appeared that their practice was patient-centred. The findings highlighted what worked in this setting, such as having mutual respect and

collaborative working relationships. What did not work so well in recognizing the needs of patients was the limited access to allied health professionals for patients and the apparent lack of interaction between allied health and the hospital staff.

5.4.6 Ethical practice

'Knowing the patient', together with good relationships with colleagues, had positive as well as negative consequences. For example, later in the day following the nurse's offer to deliver a patient's medication script as described above, the GP rang the nurses during patient handover to ask if the same nurse could get another script processed for a different patient and meet them at the same spot. One nurse commented following this incident: 'We often do other work other than nursing' (Phase 1, H3, 2010, FN, Day 1). Working outside of the scope of practice was also noted in one of the interviews:

> *I feel like we are minimally staffed and most people do a lot more than what their basic job is considered [to involve]. Because you are in a close environment, you are friends with everybody, rely on each other...*
>
> *(Phase 1, H3, Interview 27, Nurse)*

The scope and diversity of rural nursing practice, while different to that of metropolitan practice, was also affected by health services restructuring and reduced infrastructure in the towns (Lea & Cruickshank, 2007). Thus reduced staff to patient ratios and the skill mix of staff means that all levels of staff need to be productive team members (Lea & Cruickshank, 2007). At Farmville Hospital only two nurses worked on the 'floor' together at one time, which increased the transparency of their actions. A registered nurse stated to the researcher whilst she was observing: *'Most of us don't have white dress syndrome'*. The registered nurses and the enrolled nurses implied that they saw themselves as being on the same level. For example, a registered nurse explained that she was happy to follow the lead of the enrolled nurse because the registered nurse was employed casually and would step up as needed (Phase 1, H3, 2010, FN, Day 1). One interviewee mentioned that he believed that it would be a different climate if there were three nurses working together as opposed to two:

I think there is a nicety working here. Not to be definitive of anything else that has happened elsewhere, but I put it down to that enrolled nurses and registered nurses work one-to-one. And there is not a third person involved. And we have a PCA [personal care attendant] who is very obliging.

(Phase 1, H3, Interview 31, Nurse)

Hospital staff such as the PCA and nurses spoke about the influence of personalities on their working environment. One nurse acknowledged that wherever staff worked, there were common issues relating to people's personalities. However, she believed that at Farmville Hospital, where nurses were on a shift with only one other nurse, allowing for other people's idiosyncrasies was needed:

There are set nurses wherever you work: there is one that is fanatical about bed making, and there's the one who gives you a three-hour lecture whenever you ask a question, and the one that reads the Women's Weekly when she has finished her work. It's a generic thing. Here it is more contained. You are only on with one other person, it's more obvious, you become very transparent and it's harder to lose yourself. I enjoy it.

(Phase 1, H3, Interview 25, Nurse)

However, being tolerant of personalities was questioned by the PCA/cleaner who suggested that because she worked for 'an organization' this could be dealt with a little better:

There are different times when different groups of people work well together but personalities come into it, which shouldn't because we are an organization.

(Phase 1, H3, Interview 26, Personal Care Attendant / Cleaner)

The closeness of work relationships, although helpful for collaborative practice, was found to create an awkward situation. For example, the researcher noted 'uncomfortableness' between the hotel services staff and the nursing staff in the hospital. This was particularly noticeable at morning tea breaks. On Day 1, all the hotel services staff and nursing staff had morning tea together, whereas on Day 2 they had morning tea separately. The Director of Nursing explained that this was so because nursing staff were not happy with the way the hotel services manager ran her department (i.e. the manager of food and

cleaning services). However, they were reluctant to complain to her due to the hotel service manager being close friends with her:

> *It is something that has just happened over time, and the hard part about it is that it is just her personality. People have their shortcomings, like not completing jobs, and have their deficits, but also they would give you their shirt off their back. Nurses will not go down and have morning tea with the hotel services staff and they could. The nurses themselves create their own divides.*
>
> *(Phase 1, H3, Interview 29, Director of Nursing)*

Working in smaller collaborative relationships can be challenging; for example, historically nursing has been known for its horizontal violence and intra-nurse aggression (McCallin, 2005). Horizontal violence, also known as oppressed group behaviour, relates to group members feeling powerless and devalued when their views are not supportive of the dominant views (Roberts et al., 2009). Leaders can be marginalised due to uncertainty by others about where their power lies (Roberts et al., 2009). In rural settings, the close working environment may also affect ward culture and gossiping, and infighting can manifest as horizontal violence (Lea & Cruickshank, 2007). Behaviours associated with horizontal violence can be similar to those of bullying (Griffin, 2004). In the case of Farmville Hospital, staff alluded to a need to tolerate differing personalities as a result of working in a small rural community, which may indicate a form of emotional resilience (Davidson Trahaire Corpsych, 2016). For example, to avoid vulnerability, the nurses' way of coping with the issue was to avoid mixing with the hotel services staff.

The Director of Nursing also confided that recruiting in a small rural town was very different to recruiting in a capital city. With fewer applicants from which to choose, some appointed staff did have their shortcomings:

> *If we were in Adelaide recruiting, there are two staff here that would not have their jobs.*
>
> *(Phase 1, H3, Interview 29, Director of Nursing)*

A participant suggested that, while the workplace environment could change on a daily basis, it was also a part of a community:

To work here depends on management, depends on who you work with ... It is different with different combinations of nurses, because it is a community, like the two that are on today are really good friends and so I don't see too much of them because they bounce off each other, then another combination will mean you will have a different working relationship that day.

(Phase 1, H3, Interview 26, Personal Care Attendant / Cleaner)

There was an awareness of how different rural practice was to practising in city and urban areas and how staff would band together when required. In the following conversation, the nurse was standing with the doctor in the corridor and so she knew the doctor was listening. Her comment to the researcher about the doctors was half in jest. However, the GP in her reply was very serious:

Nurse explains to me that it's all juggling and prioritising. "Then we ring the doctors and they roll their eyes when we ask them to do something". GP responds: "No we don't [stated twice]. We don't actually, we are all one big team. We are all in this together and we work it out together". Then the GP stated to me: "Here we have to find solutions—we don't have the things that they wouldn't even think about in the city and even in rural places such as [Town D and Town E]. It's very different".

(Phase 1, H3, 2010, FN, Day 1)

The uniqueness of rural practice is exemplified in this example where the Director of Nursing had to consider the mix of the staff on the wards for each shift:

Depends which ones are on together. If you are in for a busy day, there are some that don't go together, so it depends on the dynamics and we might need a third person.

(Phase 1, H3, Interview 28, Director of Nursing)

There was confidence from staff that despite any differences or personality problems, the work would always get done. The Director of Nursing summarised this as: *"If things need to be done, they would all get in and get it done"* (H3, Interview 28, Director of Nursing). One of the nurses described working in the hospital as being a bit like riding on a rollercoaster:

I really enjoy working here; the care the patients receive is fantastic and, generally, it's a supportive environment. It seems to, rollercoaster, gets on a nice even plateau but then there are dips, and management styles exacerbate that. There is a feeling that people step outside their role and they can be in positions that they are not quite employed for and people find frustrating. Yeah, plenty of talk about that sort of thing does not make for a good atmosphere. On the whole, it is [a] fun place to be and there are busy times.

(Phase 1, H3, Interview 25, Nurse)

It became clear that Farmville Hospital had its own unique culture, which was based on making the best use of the resources available at the time. Although there were only a small number of health professionals they were co-dependent on each other. Everyone working together generally supported one another and the patients as best they could.

5.4.7 Summary of findings: Case Three, Phase One

Changes to the local workforce over the previous few years had influenced the climate of the hospital at the time of the study, in particular the recruitment of new doctors for the Farmville medical centre. The fact that medical centre staff were working with and assisting other towns added to the complexity and nuances of Farmville's model of general practice service provision. The new GPs were only part-time employees and were job sharing. Consequently, they were only together at the hospital-based medical practice one day a week. Otherwise, the GPs operated independently from each other. The hospital staff had to rely on outside visiting GPs such as locums to assist at least once a week, as well as for the on-call roster. For nurses, co-operating with the medical workforce created a need to up-skill; for others, it required problem-solving to find better ways to communicate with one another. There was a sense that the doctors and nurses had gained respect for each other during this process. Mutual respect was gained through their co-dependency, and was most likely assisted by the collaborative approach of the GP. This approach included the notion of the general practice being a 'part of the hospital' as opposed to the hospital just being a part of the doctors' business. However, whilst the nurses' scope of practice was further expanded at Farmville Hospital, there was evidence that some asymmetry of power still existed between the GP and the nurses. The positional power of the GP was most likely related to the priority this community placed on the value and

sustainability of rural doctor service provision. GP services are an expectation as part of local health and community services in small communities (Allan, Ball, & Alston, 2007).

It was challenging to assess the relationship between allied health professionals and the hospital staff as the town had limited access to these services. The nurses alluded to infrequent visits by physiotherapists, podiatrists and optometrists and it was evident there were no relationships built between them. The administrative staff saw themselves as part of the nursing team and vice versa. They were also included in the mandatory training sessions with the nurses and these colleagues shared a genuine mutual respect. There were personality issues with the hotel services staff and the nurses. However, this was influenced by the difficulties associated with professional and social relationships being intertwined in the workplace. The phenomena of living and working in the same community has been described as 'live my work' which gives rural nurses multiple perspectives (Mills, Francis, & Bonner, 2007). Therefore, rural nursing practice was impacted by a lack of privacy and competing perspectives (Lea & Cruickshank, 2007; Mills et al., 2007).

The education ethos was acknowledged to be somewhat 'ad hoc' and the health professionals who spoke with the researcher were very keen for further education. There had been no previous consideration of health professionals learning together through formal education and the clinical nurse manager admitted to not understanding the requirements of doctors regarding continuing professional development (CPD) points. The GP indicated that their medical centre could be flexible with arrangements for IPL, although it may be affected by having to be 'on call'. This flexibility is one advantage, perhaps, of having a workforce of part-time as opposed to full-time doctors.

Farmville Hospital had its own unique culture, with collaborative practice being influenced by historical, individual and systemic factors. Due to having fewer resources, infrastructure and staff, health professionals needed to be flexible and adaptable and to work co-dependently. They were closely linked with the community. There was a symbiotic relationship between the community, the hospital, the medical centre and those who worked there. Symbiosis is where each organization benefits from the other, along with mutually reinforcing relationships (Murray, Larkins, Russell, Ewen, & Prideaux, 2012; Poncelet et al., 2014). However, the community health department was seen as a separate

branch and it was highlighted that the roles of community health and acute nursing care were not interchangeable. The community health department viewed the medical practice as having a greater role than the hospital. This resulted in the leadership between community health and the hospital not being collaborative, thereby reducing any opportunities for shared governance or developing effective working relationships (Al-Sawai, 2013).

5.5 Summary of Phase One

Phase One findings were presented utilising each of the data types (interviews, field notes and researcher notes) for each case. Findings were reported under the six elements of collaboration required to shape IPE at the practice level: teamwork, roles and responsibilities, communication, learning and critical reflection, relationship with and recognizing the needs of the patient, and ethical practice (World Health Organization, 2010).

Multiple teams were found to operate within the health services in each town, with most health professionals working in silos. Health professionals perceived that they worked well together and as best they could with limited resources. In Cases One and Two, the role of the discharge planning nurse was seen as an important link across sites. It was hoped that the role, which had some autonomy, would improve communication between health professionals and health services. Each of the professions, the nurses, allied health professionals, GPs, community health nurses and paramedics, stated they had concerns with understanding the roles and responsibilities of others. Conflicts were observed and reported between health professionals with some of these being attributed to power differences.

The hospital in Case Three was more isolated geographically, with reduced health workforce present in the town. There were only two permanent GP's working part-time in the medical centre. The community itself placed value on the sustainability of rural doctor service provision and this was found to influence the doctor–nurse relationship. The nurses and doctors were co-dependent on each other, ensuring that patients were cared for 24 hours a day, seven days a week, and through this mutual respect had developed. Consequently, the nurses and the GP were found to be more collaborative in their practice.

The same co-dependence was not as obvious within Case One or Two, where the GPs' main focus was on their privately-run medical practices. However, in all three cases it was perceived that the relationship between community health and the hospital sector was poor.

The use of space in relation to either hindering or promoting collaborative practice was revealed in viewing the nurses' station layout in each of the three cases. The nurses' station in H2 was the most conducive, due to having extra private space where health professionals could engage in conversation. There was little time for social conversation although this appeared to occur more often in H3. This may have been a result of a more collaborative atmosphere.

The experiences and understanding of IPL varied widely, with many not having heard of the term before. Upon reflection all three cases had attempted or previously held joint education sessions utilising their own case studies for discussion, or scenarios set in the local context. Health professionals in all cases, however, were concerned about how it would be possible to get all the health professions together at a convenient time.

Finally, there were benefits and challenges revealed about working in rural practice. Close working relationships could be beneficial, for example knowing the patient and knowing the needs of others helped with productivity. Nurses were interested in getting the 'job done' and were very task orientated. However, nurses in all the cases came across as having to be both tolerant and resilient in order to practice effectively in a rural environment. The nurses were the 'middle man' making attempts to advocate for the patient and adapting their scope of practice to fit in with the GPs. The paramedics believed they needed to be flexible within the system to meet the needs of the patient. The intersection between the GPs, nurses and allied health professionals were dependant on the availability of these professions, as most were in part-time and visiting roles.

Chapter 6 now follows and will present the findings from Phase Two of the study, which involved five different IPE interventions.

Chapter 6 Phase Two (Interventions)

6.1 Introduction

This chapter describes the 'intervention phase' findings, presented as Phase Two of the study. Participants were advised that the researcher would introduce interprofessional education (IPE) as an intervention into their region as the next step of the research project. As previously outlined in Chapter 4, the IPE intervention ideas evolved during Phase One of the study. Phase One involved gathering data from participants and exploring current needs and desires for IPE. This resulted in five different types of IPE interventions (see Table 4.2). Included in the planning for each session were meeting with facilitators, negotiating dates/times, topics, educational framework, the target audience and content to be covered. Advertising of the sessions was predominantly handled by the managers of each area (community health, medical practices, hospitals, division of general practice and ambulance station). The researcher either visited in person or made follow-up phone calls prior to the sessions, to encourage attendance. All participants were provided with consent forms and information sheets, to gain their permission for observing the sessions for this research.

As outlined in Chapter 4, various types of teaching theories/modalities were used; these included experiential learning, problem-solving, working in pairs or groups, case studies, role-plays, simulation with debriefing and appreciative inquiry. The findings for each intervention are now presented and discussed under the following themes: venue and seating, attendees and their engagement with the session, scenarios/case studies, interprofessional learning (IPL), and reactions to the session. At the end a comparison and discussion of the IPE interventions is presented.

6.2 Cases One and Two: Introduction to TeamSTEPPS (Intervention A)

The TeamSTEPPS session was delivered at four varying times over two days. A total of 31 participants attended the sessions. The attendees represented a mix of professions (see Table 6.1). The first two sessions were held at Hillside Hospital and the second two at

Valley View Hospital. The number of participants ranged from 16 at the first session to three attendees at session two.

Table 6:1. Intervention A – Hillside and Valley View Hospitals, 2011

Title	Dates and times held	Type of intervention	No. of attendees
A. Introduction to TeamSTEPPS Underlying theory: *Toolkit for organizational change and shared mental models*	June 2011 Session One: 1300–1400	Education-based *Scenario-based discussion & introduction of TeamSTEPPS concepts* Educational theory: Adult learning theory, Contact theory	**Session One (16 attendees):** 10 x nurses 4 x paramedics 1 x domiciliary physiotherapist 1 x GP
	June 2011 Session Two: 1800–1900		**Session Two (3 attendees):** 1 x GP 1 x community midwife 1 x nurse
	June 2011 Session Three: 0730–0830		**Session Three (5 attendees):** 4 x nurses 1 x ancillary hospital staff
	June 2011 Session Four: 1300–1400		**Session Four (7 attendees):** 1 x practice nurse 1 x kitchen staff 4 x nurses 1 x GP

6.2.1 Venue, seating and attendance

The first two sessions at Hillside Hospital were held in the physiotherapy room which was often used for educational purposes. This was a small area but with plenty of seating. It was cold and there was a heater on. The seats had been arranged in two rows of semi-circles. The facilitator (simulation manager) was at the front and utilised a screen and projector. One nurse stood in the doorway so she could listen out for patient bells. At the first session at the time of 1300–1400 there were 16 attendees, and while there was no room to spread out, all who attended could easily hear and engage with the conversation. Only three participants attended the evening session, which was most likely due to its being held after normal working hours.

At Valley View Hospital the venue was a transportable meeting room. This rectangular-shaped room was a reasonable size with tables in the middle and chairs around them. The urn was on and food had been provided for the breakfast session. The temperature of the room was warm and comfortable. There was a pull-down screen situated at the front of the room with a table for the projector. At the morning session, there were five attendees, including a nurse who had just finished a nightshift. Having the session at this time was designed to be inclusive of the GPs, however no GPs attended this particular session. More participants attended the afternoon session, held between 1300–1400 hours on the same day.

6.2.2 Engagement with the session

A variety of health professionals attended. Of the 31 participants, the majority were nurses (n=20), with four paramedics attending session one, one physiotherapist and three GPs attending separate sessions. Other attendees included: one person who only wanted to be listed as 'ancillary staff', one community midwife, one general practice nurse and one kitchen staff member. Ancillary staff in the Australian hospital setting is representative of catering, cleaning and laundry services.

Non-verbal behaviour such as 'arm folding' was found to be indicative of the level of engagement by participants and served as a useful point for observation. The researcher noted in all four sessions that most of the participants commenced the session with their arms folded. Just what the session would entail was not explicit in the advertising, and this uncertainty may have been reflected in the arm folding. The time it took for arms to unfold was noted in the last two sessions. It was 20 minutes into these sessions when body language suggested that the participants were more at ease with the session. There was also a lot of head nodding at that time by many participants, as they appeared to understand and agree with what was being discussed.

An icebreaker was not used; however, the facilitator began each session by asking "Who thinks they work in a good team? Who is your team?" This was effective in getting an open discussion going with interaction from many participants.

6.2.3 Session content

The participants accepted the scenarios provided as being realistic for the rural context. This was observed through their reactions, including comments such as: '*Oh*, *this must be a Hillside patient!*' (Phase 2, Intervention A, FN, Session 1). This was seen as positive. It had been hoped that participants would relate to the scenarios in order to apply the TeamSTEPPS principles. The scenarios helped to create rich and honest discussion between the participants:

> *GP states: "That is very realistic".*
>
> *RN suggests a cross-monitoring strategy. Nurse says: "Oh, we would do it this way ..." (goes on to explain).*
>
> *Participant reads the scenario. All have input.*
>
> *Participant states: "Ring Dr on arrival using SBAR [situation, background, assessment, request]. Not wait for arrival of Dr". All nodding. Statement: "Our aim is to help the patient".*
>
> *(Phase 2, Intervention A, FN, Session 2)*

6.2.4 Interprofessional learning

IPL took place in all four TeamSTEPPS sessions. During the discussions, there were examples of participants learning from and about each other. The statements in Table 6.2 are taken from all four sessions where there was a question, agreement or clarification regarding patient care.

Table 6:2. Intervention A – Examples of IPL

Statement	How contributes to patient care
Nurse asks paramedic: "Can you initiate a GTN [glyceryl trinitrate] infusion?"	Clarifies roles and scope Commencing a GTN infusion is an important lifesaving measure for patients
Talking about medications, nurse says: "Oh, we would do it this way".	Understanding potential differences in medication management can reduce errors
"Ring Dr on arrival using SBAR [situation, background, assessment and recommendation]. Not wait for arrival of Dr" All nodding.	Agreement on how to use communication tool between health professionals can improve patient handover
Paramedic clarifies and suggests the team leader should give an update and let them know they have arrived.	Understanding others' roles and purpose can improve the process for patient transfer to hospital
Discussing waiting lists – a 'look of amazement' from one participant to another.	More understanding of time ambulance takes to transport patients (non-urgent). Should enhance respect and therefore better working relationships for patient care
Participant states they were pleased about a lot of paramedics being here today: "We don't often get to discuss things together".	Time together to build relationships can improve rapport and working relationships for good patient care
GP flicks through TeamSTEPPS handout. GP states: "With mental health patients, it is important to include this in patient handover".	Input from all professions contributes to better patient care

There was one example of tension. Participants were being open and asking each other questions about working as a team. A nurse and a kitchen staff member discussed the issue of patient confidentiality. The nurse indicated that she was reluctant to give kitchen staff confidential information about the patient:

> *"We are protective of it so don't want them to know anything at all." The nurse says to the kitchen staff member: "It's not your business".*
>
> *(Phase 2, 2011, Intervention A, FN, Session 4)*

This tension was managed by the facilitator, who reminded the participants about the fundamentals of teamwork. The sessions promoted reflection around participants' own perceptions of how they functioned as teams. Questions that the facilitator posed at the

beginning also included: Would you, as a patient, trust in your healthcare team? Participants alluded to working in separate teams rather than as a whole team:

> *Maybe we aren't quite the team we think we are and nursing staff are here, are just an arm and the paramedics are another arm and we don't encompass the whole system.*
>
> *(Phase 2, Intervention A, FN, Session 1)*

Participants also demonstrated that they understood the rural team was more than just the health professionals and should include the kitchen staff:

> *Kitchen staff member states: "Kitchen staff who are there more consistently might see the patient more than the nurse on a day-to-day basis". A nurse reinforces this. "We give feedback to them and they eat meals with us."*
>
> *(Phase 2, Intervention A, FN, Session 4)*

These reflections indicated differing interpretations as to what is meant by the 'team'. According to Reeves et al. (2010) there are different types of teams which can be gauged by their members' levels of interaction and sharing of common goals. An interprofessional team is typically defined as those with mutual goals and shared responsibility, with its members from different health professions meeting regularly (Jones & Jones, 2011; Reeves et al., 2010). In rural settings, teams are smaller which may create asymmetry in responsibilities held by the different professions (Fuller, Edwards, Martinez, Edwards, & Reid, 2004). This nurse, although demonstrating she was not thinking *interprofessionally*, alluded to the limitation of rural nurses being a separate and high performing team:

> *A nurse states: "Our nursing staff can't be a high performing team—there's not enough staff".*
>
> *(Phase 2, Intervention A, FN, Session 4)*

One participant reinforced this view indicating that having to aim for higher levels of teamwork was too difficult:

Some of us strive for different levels [of teamwork], we are not the AFL [Australian Football League]. Rather, we are accepting of how things are or this is how we do things around here and we don't want to change.

(Phase 2, Intervention A, FN, Session 2)

There were examples of stereotyping that occurred during the sessions. Often this was associated with participants providing opinions or insights about each other:

During group work in session 1, the group discusses the scenario and a nurse jokes: "We blamed the doctor, as we normally do".

(Phase 2, Intervention A, FN, Session 2)

In this session a GP was present and the comment may have been a result of the nurse's anxiety at the start of the session. Emotions have a role in intergroup encounters and anxiety can be common (Dickinson & Carpenter, 2005). In another example, the whole group was discussing the use of the TeamSTEPPS tools to intervene. One nurse was laughing about using the DESC (Describe, Express, Suggest, Consequences stated) script:

Nurse: "I couldn't imagine the doctor saying this."

(Phase 2, Intervention, FN, Session 3)

This revealed her perception that doctors would respond differently to the tool than other health professionals would. However, in this particular session (the third) there were no GPs present and four out of the five participants were nurses. Therefore, the medical professionals were unable to defend this statement. Perceiving the value of the communication strategies, the participants later verbalised their annoyance that no doctors had attended the session. In particular, the time of 0730–0830 with breakfast supplied had been suggested by participants in Phase One, to encourage attendance by the doctors. Whilst the nurses understood that the doctors were busy consulting and that this was their income, they were also frustrated:

Nurse: "Doctors are a protected species."

(Phase 2, Intervention A, FN, Session 3)

Thus, the nurse depicted GPs as not only being different to themselves but perhaps implying that it was a power difference that was preventing them from attending that day and participating in joint activities. However, each of the GPs who attended the other three sessions were noted to be in agreement with the discussions. There were few observed examples of IPL between the GPs and others, which may have been due to them being the non-dominant profession in this situation.

6.2.5 Reaction to the sessions

At the end of each session, participants asked the facilitator what they needed to do to instigate the use of TeamSTEPPS in their own organizations. One GP asked whether this would include the medical practices. The facilitator advised participants that it would be up to them to approach management and express their interest, but that they would need to have the GPs on board. The facilitator mentioned that it was easier to implement TeamSTEPPS in places where everyone who is part of the organization is involved:

> *"Does it help with accreditation?" asked a kitchen staff member. "I think it would be easier because it is a smaller team". The facilitator reminds them doctors are not part of system, "Though, it would be easier in a place where all are part of the same organization". Practice nurse states: "It [TeamSTEPPS] would have been good last weekend to use as we had an incident that would have been prevented. I would have liked a longer session."*
>
> *(Phase 2, Intervention A, FN, Session 4)*

Questions were raised about the feasibility of GPs being able to take part in a system-wide communication strategy.

6.2.6 Discussion and conclusion

The intervention provided participants the opportunity to have relevant discussions and interactions together. Participants could ask questions of each other and appeared comfortable to state their own opinions. The session prompted deeper thinking about what makes up a team and demonstrated strategies to improve IPL and collaborative practice. The two clinical nurse managers, one from each hospital, both expressed interest

in using TeamSTEPPS again. They were put in touch with the relevant staff at the South Australian Health Department.

IPL was limited in most sessions, as the majority who attended were nurses. However during this short, one-hour intervention, some IPL did take place in the session where there were paramedics and nurses (Table 6.2). IPL did not take place between the GPs and the others present. If there are unequal differences in the group, engagement with collaborative learning may be compromised (Reeves et al., 2008a). The use of contact theory was appropriate for guiding the planning of this session as health professionals revealed aspects of their own practice to each other while exploring communication skills in the clinical context. This type of disclosure helps to develop interpersonal relationships (Brown & Hewstone, 2005). However, frustrations were expressed by participants who wanted to schedule a session at a time which could be inclusive of all health professionals' attendance.

6.3 Cases One and Two: Understanding Suicide (Intervention B)

In all, 26 participants attended Part One and Part Two workshops about Understanding Suicide. These two sessions were held two weeks apart and not all people were able to attend both sessions. For example, Part Two had one less hospital nurse and one more mental health nurse, with the largest group at both being GPs (see Table 6.3).

Table 6:3. Intervention B – Hillside and Valley View Hospitals, 2011

IPE intervention	Dates and times held	Type of intervention	No. of attendees
B. Understanding Suicide	Part One: June 2011 1900–2200	Education-based Didactic & Small group – case discussion **Educational theory:** *Adult learning theory, situated learning theory*	**Part One (26 attendees):** 1 x pharmacy representative 1 x division of general practice staff 1 x mental health nurse 1 x counsellor 1 x clinical psychologist 2 x hospital nurses 18 x GPs 1 x practice nurse
	Part Two: July 2011 1900–2200		**Part Two (26 attendees):** 1 x pharmacy representative 2 x practice nurses 2 x mental health nurses 2 x counsellors 1 x hospital nurse 18 x GPs

The Part One and Part Two workshops will now be presented separately.

Intervention B: Part One

6.3.1 Venue, seating and attendance

The function centre was a very large room with a bar close to the entrance. The tables were round and large and set up at the front of the room before a large screen. It was very modern and warm on a cold winter night. As people arrived they checked in. Most of them obtained a drink at the bar, then went straight over to the tables and sat down. Seating was not pre-determined. This resulted in an imbalance of gender and professional mix at each table. Figure 6.1 shows a map of the seating.

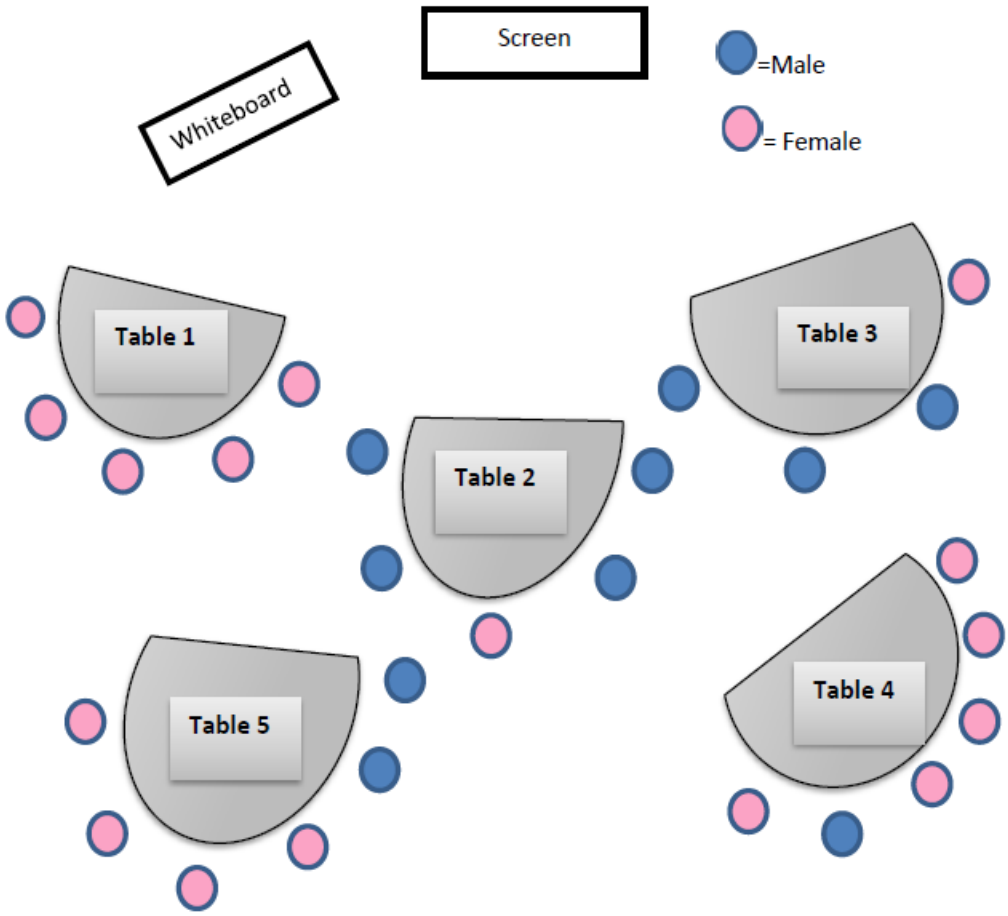

Figure 6-1. Intervention B, Part One – Seating arrangements

Predominantly, there were a majority of GPs from the region of Lake Trout, of which four were female and ten were males. This is representative of the medical workforce at the time where more male medical practitioners were employed in proportion to women (almost 2 in 5 were women) (Australian Institute of Health and Welfare, 2014a). The mix of professions and genders that occurred in the seat arrangements is shown in Table 6.4.

Other health professions represented were counselling, clinical psychologist, mental health nurses, practice nurses and senior hospital nurses.

Table 6:4. Intervention B, Part One – Seating arrangements

Table no.	Participants
Table 1	3 x nurses (2 hospital and 1 practice nurse), 2 x GPs – all females
Table 2	All GPs – 4 x males and 1 x female
Table 3	3 x male GPs, 1 x pharmacy representative
Table 4	1 x male GP, 1 x female counsellor, 1 x female clinical psychologist, 2 x female GPs, 1 x female mental health nurse
Table 5	2 x male GPs, 1 x female GP, 2 x organisers (mental health nurse and program manager), researcher

6.3.2 Engagement with the session

Participants displayed a good level of interest and engagement with the facilitator (psychiatrist – Dr A), who used a microphone. The PowerPoint slides were very well organised and used engaging images and statistics. All participants appeared very relaxed, either leaning back in the chairs with their arms apart or leaning forward on the table from the commencement of the session. Participants were most likely comfortable at their chosen table, as most were sitting with people they knew. Therefore, the environment was perceived as safe and non-threatening.

6.3.3 Session content

During the case study activities, envelopes were given to each table with a small group case study inside. This activity resulted in good conversation and dialogue at each table. There was a lot of silence while participants were reading the case studies, which were two and a half pages long. During the final case study for the evening, participants were given the choice of either splitting into pairs or working together at one table. This resulted in the participants not necessarily mixing with other participants at different tables. Some of the conversations were straying away from the case study.

6.3.4 Interprofessional learning

Halfway through the evening the researcher was asked by a GP: '*What are you actually observing?*' Following the answer, the GP explained that he had attended events in the past with other health professionals and that he, too, had noticed that the doctors tended to sit together, rather than interact with other professionals. He suggested mixing people up next time and putting a dot on their name tags to indicate which table they should sit at. The GP stated: '*If you are coming for Part Two you should try this; you can compare and contrast the two workshops'.*

It was noted that more time was spent using didactic methods of teaching compared to the interactive methods in this session. For IPE to be successful, methods used should encourage interactions which are learner focused (Reeves, Goldman, & Oandasan, 2007; Thistlethwaite & Nisbet, 2007). There were reduced opportunities for the participants to mix and some discussions were only between one profession-type. Therefore, the limited use of interactive teaching methods compared to didactic methods and the instability of the IPE group resulted in a reduced amount of interactivity (Reeves et al., 2007).

There was little evidence of IPL until the last 20 minutes of the session, when the facilitator put on the whiteboard questions that had been generated earlier. One GP put forward a very interesting question about management of mental health patients in the local hospital. This prompted some heated and passionate discussion. The IPL that occurred took the form of health professionals achieving consensus about the difficulties and challenges they experienced with mental health services and clarifying each other's roles and responsibilities in relation to patient care. However, the session ended quickly with the facilitator suggesting that, due to time constraints, the next session could be used to articulate some of these issues further. Thus, this last 20 minutes introduced material that was highly relevant and contextual to the learners. The provision of an open discussion had created an opportunity for those present to engage and debate the topic with each other. The facilitator did not discuss this with the team afterwards but perhaps he ended the session purely due to time constraints, or he may have been concerned about the intensity of the discussion and potential for conflict. IPE facilitators need to feel confident about their ability to deal with difference and conflict (Howkins & Bray, 2008). Interestingly, the

facilitator acknowledged the difficulties that were discussed here at the commencement of the next session.

6.3.5 Reaction to the session

The two hospital nurses approached the researcher at the end of this session to say that they had found the workshop worthwhile. In particular, they indicated that the discussion about the mental health patient in the hospital setting had been useful. They proceeded to provide some background about the problems they had managing mental health patients. Another participant (a clinical psychologist) mentioned that she was 'new to the area' and did not really know anyone except by name, even at the end of the session. Therefore, whilst attempting to create interaction between the participants, the session was unsuccessful in meeting the needs of this participant, who was hoping to meet and network with other health professionals.

Intervention B: Part Two

6.3.6 Venue, seating and attendance

For the Part Two session the room was set up in the same cafe style as for Part One, but each table had a giant coloured dot in the middle. Name tags were collected by participants on their way in and these displayed differently coloured dots. The organisers explained to the researcher that they had carefully divided the groups and accounted for those that they perceived might not get on very well. Although they gave the impression of being unsure about how well this would be received, the mental health nurse organiser appeared to take great delight in explaining the dot system to participants as they entered. Following this, the participants mingled at the bar, only seating themselves once the meals were being served. Vigorous discussion was noted at this time.

6.3.7 Engagement with the session

Once the presentation began, all participants appeared to be engaged immediately, as suggested by their postures (sitting with chins in their hands or sitting with relaxed arms). The same facilitator (Dr A) commenced the session by stating that he had reflected during the week about the need for further resources for rural mental health, as well as

acknowledging the current issues. He asked the audience reflexive questions relating to the end of the previous session about management of mental health teams. Dr A immediately had everybody's interest due to the content being relevant to practice.

Following this he surprised everyone with a 'fun icebreaker'. Dr A asked the participants to spend one minute introducing themselves to each other; then to tell others something they did not know about themselves; and finally to describe what they might do to 'de-stress' after work. This activity engaged people in two different ways. Some used it for fun and humour, while for others it was serious as they revealed how they 'de-stressed' following work. Dr A worked with this really well. He highlighted the need for health professionals to find constructive ways to deal with their stress and the usefulness of finding commonalities with each other, such as gardening, swimming or exercise and forming a social group. This idea also created more discussions and questions from the group. Therefore the ice-breaker was helpful in establishing a relationship between each of the participants, based on familiarity and trust (Reeves et al., 2008a).

Towards the end of the session, some participants had started to fill in the post-activity reflection questions and evaluation forms which were required of the GPs to receive their continuing professional development (CPD) points. With only 20 minutes to go, Dr A warned the audience that the remaining activities would be didactic and rushed due to the unplanned icebreaker. However, he asked participants a really challenging question and this engaged the whole group right up to the end of the session. This demonstrates the usefulness of being flexible when facilitating IPE.

6.3.8 Session content

Just before the session commenced, Dr A was listening to the mental health nurse explain the name tags with the dots to the participants and had said to her: '*Oh, I see—would you like me to do an icebreaker then?'* (Phase 2, Intervention B, FN, Part B). Following this, Dr A spontaneously introduced an icebreaker into the session. In the next part of the session Dr A further discussed the topic on which the previous session had ended, tackling issues about the rural management of mental health patients. This discussion revealed some differences between what was recommended by Dr A and what actually happens in the region. Good discussion was noted to have taken place within the case study group work in

the next part of the session. The mixing of the participants gave people an opportunity to get to know each other better. Two GPs who implied they did not know each other began chatting, one showing the other a photo of his young baby.

6.3.9 Interprofessional learning

At one table, a GP spoke with a mental health nurse. The GP stated that he perceived the case not to be applicable to him in his work, and a mental health nurse proceeded to turn this around:

> *The participants at the table are all discussing how they would manage the case (personality disorder). A GP says: "Well, I am not interested in this case; I would normally pass this onto a different GP". The mental health nurse states: "Well, actually, it is just as simple as validating this person's feelings", and goes on to explain what the basic needs of the patient are. The GP is not interested at first, but then he starts to listen. He begins to nod and remarks: "I see". This creates further discussion by all at the table as well as consensus with the management.*
>
> *(Phase 2, Intervention B, FN, Part 2)*

Therefore what might have been perceived as the norm for the GP, through further discussion enabled IPL to occur. The GP was able to learn more about the role of the mental health nurse and the mental health nurse was able to gauge more about the GP's approach to mental health patients. This highlights the benefits of presenting real and relevant cases for structured IPL (Thistlethwaite et al., 2012).

During the whole group discussion at the end, the facilitator was able to provide ideas which were profession-specific as well as relevant to the rural context related to questions from the participants. Many people were taking notes. Here is a small excerpt from the field notes:

Discussing how to medicate an inebriated patient. GP says he is worried about the airway, the [pharmacologic] agent is determined by what the hospital can manage. Mention of use of pulse oximeter. Examples are given. Dr A gives advice to those [he directed this advice to the nurses and doctors] on night shift at the hospital.

(Phase 2, Intervention B, FN, Part 2)

The open discussion optimised interaction between health professionals in a comfortable environment, and led to some examples of IPL. Whilst involving different professions in the open discussion, the facilitator provided solutions that were relevant to those present. This demonstrated the importance of IPL facilitation skills in being all-inclusive of the professions present. Dealing with complex cases requires adequate experience of interprofessional work (Dornan, Mann, Scherpbier, & Spencer, 2011). Health professionals in this session were all provided with the same advice, which may have enabled them to address any future and potential problems together and promote collaborative practice.

6.3.10 Reaction to the session

The program manager verbalised that she was impressed with the icebreaker, but that it had taken her by surprise as it was not originally planned (Phase 2, Intervention B, FN, Part B). As a consequence, Dr A had rushed the last part of the session. The mental health nurse from the planning team who had organised the dot system stated that she was very pleased with the outcome. During the session break, she referred to a conversation between another mental health nurse and a GP about personality disorders. The mental health nurse implied that the session had achieved its aim of encouraging conversations between the health professionals about mental health (Phase 2, Intervention B, Researcher Reflections, Part 2). Therefore the planning team could also see for themselves the advantages of promoting interaction between the professions which increased their awareness about each other in such an important topic area.

6.3.11 Intervention B: Discussion and Conclusion

Intervention B was undertaken in two parts and was a useful activity for several reasons. It demonstrated that for IPL to take place facilitators must consider how this will occur during the planning stage, and not leave it to chance. First, in Part One, it was evident that the

GPs were not used to interacting with other professions in this type of educational environment and therefore they were happy to stay in their own groups for the session. Second, the presenter himself most probably did not understand the concept of IPE fully until the beginning of the second session, when he overheard the explanation to participants about why the dot system was being used. Third, the sessions were mostly dedicated to GPs' learning needs. Whilst there were initially good intentions by the program manager to invite other health professionals, there were restrictions on how many other professionals could attend due to numbers and costs. The pharmacy representative had spoken to the researcher during Part Two and explained that there were a lot of rules and regulations around drug sponsorship, and that this would also affect who could be invited. The two hospital nurses who attended were in a minority. This may have influenced their decision not to speak up during the final discussion in Part One but instead to speak with the researcher afterwards about mental health patient management.

The presenter was very experienced and handled the teaching very well. He demonstrated an increased understanding of how to facilitate IPE. Whilst he was aware of the desire to use less didactic teaching methods, Dr A was also very open to new ideas and alternative ways to meet the aims of the session. Because he was flexible about the needs of the participants in Part Two, he was able to make the content more contextual and relevant for them. A decision had been made in the planning meetings not to use an icebreaker, mainly based on time considerations. The presenter ended up using an icebreaker spontaneously in the second session and this had benefits for everyone. The icebreaker engaged the participants, but more importantly put everyone on the same level, which provides equality in the learning environment (Reeves et al., 2008a). The facilitator also attempted to use the participants' commonalities as a strategy for health professionals to support each other outside of work, such as through a social activity. In rural practice, this strategy is relevant, due to the benefits of strengthening the social fabric of rural towns and building relationships (Reid, 2003).

The participants were very accepting of the coloured dot system despite the planning team's initial concerns about how it would be received. Purposely arranging where participants sat influenced the group dynamics of the session. As a result there were more interactions in Part Two than in Part One, and due to the mixing of professions more dialogue was held around the topic of mental health 'between' the professions. Therefore,

using the coloured dots to arrange the seating assisted with group processes (McKimm & Swanwick, 2013) which helped to achieve IPL. These findings support the use of contact theory as a useful theory to guide IPL where under appropriate conditions interpersonal contact helps people to appreciate different points of view (Allport, 1954; Hewstone & Brown, 1986).

In conclusion, these interventions showed that IPE planning needs to be creative, as well as consider which teaching methods and theoretical frameworks would best engage and promote interaction between health professionals. In this intervention, when comparing Part One to Part Two, the use of an icebreaker and the seating arrangements were found to make a difference and increased the amount of IPL that took place, in particular between the GPs and the mental health nurses. Presenter flexibility during the session was found to assist with achieving IPL. Therefore, facilitators must be experienced in dealing with group dynamics.

6.4 Cases One and Two: Appreciative Inquiry (Intervention C)

A total of six participants attended the two sessions which focused on using appreciative inquiry theory (Cooperrider & Srivastas, 1987) to identify and solve issues in the workplace in order to promote collaborative practice. The two sessions were held two weeks apart during the afternoon and results are presented separately.

Intervention C: Session One

6.4.1 Venue, seating and attendance

The venue for session one was a small lounge room in Valley View Hospital, often used for 'day surgery' patients as a waiting room. It was 'cosy' due to its size which proved suitable for the four participants who attended session one (see Table 6.5). Of those who had registered, one hospital nurse was unable to attend because of work pressure, three home care nurses did not turn up, and a paramedic rang to say he was required for 'a job'. Unfortunately, the nurse co-facilitator was unable to attend the first session due to the ward being too busy.

Table 6:5. Intervention C – Hillside and Valley View Hospitals, 2011

IPE intervention	Dates and times held	Type of intervention	No. of attendees
C. Appreciative Inquiry	Session one: 26 July 2011 1300–1400	Practice-based *Problem-solving & brainstorming* **Educational theory:** *Reflective practice theory*	**Session one (4 attendees):** 1 x domiciliary physiotherapist 1 x palliative care nurse 1 x hospital nurse 1 x community health nurse
	Session two: 9 August 2011 1300–1500		**Session two (2 attendees):** 1 x domiciliary physiotherapist 1 x community health nurse

The four attendees represented three different types of nurses as well as a domiciliary physiotherapist who worked with Community Health. The facilitator was an inpatient physiotherapist (Gillian). They sat around the room in close proximity with each other in arm chairs; two sat together on a small lounge. The door was closed.

6.4.2 Engagement with the session

All four participants were very enthusiastic and engaged in the interview process, which generated rich discussion. Gillian was very encouraging in the facilitation role. For example, at one point a participant stated:

> *"I don't know if I can answer these questions". Gillian reassured her and stated: "I'm sure you have got some great examples".*
>
> *(Phase 2, Intervention C, FN, Session 1)*

Importantly, to make the exercise engaging, the participant was encouraged to reflect and make it applicable to her own experiences. Learning for practice improvement should be underpinned by the principles of experiential learning and reflective practice (Nisbet, Lincoln, & Dunn, 2013).

6.4.3 Session content

Participants were accepting of the appreciative inquiry guidelines put forward by Gillian and soon paired off to interview one another. Discussions were held very quietly but efficiently (Phase 2, Intervention C, FN, Session 1). Participants had a coffee break before changing roles. The participants chose their own pairs for the interviews. The palliative care nurse and the community health nurse partnered and interviewed each other, as did the hospital nurse and the domiciliary physiotherapist.

One activity asked participants to reflect on their own vision and ideas of how they would like to see their practice transformed. Participants revealed that improving communication was an important priority (see Table 6.6).

Table 6:6. Participant responses to Interview Question 5

If you could transform the way your team operates in any way you wished, what would you do to enhance the way interprofessional care is delivered?
More communication, more often, more regularly *Improve communication between health services, 'sharing of staff'* *Communicate well with people who know you in the hospital; if they don't know you, they won't give you information*
Nurses on the ward seem to have lost some of their scope of practice – everything goes by the GP *Staff need to be re-empowered*
Some staff exhibit professional jealousy. To stop some being so reactive, we need to influence communication and body language to learn how to negotiate better

Source: Phase 2, Intervention C, Participant Interview Notes, Session One

6.4.4 Interprofessional learning

Whilst it can be argued that this was partly *intra*-professional, where those of the same profession learn within their own unique skill sets (Borduas et al., 2006) as opposed to *inter*-professional learning, there was evidence of learning with and about each other. Most of this occurred during the pair-work. For example, a nurse asked the domiciliary physiotherapist to clarify her role:

"So was that your role to organise that?" Further conversation followed soon after about nurses' abilities to make decisions about patient care.

(Phase 2, Intervention C, FN, Session 1)

The participant interview notes were summarised by the researcher after the event. Key points were entered into a table (see Table 6.7) and presented in session two.

Table 6:7. Intervention C – Summary of session one, 2011

Why it was a high point experience	Successful ingredients	Challenges and queries	Ideas for transformation
Care was successfully provided in accordance with the patient's own expressed wishes (3) Advocate for patient (2)	Good communication skills (4) Team effort (4) Achievable and clear goals (and is documented) (3)	Costs How to address staff wellbeing Appropriate workloads? Systems that support change? Gaps in communication? How to have same goal and vision How to increase role awareness How to achieve IPL	Support for all team members Share knowledge and skills (and not just because you know them well) Improve professional culture and attitudes Improve communication Learn how to negotiate Address the divide between systems (acute versus community, rural versus regional) Empowerment of professionals in their roles to provide care Improve workloads and resources (e.g. fleet cars) Improve documentation Debriefing

Source: Interview Notes (Intervention C)

6.4.5 Reaction to the session

Participants mentioned at the end of the session that they were definitely interested in attending the second session. This prompted further discussion around how to get more health professionals to attend. The palliative care nurse stated: '*It is a pity that no GPs or representatives from the medical practice came today'*. The hospital nurse responded:

'*Maybe the solution is payment of the GPs to attend*'. The open conversation led to discussion of examples of poor collaborative practice which had been triggered by the session. The session ended with a commitment to gather more interest for session two.

Intervention C: Session Two

6.4.6 Venue, seating and attendance

The venue for session two was a boardroom used by ambulance staff in Middletown, an office located halfway between the two hospital sites. Due to poor attendance at session one, it was decided by the facilitator and the researcher to try an off-site location. Neutral territory was chosen to encourage attendance by staff from both hospital sites as well as from the three medical practices and community health centre (Hillside) and allied health team who were located next to Valley View Hospital. Other efforts to increase attendance included the distribution of more brochures and follow-up telephone calls made by the researcher and Gillian. The aim was to ensure that all health professionals knew about the session. Upon re-approaching the three medical practices, there was a reply from one practice manager who indicated it would be impossible for the doctors to attend.

At session two, there were even fewer participants; the facilitator, Gillian had received apologies from two attendees from session one who were unable to make it due to work commitments. There was a very large table in the middle of the square-shaped room, with limited space around the table. Chairs were place around the large table and there were whiteboards on the walls. To try and gather as a small group, one end of the table was used. It was decided with the group that for session two, due to low numbers, the facilitator would have a dual role as both participant and facilitator; she was therefore also involved in the brainstorming activities.

6.4.7 Engagement with the session

The session commenced with the researcher presenting an overview of the notes taken in the interviews, from session one. The two participants were the community health nurse and the domiciliary physiotherapist. They and Gillian were very engaged with the exercises. They took the session seriously and deeply debated several issues. The room

was conducive to good discussion as it was a small boardroom, the door was shut and there were no interruptions. The whiteboard was used to record some ideas. The small group members appeared very determined to achieve improvement in their practice to benefit their clients or patients (Phase 2, Intervention C, FN, Session 2).

6.4.8 Session content

Once the table summary from session one had been discussed, session two was broken down into several activities with a 'handout' on which the participants could write. The final activity involved the group choosing an area on which they wanted to work. Here is an excerpt from the field notes of their joint decision-making and considerations:

> *Person 1: "The Discharge Planner will solve some of these issues."*
>
> *Person 2: "What about making the discharge planning meetings bigger and better once a fortnight – and inviting other disciples and NGO's."*
>
> *Person 1: "The problem is the time of day"*
>
> *Person 2: "This is important, it's about time management".*
>
> *Person 3: "'Nursing' don't always attend — they might not know the patient."*
>
> *Person 2: "What about a clinical round? — To encourage feedback between the clinical managers."*
>
> *Person 3: Asks to define 'clinical'.*
>
> *Person 2: "When you have a clinical person present for example a community nurse, a social worker, an acute nurse …"*
>
> *Person 2: "The benefit is the client." — All agree, "yes valuable"*
>
> *Person 3: "What about making it a trial?"*

6.4.9 Interprofessional learning

This session provided a forum for IPL in that the participants were able to listen to each other's perspectives and ideas about practice. A common denominator in the discussion related to clarification of health professional roles. The participants discussed an incident where there was a problem with a patient's medication following discharge. They believed that if all the health professions had been contributing to the discharge planning of the patient, that incident could have been avoided. They discussed the roles of the hospital team including the administration staff and the paramedics. The patient was at the centre of the dialogue with consideration given to what appropriate care was and what the

barriers might be to such care. For example, the participants discussed appropriate filling out of forms in relation to the benefits of collaborative practice:

> *I think that is why we need to know each other's roles. They had filled out every form [re equipment] because they did not know.*
>
> *(Phase 1, Intervention C, FN, Session 2)*

In the final activity, the group members decided they wanted to increase the importance of discharge planning for the benefit of their clients. They decided to look, first, at how they could improve the discharge planning meetings and, second, at how to improve the documentation processes for discharge planning. The group members could see the value of discharge planning meetings due to the fact that they were 'interprofessional' and regular. They proposed asking the clinical community nurses to participate in the meetings, since this would assist with issues such as medications and wound care. The group discussed the advantages of 'inclusiveness' in order to share knowledge and information and recognized this as a way of promoting effective collaborative practice.

The group members discussed ways that documentation could be used to improve communication, such as use of checklists and streamlined processes for documentation. To move things forward, they decided that the formation of a discharge planning working party would be a good outcome to achieve, while waiting for the arrival of the new discharge planning nurse. At that time, they were unsure about when this might happen. Since the researcher's visit a year earlier, the discharge planning nurse who worked between both hospital sites had resigned and a replacement had not yet been found. On further discussion, the group members perceived that a working party might in the short term help to move their current ideas forward. They were enthusiastic about taking responsibility for this activity, and indicated that they wanted to be able to regularly engage in debriefing about their progress. Plans were set in place about how they would go about this and what they wanted to achieve.

6.4.10 Reaction to the session

Following the session, the group members wrote a proposal and asked the researcher to forward this via email to the appropriate managers.

The group have proposed a three-month trial at one site, Valley View Hospital, where the clinical community health staff will be invited to participate in all discharge planning meetings. The facilitator has taken on the task of reviewing current paperwork and procedures re discharge planning across the region. This group would like to form a discharge planning working party within the next few weeks. Once the new discharge planning nurse commences duties, they would like to continue this work alongside them and to further explore these ideas. The group requests support of up-line managers to assist them to undertake this proposal.

(Phase 2, Intervention C, Email Correspondence)

This proposal was sent to the Director of Nursing, the Director of Country Health South Australia, all the general practices in the area, and the South Australian Ambulance Service site in Lake Trout. Respondents commented that they had enjoyed the session and valued the session methods as a way of exploring the benefits of a team approach. They also realised how important good communication is in achieving the best client outcome. Respondents were very disappointed about the low number of attendees and believed that having inadequate representation from all other members of the healthcare team resulted in fewer ideas.

6.4.11 Discussion and conclusion

Motivating busy rural health professionals to attend this session proved to be difficult, with one participant suggesting that a solution might be to pay the doctors to attend. In regards to the few who did attend, the session findings demonstrated that appreciative inquiry has the potential to provide a positive IPL environment and may be useful for building collaborative practice. These two sessions also demonstrated that appreciative inquiry can still be a successful method of group brainstorming, even with a low number of participants.

Low attendance at this IPE intervention may have been due to rural health professionals being time poor and can also be a reflection of low workforce numbers (Parker et al., 2013). Another reason may have been due to health professionals believing that their organization(s) would not support the use of application of human factors knowledge or their ideas/solutions (McGraw, 2013). Human factors knowledge is the understanding that

optimising relationships within systems between people can enhance clinical performance (Catchpole, 2016; McGraw, 2013). Appreciative inquiry is one way of building and developing organizations through focusing on the values, best practices and good experiences of people (Jakubik, 2015). Additionally, IPE can be associated as being less valuable than education which is dedicated to one profession (Chambers, Clouder, Jones, & Wickham, 2013). Therefore, the health professionals in this region may not have been attracted to attend, perceiving that appreciative inquiry was not a valuable use of their time.

6.5 Cases One and Two: Intervention D – Working with Paramedics

6.5.1 Venue, seating and attendance

In total, 12 participants registered for the session, most from Hillside Hospital, and 11 attended the session. The attendees were nine nurses of varying levels and two personal care attendants (see Table 6.8).

Table 6:8. Intervention D – Hillside Hospital, 2011

IPE intervention	Date and time held	Type of intervention	No. and type of attendees
D. Working with Paramedics	7 September 1300–1430	Education-based Educational theory: *Constructivist learning theory*	**11 participants:** 1 x community health nurse 2 x personal care attendants 3 x registered nurses (hospital) 1 x enrolled nurse 2 x clinical nurse managers 2 x nursing students

The room chosen was a multipurpose room used for physiotherapy consultations, storage of medical records and education. Chairs were set up in two semi-circles in a small area around a projector, screen and whiteboard.

6.5.2 Engagement with the session

Many participants commenced the session with closed body language, such as folded arms. Once the relevance of the session had been explained by the paramedic facilitator (Tim),

some graphic photos were presented depicting scenes that those working in the ambulance service often face. Following this segment and about 20 minutes into the session, no arms remained folded. There were many question asked by participants with lots of *'ohs'* and *'mmms*' (Phase 2, Intervention D, FN), reinforcing that most were very engaged in the session.

6.5.3 Session content

Tim clarified the differences between the different levels of training of paramedics as well as the differences between a volunteer ambulance officer and a paramedic. The audience was particularly interested in knowing which towns in the region were staffed by paramedics and which were staffed by volunteer officers. The scenario activities were predominantly focused on decision-making, and these were undertaken in pairs. Answers to the correct steps in the decision-making and priority for treatment were discussed as a whole group.

6.5.4 Interprofessional learning

Whilst no IPL took place between the participants who were all of the same profession, IPL did take place between Tim (facilitator) and the participants. For example, there was discussion around assessment of the patient, and a nurse stated: '*You could have given us capillary refill'*. Tim then explained why paramedics do not rely as much on using capillary refill when doing their primary assessments. The nurses were learning with, from and about how paramedics assess a patient in comparison to their own practice, and the paramedic learnt that nurses used capillary refill as an important part of their own assessment. For both professions this activity helped to integrate new information with their own practice-based knowledge, which provided an example of constructivist learning theory (Currens & Coyle, 2013).

There was evidence of rich learning with one's own peers and another profession to gain insight about each other. For example a nurse asked Tim: '*What would you do at Hillside?*' There was further discussion about to which hospital they would take the patient. The nurse asked: '*Would you have activated retrieval?*' The dialogue continued and Tim mentioned that the paramedics sometimes might have to ask the nursing staff for help

with their decisions (Phase 2, Intervention D, FN). In a discussion about communication a nurse asked Tim whether the ambulance service used the SBAR (Situation, Background, Assessment and Recommendation) method of communication. Then, in the reverse, Tim sought information from the nurses about the current conflict regarding the doctors' request to take patients to facilities that were not deemed to be the nearest (and therefore designated) hospital facility (Phase 2, Intervention D, FN). There was learning in both directions, from facilitator to participant and vice versa.

6.5.5 Reaction to the session

A few nurses stayed behind after the session and approached Tim. The researcher noted that they discussed palliative care. The nurse asked Tim: '*Should we try and do more about an arrangement between palliative care and the ambulance?*' Another nurse spoke with Tim about advanced directives and asked: '*Can we do a session about that with the paramedics?*' Some nurses approached Tim in the corridor and said to him: '*Heard it was great. I wish we had come now!*' (H1/2, 2011, FN, Session D). This indicated that the nurses might have been a bit sceptical about the initial value of the session. One nurse indicated she was interested in Tim's invitation to travel in the ambulance to see what takes place. Therefore, the nurses indicated further interest in future IPE activities with the paramedics.

6.5.6 Discussion and conclusion

Whilst this session only had one profession (nurses) in the audience, IPL took place between the paramedic facilitator and the nurses. The session was relevant and contextual to clinical practice as the paramedic who facilitated the session worked with the local ambulance service, and therefore with some of the participants. Tim came across as being on the same level as the participants, as he provided detailed information about himself and was willing to answer any question about his scope and role. The scenario activity helped the nurses and personal care attendants capture the way paramedics think and make decisions. In return, the nurses were willing to help the paramedic understand how they also made decisions in complex situations. Building on each profession's diagnosis and treatment ideas results in the integration of practice (McMurtry, 2015). Importantly, the professions need to be able to understand each other's contributions (McMurtry, 2010). Therefore, constructivist learning theory is a useful theory on which to base IPL.

Through social interaction, the representatives of the two professions were able to learn and make sense of each other's work practices. Each professional rather than accepting the knowledge of another, had the opportunity to ask questions and clarify decisions. Another element important for effective dialogue engagement included the relaxed environment, which was most likely due to the participants and the facilitator being on the same level. When planning IPE there is need for equality in the learning environment which reduces the tension so positive interactions and collaborative learning can take place (Reeves et al., 2008a).

Eleven people attended the session, with the majority coming from Hillside Hospital where it was held. There were no doctors or allied health staff in attendance. It was difficult to know whether the time chosen for the session was unsuitable or whether there was just no time or interest to attend. The session served as a trigger for future learning engagements between the two professions such as a palliative care session and the nurse who wanted to spend a day shadowing the paramedics.

6.6 Case Three: Intervention E – Simulation Workshop

6.6.1 Venue, seating and attendees

A total of 21 participants registered and attended the workshop. There was a mix of professions (see Table 6.9). However, of these 14 were from the nursing profession and five were personal care attendants with only one GP and one manager in attendance.

Table 6:9. Intervention E – Farmville, Lake Salmon, 2012

IPE intervention	Date and time held	Type of intervention	No. and type of attendees
E. Falls Prevention and Management	February 2012 0900–1630	Education-based Educational theory: *Transformative learning, experiential, reflective practice*	**21 participants:** 7 x enrolled nurses 7 x registered nurses 5 x personal care attendants 1 x other (health service manager) 1 x GP

The participants represented the following health services: Farmville Hospital, a neighboring hospital, Farmville Medical Centre and Lake Salmon Community Health. It was difficult to recruit allied health professionals as there were limited on-site allied health professionals in the region. On the day of the workshop, two resident allied health practitioners reported that it was not possible to attend in order to maintain clinical care requirements. Unfortunately, one GP could only attend the simulation session in the afternoon, also due to work commitments. There were four attendees who travelled from a neighboring town. The facilitators were a simulation manager and a simulation assistant from Flinders University.

The venue for the workshop was the ambulance station across the road from Farmville Hospital. The room was cold as it had high ceilings and radiant heaters were turned on. The medium-sized room was set up with five tables such that four to five participants could be grouped together around each table. A coloured-dot system was used (similar to Intervention B) to mix people so that they were grouped at a table with people with whom they would not normally work on a day-to-day basis, those who worked in a different role or were from another town. Participants were not grouped in their own teams during the morning sessions to assist them to get to know others better and to learn more about each other's roles. Participants continued social interactions in their same groups when having morning tea outside in the sun.

6.6.2 Engagement with the session

The workshop commenced with an icebreaker, which was humorous and resulted in immediate engagement of the group. One person who had their arms folded soon unfolded them once the icebreaker was underway. The pre-arranged seating meant that not all of the participants who sat together knew each other. During the reflective questions exercise, the participants at all five tables talked together quietly. When the researcher walked past a table, the participants would either stop talking or lower their voices. The researcher soon realised that this was happening because the conversations involved some social aspects; group members were getting to know each other, and perhaps did not want to be seen to be straying from the assigned task. The researcher made a conscious decision not to walk around the room for the rest of the exercise (H3, 2012, FN, Simulation Workshop). To promote a relaxed environment, participants were

invited to help themselves to coffee at any time and many took up this opportunity. A whole-group discussion generally followed the small-group discussions. Participation by the attendees was greater than planned, causing the first session to go over time.

6.6.3 Session content

Participants remained in the same small groups for the case study activity. As they got to know each other better, there was an increase in the volume of the dialogue and laughter at some of the tables. The researcher noted that some of the pre-arranged groups continued to socialize together during the morning tea break. The role-play and the simulations took up the rest of the afternoon. These activities involved everyone in some way, either as active participants in the role-play/simulation or as observers providing peer feedback during the debriefing session.

The scenario written for the role-play was a formal discharge planning meeting which aimed, through joint decision-making, to decide where the patient being discharged ought to be placed. Participants found the role-play useful, making comments during the debriefing such as: "*I got heaps out of it, like how everything is not cut and dry [sic]"* and "*I just learnt that is what it is really like in real life. It was a good scenario"* (H3, 2012, FN, Simulation Workshop). The two simulation exercises ('Mrs Robertson' and 'Mrs Dawson'), which were undertaken later in the day, generated lengthy debate and discussion in the post-simulation debriefings. The feedback offered during the debriefings indicated that the simulations were 'realistic' and 'helpful' (H3, 2012, FN, Simulation Workshop).

6.6.4 Interprofessional learning

During the role-play exercise, there was rich discourse in relation to the influence of roles and the value of each health professional's perspective such as a dietician or a doctor. The Director of Nursing had a dual role as a volunteer paramedic which led to a discussion about the role of the volunteer paramedic in relation to legal aspects of care, pre-hospital. The first simulation scenario went for 20 minutes and was stopped just as the simulated patient was about to be transferred onto the ambulance stretcher. However, some of the participants asked for the simulation to continue, as they wanted to know 'how' the patient was to be transferred onto the stretcher. Then, part way into the debriefing, there

was a further question from the GP who wanted to know more about how to lift the patient from the floor of a home. The Director of Nursing was acting in the role of a paramedic, and due to her dual role as a volunteer ambulance officer she provided a partial demonstration of how to transfer the patient onto the stretcher and explained how to lift the patient from the floor. This demonstrated IPL as the GP and other participants as well as the Director of Nursing, in her dual role as a paramedic, were learning *with, from and about each other*.

The debriefing discussion focused on communication and teamwork. There was useful debate between the nurses and the GP about the needs of the patient and the urgency of getting the patient transported to hospital (H3, 2012, FN, Simulation Workshop). Deconstruction of what occurred during the scenario led to a deeper examination by the group of the tasks undertaken by different role players. There was some disagreement between the GP and the nurses about what tasks might have been achieved prior to the GP's arrival at the bedside:

> *Participant states: "In real life, the EN [enrolled nurse] would have done an ECG [echocardiogram] while waiting for the doctor". The GP states: "But that was not a high priority, really". An EN replies that the ALS [Advanced Life Support] course advised that the ECG [echocardiograph] was a priority.*
>
> *(H3, 2012, FN, Simulation Workshop)*

In most cases, the doctors tend to view themselves in a dominant role in health care delivery (Baker, Egan-Lee, Martimianakis, & Reeves, 2011). There was some disagreement between the GP and the nurses during the debriefing session; nurses can be perceived as being subordinate to the doctor (Baker et al., 2011). Tension and conflict during interprofessional discussion is an important part of learning and working across boundaries, especially when it becomes productive (McMurtry, 2013). Initially, the GP devalued the fact that the enrolled nurse believed the ECG was an important task. The advantage of the debriefing session was the nurses' ability to challenge the GP's view, thus legitimising her actions. This finding is important in the context of IPE by demonstrating that traditional power relations can be challenged (Baker et al., 2011).

This led to further input from other nurses, followed by clarification of key points in the management of the patient by the facilitator. The integration of the key points was sensitively handled by the skilled facilitator; she was aware of possible power issues between the enrolled nurses (who had done less training than the registered nurses) and the GP. One participant explained that due to the isolated nature of their practice, the nurses did not always have the benefit of a GP being present at the beginning of an emergency. The simulation helped to highlight the GP's role:

> *It gives you the insight of—I mean, you're not always around when the doctor's around, and she's not always around when something happens like that, so it was actually a great thing to see, the doctor when that is happening, see what her role is.*
>
> *(H3, P7, Simulation Workshop, 1st Interview)*

However, not all the participants believed that they learned about the roles of others. One participant explained that she already understood everyone's roles:

> *I mean I knew what most people's roles were and what they do. Because I'm based at community health and used to work in the hospital, I'm sort of aware of what all the other girls do in community health; plus, from a hospital perspective, I know what everybody does and what their roles are.*
>
> *(H3, P4, 2nd Interview)*

6.6.4.1 Intra-professional learning

Intra-professional learning occurs where those from the same profession build competency in their own professional skills sets (Borduas et al., 2006). There was evidence of *nurses* learning with, from and about each other throughout the workshop. In an earlier session, participants were helping to clarify the roles of the hospital nurses and community health staff in relation to witnessing or not witnessing a fall either in the home or the hospital setting (H3, 2012, FN, Simulation Workshop). This led to the Director of Nursing explaining her reporting role for the Safety Learning System (SLS), which is a quality improvement tool being used by the South Australian Department of Health to improve quality and safety in health service. Another conversation occurred around 'who calls for the doctor' which

revealed some differences in nursing practice between the community health and the acute health care settings (H3, 2012, FN, Simulation Workshop).

Participants who were interviewed described how they perceived the opportunity to learn with others. Nursing teams as well as those of other health professions can consist of staff with different specialties and can result in the adoption of different group identities (Burford, 2012). Group identity can be explained by social identity theory developed by Tajfel and Turner (1979) where different types of nurses, in this case, may be considered as members of an out-group. For example, in this study the hospital nurses and community nurses have been portrayed as divided and having different values and identities. Therefore, 'turf wars' or being excluded as a member of a group can occur in *intra*-professional as well as interprofessional learning situations (McDonald et al., 2012; Wackerhausen, 2009). IPE can be seen to benefit both types of learning; intra-professional and interprofessional (Ireland et al., 2007). One participant explained that, even though she and her colleagues work for the same organization, they might not necessarily get to see each other in practice:

> *I work with all of them, but I actually don't get to spend a lot of time with them. I know of them and we all work for the same unit, but I actually don't get to spend a lot of time with them and certainly not on a study thing like this as well.*
>
> *(H3, P8, Simulation Workshop, 1st Interview)*

Reduced opportunities to socialize in the workplace could mean nursing staff at different levels may identify with each other even less. Identification with a group has many benefits such as personal security, companionship, bonding and valuing each other's contributions (Bartunek, 2011). As a result of the workshop, participants revealed an increased awareness of the perspectives, capabilities and roles of others in their workplace:

> *It really was an eye-opener to see what they're really actually doing, because although you usually see them when they do this … you never see the other side of them, their responsibilities, what they're capable of doing. So, it was really interesting for me to see what they are doing. It was really good.*
>
> *(H3, P5, Simulation Workshop, 1st Interview)*

6.6.4.2 The patient perspective

During the role-play scenario, the participant playing a role of 'daughter' telephoned into the meeting. Upon reflection the participants noted that a degree of power moved with whoever had the telephone. A discussion ensued about power imbalances that can occur between the patient, family and health professional in terms of decision-making about care. The role play allowed participants to empathise with the patient, who had little control in the decision-making process:

> *The participant who plays the role of the son states: "The fact that you are dealing with a life made it hard". The person playing the patient states: "I was feeling cranky [sic], everyone was making decisions about my life. They were talking about you but not to you or with you". The person playing the daughter states: "People believed the professionals and not the patient".*
>
> *(H3, 2012, FN, Simulation Workshop)*

The consumer having a voice has many benefits such as making the learning experience more authentic and encouraging better communication between health professionals. Understanding the patient perspective and the impact on communication is key to promoting collaborative practice (Wright, Hawkes, Baker, & Lindqvist, 2012). In the role-play debriefing, the group reflected on what they could have done differently, such as teasing out more information from the patient. In the final dialogue of the debriefing session, participants focused on whether some of the barriers to communication experienced in the role-play were due to an imbalance of power around the table. In particular, they explored the powerlessness felt by the son, who may have been pressured by the opinions of those at the table. The participant who played the role of the patient articulated how it felt to be in that situation:

> *I could feel myself getting really angry with my so-called son, and really angry with people saying what they think I should do, and nobody was talking to me. It was just really interesting. I learnt a lot out of that, I did.*
>
> *(H3, P7, Simulation Workshop, 1st Interview)*

One participant reflected that decision-making was something learned from the role-play:

> *Well, it was about phoning the family and making decisions. I learned a lot about that and what that involves and who should be involved. [In the role-play] you see a lot of mistakes that you actually can make when you do it in real life. Yeah, it was just awesome to do it and then go through it when you asked questions and thought, well, I might have done this, or I might have done that.*
>
> *(H3, P5, Simulation Workshop, 1st Interview)*

One participant explained that having patients in similar situations in her workplace meant she now had an opportunity to view them differently:

> *It really wakes you up to how people feel when those situations arise, and it made me really sit back and think how hard it is for people when they go from their home into their areas, and we have that a lot where I work. So for me it ... really pushed home that it's going to make me a little bit more aware of where they're coming from and how they actually do feel.*
>
> *(H3, P7, Simulation Workshop, 1st Interview)*

Empathy for the patient was highlighted by the same participant three months later:

> *It has had a big impact. I try and put myself in other people's shoes more and think, well, I'm right, they should be feeling like this; rather than how are they feeling, and how can I help them along? I think it's been a really worthwhile workshop to do.*
>
> *(H3, P7, Simulation Workshop, 2nd Interview)*

Therefore, additional to a small amount of IPL, the workshop was found to have benefits for intra-professional relationships and deepening understanding of the patient perspective.

6.6.5 Reactions to the session

To finish the workshop, participants were asked to share what they perceived to be a key learning outcome from attending the workshop. Individual comments were noted in the

field notes and tabulated (see Table 6.10). To demonstrate how what was learnt can assist collaborative practice, each comment has been matched with its contribution to the practice of patient-centred care and collaborative practice.

Table 6:10. Intervention E – Key learnings

Individual comments describing key learnings in final session	How the learning contributes to patient-centred care and collaborative practice
Increased confidence in other health professionals	Promotes referral to other professionals
Importance of having respect for team members and the patient, making sure everyone is heard and included	Acknowledges the contribution and input of each profession to patient care
Interprofessional education is important	Promotes collaborative practice
Understanding other health care roles	Assists delegation and sharing of care
It was great watching people, nurses are great, they have to think and observe so much	Enhances understanding of the role and scope of a profession re patient care
Importance of engaging with the patient no matter what the role e.g. paramedic, nurse, doctor	Recognizes the role of good communication with patient for any profession
Felt proud to see everyone's job and how we work together	Promotes understanding of what good teamwork looks like for the patient
Team members are important	Encourages being a team player

Comments varied, with participants stating that they now understood that IPE was important, they understood other health care roles and they realised the importance of showing respect for other team members as well as the patient.

In Case Three there were additional follow-up interviews through the agency of the grant funds. Most participants were surprised that the focus of the workshop was on teamwork as opposed to falls prevention and management:

It was something completely foreign to us; and then having feedback, it all reinforced something that's really important, but I think probably for me, a lot of what was reinforced was about communications, not so much about falls prevention.

(H3, P6, Simulation Workshop, 1st Interview)

A few stated that the workshop was not what they expected it to be. Reasons for this included that it was totally new and differed from previous falls prevention workshops. A few participants had never heard of or been involved in simulation learning. One participant commented:

I suppose initially it was: "Oh, you're going to do this". But no, no once I got into it, [it] was fine. I suppose I didn't know what simulation was. What was the expectation of simulation, I suppose.

(H3, P8, Simulation Workshop, 1st Interview)

Despite initial impressions, all participants commented that they enjoyed the interactive learning environment. One participant suggested: '*Now that we know what it is all about … bring it on!'* (H3, P2, Simulation Workshop, 1st Interview).

Interviewees pondered the positive and negative aspects of simulation and interactive learning. Only a few negative aspects were reported, such as feeling pressure from peers to perform, not being comfortable with role playing and requiring more direction for the simulation exercises:

I didn't really even know what I was dealing with, because they didn't give me long enough to look at the notes that I had in my hand. So, yeah, I felt quite uncomfortable in that situation.

(H3, P4, Simulation Workshop, 1st Interview)

I enjoyed the interaction more so than someone standing up there and talking. When you're up there and you really have to think about it, and like I said it makes people feel uncomfortable and they hate doing it, but personally I think it's more beneficial to do it that way.

(H3, P8, Simulation Workshop, 1st and 2nd Interviews)

However, the participants could see the benefits of simulation and role-play learning. The positive aspects included the ability to learn from colleagues, the opportunity to engage in self-critique and the 'hands-on' learning:

> *If you're actually interactive and being a part of it, it's worthwhile because you're actually being critiqued by people in the room and really it is a self-critique as well. So if you can be yourself, to me it's a great outcome.*
>
> *(H3, P8, Simulation Workshop, 1st Interview)*

The participants identified potential barriers to more on-site simulation or IPE sessions. These included the limited number of health professionals present in their rural setting, time, cost, issues around hierarchy, existing professional silos and the fact that some staff might not understand the value of IPE. A participant believed that health professionals would be more likely to attend IPE sessions if all areas of the health services were more united:

> *Not everybody unites as one. It's sometimes earmarked as individual areas, whereas we should be coming all under the same umbrella and working as one. You still have the stigmatism here of: "Oh well, okay, they're community health and we're hospital". And even though you keep on reminding people, "Yes, we're under the same umbrella", there is that little line that's drawn between the "that's them and that's us".*
>
> *(H3, P2, Simulation Workshop, 2nd Interview)*

One of the participants who attended from a neighboring town stated that she enjoyed travelling and spending more time with work colleagues. One of the highlights for her was meeting the staff from Farmville Hospital:

> *What for me was really important was the fact that I got to meet and spend time with the three people that I travelled down with. I really enjoyed spending the time with all the people that were there and the dynamics of the day.*
>
> *(H3, P6, Simulation Workshop, 1st Interview)*

Three months later, this participant discussed the difficulty of dealing with the territorial boundaries that exist in rural practice:

Well I think it's a huge and true problem, lack of interprofessional learning, and I also think that it's dominantly due to … some of it is really, old, old, old coveted protection stuff and it is between towns and between services.

(H3, P6, Simulation Workshop, 2nd Interview)

In summary, the style and content of learning delivered at the workshop was quite different to traditional workshop expectations, however it was positively embraced. Participants could see the value of undertaking more interactive and experiential learning in their own settings. The participants, while not used to simulation and role-play learning, could see its benefits. Nonetheless, participants alluded to the difficulty of undertaking IPE in their own settings. Due to the low numbers of different professions in the area, it was difficult to run any session that involved more than one professional group.

6.6.5.1 Reflections from the Director of Nursing

The Director of Nursing was asked to reflect on the impact of the workshop and the feasibility of this type of intervention for meeting the learning needs of the organization.

Supporting ongoing education for staff in rural locations remains a challenge, especially for minimally staffed facilities. There is the need to provide the education to all staff, but there are not enough staff to run multiple sessions, thus facilitating some staff to attend the education session while other staff are attending the demands of the client care in the health unit. Even opening the sessions up to other locations does at times increase the numbers, so the creative rostering can facilitate as many staff as possible attending. The use of agency staff is always an option, but in an age of budgetary constraints, this is not a desirable option.

Another consideration is that rural staff are ageing and, as such, practical, hands-on learning is what works for them and this project supported that which made it easier. There is a tendency to use e-learning programs for many rural/small facilities, but as a worker and leader in one such facility, this causes frustration and concern as staff report that the learning is not retained as well as when there is practical involvement. This is one of the challenges of trying to meet the needs of staff, professional requirement and stretched budget.

(H3, 2012, Simulation Workshop, Final Report)

For the Director of Nursing and her staff to undertake education sessions where attendance was intended for a whole team, rather than only one or two staff at a time, was seen as problematic. The low workforce numbers and budget allocations for professional development added to this difficulty, meaning that planning for any structured or formal IPE had low feasibility in this small rural health unit. The reflections of the Director of Nursing identified the challenges associated with delivering sessions involving multiple sites, large numbers of staff, and even multiple sessions, due to low workforce numbers and cost constraints. Following this intervention, the Director of Nursing was unable to source financial support for the nursing staff or any of the other employees of the hospital to take part in any further IPE sessions:

> *It would be good to do this, but to get the best out of it, everyone needs to participate and the budget won't allow that this financial year. A training day like this would mean six shifts of agency staff for nurses, at average of $650 each. As agency is not available for the kitchen, etc., it would mean working something out for them. Then there is the staff cost for the day and my budget is already over this year.*
>
> *(Phase 3, H3, Email correspondence, Director of Nursing, March 2012)*

Therefore, no further sessions took place. As the researcher had already collected extensive data after the workshop, the decision was made not to undertake an observation period at Farmville. In an interview following this decision, the Director of Nursing stated that she felt that there would be more opportunities for informal IPL as opposed to structured IPE:

> *So we get those kind of circumstances where you have a discussion, about this and that and whatever else and this is how it could be, and they happen to be opportunistic with the doctors. Rarely will you get them at a structured program session, particularly during the course of the day.*
>
> *(Phase 3, H3, Interview 13, Director of Nursing)*

She also believed that another barrier to IPE in rural health was associated with factoring in time and whether the sessions were provided with CPD points:

Whether you're working and you're doing it on paid time, CPD points, you've actually got to look at, is this where my priority is, or do I need to be doing this in my own time? If you are shift-working staff, is it really interesting and worthwhile going to? You can actually make yourself not rostered on for that day, so you can go and do it in your own time, if the management were supportive of it. Looking at interprofessional learning more broadly, these are some of the conflicts that would go on in people's minds.

(Phase 3, H3, Interview 13, Director of Nursing)

6.6.6 Discussion and conclusion

Intervention E introduced a group of health professionals, although mainly nurses, to different ways of learning. Whilst most traditional education is situated within the cognitive dimension, the teaching methods used such as role-play and simulation learning assisted learning in the emotive and societal dimensions of Illeris' Tension Triangle (Howkins & Bray, 2008). Therefore, those who attended perceived they gained positive time with each other with the benefits of observing each other in a clinical practice setting, as well as debating and clarifying relevant issues. Participants perceived their simulation learning experience to be authentic and contextual and reported being able to overcome their discomfort once the benefits were realised. Also highlighted were the importance of the facilitator having effective knowledge of group dynamics and being able to stimulate productive discussions. Facilitators of diverse groups must be sensitive to professional diversities and find creative ways to manage groups and behaviours (Howkins & Bray, 2008; Reeves et al., 2008a). Whilst the group was not diverse in terms of profession-types; there was diversity of types of nurses and the presence of health staff from different health departments.

Through experiential learning, participants learned that the patient could sometimes be ignored. They alluded to the influence of power when making decisions for and with the patient and their family (Field notes, p. 183). Whilst the role play, simulation scenarios and in particular the debriefing were based on transformative learning theory, there was only evidence of transformation of perspectives in relation to the patient. One of the competencies for interprofessional collaborative practice is that health professionals should be respectful and inclusive towards patients/clients and their families (Canadian

Interprofessional Health Collaborative, 2010). Thus, there was evidence of learning which contributed to a greater understanding of collaborative practice.

Due to the presence of only one GP and no allied health staff, there was limited evidence of IPL in this intervention. Examples of IPL included clarification and dialogue around profession-based clinical skills/procedures such as a paramedic's role. There was some tension between the GP and the enrolled nurses about the priority of tasks, however, and it allowed the enrolled nurses, in particular, to portray their own perspective. This example meets the aim of IPE which is to create a power-neutral workplace by reducing the asymmetry of power between professions (Collin et al., 2010).

The nature of the workshop was useful for those new to rural practice. Additionally, those attendees who travelled to the venue from another town found it beneficial to mix with like-minded colleagues. This demonstrated the benefits of inter-town training as well as the role of interactive learning in continuing professional development activities. Intervention E findings reveal there is a lot to be gained though interaction whilst learning; however, getting rural teams to learn together is not easy to achieve. Lack of buy-in and understanding about IPE from the organizations involved are barriers to teams coming together for work-based IPE activities (Bajnok et al., 2012; Miller et al., 2014; Paquette-Warren et al., 2014).

6.7 Summary of Phase Two

In all, 10 IPE sessions were completed in Phase Two. The findings were summarised in a table (see Table 6.11). The table reveals that IPL was very limited for each session. While this study did not originally intend to include several different types of IPE sessions, this opportunity allowed for the comparison of each intervention.

These findings provide the impetus for the creation of better ways to provide IPE for the rural workforce. For example, the Director of Nursing (Intervention E) alluded to the role of informal IPL opportunities as an alternative to structured and formal IPE. Introducing informal workplace learning as an effective way of promoting IPL is currently under-utilised (Nisbet, Dunn, & Lincoln, 2015; Nisbet et al., 2013). Informal workplace IPL would result in less cost and is more practical, as part of everyday practice (Nisbet et al., 2013). For

example, the potential for IPL to occur during interprofessional meetings, through increased interaction and participation by all members (Nisbet et al., 2015).

Table 6:11. IPE interventions – Summary table

IPE intervention	What worked?	Did IPL occur?	Points raised from findings
A. Introduction to TeamSTEPPS (H1 and H2)	Realistic scenarios	Yes, but limited to paramedics and nurses	Need more clarity about 'who' is the team in rural health.
B. Understanding Suicide (H1 and H2)	Intentional mixing of professions Use of real cases Use of icebreaker	Yes, limited to mental health nurses and GPs	Flexible and experienced facilitators are required for effective IPE Use of Contact theory achieved more interaction in Part 2
C. Appreciative Inquiry (H1 and H2)	Achieved enthusiasm for positive change in the workplace	Yes, but limited to physiotherapy and nurses	Appreciative inquiry has potential to promote IPL IPE may not be seen as valuable for some health professionals
D. Working with Paramedics (H1 and H2)	The session utilised constructivist learning theory which helped to integrate knowledge	Yes but limited to the facilitator (paramedic) and the participants (mostly nurses)	IPL can occur between the facilitator and the participants if viewed as 'equals' in the relationship
E. Falls Prevention and Management (H3)	Experiential learning promoted the patient-perspective	Yes but limited to volunteer paramedic, GP and nurses in the afternoon	IPL can challenge power relations Facilitators need to be experienced in group dynamics The principles used to plan and deliver IPE can also assist with intra-professional learning

However, to be successful, informal workplace IPL would still require effective leadership and support as well as teaching people how to learn from their experiences as well as from others (Nisbet et al., 2013). Therefore, explicitly focusing on learning within rural teams during everyday practice may be another strategy for building collaborative practice.

The exploration of five different types of intervention to use for IPE delivery in the workplace resulted in being able to compare different teaching environments, methods, theories and reactions by participants. This has highlighted the usefulness of considering which learning theories are appropriate for promoting IPL. Contact theory, reflective practice theory and constructivist learning theory were all found to positively contribute to interactive and interprofessional learning. Therefore, this finding is significant as there is a need for explicit learning theories to inform future curriculum development of IPE initiatives (Craddock, O'Halloran, McPherson, Hean, & Hammick, 2013).

Given the importance being placed on the need for effective teamwork and interprofessional practice in the future health care arena, it is important to continue to consider how this can be sustained as a way of learning for rural and remote health services. It will be necessary to consider how to increase interaction through learning where there are existing financial and structural barriers. One participant alluded to difficulties with learning online in relation to poor retention of information. However, with the culture of online learning being more widely accepted by health workers in rural areas, it would be worthwhile considering using this as a mode of delivery for future IPE.

The next chapter reports the findings from Phase Three of the study, whereby data was collected six months after the interventions described in this chapter. The aim of Phase Three was to undertake further observation periods and interviews to explore whether any of the interventions had any impact on collaborative practice in the hospital environment.

Chapter 7 Findings: Phase Three

7.1 Introduction

Phase Three involved observing practice and conducting interviews, and commenced six months after the IPE sessions in order to determine their impact on collaborative practice in the rural setting. The data collection was similar to Phase One; most observations were undertaken from within the nurses' stations. The inductive analysis focused on how the health teams worked together and how the IPE sessions impacted on their practice over time. In this chapter, findings from Cases One and Two are presented under headings that introduce the case, set the scene and discuss each of the key elements that show how IPE influences practice: teamwork, roles and responsibilities, communication, learning and critical reflection, relationship with and recognizing the needs of the patient and ethical practice (World Health Organization, 2010). A table reporting the number of hours of observation and interviews undertaken for each case can be found in Appendix 13. As discussed in Chapter 3 ('Research Design'), there was no observation period undertaken in Case Three and therefore no findings for Phase Three, Case Three are reported here.

7.2 Case One

The findings of each data type, including interviews, field notes and researcher notes, are now presented for Case One and discussed under the same seven headings used for Phase One of the study.

7.2.1 Teamwork

Interviewees explained that in the six months following the IPE interventions, there had been organizational changes to the way the allied health teams operated and collaborated with the nurses in the hospitals (H1 and H2). These changes were not related to Intervention C, but impacted on the proposed action plan to improve the discharge planning process. According to the inpatient physiotherapist, a new discharge planning nurse had commenced in October 2012, a process which took several months to complete. Following this new appointment, changes were made to discharge planning procedures.

One of these changes was that the community health department no longer sent a staff member to the discharge planning meeting:

> *So we no longer have anyone coming down from there [Community Health]. The discharge planning nurse speaks to them [the nurses] ... to find out whether anybody on the list is one of their clients and just to have a chat about that.*
>
> *(Phase 3, H1, Paired Interview 4, Inpatient Physiotherapist)*

Prior to the appointment of the discharge planning nurse, Intervention C (Appreciative Inquiry) had encouraged the inpatient physiotherapist to involve the nursing staff more in the discharge planning meetings. However, the inpatient physiotherapist believed that the decision to no longer include a community health nursing staff member in these meeting was not ideal:

> *So in the interim I definitely made it my job to try and get a nurse in for the discharge planning meeting every time, at either of the sites. And when the discharge planning nurse started ... I took a bit of a back step in the whole thing, and I let her do more ... But [nursing staff] don't actually have any input in the discharge planning meeting now. So it's sort of gone backwards, in a sense, rather than forwards.*
>
> *(Phase 3, H1, Paired Interview 4, Inpatient Physiotherapist)*

There had been little opportunity to act on the discharge planning proposal following Intervention C. According to the discharge planning nurse, there was often a shortage of nursing staff on the ward and thus none were free to attend the meetings. So instead, the discharge planning nurse asked the nurses for information when visiting the ward:

> *I kind of gave up asking nurses to attend the meeting because the general consensus was no, I'm too busy, you tell us. So that's cool. I'm happy with that. And, like you say, if there is something specific, or even before I do referrals, I'll go: "Oh, what do you think?"*
>
> *(Phase 3, H1, Paired Interview 4, Discharge Planning Nurse)*

Consequently, this changed the dynamics of teamwork in the organization. The allied health team found that having a discharge planner improved their teamwork, but at the same time this meant limited input from other health professionals:

> *We find, probably our discharge planning meetings are quite effective for us, and that's more the allied health team. So, well the social worker, myself and the discharge planning nurse, so that we can at least know between us who's doing what. So everything gets covered. So from that point of view it's good, but ... yeah, we don't really have that outside input, which would be useful.*
>
> *(Phase 3, H1, Paired Interview 4, Inpatient Physiotherapist)*

According to the discharge planning nurse, the GPs remained relatively distant from the discharge planning process and did not attend the meetings except for those arranged with the family. The discharge planning nurse stated that they did not want to 'annoy' the doctors more than was necessary. Consequently, the GPs connected with the discharge planning nurse and the allied health team through the case notes, although they were not convinced that GPs and the allied health team were 'on the same page' in relation to the discharge planning process:

> *Discharge planning nurse: They'll just write: "Get discharge planning involved".*
>
> *Physiotherapist: And that's probably since we've had a discharge planner, they've been thinking about that more, probably. Don't always know exactly what they mean when they ask for that.*
>
> *(Phase 3, H1, Paired Interview 4, Inpatient Physiotherapist and Discharge Planning Nurse)*

The inpatient physiotherapist mentioned that having the discharge planning nurse as a formal role again was valuable, but wondered what the community health or allied health staff thought about the new discharge planning procedures:

> *I think it's improved everything. And including the relationship between community and, not only just Domiciliary Care, but the other NGOs and even facilities, as well. And I suppose [at the] Domiciliary Care end, it would be interesting to see what they thought.*
>
> *(Phase 3, H1, Paired Interview 4, Inpatient Physiotherapist)*

The community health physiotherapist also noted that, whilst the new discharge planning procedures had improved certain processes, it meant that the community health department now had less contact with the nursing staff on the ward. Nonetheless, she believed it was a positive step:

> *So we don't have as much contact with the nursing staff anymore. If we have an issue about our client we will ring the discharge planner. Maybe that's a good thing because the clinical staff will relate more to her and talk about each individual client or their patient that they're looking after, so the discharge planning nurse is on top of the whole thing better since she's been the official discharge planner.*
>
> *(Phase 3, H1, Interview 5, Community Health Physiotherapist)*

The community health physiotherapist acknowledged that major procedural and structural changes had coincided with the timing of the Appreciative Inquiry session (Intervention C) and that this was unfortunate as they were unable to follow through with the ideas discussed at the sessions. She mentioned several constraints that followed, including a change in the attitude of the team leader (who had not attended the sessions) and a change in how patients were treated when they left hospital. Despite this, the community health physiotherapist believed the Appreciative Inquiry session (Intervention C) highlighted how teamwork could be improved between departments:

> *But I found that the sessions were really useful in just clarifying our thoughts and just trying to make us work better as a team, to try and get better contact between the acute and the Dom Care sector.*
>
> *(Phase 3, H1, Interview 5, Community Health Physiotherapist)*

Organizational changes had impacted on the action plan made by those who attended Intervention C. Whilst there had been a limited number of health professionals present at this intervention, the community health physiotherapist believed Appreciative Inquiry was useful as a potential method to improve teamwork between different sectors.

7.2.2 Roles and responsibilities

Organizational changes had impacted the nurses' and doctors' policy for managing outpatients on weekends. The policy included changes to the procedure of dispensing of medications by GPs. One nurse indicated that the presence of a GP influenced the procedures performed by nurses, dictating what nurses could and could not do; such as insertion of intravenous cannula and giving of medications. A GP explained that the changes had affected doctors because they now had to physically give medications to the patient, rather than leaving this task to the nurses. One GP believed this change was not in the patients' best interests:

> *The doctor has to see them. He can't ask for stronger drugs to be given to the patient and send them home. So they have to be admitted. Some patients are young mums with families and it makes it hard for them to have to stay in [hospital] when it's not necessary.*
>
> *(Phase 3, H1, Interview 3, GP)*

A nurse portrayed that working within the current system was not easy. The nurse used the medication dilemma to describe the impact of the system on the roles of doctors and nurses:

> *If I could get out of the system, I would. And I think you will find most ones in their 30s and 40s are even thinking the same, why would you bother? Why would you bother to be a permanent nurse given it's this hard ... Yeah, why would you put yourself out there. I mean, we can't even give Panadol out any more. No. We have to actually ring the doctor to say "Can I give Panadol to this child?" because we can't do it, we are not allowed to any more.*
>
> *(Phase 3, H1, Interview 1, Nurse)*

The above changes to policy would indicate that while changes were supposedly undertaken to promote patient safety, the changes do not support collaborative practice. The nurse and GP's comments indicated less responsibility being given to nurses and increased pressure on the GPs, which only reinforced traditional subservient nursing roles. In fact, increasing the professional autonomy of nurses can promote teamwork and collaborative practice (Apker et al., 2005; Hall, 2005). Doctors would then have more manageable workloads and more trust in nurses to make decisions.

The researcher was given permission to join a special staff meeting held one afternoon, with the clinical nurse manager acknowledging that all the staff were now familiar with the researcher and her role. Permission was also obtained from the meeting convenors. The meeting was held as a result of Country Health South Australia having reviewed the hospital budget. There was discussion about the roles of the discharge planning nurse and the community midwife, as these were only short-term funded positions. The consensus from Hillside Hospital and allied health staff was that these were important and necessary roles. Both roles were valued, but particularly that of the discharge planning nurse:

> *Director of Nursing: Yep, you really need it. You need that link with community, the GPs, with the relatives, with the hospital. It's a pivotal role.*
>
> *Researcher: So it would be a shame to...*
>
> *Director of Nursing: I don't think we can afford to lose it. So I'll fight tooth and nail for it.*
>
> *(Phase 3, H1/2, Interview 12, Director of Nursing)*

The community midwife read out her recent cost analysis at the meeting. She pointed out that she brought in funding by seeing patients in the community and saving extra bed-time in the hospital, and therefore queried how her role could not be justified in the budget. The Director of Nursing explained how she was able to juggle the funds to retain the two roles at present. It seemed that the discharge planning nurse's position was never formalised, despite the Director of Nursing having created the position, and she said it was unclear as to why the managers of Country Health South Australia were not supportive of the role:

> *This is the very interesting part; it did get filled and approved from the CEO to fill that position ... and now we are having to justify it.*
>
> *(Phase 3, H1/2, Interview 12, Director of Nursing)*

According to Lin, Cheng, Shih, Chu, and Tjung (2012) discharge planner roles are usually undertaken by social workers, nurses or case managers and provide a critical link between the patient and health care team. In a rural Australian study, a discharge planning framework was found to increase the number of patient referrals to community service providers, as well as a better understanding and awareness of hospital staff and

community health roles (Bolch et al., 2005). In this study, the discharge planning role was perceived to provide a connection between rural health professionals; however, the role was not fully supported by the State Government. A new person had now taken on the discharge planning role in this phase of the study and was from a different department to the person in Phase One. However, the role was now perceived by participants as improving teamwork in the allied health team, but widening the divide between community health and the hospital nursing staff.

7.2.3 Communication

One noticeable change that had occurred since Phase One was that a new door had been installed between the entrance to the nurses' station and the store/medication room. The Director of Nursing explained that she encouraged staff to keep the door shut as much as possible for security reasons and that it was automatically locked at 5:00pm requiring all staff, including GPs, to use a swipe card:

> *It was security, to secure the drugs that were there, and it was to secure ... medical notes and all of those things, and often the nursing station can be unattended by anybody, sometimes reception will go off to morning tea. So I'm trying to encourage them to keep it closed for that very reason; and it also reduces that noise that comes out.*
>
> *(Phase 3, H1/2, Interview 12, Director of Nursing)*

With the door between the nurses' station entrance and the corridor now being closed during the day and locked after 5:00pm, there were noticeably fewer corridor conversations in that area. The room directly across from the nurses' station was often used for outpatients when the emergency department was not staffed. Conversations could occur between staff in this room and the nurses' station, as it was an open area with no windows. This resulted in brief but amplified dialogue between staff. For example, one field note entry described a health professional student who was unsure about out how to transfer a phone call. A nurse had yelled out instructions from the outpatient room to the student on how to proceed (Phase 3, H1, FN, Day 2). This brief dialogue could be heard by anyone standing nearby because the nurse was undertaking a task at the time:

Nurse says she is in the middle of giving a drug, so yells from the door to the station to ask a nurse to come and speak with the patient's mother on the phone.

(Phase 3, H1, 2012, FN, Day 2)

The lack of windows and walls around the nurses' station made it difficult to prevent the overhearing of conversations:

A patient's relative is waiting outside the room across from the nurses' station and makes a comment to the nurse in the nurses' station who was discussing wait-time for ambulance transport for an x-ray. Relative states: "Yes, I couldn't help but overhear what is going on."

(Phase 3, H1, 2012, FN, Day 2)

On day three of the observation, the researcher could hear a nurse taking a patient history from the room, as the door of the room was open. Interestingly, earlier that day a nurse had shut the door of the room and suggested to the researcher: '*People don't realise the privacy thing!*' (Phase 3, H1, 2012, FN, Day 3). There was further evidence of corridor conversations. These were usually opportunistic:

The theatre nurse asks her a question and then passes on some information. This is done outside of the nurses' station near the open door. They begin a serious conversation about patient care. Their concern about a medical condition is discussed in the corridor.

(Phase 3, H1, 2012, FN, Day 2)

As found in Phase One, the physical structures in the hospital influenced where and how conversations took place. Corridor conversations can have their benefits for interprofessional communication (Long et al., 2006), however, they may be less ideal in rural practice where people are more likely to know each other, due to issues with confidentiality.

In relation to the communication between the doctors and the nursing staff, there was no evidence of any particular method of handover of patient care:

> *Nurse comes up to the GP in the nurses' station: "Sorry [first name], but could you just tell me what's happening with this patient?" The GP repeats what he told the previous nurse.*
>
> *(Phase 3, H1, 2012, FN, Day 3)*

Thus, the GPs would often find themselves repeating information. In one situation, the nurse was unaware that the doctor she had just been speaking with was the on-call doctor:

> *Nurse rings the medical centre. She moves into the medication room near the reception area to do this. Ringing about the outpatient who needs to see a doctor. Finds out it is the doctor who is here. States [that she] did not know he was on call. She hangs up and goes to find the doctor that she was chatting to in the corridor.*
>
> *(Phase 3, H1, 2012, FN, Day 3)*

Therefore, communication structures between the doctors and nurses were ad hoc. Informal, ineffective and interruptive communication has been noted in hospitals in previous studies (Gotlib Conn et al., 2009; Lingard et al., 2004; Long et al., 2006). More recently, Gotlib Conn, Reeves, Dainty, Kenaszchuk, and Zwarenstein (2012) found that co-location of health professionals improved collaborative decision-making. Therefore, the reduced availability and accessibility of GPs for face-to-face interactions and decision-making in the rural setting, most likely impacted on collaborative practice.

The administrative staff kept to themselves in the reception area of the hospital. For example, they were not seen having any conversations with the nurses; and their presence was not always acknowledged on entering the nurses' station with patient case notes or when placing notes on the bench (Phase 3, H1, 2012, FN, Day 2). Two administrative staff members were also seemingly affected by the changes taking place. On day two they spent an hour talking together about the restructuring changes and possible impacts on their jobs, in between answering phone calls. Therefore, there appeared to be a divide between the administrative staff and the nursing staff.

7.2.4 Learning and critical reflection

Health professionals were asked whether they attended or remembered anything about the IPE interventions organised by the researcher. One nurse stated that she had attended Intervention A (TeamSTEPPS) and Intervention D (Working with Paramedics). These had been held six and nine months previously (respectively). However, the nurse interviewed indicated that she did not remember a lot about the sessions, explaining that the work environment was not supportive of change:

> *Not interested. Here just to do the work and try and get through the minefield of work. And it's your own personal part of it that you want to maintain professionalism and stuff like that, you know what comes through, yeah. No, nothing's changed. Nothing ever changes here.*
>
> *(Phase 3, H1, Interview 1, Nurse)*

The nurse's comments may have been due to disappointment associated with the promise of IPL and collaborative practice, but could also be representative of 'burnout syndrome'. In nursing, 'burnout' is used to describe symptoms associated with work stress such as being emotionally exhausted and disempowered in the workplace (Jennings, 2008). Providing staff with access to information, resources, support and opportunities has been linked to increased levels of psychological and structural empowerment (Laschinger, Finegan, Shamian, & Almost, 2001). According to Laschinger et al. (2001), job strain for nurses is linked to feelings of loss of job control and autonomy and in a climate of organizational change this is something that hospitals should address. Therefore, work-based IPE may be difficult to implement when competing with complex organizational-based issues in the rural health care system.

Not all of the health professionals interviewed had attended an IPE session. Two theatre nurses, despite being employed at Hillside Hospital at the time, stated that they did not recall hearing about the IPE sessions. A second nurse interviewed stated that she attended the TeamSTEPPS session (Intervention A), but believed that she had not retained much of the information:

Nurse: It was really high powered and everyone talked so fast. You sort of finished and I thought: "Oh my God what did they say?"

Researcher: Okay, so it was too quick?

Nurse: Too quick, way too quick, because your mind's still going before you left. It was very fast.

(Phase 3, H1, Interview 2, Nurse)

The same nurse indicated that the session was nonetheless useful as a reminder, believing that nurses already understood the teamwork concepts, as opposed to some doctors:

No, I don't think anything's changed. I think it was a little wake-up call to try and remember to do that but, well, I think we do that anyway. Some of the doctors don't.

(Phase 3, H1, Interview 2, Nurse)

However, she did not believe that IPL was possible within the constraints of rural practice:

It's never going to happen. No I don't think it would ever happen. The physio does manual handling but that's all. No. The doctors won't come. We have trouble in getting the doctors to come and see a patient.

(Phase 3, H1, Interview 2, Nurse)

The nurse above was focused on the poor accessibility of doctors in the rural setting. The nurse perceived there was poor collaborative practice in the hospital environment which influenced her negativity towards work-based IPE. There was a general consensus by those interviewed that there was no dedicated person in the organization to focus solely on the delivery of education:

Because there's nobody to run it. There's nobody to run the education. Nobody will stand up and say: "Yeah, I'll take that. I'll take that on board".

(Phase 3, H1, Interview 6, Theatre Nurse)

One nurse remembered saying: *'That would be right. I missed out again.'* This nurse explained that it had been at least two years since she attended any professional development, with one reason being the cost:

> *There was a two-day workshop, but we had to pay and [I] could not afford it as [I was] also studying. Noticed a session recently on endoscopy and deals with scopes but thought: "No, I can't afford it".*
>
> *(Phase 3, H1, 2012, FN, Day 2)*

In a similar manner to Phase One, health professionals expressed their dissatisfaction with access to professional development in the rural setting.

7.2.5 Relationship with, and recognizing the needs of, the patient

Health professionals described the changes to the current system of care as moving away from focusing on the needs of the patient. One GP believed that they should be consulted about changes that directly impacted on how they provided patient care:

> *Making decisions about patient care without consulting the GPs as to what we think about it. Whoever is making these decisions obviously has no idea of the impact it has. They don't realise that it is to the detriment of the patient.*
>
> *(Phase 3, H1, Interview 3, GP)*

The same GP was concerned about the mix and availability of nurses to perform certain tasks, which also had direct impact on the patient:

> *What if an experienced nurse is needed for a procedure and the less experienced [nurse] is by herself and needs to give medication without supervision? What if you need to do a log roll and need more people, but the ambulance is not here yet?*
>
> *(Phase 3, H1, Interview 3, GP)*

Those who had facilitated the meeting held by Country Health South Australia with the nurses indicated they were meeting with the GP staff for further discussions. According to

one nurse during the observation period, not all doctors perceived the recent events as relevant to them:

> *Yesterday another GP even said that the cutting down of staff is not his problem. He just dismissed what we said and said: "It's not my problem".*
>
> *(Phase 3, H1, 2012, FN, Day 3)*

Therefore, GP views differed in relation to the staff cuts and some of this could be attributed to the way in which rural GPs practice. Interventions, such as the systemic changes occurring here, which impact on clinical practice in the acute care environment, can disturb the medical profession's autonomy, and thus create resistance to change (Flisher & Burn, 2003)

7.2.6 Ethical practice

There was evidence that trust between health professionals was an important factor when making decisions about patient care. A GP and a nurse were conversing in the corridor in front of the nurses' station desk and they were discussing what to do if the patient's intravenous cannula came out when the patient was being given a course of intravenous antibiotics:

> *GP: Now the patient in [Room] 6.*
>
> *Nurse: Yes I know. But what if the Jelco [intravenous cannula] comes out?*
>
> *GP: Well then I won't put it back in. Keep it going as long as you can.*
>
> *Nurse: If it comes out do you want to write up some oral antibiotics? Just in case?*
>
> *GP hesitates.*
>
> *Nurse: It will save you getting a phone call, or being woken up during the night.*
>
> *GP: Okay, but don't take it out.*
>
> *Nurse: No we won't. Trust me I am a nurse (smiles).*
>
> *(Phase 3, H1, 2012, FN, Day 3)*

The researcher asked the nurse shortly after if this was a conversation she would have with any GP. The nurse inferred that making a suggestion to a doctor would be judged as leading the decision-making:

> *The nurse replied in the affirmative stating that she was surprised that the GP had said yes. He is one of the ones that does not like to be told what to do.*
>
> *(Phase 3, H1, 2012, FN, Day 3)*

This response and the conversation that preceded it, is an example of the doctor–nurse game (Stein, 1967). In this example, the nurse plays the game by making the doctor feel like he is making the decisions. Nurses tend to defend this position by believing that this will help to maintain a good working relationship (Flisher & Burn, 2003). According to Holyoake (2011), the game is complex and while nursing remains dependent on medicine, the game is far from over.

According to the Hillside-based health professionals, there was no consideration as to what might be important to the rural practitioner and rural practice when decisions were made at the highest level. For example, the theatre nurses were discussing the review of the budgets of country hospitals and suggested the proposed changes could have been approached in a better way. They suggested that if the needs of the community had been taken into consideration, such as when the local harvest takes place, this would have meant that the reduction of the number of nurses could have taken place in a quieter period:

> *I think it should have been sent out to all the nursing staff, in the form of a letter, in the form of writing, this is what we're planning to do. There'll be a meeting to discuss it at a certain date ... And then at the meeting they could have said look, we want to trial this. Vintage [harvesting] has just finished and would have been prime time to have trialled it, because we have less people during vintage in the ward. They seem to stay away because they've got too much to do.*
>
> *(Phase 3, H1, Interview 6, Theatre Nurse)*

The theatre nurses also believed that, had there been more cooperation between Country Health South Australia and rural health professionals, other ways of reducing the budget

may have been found (Phase 3, H1, Interview 6, Theatre Nurses). One nurse explained that it was also important for nurses to feel supported and to support each other:

> *The group of girls that actually work here I think are really supportive of each other, so I think that's the only thing that's going to hold most together, that they can turn to one another when it is … if you get annoyed or you get frustrated. It's not going to work if everyone's not supportive of each other, anyway.*
>
> *(Phase 3, H1, Interview 6, Theatre Nurse)*

The community health physiotherapist was frustrated with the system and believed the decisions made by senior managers were not democratic:

> *The way we work is being governed by higher than us, so we have little influence on it. So it happens, and I think too, that's what's happened with the nursing staff now in the acute sector. This decision has come from higher up to say thou shalt cut down on your, you know, there's no funding for this so therefore you are to cut out a nurse from that shift. We have very little influence on how we work.*
>
> *(Phase 3, H1, Interview 5, Community Health Physiotherapist)*

Therefore, the health professionals indicated they were frustrated and believed they should have more input into the State Government's system-wide changes. In light of further structural changes, the theatre nurses were concerned that the relationships between the doctors and the nurses would be negatively affected:

> *I think the relationship will be under a lot of stress and I think it'll put a lot more stress on the GPs because, you know, it's just the RN [registered nurse] on with the EN [enrolled nurse]. They're going to want backup. It's going to put more phone calls through to them, between five when the clinics close and overnight—probably more that they'll have to come in and do. I think there's going to be a lot of responsibility put back on the ENs if the RN is doing the A&E [accident and emergency] and there's, I don't know, 15 patients on the ward—that's huge. It's going to impact all round, I think.*
>
> *(Phase 3, H1, Theatre Nurse, Interview 6)*

It seemed that the current climate of change had potential to increase tension in the relationships between health professionals and was impeding collaborative practice.

7.2.7 Summary of findings: Case One, Phase Three

The atmosphere at the time of Phase Three was one of dissatisfaction and concern about the changes taking place, as voiced by the health professionals in the study. The timing of these changes (introduced between Phase One and Phase Three) made it difficult to determine any influence of the IPE interventions, such as improved collaborative practice at the Hillside Hospital. The proposal to improve discharge meetings after Intervention C was not able to be followed through. The allied health staff perceived their teamwork had improved as a result of the discharge planning nurse being co-located with the community health staff. The role was seen as a vital link between the health professions, however, at the time, was alleged to have widened the gap in the relationship between hospital and community health staff. For example, the discharge planning meetings were now run differently and excluded staff members who had previously attended from community health and the hospital.

Attempts had been made to improve privacy and confidentiality in relation to patient notes, medications and private conversations in and around the nurses' station. The installation of a security door and directives from the Director of Nursing were observed to have reduced corridor conversations. However, there was still a need for opportunistic dialogue between the nurses and doctors, especially as there was no formal method of information exchange about patient care during visits by the GPs. As the nurses' station was not enclosed, the problem of 'yelling out' to others remained, affecting noise levels and confidentiality. Physical structures as well as ad hoc communication processes between health professionals were found to lessen their ability to practise in a collaborative manner.

Policy and staffing issues threatened to impose on the autonomy of both the GPs and the nurses. Seemingly, the threats to autonomy had potential to further the tensions between them. Added stressors to health professional relationships were identified, such as having fewer nurses on a shift and system-wide operational changes. The study findings also demonstrated the existence of the doctor–nurse game and the presence of a hierarchy

between the GPs, nurses and allied health staff. For example, the discharge planning nurse perceived that she might 'annoy' a doctor which demonstrates her downplaying the GP's limited input into team decision-making. Limited face-to-face interactions from GPs meant that there were fewer opportunities to make joint decisions with nurses or allied health professionals.

The influence of the IPE interventions was minimal due to organizational changes that actively prevented collaborative practice. These factors included budget constraints, changes in staff and physical infrastructure. Therefore, training and organizational changes need to have a coherent approach to achieve collaborative practice.

7.3 Case Two

The findings from each of data type, including interviews, field notes and researcher notes, are now presented for Case Two.

7.3.1 Teamwork

Whilst Valley View Hospital had been through a similar meeting to that at Hillside Hospital, a few more days had elapsed since the meeting, and there seemed to be less tension in the air than there had been during the Hillside field observations. The Valley View nurses' station was a hive of activity with several people coming and going. It was evident that administrative staff were part of the team:

> *Receptionist comes into nurses' station, asks about a patient, as he is helping a relative. Kitchen trolley goes past as nurse comes out of station. The receptionist smiles at nurse: "Now what's happening [uses first name]?" Nurse: "The lady in cas [casualty] is going home". Loud beeping noise. Receptionist: "Oh what's that—another ambulance? Where are we going to put them all?" The nurse manager comes running in: "Who is in cas? Shall we move him to the ward—would that be easier?"*
>
> *(Phase 3, H2, 2012, FN, Day 1)*

The social worker stated that she was quite new to the region and believed that she, the physiotherapist, and the discharge planning nurse worked well together. Yet, limited hours meant that she was not able to spend time with other health professionals:

> *Having a discharge planner, it's fantastic because she … we work very closely together, and that probably works extremely well; but in terms of being able to work very closely with the nursing staff, that's a bit limited just given the hours that I've got.*
>
> *(Phase 3, H2, Interview 7, Social Worker)*

The social worker indicated that despite the social worker position having existed in Lake Trout for about three years, not all of the doctors used the service:

> *Some of them [GPs] will use me all the time, they obviously understand that I am here and that I am available, and then others … perhaps, probably haven't met a lot of them, just working around here, and because I am only here one day a week ...*
>
> *(Phase 3, H2, Interview 7, Social Worker)*

The social worker indicated that the small number of hours spent in the role meant that she may not always be considered as part of the team:

> *I am not directly aligned with the hospital, I am aligned in community, although I am providing a service here, so … and then again because of the small position I am very easily forgotten about...*
>
> *(Phase 3, H2, Interview 7, Social Worker)*

Lack of face-to-face interactions between the social worker and other rural health professionals, therefore, can inhibit poor collaborative practice. For example, the nurses had never considered including other health professionals in their professional development sessions:

Clinical nurse manager 1: We don't often think about it, like that burns education tomorrow. They will look at [the] social side of the fact that you've got an impact of someone being in hospital for a very long time and the social work department. I would never have thought to say to [X]: "Oh, you probably should go along."

Clinical nurse manager 2: It's about looking outside your little … our patch.

(Phase 3, H2, Interview 8, Clinical Nurse Managers)

The clinical nurse managers reflected on the idea of including other health professionals as part of the team. They believed that separate budgets were a barrier:

And I think it's about recognizing that they're part of your team so, therefore … [pause]. I think we need to do it, I agree, and part of it is also the way that the education budget is funded as well ... We're only managing the nursing staff and I wouldn't even think to let the doctors know probably about some of the stuff we do, because really they have their own agenda with their own training, so maybe it's the way I have to think, maybe I have to change the way I think.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

A paramedic also gave an example of not being included in hospital professional development:

We don't hear of any training sessions that the hospital do, they're not advertised to us at all even though we're 'Health', so if they were to have a session on ... patient care analgesia or whatever, we don't hear of any of that training. And obviously we don't advertise our training either. So I think there is that delineation between them and us, which is unfortunate because in a small community I think it would work well.

(Phase 3, H2, Interview 9, Paramedic)

Inflexible financial resources at the organizational level can result from siloed funding at the system level (Newhouse, 2009). Additionally, constrained budgets, as evident in this study, results in funding outside of professional boundaries being even more reduced,

which makes IPE unattainable (Gilbert, 2005). Therefore, work-based IPE clearly requires more policy-level and financial support (Ginsburg & Tregunno, 2005; Politi et al., 2011).

7.3.2 Roles and responsibilities

According to the social worker, allied health services were quite limited in the region. She explained that another difficulty was that her role was only targeted at hospital inpatients. The social worker also explained that being under the umbrella of community health might be the reason why her role and responsibilities were not always clearly understood:

> *I think because I am employed by Community Health, my team leader is in Community Health, but I sit in the hospital so there's probably a lot of things that get missed ... I just come and go, and I do try and let everyone know what I am doing, but there was no probably orientation process through the hospital, I am not directly aligned with the hospital.*
>
> *(Phase 3, H2, Interview 7, Social Worker)*

During the paired interview, the clinical nurse managers debated an incident where the social worker had not responded to a fire drill when she was in the nurses' station. They agreed that it was probably because no-one had previously given her any fire drill instructions and concluded that she was not seen as a part of their organization:

> *So it comes down to an orientation system and who does [it] and we've often had this issue [which] is: who does the orientation for staff that actually aren't looked after by us? So we do all the nursing side of it, certainly if the doctors bring over med students I let them do their own orientation, they can show them just as well as I can, so I'm not sure.*
>
> *(Phase 3, H2, Interview 8, Clinical Nurse Manager)*

However, they discussed investigating further how they could be more inclusive of the social worker in relation to fire training:

I can maybe talk to the social worker on Thursday and maybe we should be doing that [orientation] as regards to a site thing, because she is regularly on the site even though she's always with someone. It's about the fact that we had this incident really.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

The implications were that those who were in a visiting role, such as the social worker, were usually not expected to operate as part of a team, despite the patient being central to everyone's care. This example reinforces that the different areas of health service provision in the rural environment, worked and operated in silos.

One GP had raised concerns about the impact of reducing the number of nurses on a shift. He explained that one of the new GP registrars-in-training had worked his first weekend on call and the nursing staff had been unable to assist him:

When you're on your own as a new trainee, it's a disaster. And it is hard even when, you know, you're experienced on your own, it's much nicer to have the nursing staff there. We leave our patients here in the nurses' care when we go back to clinic and expect that our patients will be told when things are going on, and I don't know how we can guarantee that, when they are flat strapped and they have so much paperwork to do.

(Phase 3, H2, Interview 10, GP)

Like Hillside Hospital staff, GPs were genuinely concerned about the impact on their own medical practice. The GP above, while relaying his concerns regarding nursing work, indicates the importance of trust in the doctor–nurse relationship. The GP implies a level of trust between GPs and nurses when he mentions 'we leave our patients in the nurses' care'. However, the GP's choice of words, 'our patients', also indicates a degree of control in the relationship.

As with Phase One findings, and despite Intervention D, there was still a perception that the nurses and doctors did not fully comprehend the scope of the paramedic's role:

I think the hospital's still got the perception of, you know, you're late, you know, we rang for this two hours ago, what's taken you so long? Hang on a minute, there's risk management here, there's already a car at [hospital X]. They're not going to dispatch another car and send it out and leave the whole of the region uncovered for an emergency response.

(Phase 3, H2, Interview 9, Paramedic)

A paramedic also explained that there was still the misconception that the primary role of the paramedic was transferring patients:

What starts to annoy us, is that a lot of the transfers happen at night. I often hear nurses have said to doctors, I've heard them say, there are only two of us on tonight, we can't look after this patient, and they need to go. And the doctor just says: "Oh, okay, call an ambulance".

(Phase 3, H2, Interview 9, Paramedic)

However, the clinical nurse managers reported that the nurses' general awareness of the paramedic role had increased. The nurses reflected on a recent meeting where a paramedic had spoken about the difficulties of servicing the region. The nurses agreed and advocated on behalf of the South Australian Ambulance Service (SAAS) with the aim of helping the relationship between the paramedics and the hospitals:

I think communication-wise the information is getting out there, and I think [staff member X] and myself are good at getting the information out to staff to make sure "Come on guys, right, if we can manage it some other way to take the pressure off SAAS, the relationship can only get better."

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

Thus there is evidence of increased awareness of the role and scope of paramedic practice which may be attributed to Intervention D.

7.3.3 Communication

Compared to Hillside Hospital, the design of the Valley View Hospital nurses' station appeared to define a space where social and professional conversation could take place,

away from the patients and the corridors. On the morning of day two, the researcher noted at least five nurses, two GPs and a midwife at one time in the back room. The doctor and nurses appeared comfortable communicating in the nurses' station:

> *I note that the female GP is having a social conversation about netball with the nurses. Doesn't sit. Second GP is sitting and writing in case notes and chatting to midwife.*
>
> *(Phase 3, H2, 2012, FN, Day 2)*

The ambulance crew did not appear comfortable with being in the nurses' station. On two separate occasions, a paramedic was observed to be writing up notes in the corridor (Phase 3, H2, 2012, FN, Day 1). When it came to handing over the patient, the paramedic appeared unwilling to interrupt the nurses:

> *Ambulance officer comes into station to give some information. States "sorry to interrupt". Hands-over. Walks back out.*
>
> *(Phase 3, H2, 2012, FN, Day 1)*

The paramedic, through his actions, did not appear to be a part of the hospital team.

Similar to Phase One findings, Valley View health professionals had no definitive system of communication between the doctors and the nurses, when the GPs did their rounds. In the following example, a GP who was unsure which nurse was looking after his patient went in search of a nurse and found her in the corridor, where the information was then handed over:

> *GP [to nurse in nurses' station]: "Do you know who is looking after Mrs X in [room] 2?"*
>
> *Nurse: "Sorry no. I am from the morning shift. I could find the allocation book?" Goes to look but it's not there.*
>
> *GP says that's fine and walks off to look for a nurse. He meets three nurses in the corridor who are moving beds around. A nurse gets [a] hand-over sheet out to jot down his orders, in the corridor.*
>
> *(Phase 3, H2, 2012, FN, Day 1)*

Therefore, the corridors in this situation above were 'important conduits of clinical information' (Long, Iedema, & Lee, 2007 p. 183). This and other examples in the findings, have demonstrated how the corridors in the rural hospitals presented spaces which were flexible and dynamic with targeted communication taking place (Long et al., 2007), as opposed to occurring in formal and structured ways. Therefore, informal everyday encounters in rural hospital corridors may be an important mode of communication for health professionals.

The clinical nurse managers explained that they were currently working on ensuring consistency with the use of the recently implemented ISBAR structured communication tool for clinical handovers. The clinical nurse managers both agreed that the introduction of ISBAR had improved communication between the nurses and the doctors:

> *I think, the ISBAR tool for how to actually get that information across and be factual and have all the information needed in front of you so you can relay it to the doctor has made it safer for the patient and certainly easier for the doctors then to make a decision on the phone.*
>
> *(Phase 3, H2, Interview 8, Clinical Nurse Manager)*

The clinical nurse managers suggested that the advantage of using a communication tool was that the information being passed on was factual rather than emotive. One clinical nurse manager provided an example of how emotion impacted on the relaying of information to a GP:

> *The tool empowers them, I think, to make a really factual decision, not emotional, sort of 'getting caught up'. That's it, they get caught up in a situation, and we had a patient here the other day who had partially amputated the tip of his finger and the nurse that was assessing, I happened to go in there and help, but she rang the doctor straight away. I scored him as a three. Pain was under control. He was fine. As long as we didn't touch him, he was fine. We did it from totally different angles. She got caught up in the "oh no, he's got a partially amputated finger" and went with it and rang the*

doctor. And I said, hang on, he's okay, he's actually okay, we can manage him, you can call the doctor but he doesn't have to come right now. And that's trying to make them not get caught up in the emotion.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

In part, the above scenario depicted a nurse in the emergency department, requiring mentorship in her practice. The senior nurse describes her actions as being from a 'different angle', which can challenge the traditional decision-making hierarchy that exists between the doctors and nurses (Gotlib Conn et al., 2012). This example can be examined through an 'emotion work' or 'emotion management' lens, whereby the emotions of self and others must be managed, and has been linked to underlying power dynamics between professions (Hart, 2011; Miller et al., 2008). Empathy for the patient is fundamental to nursing practice (Kenny, 2002; Miller et al., 2008), however the senior nurse cautions the necessity for nurses to avoid 'getting caught up'. The senior nurse describes how by constraining emotion, the nurse can be in control of the situation and does not necessarily have to ring the doctor. According to Hart (2011) emotion management strategies are more prevalent in situations with a power imbalance. Kenny (2002) explains that the humanistic focus of nursing can override nurses' value-base. Nurses who can manage their emotions work and articulate and share patient information with other health professionals, provide some insight into their own role in interprofessional teamwork and communication.

7.3.4 Learning and critical reflection

At Valley View Hospital, the researcher was unable to find any nurses, other than the clinical nurse managers, who had attended any of the IPL sessions in Phase Two. Some of the GPs, however, remembered the researcher from the mental health workshops, Intervention B (Understanding Suicide). The clinical nurse manager had hoped that the IPE mental health session would increase GPs' awareness of the need to refer their mental health patients on to other health professionals, such as those who specialise in mental health:

But I kind of think that the training … that night was really interesting, and I think hopefully it made some people, the GPs, more aware. I don't think as nurses that we're not—I think we're more onto it, more switched on.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

The clinical nurse manager implied that the nurses were more aware of needs of mental health patients, compared to GPs. However, this was not the view of one GP interviewee. Although the workshops had been held eight months previously, a GP indicated that she was appreciative of the nurse managers being given an opportunity to gain insight into what it was like for the doctors to deal with psychiatric patients:

That was really good. I thought it was very good that it was a multi-disciplinary one and your question about [the clinical nurse managers] being there, because a lot of our battles are nursing comfort and nursing skills with psychiatric patients. And so it was good for them to hear that side of the story, be aware of that side of the story. I really enjoyed it.

(Phase 3, H2, Interview 10, GP)

Another clinical nurse manager reinforced this view, stating that she was more enlightened about the GP approach as a result of attending the IPL session:

It was interesting to listen to how some of [the GPs] responded as well. And I think, to me, gave me better understanding of what they see ... because we see one side and then our focus is about getting them to a safe secure place.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

Thus, whilst there was some indication of the benefit for both the GP and the nurse, there was no indication that the GP had learnt anything from the nurses.

The clinical nurse managers discussed what they remembered most from Intervention A (Introduction to TeamSTEPPS), namely that poor communication could be due to health professionals lacking in their understanding of each other's roles in the team:

Clinical nurse manager 1: I remembered how important communication is.

Clinical nurse manager 2: When the communication broke down, that the domino effect happened in a negative way, not a positive way. So I think that's important and everyone needs to come onto the same playing field. Even though your role is different, you still need to be on the same playing field, and you need to know where you fit into that, and I think all members of the health team need to know that.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

The clinical nurse managers explained that they were motivated following the Phase Two interventions (A and B) to invite the GPs along to a nurses' in-service session, which the GPs had been previously unwilling to attend. To improve attendance they had invited a specialist to facilitate the session. This resulted in one GP attending; which the managers were happy with:

Only a few months ago, we had 14 attend at [Hillside] and that includes nursing staff, and my, I was pleasantly shocked really, but somebody from the medical practice turned up!

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

The IPE interventions undertaken in Phase Two may have encouraged them to consider inviting other health professionals to joint sessions. However, the poor attendance by the GPs may have been a reflection of the findings in this study, such that GPs had minimal time for education and placed little value on joint education.

The paramedic who facilitated Intervention D (Working with Paramedics) said he believed that, since the intervention, the hospital staff were more understanding of the limited numbers of ambulance vehicles in the region:

I guess the only feedback that I've had is that I think the hospital's more appreciative of what we are and what we do, and how we do interact with them. And I guess things like, for us in [Lake Trout], knowing that if one car is out, that they won't always get a vehicle straight away, knowing that an ambulance is not on call 24/7 to be there within 10 minutes.

(Phase 3, H2, Interview 9, Paramedic)

The IPE interventions may have increased awareness of others, but there was no evidence of any changes to practice. The social worker stated that she had not known about the mental health workshops, which had been organised by the Division of General Practice. However, the GPs were generally cautious about inviting too many different health professionals to their own professional development sessions:

> *We've had that with a number of forums and things, so you end up with people that are either pushing their own wheelbarrow or, you know, into Norwegian fish slapping or something like that, it's very hard to know exactly what's going on. Certainly on the number of social workers and things ...*
>
> *(Phase 3, H2, Interview 11, GP)*

The GP used two idioms to describe his views about other health professionals attending GP-driven education. Firstly *'pushing their own wheelbarrow'* is derived from the saying 'to push your own barrow' as opposed to hopping in the barrow and engaging with the overall agenda. This denotes that he believed that there is a risk inviting other professions that might not be totally interested in the GPs' program. Similarly, with his reference to 'fish slapping', he was possibly referring to a Monty Python skit (Cogan & Massey, 2014 p. 280) where they perform 'a very silly traditional dance'. Cogan and Massey (2014 p. 280) explain that two people are 'joyfully slapping each other with a fish until one falls into the canal'. In the original Monty Python episode 'Norwegian fish slapping' was put forward as a complementary health practice. Therefore, the GP implied that he believed there are vast differences between his, and the practices of other professions. The GP may have been indicating that the medical profession is reluctant to be inclusive of all health practices they do not approve of.

There was uncertainty about whether it was feasible for health professionals to physically learn together in the current circumstances. A paramedic indicated it would need a commitment and a change of culture to release staff for the purpose of professional development sessions. His comment reflects the need for support from the top-down:

That's what has to be changed, it's changing [the] culture and the ability for hospitals to say: "Now, we will write off the books, we won't have any appointments this afternoon". You know what I mean? "Just go skeleton staff in the wards and the rest can go and do two hours of education." But it doesn't happen because there is no staff, which is quite sad in a way.

(Phase 3, H2, Interview 9, Paramedic)

The paramedic implied that organizations should create dedicated time for IPE. Challenges for implementing work-based IPE include a lack of organizational leadership and support, as well as time and resources (Hammick et al., 2007; Paquette-Warren et al., 2014). Organizational determinants such as leadership, human resource management and structural levers are needed for collaborative practice (San Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005). Organizations, then, must provide time and space-sharing opportunities in order to develop collaborative practice (San Martín-Rodríguez et al., 2005). Additionally, the learning needs of each health profession should be assessed (Hammick et al., 2007) and the leadership should be shared between local leaders (Ginsburg & Tregunno, 2005).

The paramedic explained how having separate identities meant that health professionals had a tendency not to mix in rural practice:

Even though we belong to Health and we are one team, we are a separate identity in that we don't mix at all other than when we bring a patient in, hand over, goodbye, thank you very much. Which is a shame, really, because I think we should be able to mix more.

(Phase 3, H2, Interview 9, Paramedic)

The paramedic believed that the separation between health professionals was also partly due to not being co-located on the same premises:

There are a couple of places I relieved as OIC [officer in charge] and those stations, they are a part of the hospital, and in fact they were actually right in ED [emergency department], and to get out of the office you were part of ED. So you did mingle with the staff, you did mix, and when they had difficult patients come in, they just called out—"Can we get a hand?", so that combination was there, and I think that being where we are, we are that separate identity.

(Phase 3, H2, Interview 9, Paramedic)

The paramedics voiced their concerns about the lack of face-to-face interactions between health professionals. This study likewise found, that GPs and social workers were not considered as part of the hospital team due to their limited face-to-face interactions with the nurses. The paramedic suggested that doing something social together might assist to promote interaction in order to improve collaborative practice:

It's a pity we don't mix more. Socially we don't mix, and I think it would be good to socially mix, but it doesn't happen. I've thought of setting up just an ambos versus the Hillside staff at a lawn bowls night or something like that. Let's order, charge five bucks a head and get in a few pizzas and have a night, and I have asked people if they'd be interested and they've said yes.

(Phase 3, H2, Interview 9, Paramedic)

Interestingly, a clinical nurse manager also suggested that socializing might help to promote collaborative practice in Lake Trout, and that the nurses would be interested in more social events:

I think sometimes if we get to know someone socially, then they might broaden things a bit. I think we're very used to our professional relationships and there's a fine line between the doctor and the nurses, I think. And so if we have a few social things, then probably get to know someone as a person rather than a professional, it might make things easier.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

Communities of practice are where groups of people can share information and find value in their interactions (Wenger, McDermott, & Snyder, 2002). When examined through the

lens of community practice theory, the paramedic and nurse were seeking ways to develop a common sense of identity through informal processes (Wenger et al., 2002). The paramedic and the nurse both perceived that increasing face-to-face interactions between health professionals would assist to strengthen their professional relationships. By increasing social contact outside of the working environment, these health professionals would create opportunities to get to know and understand each other better. The need to build up the sociality of the learner, directly links with the central aspect of IPE, where communication and interaction assist their integration into communities (Howkins & Bray, 2008).

7.3.5 Relationship with, and recognizing the needs of, the patient

The social worker reflected on the difficulties associated with her position having limited hours in the town. She stated that she had to rely, in part, on the nursing staff and the discharge planner to provide information about the patients:

> *I am only point three across both hospitals so one day one week I will get a day, and the next week I will only get half a day. So it's not a lot to be able to get to know all the nursing staff, to know all the patients, I am really relying on what they pick up and what they let me know has gone on about what I might need to do.*
>
> *(Phase 3, H2, Interview 7, Social Worker)*

The social worker stated that current funding excluded having a generic social worker in community health in Lake Trout. The impact on patients was that unless they fitted into a category such as mental health or aged care services, she was unable to refer in-patients to a community-based social worker when they were discharged. In a climate where rural currently represents a high level of disadvantage (Dellemain & Warburton, 2012), this funding model falls short of providing adequate care to a rural community.

One clinical nurse manager stated that not all of the GPs were focused entirely on the patient's needs. She perceived that some GPs seemed reluctant to involve other health professionals in patient care. The clinical nurse manager also implied that if a patient had complete trust in their GP, the patient might not want to upset the GP by suggesting they could be referred on to somebody else:

When I think of aged care, some doctors handle it really well and some are appalling. You've got patients in here that are suffering from depression, from all sorts of reasons, and probably need a geriatric assessment. And we're buggered if we can get the GP to say, come on let's get some other specialities involved (not just you as the GP) who actually [recognize] people with their problems a bit more and [treat] them a bit more effectively. I've got one GP here that is very reluctant for any nursing guidance in any area, or even a discharge planner who said let's get on the gerontic team, and—nope, just really: "No, this is my patient, this is how I manage it". And you think, you sort of feel like saying to the patient, I think you should probably see someone else, get some outside help. But they're so stuck, they're committed to their relationship with their GP and don't want to upset them.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

Patient ownership was alluded to in Phase One of the study, where a GP wanted nurses to have more of an assertive role in the decision-making. However, this quote demonstrates that the clinical nurse manager believes that not all GPs want to practise collaboratively. It also highlights the difficulties associated with nurses wanting to advocate for the patient, but also recognizing the complexities of the doctor–patient relationship (Ganesh, 2009). However, the problem with not doing anything is that it reinforces an unequal relationship between the doctor and the patient. This indicates that power and status in relationships are like the 'elephant in the room', where they are present but rarely acknowledged (Hart, 2011).

7.3.6 Ethical practice

Reflecting on Intervention B, the clinical nurse managers spoke about how they felt during the GP-driven session. One mentioned that she was quite new at the time and felt a bit shy. The other nurse manager commented on the power struggles between the nurses and some of the GPs:

They're polite and say "hi girls, it's nice to see you here", but as regards to the fact that we get the same information at the same time, no. It was sort of like, let's get the levels right still, still the hierarchy, and with some of them that will never ever change. And I think we work with that. I think nurses will always work with that.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

Therefore, hierarchical relationships were perceived during the sessions, which may have been due to the dominant presence of one profession (in this case the GPs). As the sessions were mainly focused on the GPs, this affected the interprofessional nature of the sessions.

The clinical nurse managers shared an incident where the GPs were invited to a hospital-based session where a specialised nurse was going to train the staff on how to use a new piece of equipment. One of the GPs stated that the doctors would only be interested in coming if a doctor facilitated the training:

With doctors it's about, you've got to gain their respect and then you'll be accepted. There was one in-service that was given by a nurse; but because it was given by a nurse, they said well that's all very good, but we'll come back when … you get it given by a doctor.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

The clinical nurse manager suggested that the GPs' lack of orientation in relation to the new piece of equipment would not be in the best interests of patients:

They're the ones that lose out or the patients will in the long run, because the nursing staff know how to use it, but the GPs are probably going to muddle through as usual, or rely on the nurse to get them through, that hasn't got the 'you beaut' training background.

(Phase 3, H2, Interview 8, Clinical Nurse Manager)

The clinical nurse managers implied that nurses were not respected by the GPs. Authentic collaborative practice involves respecting differences (Bleakley et al., 2006). The above example where doctors would not attend a session not run by *'one of their own'*, also

relates to respecting competence (Pullon, 2008). Mutual respect is an element of collaborative practice (Barr et al., 2005; Jäppinen et al., 2015; San Martín-Rodríguez et al., 2005; Sargeant, 2009) and so not respecting differences and competence presents a barrier to future collaboration between these two professions.

Nevertheless, the nurses too demonstrated that they did not always convey respect for the GPs. One busy morning in the nurses' station back room, a nurse and a student nurse were getting some medications out of the trolley. A GP approached them and asked if they would note down that he would be back in the morning to put a plaster on a patient. He then explained his requirements (Phase 3, H2, 2012, FN, Day 2). Several hours later, the student sought guidance to complete the nursing notes, as she was unable to read the GP's writing. The student was concerned about how to convey the information in the case notes:

> *Student asks the nurse: "Dr [X] told me he wants to do a plaster in the morning and wants everything organised. What do I write in the notes—that he wants everything organised? I can't read what he wrote … "Something apply … something." Another nurse walks in: "That's Dr [X]. You can't read it. First nurse says: "That's fine. If no-one organises it, then it's his problem. I am not his helper" (laughs).*
>
> *(Phase 3, H2, 2012, FN, Day 2)*

The incident did not appear to portray collaborative practice between the GP and the nurse involved. The GP giving orders and that he 'wants' something done does not constitute being 'collegial' (Sheehan et al., 2007), nor does it implicate shared values (Pullon, 2008). The nursing–medical division of labour is traditionally associated with nurses following medical orders as opposed to nurses negotiating care (Sullivan et al., 2008). The use of power in language leading to interprofessional tensions, are often part of the hidden discourses that underlie the delivery of patient care (Hart, 2011; Jabbar, 2011; Matziou et al., 2014).

7.3.7 Summary of findings: Case Two, Phase Three

Building on the findings from Phase 1 and 2 of the study, Phase 3 further highlighted the work tensions within H2. There was more involvement of team members than at H1 but

the organizational structure meant that some roles, such as the discharge nurse and physiotherapist were not able to collaborate. Like many allied health professionals in rural health, their positions were affected by funding models and government policy (AHPA, 2013; Parliament of Australia, 2012; SA Health, 2015). According to AHPA (2013), allied health professionals' contribution to consumer wellbeing often goes unrecognized and results in poor referral practices. This study found that not all GPs referred patients to the social worker. Ostensibly there is a lack of connectedness of allied health professionals to issues within the health sector and they are often excluded from governance and leadership roles (AHPA, 2013), which is reinforced in this study, where a lack of interaction was found between the allied health division, GPs and nurse managers.

Physical infrastructure can enhance or impede collaborative practice (World Health Organization, 2010, 2013). It was found that corridors were an important place to communicate for health professionals. This was due to the limited number of nursing staff on a shift with the demands of a busy ward, with no formal communication structures in place between the doctors, nurses and allied health division. The hospital administrative staff at Valley View Hospital were more a part of the hospital team compared to H1 which could also relate to the physical spaces within the hospitals. The receptionist and other administrative staff at Hillside were co-located next to the nurses' station, with an open doorway between them. It could be assumed that because they worked alongside each other, there was less need to communicate face-to-face. In contrast at Valley View, the receptionist worked mostly alone and was located some distance from the nurses' station. He was unable to see when people were physically present or not in the nurses' station and so reverted to practices such as switching the phones over between breaks and visiting the nurses' station to communicate directly with the nurses. This resulted in better communication and teamwork with the nursing staff. Additionally, the organizational structure was different between the two hospitals in regards to employment of the reception staff. At Hillside, both staff were part-time whereas at Valley View, there was only one full-time receptionist, which provided an opportunity to build a rapport with the hospital staff.

There was little evidence of the doctors, paramedics and nurses practising collaboratively. Their relationships were impacted by power differences, limited face-to-face interactions and the fact that they worked for different organizations. The hospital, community

health/domiciliary care, the ambulance service and the privately-run general practices were all separate organizations. Barriers to collaborative practice included health professionals operating within separate budgets and being located in different buildings. Visiting health professionals were not seen as part of the team; for example it was revealed in Phase 3, that they were not usually invited to hospital activities such as continuing education or fire training.

There was no evidence of any specific changes resulting from the Phase Two interventions. The mental health IPE workshops (Intervention B) were viewed favourably by both the GPs and the nursing managers who had attended. However, Intervention B was both GP-driven and GP-focused. While some participants suggested that they would like to see more IPE take place, the GPs remained more cautious. The GPs in the hospital did not attend nurse-focused sessions and were reluctant to invite other health professionals to GP-focused sessions. Reasons were attributed to time constraints. One important trait of IPE is the social aspect, however the findings in Case Two, Phase Three revealed that there was limited time and sharing of knowledge.

7.4 Summary of Phase Three

Phase Three entailed a repeat of the Phase One research methods. Health professionals and non-professionals were observed and interviewed six months after Phase Two was competed in each hospital. This phase, however, was limited to two out of the three hospitals in the study. In both H1 and H2, corridor conversations took place spontaneously and informally revealing that corridors were important spaces for the exchange of information. Interprofessional corridor conversations have been found to be necessary to maintain communication between health professionals (Long et al., 2007; Miller et al., 2008). In rural hospitals where there are limited numbers of staff and few formal interprofessional communication processes in place, corridor conversations were therefore vital for face-to-face interactions to occur.

There was further evidence of the existence of the doctor–nurse game, reinforcing the view that rural hospitals are places where doctors remain at the top of the hierarchy (Roberts et al., 2009). Despite the GPs not having input into all decision-making they maintained a level of autonomy in the rural hospitals. For example, nurses, while wanting

to advocate for aged care patients remained silent. The disempowerment of nurses is not new and relates to the nursing–medical tradition of labour (Sullivan et al., 2008). Copnell and Bruni (2006 p. 307) found that nurses tended to be reluctant in voicing work context realities and would remain silent rather than promote disharmony even though it worked 'against collaborative approaches to decisions about practice changes'. However, nurses in this study did demonstrate attempts to be more autonomous in their practice; for example, by carefully managing how they would communicate patient information to the GPs. Increased nursing autonomy has been found to improve teamwork and collaborative practice (Rafferty, Ball, & Aiken, 2001). Having more control would place the nurses in a position where they could be more involved in decision-making with the GPs.

Through organizational changes that had occurred between Phases One and Three, there had been employment of a new discharge planning nurse who was located in the department where allied and community health staff were located. The discharge planner operated between the two hospitals but due to her location the teamwork within the allied health division had reportedly improved but the gap had widened between community and allied health and the hospital nursing staff. Therefore, collaborative practice was affected by rural organizational structures. Additionally, there was evidence of system-wide changes which appeared to increase tensions between health professionals. To assess any changes from the interventions was difficult in the climate at the time and was also due to the limited IPL that had taken place during Phase Two.

Face-to-face interactions in rural practice seemed to affect whether or not collaborative practice took place. Jones and Jones (2011) found that face-to-face contact improved understanding and trust between health professionals in a 34-bed hospital ward. Therefore, this study contributes important insights into the nuances of rural practice, finding that the lack of interactions between health professionals is detrimental to collaborative practice. To be able to implement successful work-based IPE would require shared leadership and organizational support to find out the needs of each profession. The purpose of the IPE and IPL would need to be transparent and clear, in order to encourage each of the professions to attend.

The succeeding chapter presents a cross-case analysis of all three cases in the study. Findings will be discussed in order to explore the IPE-IPL-collaborative practice nexus.

Chapter 8 Cross-Case Analysis

Sit for lunch by a group of high-energy physicists and you know about boundary, not because they intend to exclude you, but because you cannot figure out what they are talking about. Shared practice by its very nature creates boundaries.

(Wenger, 2000 p. 232)

8.1 Introduction

This chapter draws together findings from each of the three cases in the study. Key findings from each case were analysed using concept maps (level 1 coding), which combined all of the findings for Phase One and Phase Three (see Appendix 13 and 14). Each concept map was then examined by the researcher to look for similarities and differences between cases. These differences were categorised into a table (see Appendix 15) and interpretations and notes were made (level 2 coding). Coding at level three involved a discussion with all three supervisors using the concept maps, as well as reflections on Phase Two. Consequently, four themes were developed from the analysis: teamwork in the rural health environment, conceptualising collaborative practice in rural hospitals, sharing of educational experiences, and the impact of physical space on collaborative practice (see Appendix 16). Community of practice theory (Couros, 2003; Cox, 2004; Cox, 2005; Wenger, 1998; Wenger et al., 2002; Wenger & Snyder, 2000) was used to further understand the comparisons between each case. Each theme is now discussed and considered in the context of rural health and the IPE-IPL-collaborative practice nexus.

8.2 Teamwork in the rural health environment

The first theme explores the role of teamwork in the rural health settings in the study. In all three cases, teamwork was seen as fluid and changeable. Team composition depended on who was available and when. In *Case Three* once a week, the medical centre had an additional member of the team: a locum GP along with the two permanent part-time GPs. The social worker in *Case Two,* who occupied a visiting role, was only accessible to inpatients and staff once a week which may be one reason why she was not seen as part of the hospital team. In *Cases One and Two*, when the GPs visited the hospitals, the

perception was that, although they formed part of the hospital team, they worked independently from the other health professionals. Teams vary widely depending on the type of institution and services offered and reflect whether they are composed of loosely associated personnel or a smaller number of highly interdependent professionals (Ellingson, 2002). This study found that team membership varied widely, and, consequently, teamwork in all three cases was conceptualised differently. For example, in *Cases One and Two*, the GPs saw themselves as operating as a separate team, with the medical practices being their main focus. By contrast, the GP and the nurses in *Case Three* operated as an interdependent team. When health professionals perceive themselves as interdependent they are more willing to share responsibility and decision making with each other (Ellingson, 2002). The relationship between the nurses and the GP in *Case Three* was based on mutual respect, and whilst teamwork was acknowledged as a work in progress, they valued each other's input. For example, the GP in *Case Three* portrayed an interest in being more collaborative and indicated an interest in attending IPE sessions. The respect was reciprocal as the nurses believed that this stemmed from joint problem-solving about patient-related issues.

Teamwork implies a shared team identity with all team members interacting and communicating in relation to independent tasks (Reeves et al., 2010). In all three cases there were multiple health professionals working within, or extending from, the hospitals. Very few participants perceived they were all part of one team which combined all the health services in the town. Often one large team can be representative of a small organization or, alternatively, divergent and smaller subgroups can form from this (Reeves et al., 2010). For example, some of the hospital-based teams included an administration team, nursing team and hotel services team. Visiting health professionals such as social workers, GPs, specialists and community health workers were part of other teams, outside of the hospital walls. In *Case Ones and Two* there was a hospital (inpatient) physiotherapist as well as a community health physiotherapist who were not necessarily part of the same team as they worked for different departments. Teamwork is more complex when it has to incorporate different work schedules and when team members are distributed 'across time and space' (Lingard et al., 2012 p. 874) such as those within this study. As teams become more fluid, the less likely it is that their members will perceive they are part of such teams (Zwarenstein & Reeves, 2002). Whilst collaborative practice can be more difficult in teams which are dynamic and changing (Billett, 2014), teams generally do not have any

accountability for collective learning (Jackson-Bowers, Kalucy, & McIntyre, 2007). Therefore, when multiple teams operate in silos, as found in this study, it becomes more difficult to share information or responsibility. Being able to participate in decision-making is a major goal of IPE and is also associated with higher levels of collaboration (McDonald et al., 2012).

8.3 Conceptualising collaborative practice in rural hospitals

The two most important capabilities for enabling collaborative practice are communicating effectively and understanding and appreciating professional roles (Suter et al., 2009). The second theme explores how collaborative practice was conceptualised in the hospitals in this study. Barriers to collaborative practice found in this study included a lack of understanding between health professionals from the community sector and the hospital (acute) sector (all three cases); between the nurses, GPs and the paramedics; and between the GPs and the hospital and community health nurses (*Cases One and Two*). Additionally, those who worked within community health were perceived as separate from the hospital (acute-patient) staff in all three cases. The main reasons attributed to this were being located in different buildings and being managed by a different section of the healthcare system. In *Case Ones and Two* it was revealed there were low numbers of patient referrals from nurses and GPs to both community and allied health services. Communication between each health sector was perceived as suboptimal, with some difficulties being associated with geographical location with consequent reduced access to information. The primary and community health sector is the sector most frequently used by Australians in the prevention and management of illness and injury (Productivity Commission, 2015). The case for improving the connection between hospitals and community health has been an ongoing priority of the Australian Government since the establishment of the National Health and Hospitals Reform Commission in 2008 (Bennett, 2009; Bennett, 2013). Additionally, the State Government of South Australia has recently undertaken system-wide reform aimed at strengthening partnerships across in-hospital, community-based and primary care sectors (SA Health, 2009). In doing so, the aim for rural health has been to 'establish systems to improve collaboration between health professionals to ensure patients get the right care, in the right place, at the right time, by the right care providers' (SA Health, 2009 p. 25). Subsequently, the Government of South Australia (2015b) released a Strategic Plan 2015–2020, mandating the *rural* South Australian health care system to

further engage with community ambassadors in order to gain more information. However, this study found there was a disconnection between the rural hospital (acute) sector and the community-based care, despite the system-wide reform. This study found that where health professionals work for different organizations and are not co-located geographically, barriers to collaborative practice were created.

In rural and remote settings there are a range of diverse models of health care delivery such as hub and spoke, integrated service, primary health care, and discrete provision (Wakerman et al., 2009). The most common model for General Practice in Australia is private fee-for-service (Browning, 2000). The alternative GP service model which operated in *Case Three* was viewed as a useful compromise to sustain the health care services in the town and surrounding areas. In recent times, providing 24-hour, seven-day-a-week medical services to rural communities has meant sourcing alternative models such as the use of locums and sub-contracting of services (Rural Doctors Workforce Agency, 2011). The GP in *Case Three* regarded herself as part of the hospital team, more so than the GPs in *Cases One and Two*. Reasons for this could be attributed to a major focus on having only one medical practice which was relied upon to provide adequate coverage of the town, over the course of each week, as well as the collaborative style of the GP.

The limitations of operating in a fee-for-service model in general practice in Australia are that GPs devote less time to meetings and workshop attendance and there are fewer incentives to work across service boundaries (McDonald, Davies, & Harris, 2009). The alternative model utilised in *Case Three*, also known as 'fly-in fly-out' or 'drive-in drive-out' services, was determined by The House of Representatives Standing Committee on Regional Australia (2013) to provide increased flexibility for GPs, as they can maximise their time both at work and home. Australia's health care system is a complex network, shaped by factors such as age, location, socio-economic and cultural background of its residents (Australian Institute of Health and Welfare, 2014b). In 1975, an insurance-based national health funding scheme changed the funding arrangements for doctors and in 1984 as part of the Medicare system, bulk-billing was introduced where GPs could accept 85% of the fee as total payment (Browning, 2000). According to McDonald, Davies, and Harris (2009), GPs' collaboration with other health professionals is constrained by the fee-for-service model in which they practise. General practice in Australia is constructed as a small business, with most rural GPs having two jobs; that is, providing a full range of services to the community

and local hospital as well as working in their own practices (Rural Doctors Workforce Agency, 2011). The expectation of GPs to contribute to collaborative practice therefore becomes a 'double-edged sword'. They are key players in the provision of rural health services but, as this study found, it is difficult to commit wholly to both jobs. For example, there were GPs who saw their role as providing a private service to a public organization.

Nurses' work was predominantly task-focused and patient-driven with little time for interaction with other health professionals. Nurses in all three cases perceived they were required to be resilient, with a diverse and extended scope of practice. The model of rural nurses working within the limitations of smaller teams and sparse resources is not a new one (Bushy, 2002; Lea & Cruickshank, 2007; Sullivan et al., 2008). Nevertheless, this study found that rural nurses continued to work within a hierarchical system of care and their everyday practice was influenced by power, control and knowledge (McCallin, 2001). The power imbalance between the doctors and nurses, described in Stein's (1967) doctor–nurse game was evident in this study. For example, nurses worked under a traditional division of labour where doctors generally gave orders to be undertaken by the nurses, who were observed to avoid making decisions. In *Case Ones and Two* the GPs were found to be autonomous and practising independently. The language used by GPs in *Cases One and Two* indicated that hospital patients were 'their' patients, suggestive of a lack of joint care or interdependency in the nurse–doctor relationship. Nurses stated it was part of their role to 'master' knowing what the GP's preferences were, which indicates compliance rather than collaboration. Nurses chose to be silent when it came to being advocates for patients, indicating they were disempowered. However, one senior nurse challenged the traditional decision-making hierarchy through emotion management. Hart (2011) explains that emotion management is a strategy to manage emotional reactions in the workplace when there is a power imbalance. For instance, in this study the nurse explained to another nurse exactly how and when information could be shared with a doctor in the emergency department (*Case Two*).

In contrast, there was evidence of increased nurse autonomy in *Case Three*, but despite this, the GPs still retained positional power, due to the importance placed on the medical profession's presence in the town by the community. Therefore, the demographics of a geographical location as opposed to the location itself can influence autonomy and collaborative practice of rural health professionals (Hegney, 2007). Despite recent

concerns about the impact of the drive-in drive-out model on communities and infrastructure (Hussain et al., 2015), this study found that the *Case Three* GP service model encouraged a collaborative relationship between the community, the hospital and the medical centre.

Community of practice theory assists an understanding of social learning systems and is based on the work by Etienne Wenger (Wenger, 1998; Wenger, 2000; Wenger et al., 2002). The barriers to collaborative practice found in this study can be further understood by community of practice theory. The concept of communities of practice (Wenger et al., 2002) helps to understand why it can be difficult for rural health professionals to collaborate. Communities of practice are groups of people who share a concern or a passion for something they do, and who learn how to do it better through regular interaction (Wenger, 2006). Social participation is seen as the process by which members of a community of practice gain their insights and knowledge (Wenger et al., 2002). Based on social learning theory (Bandura, 1977; Lave & Wenger, 1991; Vygotsky, 1978), communities of practice explain how social interaction is fundamental to learning from one another. This study found that there were limited opportunities for face-to-face interactions between health professionals. Therefore, the professions that operated within each of the rural hospitals in the study could be viewed as having membership of its own profession-based community of practice (see Figure 8.1). Being part of a community of practice implies 'participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities' (Lave & Wenger, 1991 p. 98). Health professionals in this study voiced their concern about the difficulties associated with negotiating any joint training or IPE, that is, mutual engagement negotiated through practice (Wenger, 1998). Figure 8.1 illustrates the limited overlap between nurses, paramedics and allied and community health as well as the GPs being members of separate and isolated communities of practice. In *Cases One and Two* opportunities for regular interactions between communities of practice were limited.

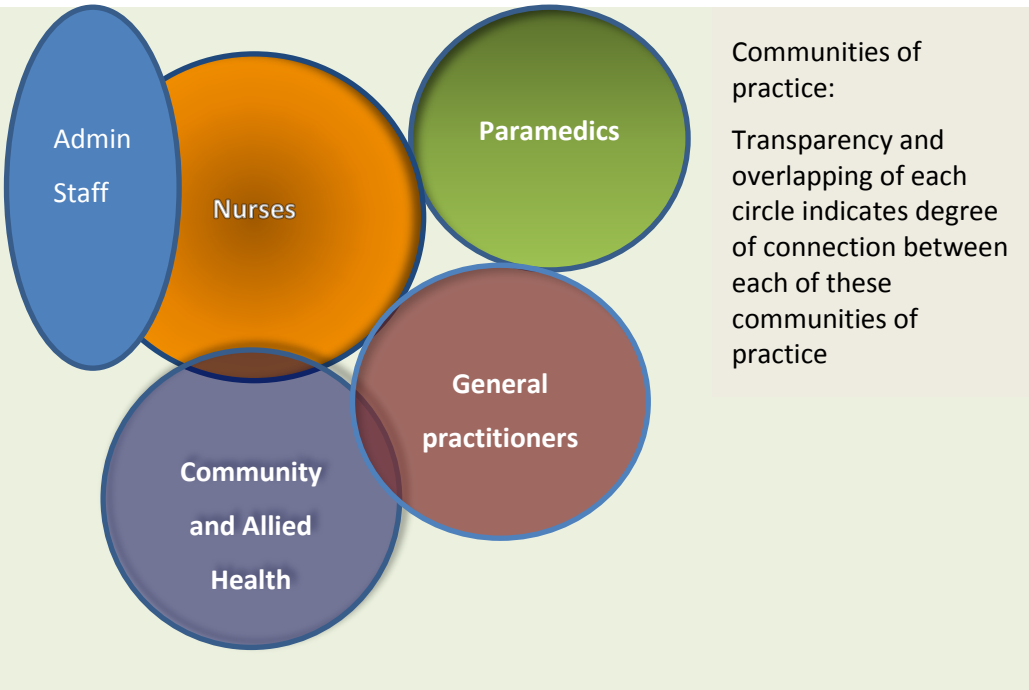

Figure 8-1. Communities of practice in the rural context (Cases One and Two)

The general practice model for the GPs in *Cases One and Two* meant that the GPs had developed their own communities of practice defined through shared knowledge (Wenger et al., 2002). As depicted in Figure 8.1, the GPs in the study were regarded by the other health professionals as being on the 'outer' rather than as central to the team. The GPs did not perceive themselves as being part of the same team as the hospital-based nurses, paramedics or community and visiting allied health professionals. The Division of General Practice was an organization responsible for arranging GP-only education. Therefore, GPs in each general practice saw themselves as belonging to private and separate communities or teams, which could be considered communities of practice. The Division of General Practice brought together individual GPs from each of the general practices in the towns, in this way creating another, larger community of practice. The consequences of differing private and public business models are that they operate at different levels of collaboration based on their own commitments (McDonald et al., 2009). In this case, the GPs' primary allegiances were to their private practices and their hospital practice was seen as additional work.

By comparison the GP practice model in *Case Three* was different and may explain why there was more evidence of collaborative practice in Phase One of that Case. The GP and

nurses indicated they had a level of respect for each other which was reflected in their level of collaboration. The GP and nurses in *Case Three* worked together as a team. This was also evident in their use of language, such as the term 'we' when making decisions about the patients. The administration staff also used the term 'we' when referring to the hospital team. Unlike the administrative staff in *Cases One and Two*, the staff in *Case Three* took part in mandatory skills training alongside the nursing staff. There was some evidence of collaboration between the nursing staff and administrative staff in *Cases One and Two* also, such as consideration by the receptionists for how to reduce the flow of phone calls to the nurses. The receptionists seemed to operate under different management structures. Being full-time and situated away from the nurses' desk was more conducive to teamwork (Case Two). The receptionist in *Case Two* demonstrated he had a good insider perspective of the hospital, which is one of the seven principles for cultivating communities of practice (Wenger et al., 2002). The outsourcing of a part-time receptionist in *Case One* disrupted teamwork in the organization, with that particular staff member having wider interests outside of the hospital environment, and therefore belonging to more than one community of practice. The part-time receptionist in *Case One* may not necessarily have shared the same values, practices and approaches as those already working at the hospital (Snyder & de Souza Briggs, 2003; Wenger et al., 2002). In *Case Three* the hospital staff had increased their efforts to interact more, both socially and educationally, with staff and clients from the small stand-alone residential facility next to the hospital. Therefore, the nurses, administrative staff and GPs in *Case Three* could be depicted as being at the beginning of developing a joint and interprofessional community of practice (Figure 8.2).

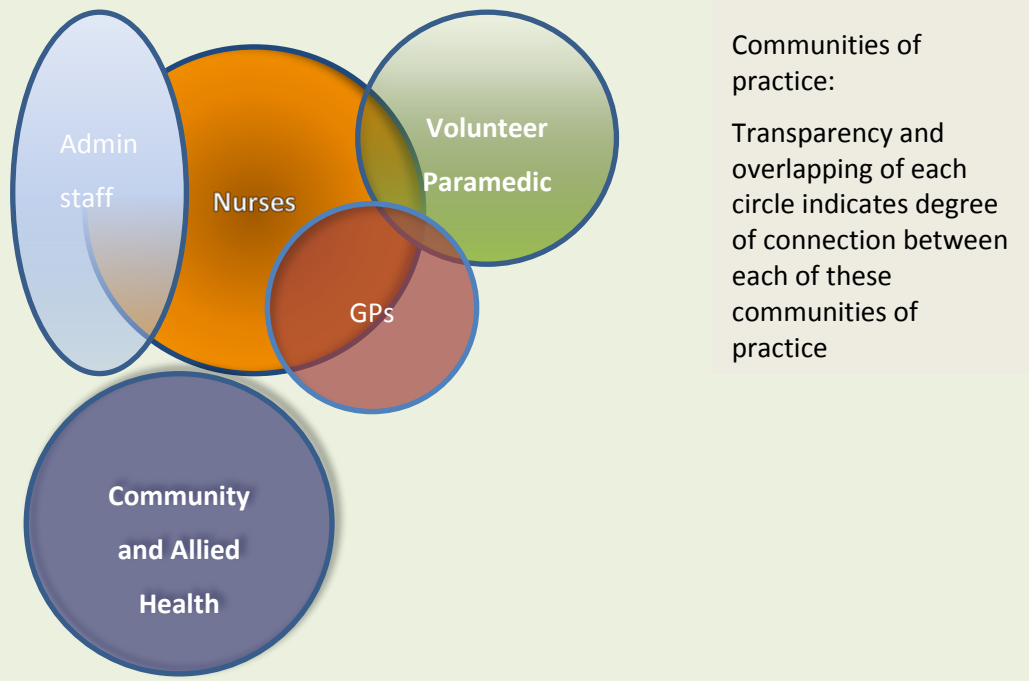

Figure 8-2. Communities of practice in the rural context (Case Three)

Jackson-Bowers et al. (2007) explained that some communities may start off as teams and then, depending on their level of cohesiveness, a community of practice will develop further over time. Thus there was the potential for an interprofessional community of practice. As one nurse indicated, collaborative practice was still a 'work in progress'. There was a strong emphasis on the partnerships between the rural community and the hospital. There were, however, limited visits from allied health professionals. None were encountered in *Case Three* during the researcher's visits. However, the community and allied health community of practice had a better connection with the hospital staff in *Cases One and Two*, due to the discharge planning nurse role (see Figure 8.1).

In *Cases One and Two*, the paramedics suggested that they did not mix with other staff in the hospital context, with interactions being task-focused. They attributed their separateness to politics, having separate identities and not being co-located. The paramedics in the study formed their own community of practice, finding it difficult to connect with the nurses working in the hospitals. For example, the paramedics stated that the nursing staff did not understand and value their role, but this was reciprocal, as the paramedics also admitted to not understanding the role and perspectives of nurses. Whilst the paramedics worked for SA Health, they were structurally separate to the primary

health care system. Having a predominant role in pre-hospital care, there was also an assumption by other health professionals in the study that the paramedic role stopped at the hospital door. Mulholland, O'Meara, Walker, Stirling, and Tourle (2009) found that most of what a rural paramedic does in practice is only informally recognized. They claimed that the rural paramedic role would be better understood through more organizational, professional support and training which would assist them to merge into and be accepted as part of the rural multidisciplinary health care team (Mulholland et al., 2009). Brown and Duguid (2001) explained that when communities have distinct practices this can make communication between them more difficult. However, despite their differences in this study, the paramedics portrayed a desire to engage more and undertake joint education or social interaction with the nurses.

Case Three was different as the town relied on volunteer ambulance officers. Additionally, the Director of Nursing was a volunteer ambulance officer which also had the potential to impact the relationships between her and other health professionals. The community-volunteer model relies on the involvement of health professionals, emergency workers and members of the local community, which adds to its 'strong rural character' (O'Meara, 2003). Similar to the GP model in the town, the structure of the community-volunteer model means that the ownership and responsibility of emergency pre-hospital care is managed together by the community, the local hospital and local GPs, which places more emphasis on local governance and management (O'Meara, 2003). This model acted to strengthen the partnership between the community, the hospital and the medical centre.

Following Intervention D, in *Cases One and Two* the nursing staff and the paramedics were looking at strategies to build a stronger relationship in order to improve collaborative practice. The paramedics and the nurses both wanted to increase their opportunities for sharing resources and each other's expertise. They believed that to develop shared understandings and the experience of learning with, from and about each other would help shape their identities and add meaning to each health professional's role (Jackson-Bowers et al., 2007). However, such communities can also become defensive and self-focused (Wenger, 2000).

The problem with communities of practice is that they are bounded by individual members who have their own established norms (Wenger, 1998). Hierarchical issues within a

community of practice where some members remain as peripheral contributors may create a power imbalance, with group decisions not being representative of the entire community of practice (Li et al., 2009a). Belonging to a community of practice had a powerful effect on the relationship between the nurses and paramedics. Future social interactions would have to take into account the power shifts between them in order to declare and identify an allegiance with other members of other communities (Clark, 2007). As this study found, there can be challenges with communicating across different communities of practice to coordinate IPE.

8.4 Sharing educational experiences

Phase One revealed that none of the health organizations in *Cases One, Two or Three* had any current, regular and ongoing professional development, where *two or more professions came together with the purpose of improving patient care*. However, health professionals in all three cases agreed that IPE would be beneficial for various reasons, such as appreciating each other's differences and perspectives as well as providing the opportunity to sit down and have regular interactions and discussions about patient care. Additionally, this study found several barriers to interaction and knowledge exchange within each of the three cases.

Continuing professional development (CPD) in all three hospitals was not given a high priority, in part due to the conditions under which the health system operated. Lack of access and support for continuing education have been cited as being part of the reason for rural workforce shortages (Parliament of Australia, 2012). Reeves et al. (2007) suggest that organizational resources are critical to the success of work-based IPE. However, in Phase Two of this study it was determined there was little support for delivering IPE in rural organizations. Staffing levels and employment status made it difficult for health professionals to commit to attendance at IPE sessions and subsequent knowledge sharing. In Phase One, members of each of the professions expressed the same view: undertaking IPE sessions together would be problematic. In recognition of problems such as this, Reeves et al. (2006) recommended scheduling sessions to suit the staff's needs and that plans be made for cover while they attended. Notwithstanding attempts to achieve various scheduling of times in Phase Two, there was difficulty in attracting numbers of attendees, in particular GPs. Poor attendance by doctors has also been found in previous studies

(Boutcher, Conn, Mroziewicz, & Guttman Sokoloff, 2014; Kuper & Whitehead, 2012; Whitehead, 2007).

Rural hospitals have been referred to as 'academically isolating' places (Marais et al., 2007; Wilson et al., 2009). *Case Three* reinforces this statement as only one IPE session was held. Reasons included the high cost of hospital replacement staff and the need for a sufficient critical mass of attendees to legitimise local education delivery. For example, in *Case Three* there were no permanently employed allied health professionals, which reduced opportunities for IPE. De Villiers and De Villiers (2004) found that the success of rurally located educational strategies is dependent on the local environment, practical applicability and clinical relevance. The reasons for limited invitations to IPE activities in workplaces can include fragmented work environments, and workers being restricted by experiencing only short periods of clinical practice (Billett, 2014). This study reinforces Billet's views (2014) as several GPs, physiotherapists and social workers were part-time employees which restricted the amount of time they had to spend interacting with each other. Work models meant some health professionals were not always on site in the township and therefore not able to participate fully, or participate at all, in IPE activities presented.

Additionally, health professionals who were members of other organizations may have found it more difficult to consider IPE because it was external to their main work environments. Most CPD mentioned by health professionals in this study was profession-focused. It was rare for any group of health professionals in all three cases to invite another group to formal education sessions. For example, in *Cases One and Two,* the Division of General Practice as well as the GPs were reluctant to invite non-GP health professionals to attend training sessions, and the nurse managers rarely considered including others in the hospital-based sessions. The paramedics argued that training in silos resulted from each profession working in siloed practice.

Work-based IPE can be viewed through the previously discussed community of practice lens where the purpose is to build connectedness to link communities together, and enable boundary crossing (Jackson-Bowers et al., 2007). Knowledge which cannot flow easily across boundaries to other professions or other communities of practice is what makes professions distinct, but it can create further divisions between them (Brown & Duguid,

2001; Tagliaventi & Mattarelli, 2006). Having already established that collaborative practice in the rural environment can be disabled through reduced opportunities for regular face-to-face and timely discourse between the health professionals, this study also found that the existence of multiple communities of practice may be a reason why formal IPE was very difficult to implement. Whilst health professionals were interested in IPE, their connectedness to their own community of practice meant they were more comfortable in their own groups. With the communities of practice being profession-specific there is more likely to be members with similar values, behaviours and practice (Lok, Westwood, & Crawford, 2005). Learning in one's own community of practice, referred to as situated learning, occurs where members participate in a shared activity; this is based on social learning theory (Lave & Wenger, 1991). Therefore, there are conditions which may be required to implement IPE, and subsequent IPL, successfully such as either having a strong link between profession-specific communities of practice or when a community of practice has interprofessional membership.

The department managers were constrained by organizational policy which limited their ability to enable collaborative practice. However, more attention to structures and process to support teamwork and collaborative practice is needed (Bajnok et al., 2012; Miller et al., 2014). IPE would be better accepted if it was compatible with each organization's funding and goals. For instance, workforce interest in strengthening IPL to achieve interprofessional capabilities may help to overcome some of the scheduling problems of IPE (WA Clinical Network, n.d.).

To support and encourage communities of practice to connect, Snyder and de Souza Briggs (2003) suggest more leverage and government support. They argue that community network structures required for interagency collaboration may not fit within traditional structures of an organization. When leadership between departments is collaborative, shared governance assists to work across service boundaries (Ravet, 2012). However, traditional governance and issues with resources being widely spread between departments makes boundary crossing problematic (Jackson-Bowers et al., 2007; Snyder & de Souza Briggs, 2003). Funding arrangement between health organizations and resource issues are significant barriers to IPE and collaborative practice (Pullon et al., 2009).

Consequently, there may be a number of risks associated with attempting to implement IPE in rural practice. Risks identified in the study included reduced availability of health professionals to attend sessions and the possibility that those that did attend were not engaged with the process. One GP also alluded to a reluctance of doctors to be inclusive of *all* health professionals for the purpose of IPE. Profession-specific communities of practice were found to operate in the rural context, with strong boundaries reducing the knowledge flow between them. Boundaries create divisions as well as 'fragmentation, disconnection and misunderstanding' (Wenger, 2000, p. 233). Fragmented and siloed practice meant that health professionals did not typically communicate on a regular basis about patient care. Therefore, in implementing work-based IPE it was difficult to balance the number of professions and create a stable group for regular attendance (Reeves et al., 2007), thus adding to the complexity of IPE delivery in the rural environment.

8.5 The impact of physical space on collaborative practice

Observing interactions in the hospital setting drew attention to the physical layout which highlighted how 'space' can influence informal and social interactions between health professionals. A key finding was that there were increased opportunities for collaborative practice when face-to face contact occurred between participants. The health professionals in the study, in particular the nurses, indicated that they preferred synchronous communication. Yet much of the dialogue between health professionals was undertaken over the telephone. Notably, in the nurses' station, where one would expect health professionals to hold discussions, there was lack of space, frequent interruptions and lack of privacy which made face-to-face conversations more difficult (Gum et al., 2012).

The paramedics commented that collaborative practice would be assisted if they were able to 'mingle' with others in the workplace. However, the paramedics were found on more than one occasion to write their patient notes in the corridor *(Case Two)* rather than in the nurses' station. This study found that the nurses' station as a physical and social space may have further emphasised the separateness of the health professions (Gum et al., 2012). Furthermore, it was revealed that corridors were a vital part of interprofessional communication, providing a space for informal and spontaneous conversations. Increased corridor conversations may have also been due to the poor design of the nurses' stations.

Immersive work spaces designed for all health professionals to mingle would improve collaborative practice (Gum et al., 2012). In *Case Two* there was evidence that having a defined area in the nurses' station where health professionals could have private conversations promoted interprofessional communication. Whilst the corridors proved useful for targeted communication, a more private area gave an opportunity for both formal and informal conversations, such as the debriefing session in *Case Two*. Perhaps somewhat paradoxically, having the receptionist/administrative staff located away from the nurses' station *(Case Two)* resulted in improved communication between nurses and administrative staff, as opposed to the other cases where they were located side by side. Communication processes may have been better managed by the receptionist in *Case Two*, due to the receptionist making fewer assumptions about the movements of the nursing staff. For example, he would have to leave his area, to go to the nurses' station to deliver information or introduce visitors. Similarly, Gregory, Hopwood, and Boud (2014) explored architectural spaces in an acute hospital setting as 'lived' spaces, and the extent to which they regulated how practitioners engaged with and learned from each other. Spaces for dialogue can be fluid and relational and therefore the ways in which health professionals intersected in the hospital were shaped by physical spaces (Gregory et al., 2014). The culture of social space (Bourdieu, 1989) in health care settings is an important consideration for building and shaping collaborative practice. Rural practitioners should consider how to best use interprofessional spaces and hybrid spaces for learning and conversation through IPL, discussion and collective reflection (Bjørk, Tøien, & Sørensen, 2013).

In *Case Three* the medical centre was located on the premises of H3 whereas, in *Cases One and Two*, there were three medical centres from three towns associated with the hospitals. Heath et al. (2015) also found that co-location of health professionals on the same site promoted collaborative practice, thus reinforcing the findings of this study. Hence, the collaborative efforts of the GP in *Case Three* may also have been due to GPs' ability to be on site more easily. Additionally, this study found that working in separate buildings emphasised the separateness between profession groups, such as the allied health professions and the nurses. Better access and enhanced visibility creates opportunities for informal interactions (Bosnic-Anticevich et al., 2014; MacNaughton et al., 2013; Oandasan et al., 2009). However, Lawn, Lloyd, King, Sweet, and Gum (2014) caution that whilst co-location is more convenient, each profession will still have its own cultures, systems and

ways of working. They stressed the importance of having an established program where workers could come together in order to increase their understanding of each other (Lawn et al., 2014). Baxter and Brumfitt (2008) found that team size and regular contact were important in establishing a team over professional identity. Therefore, co-location and integrated information systems are important collaboration mechanisms in rural practice (McDonald et al., 2009).

8.6 Summary

The cross-case analysis highlighted the complexity of rural collaborative practice, as well as the difficulties associated with work-based IPE delivery. Four themes were discussed: teamwork in the rural health environment, conceptualising collaborative practice in rural hospitals, sharing of educational experiences, and the impact of physical space on collaborative practice. The dominance of profession-based communities of practices was found to exist within the rural health setting and hindered the IPE–IPL–collaborative practice nexus. Communities of practice have previously been considered in the theorisation of the development of IPE, IPL and collaborative practice (Hean et al., 2013) and as a way to improve practice and delivery of patient care (Ranmuthugala et al., 2011). In this study communities of practice have be used to explore health professional relationships in rural practice and some of the barriers to IPE, IPL and collaborative practice.

The findings highlight that multiple communities were in operation, as opposed to any single interprofessional community of practice. Wenger (1998 p. 128) describes organizations as 'constellations of communities of practice'. Each community has different sets of practice and each is responsible for the different competencies that an organization needs. Therefore, analysing the rural health system in this study revealed segmented health care provision, due to multiple communities of practice working within this realm of health. The intention of this study was to explore both the impact of work-based IPE in the rural hospital setting and whether this initiative fostered IPL and in turn led to improved collaborative practice. The cross-case analysis revealed that in *Cases One and Two*, multiple communities of practice were in existence; each profession-specific in their composition. There was little evidence of the communities linking together or being able to cross boundaries for the purposes of IPE or information sharing. In contrast, in *Case Three,*

the doctors and nurses perceived they were part of at least the beginning of an interprofessional team. As a result of their synergy, and because of having even fewer resources than in *Cases One and Two,* the health professionals in *Case Three* demonstrated a history of building relationships, which promoted a sense of belonging and mutual commitment between them (Wenger et al., 2002). While there was no formal collective responsibility for knowledge sharing, such as IPE, *Case Three* doctors and nurses demonstrated collaborative practices more frequently than those in *Cases One and Two*. Therefore, the doctors and nurses in *Case Three* were located in two separate communities of practice but there was evidence of boundary crossing due to shared goals and shared history, with potential to develop into an interprofessional community of practice. Boundary crossing requires being able to value the collective competence and recognizes the expertise of those outside of a communities of practice (Wenger, 1996), thus providing a ripe environment for IPL.

The cross-case analysis revealed how the impact of the rural environment and power imbalances affected collaborative practice. Nurses in *Cases One and Two* were found to be mostly subservient to the GPs, with evidence that the GPs were autonomous and independent in their practice. The nurses preferred to avoid decision-making and found it easier to remain silent rather than create conflict in the nurse–doctor relationship. Collaborative practice was influenced by the distribution of roles and professions. Health professionals worked for both private and public systems, with many having part-time roles which affected their ability to commit time and energy whilst in the hospital setting. Different models of health care were found to affect the level of collaboration between health professionals. The drive-in drive-out model of general practice may have been responsible for the increased level of collaborative practice in *Case Three*. On a final note, IPE was not practical in the rural setting where there were fewer health professionals in the one place at the one time as well as fewer resources. Therefore, alternative strategies are needed to support work-based IPE in rural environments and ways to promote IPL between communities of practice.

The final chapter of this thesis now follows and presents the implications of the findings from each of the three phases. Recommendations are made based on the aim of this research, which was to find out how IPE can promote IPL and influence collaborative practice in the rural setting.

Chapter 9 Discussion

And this is one of the major questions of our lives: how we keep boundaries, what permission we have to cross boundaries, and how we do so.

— A. B. Yehoshua

This chapter examines the implications of the findings presented in Chapters 5 to 8 in relation to collaborative practice as described by the World Health Organization (2010). The findings are further explored in relation to two theories: social learning and community of practice (Lave & Wenger, 1991; Wenger, 1998; Wenger, 2000; Wenger et al., 2002). The relationship between communities of practice, interprofessional learning and collaborative practice in rural settings is elucidated. Collaborative practice is socially constructed and therefore may or may not develop in health services, depending on how well IPL is supported. Implications and recommendations are made based on the aim of this research, which was to find out how IPE can promote IPL and influence collaborative practice in the rural setting.

9.1 IPE, IPL and collaborative practice in the rural setting

This study explored five different types of IPE activities delivered as a part of workplace learning in the rural setting. IPE activities included scenarios, case-based discussion, appreciative inquiry, role-play and simulation. All activities were informed by Illeris' framework, which he calls the Tension Triangle (Illeris, 2002, 2003). The Tension Triangle draws upon several learning theories and is primarily underpinned by constructivist learning theory. Illeris' Triangle highlights the importance of the learners interacting with each other to gain insight into the work practices of other health professionals. Learning approaches used to guide the Phase Two activities included adult learning theory, constructivism, experiential learning and contact theory. Each was determined to contribute towards learner interaction during the learning process.

The WHO Framework for Action on Interprofessional Education and Collaborative Practice (2010) was used as a basis for enquiring about collaborative practice, by framing data within categories: teamwork, roles and responsibilities, communication, learning and critical reflection, relationships with and recognizing the needs of patients, and ethical

practice. Each phase of the three cases provided a rich context to explore the way rural health teams interact. IPE sessions were held and participants were interviewed and observed. After analysis of each of the three study phases, a cross-case analysis was conducted. Each phase of the three cases provided a rich context to explore the way rural health teams interact. This study found that it was challenging for rural health professionals to engage in work-based IPE. Barriers to work-based IPE were found to include low numbers of health professionals, predominance of part-time roles, minimal focus on joint professional development and health professionals working across different sites. Similar findings have been reported in the literature. For example, Curran, Fleet, and Kirby (2006 p. 54) found there were 'geographical, organisational, financial, attitudinal and technological' barriers to workplace learning in rural settings. In this study, major barriers to implementing the IPE interventions included fluctuating attendance rates and the lack of attendance from across the professional groups. Whilst Reeves et al. (2006 p.252) suggested attendance may be increased through the provision of 'protective time' for staff, Marais et al. (2007) argued that effective local leadership in isolated rural hospitals is needed to promote IPE strategies.

The uniqueness of rural practice was found to contribute to workplace based barriers to collaborative practice. This study found that rural health services tend to be comprised of multiple overlapping communities of practice that perpetuate the status quo in power relations with doctors and nurses at the centre, but with little collaborative practice. This research demonstrated how rural health practice is socially constructed and perpetuates traditional power relations in healthcare teams in which allied health professionals are particularly marginalised. These findings are consistent with Boyce's body of work regarding the development of allied health professions in Australia (Boyce, 2006). It is also consistent with other IPE researchers who suggest that doctors and nurses practise according to traditional stereotypes (Reeves, Nelson, & Zwarenstein, 2008b) and social status (Reeves et al., 2006). These researchers also suggest IPL is a catalyst for collaborative practice (Reeves et al., 2013). This body of work has culminated in the WHO framework (2010) and provides an impetus for IPE and IPL in organizations. However, this research has shown there are many organizational and professional barriers to IPE, IPL and collaborative practice in rural health.

9.2 Communities of practice as a barrier to IPE, IPL and collaborative practice

Findings revealed that communities of practice do not naturally create an environment for the development of collaborative practice. Those who see each other every day and are co-located in the same building find it easier to share ideas and collaborate (Burt, 2009; Wenger et al., 2002), whereas in the rural setting, health professionals worked in silos and were based in separate departments and different physical locations. Each group of health professionals operated within its own profession-based community of practice, thereby creating multiple communities of practice within rural health services. It is well established that most health professionals are more comfortable in their own groups (Hollnagel, Braithwaite, & Wears, 2013). This was highlighted in this study, where each profession raised concerns about the impact of organizational change on their own practice, and participated in profession-focused CPD. It has been argued that communities of practice can also create rigid and formal boundaries, and this limits the flow of knowledge to other communities of practice (Filstad, 2014). Therefore, only having profession-based communities of practice widens the gap for building relationships between health professionals. During the course of this research, it was found that there was limited mixing and professional and social contact in the work environment.

Fischer (2001) argues that communities of practice assume there is one single knowledge system. In this study, communities of practice formed around different aspects of clinical practice, which excluded some professions. D'Cruz, Jacobs, and Schoo (2009) have demonstrated how knowledge-in-practice is envisaged differently by different professions. Brown and Duguid (1991) postulate the concepts of canonical and non-canonical practice. Canonical practice occurs when those who work in an organization operate only according to its rules and regulations, and non-canonical practice is where workers have more flexible views which increases their understanding and ability to solve problems, such as through collective learning (Brown & Duguid, 1991).There is confusion in the literature about whether a community of practice includes teams, people from the same discipline, or is more likely to form from canonical groups (Brown & Duguid, 1991; Hildreth, Kimble, & Wright, 2000; Jackson-Bowers et al., 2007; Li et al., 2009b). Canonical groups tend to emerge from working and learning in the workplace because members are situated in

practice and acquire the subjective views and language of that community (Brown, Collins, & Duguid, 1989; Brown & Duguid, 1991). Such canonical groups existed in this study, and were reinforced by the CPD being profession-specific and developed "in-house". Learning was more focused on 'being' a practitioner rather than about practice (Brown & Duguid, 1991). Importantly, the learning was context-driven and based on organizational needs rather than socially-constructed learning which aims to generate exchange between learners (Barr, 2013). Communities of practice in this study were bounded by restrictions, locally and organizationally. For example, not all who were present in the workplace were deemed as 'legitimate' and some members were overlooked and left out (Brown & Duguid, 1991), such as the social worker who did not respond to the fire drill.

Brown and Duguid (1991) explain that non-canonical communities of practice may not be recognized by organizations as they are more fluid and can incorporate people from the outside. By including a variety of perspectives, the collective knowledge is increased and strengthens the core of a community of practice (Snyder & de Souza Briggs, 2003). Alternative strategies to bring professions together from different communities of practice include forming a community of interest (Fischer, 2001). With communities of interest, members can learn from heterogeneous experiences (Hafkesbrink & Schroll, 2011) and 'the construction of shared understanding requires an interaction and synthesis of several separate knowledge systems' (Fischer, 2001 p. 3). However, the downside is that in contrast to a community of practice, communities of interest are temporary and tend to be project-based (Hafkesbrink & Schroll, 2011) which will not be useful for building sustained collaborative practice. Brown and Duguid (1991 p. 55) suggest that to promote interchanges between communities of practice, organizations must recognize and acknowledge that they are themselves a "community-of-communities". They argue that the linking of communities requires the "right" medium to support learning-in-working innovation, such as the promotion of narrative exchange between them to assist collaborative practice (Brown & Duguid, 1991). However, this requires conceptual reorganization and is dependent on changing organizational structure (Brown & Duguid, 1991).

9.3 Power and communities of practice

Being a member of a community of practice can isolate learners and limit their world views (Brown & Duguid, 1991). Adler, Kwon, and Heckscher (2008) described how the nature of a community of practice can increase its power and therefore reduce the ability of its members to operate collaboratively. For example, GPs who have the status of independent practitioners, as evident in this study, have the ability to self-govern which means they can be selective about their relationships (Adler et al., 2008). This places the doctors in a position of autonomy even if they are treated as equal members of a hospital (Adler et al., 2008). GPs' priorities were not always associated with the running of the hospital and this influenced their contribution to decision-making processes. Therefore, the asymmetry of power between the professions found within the study can be attributed to profession-specific communities of practice. Operating within a work context where importance is placed upon professional autonomy and traditional hierarchy, can take on the form of a *gesellschaft* community of practice. The term *gemeinschaft* originated in 1887 to explain the modernisation of society (Tonnies, 1963), with *gesellschaft* representing the shift of social relations and connections away from 'community' (Clark, 2007). According to Adler et al. (2008) the consequences of doctors being oriented towards a *gesellschaft* bond, as seen in this research, is that it limits their interactions outside of their own community of practice. They are more inclined to focus on updating their own professional knowledge and maintaining a strong professional autonomy rather than being in collaboration with others. Therefore, the *nature* of their community of practice may be the reason for the GPs' disinterest in attending IPE sessions during Phase Two of the study.

In contrast, communities which are allied or linked to each other increase opportunities for collaborative and changing practice (Brown & Duguid, 1991). In *Case Three*, the shared history between the medical centre and the hospital, with additional support from the community, was found to strengthen the relationships between the health professionals. According to Adler et al. (2008) the type of community of practice in *Case Three* leans more towards a collaborative community (and away from the *gemeinschaft* or *gesellschaft* forms) which supports interdependent work processes with shared goals. It can be argued then, that *Case Three* had more evidence of collaborative practice, and this was due to the nature of the communities of practice and the organizational context of the hospital, medical centre and community.

9.4 Interprofessional communities of practice

The question remains then, as to whether or not interprofessional communities of practice are feasible and provide impetus for the IPE-IPL-collaborative practice nexus to be more successful. McMurtry (2013 p.84) states 'if learning is understood in terms of increasing participation in social practices, then there is a need to establish interdisciplinary and interprofessional communities of practice'. This research has determined that alternative strategies are needed to promote IPL between rural communities of practice. One strategy to aim for is building interprofessional communities of practice. Communities of practice are composed of three aspects, legitimation, peripherality and participation, and all three are required (Lave & Wenger, 1991). Legitimate peripheral participation occurs when an individual, such as a newcomer, can move from peripheral participation while observing more experienced practitioners at work, gradually moving to full participation through interactive involvement (Lave & Wenger, 1991). Legitimation of members arises from social relationships and the more they get to know each other, the more confidence they have in each other's knowledge and information which reinforces the importance of face-to-face interactions (Hildreth et al., 2000). This research found that face-to-face communication, both formal and informal, could impact on collaborative practice. Connecting legitimation to an interprofessional clinical encounter implies that individuals will be able to enact how to be interprofessional and collaborative in their practice (Sterrett, 2010). Legitimation in collaborative practice will involve being able to:

> *…construct conceptual common ground, to be open-minded and flexible, to show others trust and respect, and to develop structures like regular meetings and formal and informal guidelines for resolving conflict (McMurtry, 2013 p. 84).*

Peripherality relates to moving from the outside to the centre of the community and denotes the degree of engagement and participation through learning (Hildreth et al., 2000; Lave & Wenger, 1991). Therefore, emphasis is placed on the observation of others and how they converse (Brown et al., 1989). Additionally, through observation of another's practice, health professionals can integrate aspects, adding depth to their own practice (Sterrett, 2010). In this research, there were very few examples of health professionals undertaking or preparing for clinical tasks together in the hospital setting. For example, nurses were disinterested in collaborative practice when it came to helping the GP to apply

a plaster of Paris cast on a patient in *Case Two*. Patient tasks were undertaken separately, such as nursing care and visits by the GPs or members of the allied health professions. Most importantly, patient-related dialogue was impacted by physical structures and a lack of interprofessional space and time. There were few opportunities for health professionals to come together, and when they did, there was not always representation of all health professions present. Physical and temporal distances will mean that some members may only be accepted as peripheral members (Hildreth et al., 2000). However, as evident in this study, being on the periphery can contribute to an asymmetry of power. Therefore, collaborative practice necessitates innovative ways to bring health professionals together. This also ensures that novice professionals will have access to more expert practitioners. Anderson, Hean, O'Halloran, Pitt, and Hammick (2014 p. 303) suggest that interprofessional communities of practice should include regular patterns such as:

> *…work meetings, a seminar program to promote sharing of ideas, teleconferences focused on particular projects, with a central tenet that during these activities participants learn about, from and with each other.*

Participation in communities of practice implies that all members are able to participate in practice without boundaries (Lave & Wenger, 1991). However, Lave and Wenger (1991) warn that peripherality can be both empowering and disempowering, depending on the position of the periphery of practice. According to Brown and Duguid (1991), the environment plays a role in how and where IPL would take place. In this study, participation in practice included corridor and spontaneous conversations as opposed to formal ones. According to the health professionals in this study, having a level of familiarity with colleagues made it easier to stop them in the corridor and hand over or provide information. Informal discussions, away from the central hub, have been described as 'water cooler' learning or knowledge sharing at the clinical 'backstage' (Waring & Bishop, 2010 p. 326). The benefits of corridor conversations have been noted in previous studies (Iedema, Long, Forsyth, & Lee, 2006; Long, Iedema, & Lee, 2007; Miller et al., 2008). This research found that there was potential for IPL during ad hoc problem-solving discussions. Similarly Hildreth et al. (2000) reported that problems were resolved more quickly in a community of practice when resulting from informal ad hoc encounters. Promoting collaborative practice and IPL in an interprofessional community of practice

therefore, would encourage members to be willing to engage in dialogue, be accepting of differences and to value relationships (Sterrett, 2010).

9.5 Implications

The IPL domains used in this study to structure the content analysis, namely teamwork, roles and responsibilities, communication, learning and critical reflection, consideration for the patient, and ethical practice (WHO, 2010), proved to be a useful way to explore collaborative practice. This study determined that multiple and separate communities of practice existed in rural health and created boundaries between the health professionals in the study, and acted as barriers to IPE, IPL and collaborative practice. McMurtry (2013) claims that the theory of community of practice (Lave & Wenger, 1991) and its consideration for social learning, is what may be required to move beyond professional differences. Context for learning is particularly relevant to rural practice, as this study found that opportunities for social engagement between health professionals were restricted by profession-based communities of practice. When IPL occurs in the workplace, workers are actively learning through work (Wilcock et al., 2009) and this can be either informal or formal (Barr et al., 2005). Achieving IPL and subsequent collaborative practice was found to be complex, as health professionals are required to share their norms and values (Ravet, 2012) and once this occurs, 'shared understandings' (Croker et al., 2009) about collaborative practice can be achieved. Situated learning views learning as being situated in the healthcare context and promotes the sharing of tacit knowledge (Sargeant, 2009). It makes sense that 'if people are going to learn and work in conjunction with others they must be given the situated opportunity to develop these skills' (Brown et al., 1989 p. 40). The findings in this study support the view that IPE requires a shift in the way educators think about professional education, with focus away from traditional CPD to a social learning framework (Sargeant, 2009).

When considering how IPE and IPL can be adopted within the workplace, communities of practice may have a role. Anderson et al. (2014) argue that development of a community of practice can enhance the sustainability of IPE. Health professionals who share a set of goals and have a sense of community are more likely to belong to a community of practice (Steinert, 2014; Wenger, 1998), and both of these elements were present in *Case Three*. Given that 'community' and 'practice' are two out of the three defining components of a

community of practice, to become an interprofessional community of practice would require the third and final component where members are committed to being able to learn from each other, and have a shared domain of interests (Wenger, 1998). Strategies can be developed to promote shared interests in an interprofessional community of practice, such as creating a dialogue between those inside and outside, inviting different levels of participation, focusing on value, developing both public and private community spaces and combining familiarity, excitement and regularity in the community (Anderson et al., 2014 p. 303; Wenger et al., 2002). Through increasing participation and access to diverse perspectives, interprofessional communities of practice can generate their own concepts, artifacts, and identities (McMurtry, 2013). Legitimate participation would extend to include other professions and contribution to patient care would be an interdependent effort (Adler et al., 2008). The shared repertoire of language, stories and practices (Wenger, 1998) could be encouraged as they help to nurture interprofessional communities of practice (Steinert, 2014).

IPE for rural practice would need to account for the different types of work models, organizational contexts and geographical location of those who work there, as these affect the development of an interprofessional community of practice. Employment status, staffing levels, budgets, power asymmetry and physical structures were found to affect the level of engagement of health professionals in this study. With the aim of building stronger interpersonal relationships within the practice setting, organizations would need to increase the engagement of health professionals across boundaries. Establishment of interprofessional communities of practice can occur if innovative ways can be sought to promote IPL in the workplace. Whilst consideration could be given to online learning as a mode of IPE delivery, this may prove difficult as the health professionals in this study were found to be time poor and online learning may not promote social interaction. Instead, informal workplace IPL could be considered as a part of everyday practice, which can include team meetings, debriefing after team-based rounds, discussion of morbidity and mortality data, review of quality improvement data or case presentations (Nisbet et al., 2013). The potential benefits of informal workplace IPL include enhanced relevance and application of learning and less time spent away from the workplace to attend formal learning programs (Nisbet et al., 2013). An interprofessional community of practice allows for a synergistic collaboration between its members as opposed to conflicting separation

(Brown & Duguid, 1991) and would therefore provide a unique opportunity to promote the IPE-IPL-collaborative practice nexus.

Implications for policymakers and senior managers include understanding the importance of promoting context for engagement of health professionals in unique rural environments. By adopting theories such as community of practice and social learning, strategies can be developed to support IPE and IPL in the workplace. Policy directives must consider how to budget for health professionals to participate together in formal and informal CPD activities in rural areas. By providing better access and support for joint CPD, there would be less professional isolation and more opportunities for health professionals to learn with, from and about each other. Funding models should support visiting health professionals to be able to spend time with other health professions in rural locations as opposed to the limited time that was evident in this study. A framework would need to be developed which supports both formal and informal institutional arrangements which grow and develop collaborative learning between the organizations and the communities (Hafkesbrink & Schroll, 2011). For example, whilst hospitals support their staff members to organize work-based interprofessional development, the organization itself would be required to have an understanding of the CPD prerequisites of professions other than nurses.

Interprofessional relationships are an important element of collaborative practice. Findings from *Case Three* indicated it might be possible to build interprofessional communities of practice in a rural health setting. However, communities of practice are also thought to be loosely defined theoretically, with their own merits and limits. For example issues of power and inequality have not been well addressed (Barton & Tusting, 2005; Botha, Kourie, & Snyman, 2014; Fox, 2000; Touati, Denis, Roberge, & Brabant, 2015). The potential of using communities of practice as a tool to foster collaborative practice through IPE and IPL, across units and departments, promoting interactions and mutual trust has only recently been applied to health organizations (Bertone et al., 2013; Kothari, Hovanec, Hastie, & Sibbald, 2011). Currently views differ about what is needed to enable learning and change for successful communities of practice in the health setting (Touati et al., 2015). The power differentials between health professionals as found in this study, can constrain learning and change (Touati et al., 2015). Further research will be needed to explore whether interprofessional communities of practice are a solution to strengthen the IPE-IPL-

collaborative practice nexus, in particular how local changes could be supported to promote collective learning.

9.6 Limitations

This study had several limitations which may have influenced the findings. First, the study was geographically restricted to South Australia, and the three rural hospitals studied were a convenience sample which may have reduced the opportunities for broader sampling and diversity (Marshall, 1996). This sampling approach, however, did ensure that the participants came from similar-sized organizations for comparable data analysis (Yin, 2009). Furthermore, two of the hospitals shared the same Director of Nursing and were therefore linked to each other. This enabled the study of similar management approaches in different contexts.

The question being asked by the study was *How does work-based IPE promote IPL and influence collaborative practice in three rural hospitals in South Australia?* This study was unable to establish that IPE led to IPL and subsequently to collaborative practice. Possible causes for this may be having multiple interventions, some having a limited number of professions in attendance. Having site-led IPE, with each site choosing their IPE interventions may be considered a limitation of the study. For example, health professionals nominating IPE sessions meant that the same or a similar intervention could not be compared across sites. However, sharing this responsibility created engagement in the project, and ensured activities were designed to be locally relevant. It enabled better advertising of the activities.

The study had less input from the allied health professionals and doctors, due to the siting of the investigation within a hospital context. The research relied on chance meetings with health professionals while they made their visits to the hospital or when they happened to be 'in town' and this may have reduced the opportunities to meet with a larger number of relevant professionals. Recent recommendations have been made regarding scope, service delivery (private and public), leadership and roles in rural areas (Mason, 2013). Therefore, future studies would benefit from finding ways to be more inclusive of the allied health professions. Whilst some interviews were undertaken outside of the hospital environment, future researchers should consider undertaking additional observations of health

professionals in other rural organizations such as medical centres, ambulance stations and community and allied health departments.

Whether or not participants in the study understood IPE and IPL at the beginning of the project may have affected the findings. This is not a limitation of the study per se but is an initial important finding which may have affected the subsequent conduct of the study. For example, the research may have benefitted from including workshops at the beginning of Phase One which aimed to explain the key study terms to the study participants with particular emphasis on the purpose of IPE. The researcher ensured that the hospital managers understood the aims of IPE, but a limitation of the research was that the concept of IPE was not well portrayed to the participants.

Being unable to complete Phase Three, Case Three, was an acknowledged limitation of the study. Some additional data was collected in Phase Two for this case through the follow-up interviews funded by the grant. *Case Three* also revealed issues being faced in small rural health units in regard to resources and funding. Differences were revealed between each of the three cases which have offered insight into the development of collaborative practice in rural environments. Despite *Case Three* being incomplete, the data that were gathered did reveal a more collaborative environment, particularly in relation to the nurses and doctors. It raises further questions about the nature of collaborative practice in smaller units with fewer resources as in *Case Three*.

Within the limitations, this study was able to compare three different cases in the rural setting, which identified the types of barriers that can impact IPL and collaborative practice. Future research should focus on how to deliver IPE within communities of practice, and then on how this contributes to IPL and collaborative practice. Ultimately, the aim of future work-based IPE research should be to explore innovative ways to encourage more face-to-face interactions and linking of professions across boundaries.

9.7 Conclusion

The study set out to examine whether IPE promoted IPL and had any subsequent influence on collaborative practice in three rural hospitals. It used a case study methodology over three phases. Phase One explored the existing organizational structure and collaborative

practice amongst health professionals in each hospital. Phase Two focused on the implementation of IPE interventions. Phase Three repeated the investigations of Phase One in two of the three hospitals six months later. The overall research question was *How does work-based IPE promote IPL and influence collaborative practice in three rural hospitals in South Australia?* The findings in this study indicate that collaborative practice is socially constructed and therefore may or may not develop in rural health services depending on how well IPL is understood, supported and attended by all professions. The IPE sessions offered had little effect on IPL and in turn collaborative practice. The main reasons for this were that as each of the IPE planned activities evolved, the siloed practice that occurred in each rural setting became a major barrier. The dominance of profession-based communities of practice hindered the IPE-IPL-collaborative practice nexus.

The comparison of three different hospital cases provided insight into the nature of rural practice in South Australia. Rural practice and health professional relationships were influenced by systemic, organization and interactional factors. The sharing of information was complicated by organizational change, work and funding models, staff working in both private and public systems, physical structures and power differentials. There was evidence of the doctor–nurse game, with doctors in this study remaining at the top of the hierarchy. Each group of professions—GPs, ward nurses, community health nurses, allied health professionals and paramedics—was found to practise in a silo, bound by geographic location and the unique nature of its practice. This finding was likened to the existence of multiple and separate communities of practices which experienced only brief, rapid interactions with other professional groups. Profession-based communities of practice contributed to health professionals reporting of a lack of awareness, as well as some misunderstandings, about each other's roles and capabilities.

This study demonstrated limited IPL resulting from the IPE activities and no evidence of improving collaborative practice. However, informal interactions and spaces were found to be important for potential IPL and collaborative practice. For example, this study indicated that the provision of structural spaces and the availability of time for conversation encouraged face-to-face dialogue. According to Sterrett (2010 p. 260), 'respect, collegiality, and informality seem to be the glue that establishes relationships'. Therefore, informal learning, as with any situated practice, should be seen as essential to build collaborative practice. Creating natural forums for learning can result in an informal sense

of belonging (Snyder & de Souza Briggs, 2003). In the context of collaborative practice, where trust and respect are required, having a sense of belonging can help to foster the development of interprofessional communities of practice. It is through informal interactions that personal relationships and trust can be built. In doing so, this may be the impetus that is needed for all professions to be able to contribute to the collective learning process (Nisbet et al., 2013).

Elston and Holloway (2001) claim that it will take a new generation for an interprofessional culture of practice to exist. Furthermore, Wackerhausen (2009) suggested that health professionals will need a certain degree of 'virtue' and 'courage' to reflect and learn in a challenging and transformative manner. In order to move forward, then, we need a generation of health professionals who are prepared to engage across boundaries, and feel comfortable in doing so. Importantly, in order to achieve collaborative practice, there is a need to find more creative ways to better connect and to provide education that will enable health professionals to learn together and from each other.

Appendix 1. Literature Review Table

	Author/year	Intervention	IPE pedagogy	Targeted Intervention Outcome(s) (classification)	Target group (n)	Outcomes	JET Level
1.	McKiel, Lockyer & Pechiulis 1988	Testing of a model for conjoint continuing education. A 4-week course about diabetes was developed for medical, nursing and dietary staff from hospital and a diabetes clinic.	Well researched methods for conjoint teaching, such as small group discussion where different professions could be permitted to interchange ideas. Ensured content was applicable to 'interdisciplinary problems'.	Individual, Practice and Organizational-based	Medical, nursing and dietary staff from hospitals and a diabetes clinic in two rural communities. Meetings were held to ensure they were genuinely interested and were prepared to alter practice.	Chart audits of patients with diabetes mellitus were conducted to compare clinical performance 3, 6 and 12 months after the course (not in this paper). They wanted more programs by the university team.	Not indicated however, data was being collected targeting level 4b- Benefits to patients/clients
2.	Weeks, Counsell and Guin 1994	Allow staff nurses to participate in an area of interest that related to their area of work. Examples of choices (for one shift per quarter) were observing a neurosurgical procedure, neuroscience clinical nurse specialist, enterostomal therapists, occupational therapy, physical therapy,	Unstructured and informal. Nurses would choose an area and participate in patient care under the supervision of a preceptor. No orientation given.	Organizational-based	Nursing staff (number not indicated)	Interpersonal relations increased with other professions. However, there were numerous obstacles identified such as staff shortages, limited times, costs, some staff had inadequate motivation to organise learning opportunities.	Level 1- Reaction

		neurosurgery clinic, radiology.					
3.	Mann, Viscount, Cogdon, Davidson, Langille & Maccara 1996	10–12 participants met for 2 hours weekly across 4 weeks to discuss problems concerning individuals at high and low risk for cardiovascular diseases and heart health in their community	PBL approach and PRECEDE framework applied. Four cases presented (one each week) re cardiovascular disease. Given educational objectives. Small groups which reconvened at the end of the evening.	Individual and Practice-based	Nurses, physicians, dieticians, pharmacists, social workers, health educators	Multidisciplinary case-based learning is an effective means of acquiring new understandings and promoting health professionals' collaboration in addressing heart health.	Level 1- Reaction
4.	Reeves & Freeth 2000	IPE sessions focused on discharge planning, pain management and IV drug administration at lunchtimes for 2 hours in length.	Started with lunch to provide an informal atmosphere. Case scenarios with opportunities to practice hands-on tasks facilitated by clinical experts.	Individual and Practice-based	Preregistration house officers and newly qualified nurses. N=19 (not broken down by profession)	Useful to participants. They would be keen to continue with expansion to other professions. One group experienced conflict but became more cohesive than the other groups. Facilitators tended to dominate. Workplace changes included more interaction between them for discharge planning and setting up of IVs.	Level 1- Reaction Level 3- Behavioural change
5.	Monaghan & Duarri 2001	A 2-day course (stroke rehabilitation program) was repeated five times in parallel with the establishment of two new stroke wards. This process assisted the development of further educations sessions once the wards opened.	Representatives from all disciplines were involved in the teaching. Day one covered theory and day two involved practical sessions like practical swallowing with an emphasis on experiential learning.	Individual, Practice and Organizational-based	A total of 86 staff from the acute, rehabilitation and community health services – including all disciplines and grades (breakdown not supplied)	Group approach to organising the courses worked due to having a group co-ordinator – all had the same philosophy and worked hard to avoid professional rivalry. May not have been as achievable with an already established ward or department.	Level 1- Reaction

6.	Foy, Tidy, Hollis 2002	Action to Support Practices Implementing Research Evidence (ASPIRE)	Workshops with team exercises; literature search, critique literature, action plans to change practice	Practice-based	21 primary care teams	Teams reported better mutual understanding or working relationships. Teams with doctors as leaders appeared to negotiate obstacles more easily. Many challenges and lessons learnt.	Level 1- Reaction
7.	Zwarenstein, Bryant & Reeves 2003	A 4-week hospital reorganization training program.	Four elements: teambuilding sessions, creation of nurse–doctor teams, change from task nursing to team nursing and each nurse–doctor team to complete daily joint planning rounds	Organization-based (Team building can be classified as a combination of classroom and practice–based activities)	Nursing and medical staff (intervention ward and control ward)	In the intervention ward: Increased communication; Patient length of stay reduced; Readmission rate reduced; Improved patient satisfaction; Absenteeism fell; More patients received better targeted care; Reduction in pharmaceutical and laboratory costs	Level 4a- Change to organizational practice Level 4b- Benefits to patients/clients
8.	Bleakley, Boyden, Hobbs, Walsh & Allard 2006	The intervention consisted of three elements: iterative formal education input; introduction and subsequent embedding of team self-review (briefing and debriefing); and introduction and subsequent embedding of narrative close-call (near-miss) reporting	Two-day seminar (Human Factors), a one-day symposium on non-technical aspects of patient care and safety in theatres with small interprofessional group discussions. Followed by a new system of briefing and debriefing before and after operating lists. A reporting system was developed for theatre staff to report any close-calls addressed by governance meetings.	Individual, Practice and Organizational-based	Theatre staff in two complexes in a large, acute, rural UK hospital setting. A = intervention group; B = comparison group	Positive, unidirectional changes in attitudes towards teamwork were established. Tolerance of difference promotes healthy debate about the quality of safety practices.	Level 2a- Modification of attitudes/ perceptions
9.	Phelan, Barlow & Iverson	Two-year project. Peer collaboration groups in a large	Interprofessional conversations: small groups	Individual, Practice and Organization-based	Two of the groups were interprofessional. This was a group of	Unstructured, but focused conversations about daily practice; for example, the	Level 2a- Modification of attitudes/ perceptions

	2006	urban Canadian Health region as a way of promoting continuous learning at work	met with one another for 1–2 hours each month, for a period of 6–8 months, to discuss issues related to their ongoing practice		three (a grief counsellor, a psychologist and a chaplain) and a group of two (a physician and a clinical nurse specialist)	physician came to understand ''the illness/beliefs model'' and ''a new way of being'' with patients, as a result of her peer's approach to practice.	
10.	Reeves, Freeth, Glen, Leiba, Berridge & Herzberg 2006	IPE workshops over 3 weeks	Team members undertook a range of interactive learning activities designed to enhance their understanding of collaboration including an action plan.	Practice-based	Two community mental health teams in separate inner city locations (n=32 from social work, nursing, OT, medicine, support staff)	Unable to implement action plans – no support or funding to do so. Perceptions of collaboration and IPE remained largely unaltered. Enhanced understanding of teamwork.	Level 2b- Acquisition of knowledge/skills
11.	Curran, Sargeant & Hollett 2007	The Building a Better Tomorrow Initiative (BBTI) was a CPD program established to enhance the collaborative competencies of primary health care providers and foster interprofessional collaboration in primary health care settings.	Based on a Needs Assessment of primary healthcare providers. Targeting competencies for interprofessional collaboration. Modules offered varied from 1–2 days and topics were: facilitating adult learning, understanding primary health care, team building, conflict resolution, building community relationships and program planning and evaluation. Methods used for teaching not specified. Train the trainer was used to enhance capacity.	Individual, Practice and Organizational-based	A total of 683 BBTI modules were delivered across the Atlantic Canada provinces; a total of 3,725 participants completed at least one module. Participants from the nursing profession represented the largest group *n*= 1,620, followed by social work *n*= 398, occupational physiotherapy *n*= 147, dietetics *n*=138, and medicine *n*=113. Plus, many other professions and non-clinicians	Interprofessional CPD was effective in enhancing understanding of the roles of other professions, fostering respect and positive attitudes toward interprofessional collaboration, developing collaborative competencies, and promoting organizational change. CPD and other team development activities must be supported by appropriate organizational structures and philosophies. CPD must be viewed as an enduring activity in order to support team development and growth on an ongoing basis and to orient new providers to interprofessional collaboration in the primary health care setting	Claimed to have achieved all levels (results were self-reported)

12.	Watts, Lindqvist, Pearce, Drachler and Richardson 2007	IPL program held over 8 months	Team meetings with a facilitator 2 hours monthly working on areas to improve care	Practice-based	Nine different teams within a healthcare trust (acute, mental health and local community hospital)	Improvements in perceptions of team climate and teamwork	Level 2a- Modification of attitudes/ perceptions
13.	Thompson, Donnison, Warnock-Parkes, Turpin, Turner & Kerr 2008	CAT training course (cognitive analytic therapy) for complex mental health issues for multidisciplinary staff. An intensive training week away from the CMHT base, a brief personal reformulation experience, followed by 6 months of CAT case supervision in a small group setting.	Theoretical, clinical and experiential sessions. Discussions which focused on teamwork and sharing of experiences.	Individual and Practice-based	The number who attended is not revealed in the paper however, 6 social workers and 6 community psychiatric nurses participated in the 1-month follow up interviews.	The training may facilitate an improvement in team cohesion. Improvements to the course as a result of the interviews: more realistic and clear appraisal of workload implications, consideration of routine provision of supervision beyond completion of training, appropriate acknowledgement of participants' existing skills, discussion of confidentiality issues, follow-up training sessions, and more rigorous selection of clients for CAT-informed case work.	Level 2a- Modification of attitudes/ perceptions Level 2b- Acquisition of knowledge/skills
14.	Toner, Ferguson & Sokal 2009	Program for Outreach to Interprofessional Services and Education (POISE) developed by three centres. POISE was designed to develop, implement, evaluate, and sustain IPE and training for health care learners, while emphasizing improved access to health services for the geriatric population in	Combination of role-playing exercises and small group discussions (professional roles and communication). One component of POISE is in the form of CPD – 5 days over the course of the year (Geriatric Mental Health and Geriatrics). Another is a combined on-site and distance learning program – didactic as well as telehealth and videoconferencing for	Individual and Practice-based	The total number of participants in the POISE educational activities in upstate New York was 2424. This number represents repeat attendees. Numbers varied for each program: medical doctors, registered nurses, social workers, administrators, nursing practitioners (large numbers).	POISE offered low-cost continuing education credits and contact hours in a wide range of disciplines. (Questionnaires were funded by the US Dept. of Health and Human Services.) Offered strengths and weaknesses of the program. No evidence of effect on clinical practice.	Level 1- Reaction

		medically under-served areas.	aspects of teambuilding.				
15.	Zwarenstein, Goldman & Reeves 2009	Cochrane Review. To assess the impact of practice-based interventions designed to change IPC	No education provided as these were purely practice-based interventions.	Practice-based	Five studies met the criteria. Two interprofessional meetings, One interprofessional audit, Two interdisciplinary rounds	IPC interventions can improve healthcare processes and outcomes but hard to draw generalisable inferences. More rigorous studies needed as well as qualitative methods for insight into how interventions affect collaboration and how contributed to changes in outcomes.	1) Level 4a, 4b (claim) 2) Level 4b 3) Level 4b 4) Level 4b (no difference found) 5) Level 3 (no change) Level 4b
16.	Rice, Zwarenstein, Gotlib Conn, Kenaszchuk, Russell & Reeves 2010	Communication strategy	One-on-one training to senior professionals in each ward who then promoted the new communication strategy (introduce, share information about roles and profession and feedback)	Practice-based (and organizational)	Two wards in an urban, university-affiliated teaching hospital comprising around 250 staff and trainees.	Limited uptake of the intervention. Interprofessional hierarchies had an impact on communication and collaboration.	Level 1- Reaction
17.	Jones & Jones 2011	A service improvement program to encourage better teamwork in a UK medical rehabilitation wards over 12 months	Three changes: 1) change of proximity of staff 2) consultant-led daily ward rounds and team meetings weekly 3) staff workshops	Individual, Practice and Organizational-based	12 staff members (one consultant, five nurses, three physiotherapists, two occupational therapists, one social worker) were purposively sampled and interviewed using semi-structured interviews	Four themes: the emergence of collegial trust within the team; team meetings, participative safety and patient safety; conflict and the mediating effect of shared objectives and trust; and autonomy within the team. There is a degree of overlap between the themes identified.	Level 4b- Benefits to patients/clients
18.	Norgaard, Ammentorp, Kyvik, Kristiansen & Kofoed	Communication skills training course in patient-centred communication	Teaching methods were presentation of skills for patient-centred communication and	Individual, Practice and Organizational-based	Department of Orthopaedic Surgery, Kolding Hospital in Denmark. The department consists of	Professional background was a factor in the health care professionals' attitude to communication skills training and how they felt that the	Level 2a- Modification of attitudes/ perceptions Level 2b- Acquisition

	2011		supervised role-play. A 6-week interval gave the participants opportunity to practise their new communication skills and to video record an authentic communication situation with a patient or a colleague before a follow-up day during which the video recordings provided the focus for discussion, supervision and personal feedback.		two in-patient wards, an out-patient clinic, an emergency ward and an operating theatre. The course was compulsory for all staff members with patient contact, i.e. doctors, nurses, nursing assistants and medical secretaries. (n=190). Each class had eight participants with varied professional backgrounds.	training affects their ability to communicate with patients and colleagues. The doctors in this study seemed to prefer a different teaching culture and approach.	of knowledge/skills
19.	Andrew & Taylor 2012	3-day course to equip clinical staff with communication skills to assist with palliative care situations – (It's Good to Listen: Advanced Communication Skills in End of Life Care)	Learner centred, interprofessional and experiential. Included identification of group agenda, use of group discussion, interactive and triad role-play, sculpting, videotaped interviews with actors, self-assessment, and peer feedback.	Individual and Practice-based	N=39. A range of health and social care professionals who worked in acute and community settings	Tensions were identified in organizational culture in terms of support and direction for developing, maintaining, and ensuring effective communication skills. These issues related to human and financial resources such as access to training and to a lack of clarity about appropriate levels and types of communication skills development and structured feedback.	Level 1- Reaction
20.	Bajnok, Puddester, McDonal, Archibald and Kuhl 2012	Teams of Interprofessional Staff (TIPS) project: learning about and applying team development strategies. Experts on topics such as:	Jointly developed by a nurse & physician. Three sessions were termed *Kick-Off, Mid Term Check-In* and *Final Summit.* Sat in teams while learning. Each team had an	Individual, Practice and Organizational-based	Five health teams across Ontario, participating in three, 2-day face-to-face IPE sessions over an 8-month period each with between 5 and 7 participants of varying	The paired samples t-test showed a significant increase in scores for the following items: Decision making responsibilities for patients are shared among interprofessional team members. Each of the	All levels reported on

		appreciative inquiry, conflict resolution, critical conversation methodology, cultivating a teamwork culture, having difficult conversations, and how to develop a team agreement.	advisor to guide developing and implementing a team action plan, carrying out team goals. During sessions time for teambuilding and networking given.		disciplines: nurse, physician, occupational therapist, physiotherapist, dietician, audiologist and ultrasonographer.	associated items in the survey showed a mean increase from the pre-test to post-test. Increased awareness of IPP. Belief that in order to change the hospital culture from an organization working in silos to one working in interprofessional collaborative teams, senior management needed to be educated and take a lead role to move collaboration to the next level in their organization.	
21.	Braithwaite, Westbrook, Nugus, Greenfield, Travaglia, Runciman, Foxwell, Boyce, Devinney & Westbrook 2012	272 substantial IPC intervention activities over 3 years	Engagement of health staff in interprofessional action research projects	Practice-based and Organizational-based	2,407 face-to-face encounters with health system personnel. Percentages (2008–10) were: medicine (8%, 5%, 9%), nursing (40%, 52%, 45%), allied health (36%, 33%, 35%), administration (12%, 5%, 7%), and other professions (4%, 4%, 4%).	Explored changes in attitude over time. Some of the goals of interprofessionalism may be more achievable than others. A limitation of the study was staff turnover. Allied health and doctors held the more extreme attitudes; allied health expressed the most favourable and doctors the least favourable views about interprofessional collaboration.	Level 2a- Modification of attitudes/perceptions (No evidence found of improvement in attitude)
22.	Carr, Worswick, Wilcock, Campion-Smith and Hettinga 2012	Evidence about back pain management and quality improvement was offered to nine primary care practices through workshops and accompanied by practice support meetings between workshops	Project teams which included patients designed service improvement projects in relation to chronic back pain	Practice-based	44 practice staff and 11 patients attended workshops and the facilitated project meetings. Mixture of GPs, practice nurses, physiotherapists, receptionists and admin staff.	True engagement with patients and their inclusion in IPE, in ways that reinforced practice-based learning, was a catalyst for the sort of behavioural change which leads to improved patient outcomes.	Level 1- Reaction

23.	Hjalmarson & Strandmark 2012	Fracture prevention workshops involved four half-day sessions, to determine how to integrate health promotion into clinical practice	Lectures, dialogues in groups, discussion and practical event. Content was participant-driven. For example, communication, health promotion and tool construction	Practice-based	Health professionals from primary health care and orthopaedic departments (n=19). Four nurses, five occupational therapists, eight physiotherapists and two physicians. Four different departments with four different managements but were part of the same health care system.	Learning processes through patient-centred interaction and face-to-face collaboration based on the professionals' own requests and experiences can be an important motivator to promote fracture prevention activities.	Level 2a- Modification of attitudes/perceptions Level 3- Behavioural change
24.	Slater, Lawton, Armitage, Bibby, Wright 2012	A multiprofessional, team-based training program that embeds patient safety within quality improvement methods over 20 weeks	Three elements: online module individually (Introduction to Patient Safety); teams of 3–6 each with a junior doctor address a patient safety issue in own work environment; meet with executives to discuss and spread achievement	Individual, Practice and Organizational-based	Eleven multiprofessional teams (3–9 members) participated: 4 teams from the local general hospital, 4 teams from the mental health service provider, and 3 individual general practices. In total: 55 health professionals were involved in the program including 16 junior doctors, 12 senior doctors, 13 nurses, 9 managers or administrators, 3 pharmacists, 1 occupational therapist, and 1 social worker.	Eight of the 11 teams demonstrated significant improvements in patient safety practices and/or outcomes. Improved multiprofessional communication and teamwork in certain teams.	Level 1- Reaction, Level 2a- Modification of attitudes/perceptions Level 4a- Change to organizational practice
25.	Heath, English, Simms, Ward, Hollett and Dominic	Intensive 2-day workshop (Creating and Sustaining Collaborative Care for Eating Disorders)	Five sections presented by four different professions including short videos and slides. Different professions	Individual and Practice-based	41 health and education professionals 27 agreed to be followed up after 6	Positive changes in interprofessional attitudes and skills. Post-workshop, 69% (n=24/35) of participants indicated intention to change	Level 2a- Modification of attitudes/ perceptions Level 2b- Acquisition

	2013		were grouped by geographical proximity and tasked with identifying how work to together better and developing an action plan		months	practice, and on follow-up, 7 of 10 respondents reported implementing changes in practice as a result of the workshop.	of knowledge/skills Level 3- Behavioural change
26.	Jeffs, Abramovich, Hayes, Smith, Tregunno, Chan and Reeves 2013	Multiple stakeholders took part in an interprofessional patient safety competency-based intervention at a large urban teaching hospital.	(1) completion of online patient safety learning modules (which were developed for a corporate-wide initiative) (2) a 3-day team-based patient safety training programme; (3) a 6-month interprofessional action learning project supported by a mentor with expertise in quality and safety (4) presentation by each team of the project outcomes to senior organizational leaders and steering committee members	Individual Practice and Organizational-based	Three teams from different clinical areas (orthopaedics, cardiovascular surgery, general surgery) were nominated by senior managers to participate. Each team was led by a physician and included nurses, occupational therapists, physical therapists, dieticians, case managers, clinical assistants and administrators (9 in each group)	Healthcare professionals (with the exception of physicians) and support staff perceived that they acquired patient safety competencies in an interprofessional context that resulted in the perceptions of improved patient and work flow processes.	Level 4a- Change to organizational practice Level 4b- Benefits to patients/clients
27.	Meyer Edgar, Lees Amanda 2013	CPD program aimed at influencing interprofessional and collaborative learning using Activity Theory. Six sessions over 5 months	Small group work sessions – task-focused. Draw up an action plan to address a problematic issue within their collaborative practice	Practice-based	Middle managers from social work, youth information, advice and guidance, education and health. A range of professions was represented, such as social workers, speech and language therapists, health visitors, education	Exposure to views, perspectives and opinions different from one's own was seen to spark learning and opportunity to reflect on systemic contradictions to motivate changes in practice. Important to the functioning of an activity system, 'community' and 'division of labour' were influences that	Level 2a- Modification of attitudes/perceptions

					welfare practitioners, mental health professionals, a head teacher and a school inspector (n=52)	seemed to influence strongly the extent to which collaborative working translates from IPL to practice.	
28.	Reeves, Perrier, Goldman, Freeth & Zwarenstein 2013	Cochrane Review. To assess the effectiveness of IPE interventions	Most intervention teaching details were reported however not all. Included were 'interactive', team planning, didactic combined with group discussion, role-play and action plans.	Varied	15 studies (eight RCTs, five CBA and two ITS studies)	Not able to draw generalisable inferences about the impact of IPE. To improve the quality of evidence three gaps will need to be filled: first, studies that assess the effectiveness of IPE interventions compared to separate, profession-specific interventions; second, RCT, CBA or ITS studies with qualitative strands examining processes relating to the IPE and practice changes; third, cost-benefit analyses.	Outcomes reviewed were for healthcare processes: Level 3- Behavioural change Level 4a- Change to organizational practice Level 4b- Benefits to patients/clients
29.	Miller, Coombes, Brown & Harwood 2014	Integrated Care Development Programme (ICDP) was a continuing interprofessional educational programme for health and social care managers and commissioners. Learning activities centred on the development of an integrated business plan to address a local priority for improvement.	Workplace-based and university learning activities focused on development of an integrated business plan to address a local priority for improvement.	Organizational-based	Seven teams from six health and social care localities (n=31). Professions included social work, nursing, therapy and medicine as well as staff from a management or finance.	Confirm the relevance of established IPE theories within the context of those working in strategic roles. Important aspects were focusing the programme around a shared task (experiential learning), making content and tasks relevant to participants' roles and current responsibilities (workplace learning), drawing on the alternative insights of co-participants as a means to expand and challenge previous perspectives and interpretations (collaborative and social), and encouraging participants to learn from experiences and experiment with new approaches	Level 1- Reaction Level 2a- Modification of attitudes/perceptions Level 2b- Acquisition of knowledge/skills Level 4a- Change to organizational practice

						(reflective learning). Teams that did not achieve any changes in organizational or partnership working did not receive direction or interest from their organizations, and were also those that experienced the most internal team conflict	
30.	Owen, Brashers, Littlewood, Wright, Childress and Thomas 2014	A session related to Surviving Sepsis was repeated three different ways (using three different educational theories) and compared	Learning objectives were to describe IPE based upon personal experiences (social identity theory), to identify the collaborative behaviours needed for sepsis guidelines and team members responsible. Three activities over 6 months. Communities of Practice theory applied to second activity. Reflective and experiential learning to third activity.	Practice-based	Thirty-two people (9 MDs, 19 RNs and 4 PhDs) participated in the first activity. Eleven people (3 MDs, 8 RNs) participated in the second and third activities.	Session 1: RIPLS no change, Session 2: pre/post changes in the assignment of responsibilities for the roles of physician, nurse and respiratory therapist were noted, most often with less assignment of responsibility being given to physicians and more assignment of responsibility being given to nurses and respiratory therapists. Session 3: CIPE and learning within communities of practice must recognize that learning is strongly influenced by the unique aspects of each workplace. IPE may not change the attitudes of participants already favourable towards IPL.	Level 1- Reaction Level 2a- Modification of attitudes/perceptions Level 2b- Acquisition of knowledge/skills (unable to demonstrate significant changes Level 2a)
31.	Paquette-Warren, Roberts, Fournie, Tyler, Brown and Harris 2014	Partnerships for Health to capture program details that would allow for an accurate interpretation of program outcomes	Teams comprising at least one physician, one practice-based team member and one community-based health care provider to be eligible. Educational	Individual, Practice and Organization-based	Practice-based and community based health professionals and administrative staff. 106 teams from 47 primary healthcare sites across	The coming together of multiple teams for off-site learning sessions (streams A and B) was most effective as it facilitated interaction and created a sense of “togetherness” that was	Level 1- Reaction

		and help refine future programs. Example of QI activities: focused on team communication, medical directives, patient communication and education, diabetes pre-planned visits, and patient identification.	activities included pre-work sessions, learning sessions and instruction manuals about chronic and interprofessional care approaches and QI information. The focus was on diabetes. Supported by monthly teleconferences, assigned coaches, IT support and web-based tools for various purposes.		Southwestern Ontario to participate in the program. Seventy-eight teams (12 stream A teams, 14 stream B teams, 10 stream C teams, 9 stream D teams, 1 stream E team, and 32 teams that participated in supportive activities in association with a stream A team [i.e. same practice site]) were included in the evaluation.	enabling, energising and motivating through the sharing of strategies to tackle common challenges in QI. The challenges were data entry and retrieval, organizational/leadership buy-in, and a lack of time/staff/practice resources. Participants preferred more directive coaching styles, pre-work sessions versus manual, series of sessions versus single sessions, opportunities to network, and hands-on practice coaching support to help ensure progress and maintain momentum. They suggest the need for a combination of classroom and workplace learning with a higher proportion dedicated to classroom learning.	
32.	Watters, Reedy, Ross, Morgan, Handslip and Jaye 2014	A one-day simulation course at a large hospital with a clinical simulation facility	Five clinical and one communication scenarios undertaken in pairs for 15 mins while other learners observed through live feed. After each scenario a facilitated debriefing took place.	Practice-based	One hundred and fifteen nurses and midwives along with 156 doctors, all within the early years of their postgraduate experience.	Clinical trainee self-efficacy in some domains improved compared with a uniprofessional simulation course.	Level 2a – Modification of attitudes/perceptions
33.	Choi & Seng 2015	One-hour in-service program. The program content included information about maltreatment trauma and its effects on health, the	Interactive slide presentation, direct instruction and application-based discussion questions at key points – on changing the habits of	Individual-based and Practice-based.	It was designed for perinatal health care professionals (i.e., nurses, midwives, obstetricians, perinatal social workers, birth assistants) and agency	Suggestion that laying the groundwork for this training by clearly advertising it as a joint staff–clinician event could result in a more satisfactory outcome. The question is raised about	The interprofessional nature was not explored. However, found there was a need to introduce the benefits of collaborating across

		specific effects of trauma on childbearing women, and trauma, informed care. Used a framework for understanding how post-traumatic stress may manifest during perinatal care.	the mind to use a trauma-informed care framework, the language to use with patients and colleagues and examples of trauma-informed interventions.		personnel (i.e., administrative workers, support staff). 53 attendees: 31 social workers, 5 nurses or nurse midwives, 10 admin personnel, 5 birth assistants (doulas), 2 other. Two organizations: one urban (parenting and welfare), one rural (county's community mental health organization).	whether it is better to conduct mixed-group training early on or to train the groups separately so that less knowledgeable individuals have a chance to become more secure and competent in their knowledge? In-service for all members of staff (admin and clinical) need to be designed with group dynamics that favour different knowledge levels and include a focus on all roles.	roles in future training.
34.	Heath, Church, Curran, Hollet, Cornish, Callanan, Bethune, Younghusband 2015	Interprofessional, intersectoral education program designed to enhance collaborative mental health capacity in six rural sites over 20 weeks	Skill development in mental health interventions using didactic and experiential teaching tools	Individual & Practice-based	Participants came from a wide variety of sectors, including health care, community agencies, justice and schools. A total of 125 professionals attended at least one session.	Practice changes, including more interprofessional and intersectoral collaboration. This study suggests that embedding explicit training in collaborative care in content focused continuing professional education for more complex and chronic health issues may increase the likelihood that professionals will work together to effectively meet client needs.	Level 2a- Modification of attitudes/perceptions Level 2b- Acquisition of knowledge/skills Level 3- Behavioural change
35.	Leppakoski, Flinck & Paavilainen 2015	Domestic Violence (DV) training sessions. Orientation plus facilitated discussion about DV from an ethical and legal perspective and service networks.	Aim was to promote interactivity. Facilitators guided the discussion so that dialogue was reciprocal and equal, with opportunities to search for different solutions,	Individual and Practice-based	Nurses, physicians and social workers from emergency clinics both in primary health care and in specialised health care, an orthopaedic ward and an acute psychiatry	Not all that enrolled attended. Poor commitment to training from both the trustees and the participants.	Level 1- Reaction

		Experts represented supporting parties such as police, social and crisis workers, child protection and shelters	question one's practice and reflect together.		emergency unit.		

Appendix 2. Letter of Introduction

Professor David Prideaux

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Appendix C
LETTER OF INTRODUCTION

Dear Staff Member/Health Professional,

This letter is to introduce Lyn Gum who is a staff member and undertaking Higher Degree Research through the School of Medicine at Flinders University.

This research may lead to the production of a thesis or other publications on the subject of exploring the influence of interprofessional learning on the collaborative culture in 2 rural hospitals.

She would be grateful if you would volunteer to assist in this project, by consenting to being observed in your daily practice at the hospital (excluding at the patient's bedside) and being interviewed on 2 or three occasions for approximately 30 minutes, spaced over a 12-14 month period. There is intention to make an audio recording of the interviews and therefore II will seek your consent, on the attached form, to record the interview, to use the recording or a transcription in preparing the thesis, report or other publications, on condition that your name or identity is not revealed., and to make the recording available to other researchers on the same conditions.

The observation of your work activities as part of the study will involve observing and writing a description of your professional activities, interactions and role. I require your permission on a second consent form to undertake 'observation of professional activity'. The use of these data, and other information which I have agreed may be obtained or requested, in the writing up of the study are subject to the following conditions:

Any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis, report or other publications. You are, of course, free to discontinue participation at any time or to decline to answer particular questions.

Participants who are interviewed will have an opportunity to check their transcripts (by posting these to the hospital to each individual in confidential mail) and report any required changes. The participants will be offered the opportunity to read interpretations prior to the final report. The final report will be made available to the hospitals before submission of the thesis.

Any enquiries you may have concerning this project should be directed to me, Professor David Prideaux, Deputy Dean and Professor of Medical Education on 8204 5675 or Email David.Prideaux@flinders.edu.au.

Or alternatively you can telephone Lyn Gum on 8586 1007, 0439593739 or by fax on 85863668 or by email (lyn.gum@flinders.edu.au).

Thank you for your attention and assistance.

Yours sincerely

inspiring

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 4754). For more information regarding ethical approval of the project the Secretary of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au.

Appendix 3. Information Sheet – Phase One

The influence of interprofessional learning on collaborative culture in 3 rural health services

LYN GUM (Flinders University Rural Clinical School - Renmark, SA)

Supervisors: Professor David Prideaux. Assoc. Professor Jennene Greenhill, Dr. Linda Sweet.

This project intends to explore the collaborative culture in three South Australian geographically diverse rural health services during the implementation of an Interprofessional Education (IPE) program. This project will be a case-based study with a qualitative approach. A 'rural' focus has been chosen due to the current emphasis on rural health professionals being able to collaborate and provide a team approach to health care with limited services, limited professional development opportunities and workforce shortages.

Interprofessional collaboration in health care is widely promoted as a way of providing quality and better care. Interprofessional education (IPE) is defined as 'occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of [service]' (Barr et al, 2005, p xxxiii). ***Interprofessional learning*** is the learning which arises from the interaction between the learners who are involved in an 'interprofessional experience' (Barr et al. 2005).

Your hospital has been chosen as a part of my study to explore the influence of the introduction of some interprofessional education activities which are intended to involve as many different professionals and staff members as possible.

All staff at the hospital will be invited to attend staff meetings where I will outline what the research involves and ask your permission and consent to be included in the study.

You will be provided with a letter of introduction which will explain the purpose of the research. Firstly, I would like to observe your practice and everyday work and interactions in areas defined and negotiated through consultations with the director of nursing and relevant senior staff and general practitioners. I will not be including patient interactions at the bedside. The notes taken will be purely descriptive about the interprofessional and social interactions in your day to day work to gain an understanding of collaboration and interprofessional practice in your hospital. I will adopt a 'marginal participant' role which means that following observation of interactions (verbal and non-verbal) and I may need to clarify issues or ask questions with you.

I also understand the need to follow hospital protocol when unexpected events arise. I am aware the requirement to follow hospital protocol and the possibility that I may be requested to leave a room or area.

I will be asking some staff members if they would consent to being interviewed individually. The aim of the interviews is to explore further the collaborative culture in the hospital over **time**. It is important that I follow participants through until at least 6 months following the education sessions (interprofessional learning activities). I will also be asking participants who attend the education sessions to fill out an evaluation form following the session.

Please find attached a 'research plan' so that you can see what how this all fits together over a period of 12-15 months.

Barr, H., Koppel, I., et al. (2005). Effective Interprofessional Education: Argument, Assumption and Evidence. Victoria, Australia, Blackwell Publishing Ltd.

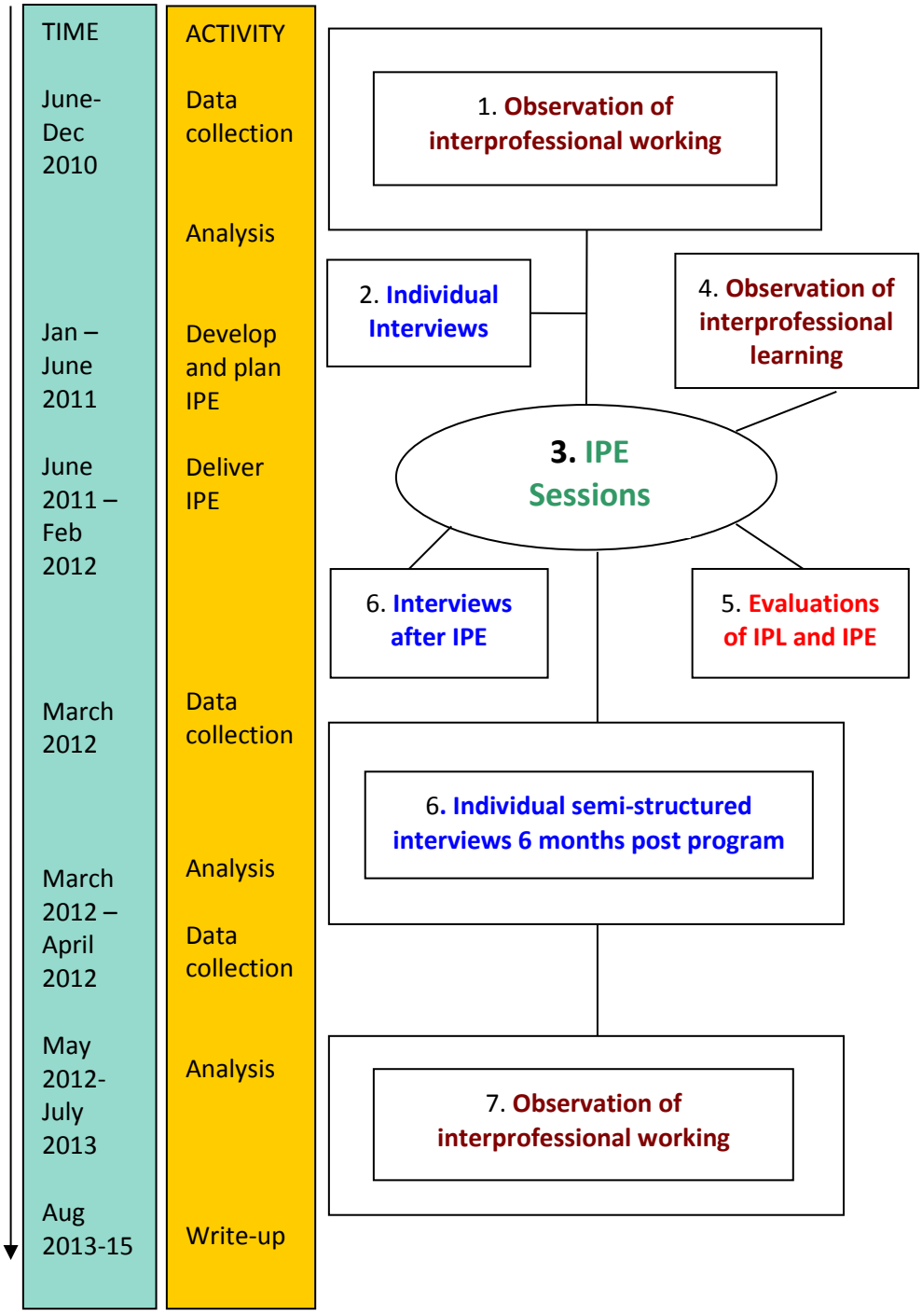
Thanks

LYN GUM

Research Higher Degree Student
School of Medicine
Flinders University

You can telephone Lyn Gum on 8586 1007, 0439593739 or by fax on 85863668 or by email (lyn.gum@flinders.edu.au).

RESEARCH PLAN



Appendix 4. Consent Form

CONSENT FORM FOR OBSERVATION OF PROFESSIONAL ACTIVITY

I hereby give my consent to ……..... a researcher/research student in the Faculty of Health Sciences at Flinders University whose signature appears below, to record my work activities of my professional activities and role, as part of a study.

I give permission for the use of these data, and other information which I have agreed may be obtained or requested, in the writing up of the study, subject to the following conditions: My participation in this study is voluntary, and I understand that I may withdraw from the study at any time.

SIGNATURES

Participant……Date……...

Researcher……Date……..

Appendix 5. Observational Field Work

Variable	Descriptors: Raw behaviour (not interpretation)
1. Time/Duration	Note time and length of observation
2. Setting	Physical environment Context Noise
3. Roles	What brings them together Introductions, Titles/names used Clarity, overlapping, Misunderstandings, support, Understanding of others' roles
4. Activities and Interactions	What is going on? Sequence of activities How do people relate to the activity and relate and interact with each other? Reactions, influence of change Informal/unplanned activities What does not happen but should?
5. Communication	Direction of flow of information Equal participation, information sharing, dealing with poor communication, use of language (shared or common?), silence Symbolic meanings of words Non-verbal communication Appearances, tensions Body language
6. Collaboration and Teamwork	Respect - values respected (WHO, 2010; Hall 2005) Teamwork (Barr et al. 2005; Hall 2005) Leadership (Mickan 2010; Greenfield et al. 2010; Hall 2005) All views considered (Greenfield 2010; CIHC 2010) Management of conflict/tension (WHO 2010) Group dynamics (Hall 2005)

Adapted from Merriam (1998)

Appendix 6. Individual Interview Questions

Pre-interprofessional education

1. Ask each participant to describe role and where fits into the organization.

2. What do you think working 'collaboratively' means?

3. Can you tell me a bit about what is like to work here?

(Prompts: how do you feel about working here?)
(working environment? teamwork, patient-centred, dynamic, formal vs informal, social climate, goals)

3. How well do you think the staff in your organization (hospital, health centre, medical centre) collaborate with each other and visiting health professionals in everyday practice?

(ask to give examples and how they feel about this)
(Prompts: how it affects teamwork, communication skills, relationships, patient care, decision making, leadership)

4. Do you understand the terms 'interprofessional learning' or 'shared learning'?

(opportunity to explain if needed)

Tell me about any experiences you have had with interprofessional learning/shared learning?

(ascertain thoughts, feelings, attitudes about this)

5. What factors do you feel may have to be carefully considered by facilitators before attempting to develop some interprofessional learning for the staff members at this hospital?

(Prompts: how to prepare for this type of learning, type of topics)

During and post-interprofessional education program

1. Tell me about any interprofessional education sessions you have attended so far this year.

(Which ones, how many, how do they feel about them)

2. Can you tell me about any effects of the interprofessional education sessions on your co-workers, patients or how you do your work? *(immediate or over time)*

(Prompts: communication, patient care, shared language)

3. Do you have any examples of how your or any other team operates differently as a result of any of the interprofessional education sessions?

4. What do you feel have been the enablers for you to apply your learning to your work/practice

(e.g. organizational support, supervisor support)?

5. What do you feel has hindered you from applying your learning to your work/practice

(e.g. organizational support, supervisor support)?

6. Do you think the interprofessional education sessions have had, or could have, any impact on the overall working environment in the hospital? (Why or why not?)

Post-interprofessional education

<u>For managers only</u>

1. Have you been able to determine any overall impacts of these changes on your organization? Are these desired? Please explain.

(if any unanticipated please explain)

2. If desired, do you think the positive impacts are sustainable? What actions do you think might be necessary to ensure that they are sustained?

3. Are there any comments you would like to make about the impact or lack of impact of the interprofessional learning sessions on your health service?

Appendix 7. Consent Form

CONSENT FORM FOR PARTICIPATION IN RESEARCH

(by interview)

I ….....

being over the age of 18 years hereby consent to participate as requested in the …… for the research project on ……

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 my information and participation.
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 and am free to decline to answer particular questions.
   - While the information gained in this study will be published as explained, and individual information will remain confidential.
   - While every effort will be made to protect my anonymity, this may not always be possible due to the small number of participants
   - If I decide not to participate in the research it will not result in any discrimination or any other penalty.
   - I may ask that the recording/observation be stopped at any time, and that I may withdraw at any time from the session or the research without disadvantage.
6. I have had the opportunity to discuss taking part in this research with a family member or friend.

Participant's signature…… Date……..

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

Researcher's name…….....

Researcher's signature…….. Date…….

NB: Two signed copies should be obtained. The copy retained by the researcher may then be used for authorisation of Items 8 and 9, as appropriate.

8. I, the participant whose signature appears below, have read a transcript of my participation and agree to its use by the researcher as explained.

Participant's signature…… Date……..

9. I, the participant whose signature appears below, have read the researcher's report and agree to the publication of my information as reported.

Participant's signature……

Appendix 8. Information Sheet – Phase Two

Information Sheet – Research Project – PHASE 2

The influence of interprofessional learning on collaborative culture in 3 rural health services

LYN GUM (Flinders University Rural Clinical School- Renmark, SA)

Supervisors: Professor David Prideaux. Assoc. Professor Jennene Greenhill, Dr. Linda Sweet.

This project intends to explore the collaborative culture in three South Australian geographically diverse rural health services during the implementation of a an Interprofessional Education (IPE) program. This project will be a case-based study with a qualitative approach. A 'rural' focus has been chosen due to the current emphasis on rural health professionals being able to collaborate and provide a team approach to health care with limited services, limited professional development opportunities and workforce shortages.

Interprofessional collaboration in health care is widely promoted as a way of providing quality and better care. Interprofessional education (IPE) is defined as 'occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of [service]'[1]. ***Interprofessional learning*** is the learning which arises from the interaction between the learners who are involved in an 'interprofessional experience'[1].

Your hospital has been chosen as a part of my study to explore the influence of the introduction of some interprofessional learning activities which are intended to involve as many different professionals and staff members as possible.

You will be provided with a letter of introduction which will explain the purpose of the research. I have already collected baseline data when I visited in 2010 to observe your practice and everyday work and interactions in areas defined and negotiated through consultations with the director of nursing and relevant senior staff and general practitioners.

This time I am observing the IPE sessions. The notes taken will be purely descriptive about the interprofessional and social interactions during the session to build further on my baseline data and to gain an insight into interprofessional learning. I will adopt

a ‘marginal participant’ role which means that although I am not the educator who facilitates the session, I have assisted with its implementation and may need to assist at some point during the session. I also may need to clarify issues or ask questions with you.

Last year I did undertake some individual interviews. You may be approached as a follow up from these IPE sessions for a further interview. The aim of the interviews is to explore further the evaluation of the IPE sessions. As previously mentioned last year I intend to follow participants through until at least 6 months following the education sessions (interprofessional learning activities).

Today you will be asked to fill out an evaluation form following the session which will assist my research.

1. Barr, H., Koppel, I., et al. (2005). Effective Interprofessional Education: Argument, Assumption and Evidence. Victoria, Australia, Blackwell Publishing Ltd.

Thanks

LYN GUM

Research Higher Degree Student
School of Medicine
Flinders University

You can telephone Lyn Gum on 8586 1007, 0439593739 or by fax on 85863668 or by email lyn.gum@flinders.edu.au

Appendix 9. Interview Questions — Phase two (Round One)

<u>Round One</u> (1 week following workshop)

1. Please tell me about your reflections and feelings that have resulted from your being a participant in the fall prevention and management workshop last week? *(reactions, how they felt etc.)*

2. What did you think about the types of teaching methods used? *(interactive learning and simulation)*

3. Could you give me 3 positive outcomes for you personally as a result of the day? *(learnings, relationships)*

4. Could you explain anything that you found difficult on the day? *(challenges to learning environment, culture)*

5. Do you think what you learnt from the workshop will affect any of your co-workers, your patients and how you do your work, now or in the future?

   (Prompts: communication, patient care, shared language)

6. What do you think might be the barriers in being able to apply what you learnt to your practice?

   (e.g. organizational support, supervisor support)?

7. Would you like to make any suggestions as a result of your attendance at the workshop about future sessions or how to improve teamwork in your organization?

Appendix 10. Interview Questions — Phase Two (Round Two)

<u>Round 2</u> (8-12 weeks post workshop)

1. Please tell me what you remember most about being a participant in the 'Falls Prevention and Management' workshop held in February this year?
   (reactions, how they felt etc.)

2. Can you remember what you thought you might do, or even think, differently about teamwork or working with any of your colleagues, or in your own practice as a result of the workshop?

   If no, are you saying that the experience had no impact on you or your work?

   If yes, can you give any examples of anything you have done?

   (Prompts: communication, patient care, shared language)

3. Have there been any barriers or enablers in being able to apply any of these reflections/actions to your practice?

   (e.g. organizational support, supervisor support)?

4. Are there any comments you would like to make about the impact or lack of impact of the interprofessional learning sessions at your health service?

Appendix 11a. Phase One – Analysis and Coding

Tree Nodes (Phase One)	2nd level coding Nodes	Nodes explored further (3rd level)
Collaboration and Teamwork	Approach to provision of care Barriers Definition of collaborative practice Concepts of collaborative practice Examples of collaboration or teamwork Mix of staff Professional identity Relationships Shared language Sharing information What helps with collaboration	Approach to provision of care Concepts of collaborative practice Relationships What helps with collaboration
Communication	Interactions Tensions Phone calls Systems	Informal conversations Barriers to effective communication
Interprofessional Learning	And simulation Attending a session Between sites Examples of IPL Formal vs informal Had not heard of it before Understanding IPL What is needed	Understanding IPL
Roles	Approach to role Collaborative roles Current views of role Dichotomy of roles Finding out about each other Health service roles Not understanding roles	Not all understood roles of others Private vs public
Setting	Changes to Dichotomy of health services History	Dichotomy of health services Physical environment

	Models of care Physical environment Rural vs metro Systems Town rivalry Working environment Working in both or one site	Rural vs metro Working environment

Appendix 11b. Phase Three – Analysis and Coding

Tree Nodes (Phase Three)	2nd level coding Nodes	Nodes explored further (3rd level)
Collaborative Practice	Awareness of collaborative practice Barriers Concepts of collaboration Health professional roles Patient-centred care Re professional development Rural context Suggestions for improved collaborative practice Teamwork	Awareness of collaborative practice Barriers Concepts of collaboration Health professional roles Patient-centred care
Communication	Conflict Decision-making Emotive Examples How to improve System	Examples
Interprofessional Learning	TeamSTEPPS Appreciative Inquiry Mental health Paramedic session Suggestions re more health professionals in future IPL	TeamSTEPPS Appreciative Inquiry Mental health Paramedic session Suggestions re more health professionals in future IPL
Changes following Phases 1 and 2	Handover Communication Meetings Government Staffing changes IPE	Communication Staffing issues
Setting	Design Privacy Quality and safety	Impact of physical spaces

Tree Nodes (Phase Three)	2nd level coding Nodes	Nodes explored further (3rd level)
Relationships	Between the same discipline Comparison of Feelings towards other professions Hierarchy-territorialism Patient–practitioner relationship Trying to improve Use of humour	Feelings toward other professions Hierarchy-territorialism

Appendix 12a. Phase One – Level 3 Coding

Nodes from 3rd level coding (Phase One) Collaboration and Teamwork	Explored further under the following categories	
Approach to the provision of care	Doctors Hidden aspects How reliant on others Knowing others Nurses	Organizational Ownership Patient-centred care Seen as working together
Concepts of collaboration (this category deductive)	Interdependency Partnership Power Sharing	
Relationships	Between community and GPs Between GPs and allied health Between hospital and community Between hospital and GP Between hospital and government Between hospital and community health	Between paramedics and hospital In General Practice In hospitals Reciprocal With nurses or midwives With doctors With patients
What helps with collaboration	Communication skills Dependent relationships Feeling a connection Good relationships In an emergency Intra-collaboration Knowing the patient Location or environment	Medical input Model of care Sharing information Staff numbers or mix Understanding roles Values and attitudes

Appendix 12b. Phase Three – Level 3 Coding

Nodes from 3rd level coding (Phase Three) Collaborative Practice	Explored further under the following categories
Awareness of collaborative practice	Junior staff Senior staff
Concepts of collaboration (this category deductive)	Examples Interdependency Partnership Power sharing
Barriers	Different system/approach Hierarchy Time
Health professional roles	Allied Health Discharge planner Doctors Nurses Paramedics
Patient-centred care	Impact on patient Questionable

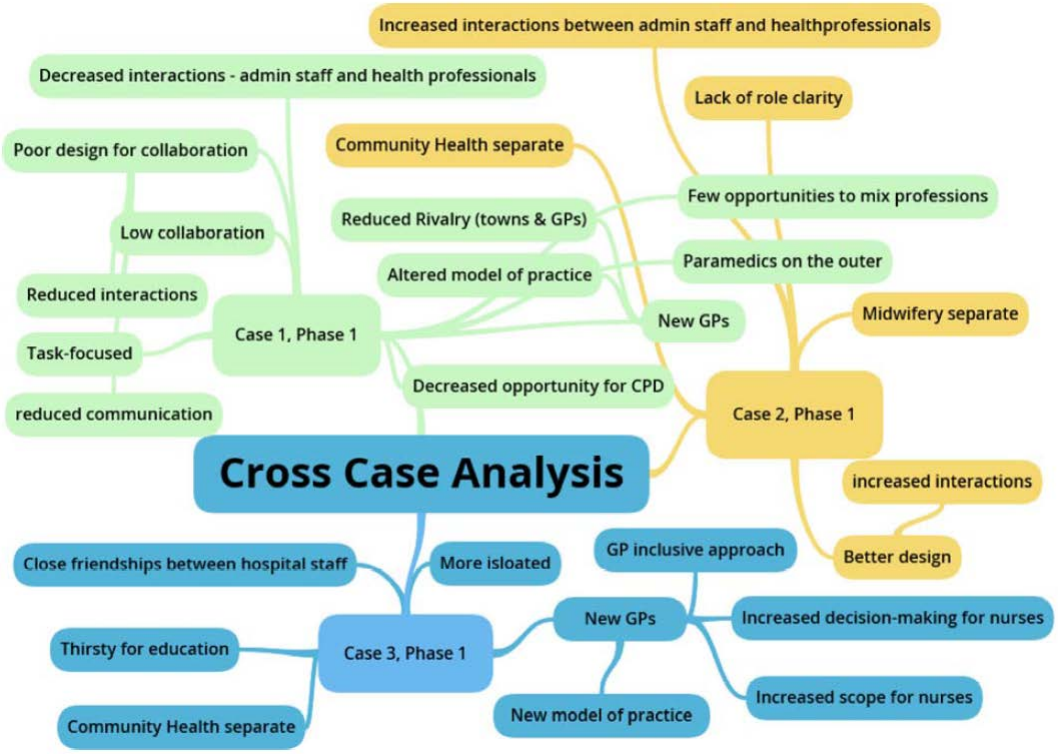
Appendix 13. Hours of Observation – Phase One

Date	Interviews	Hours of observation
Hospital 1		
21 June	2 x nurses 1 x administration 5 x paramedics (focus group)	6
22 June	1 x GP 3 x nurses	5
23 June	1 x GP 1 x nurse manager 1 x ultrasonographer	5
TOTAL	**10 interviews + 1 focus group**	**16 hours**
Hospital 2		
5 July	1 x nurse 1 x physiotherapist 1 x GP	8
6 July	2 x GP 1 x nurse 1 x administration 1 x community health nurse 1 x case manager	5.5
7 July	1 x clinical nurse manager 1 x community health physiotherapist	3
TOTALS	**11 interviews**	**16.5 hours**
Hospital 3		
13 December	1 x administrator 1 x day care centre manager 2 x nurses 1 x clinical nurse manager	7.5
14 December	1 x community health manager 1 x GP 2 x nurses 1 x director of nursing 1 x personal care attendant/cleaner	4.5
TOTALS	**11 interviews**	**12 hours**
Phase One Total	**32 + 1 focus group**	**44.5 hours observation**

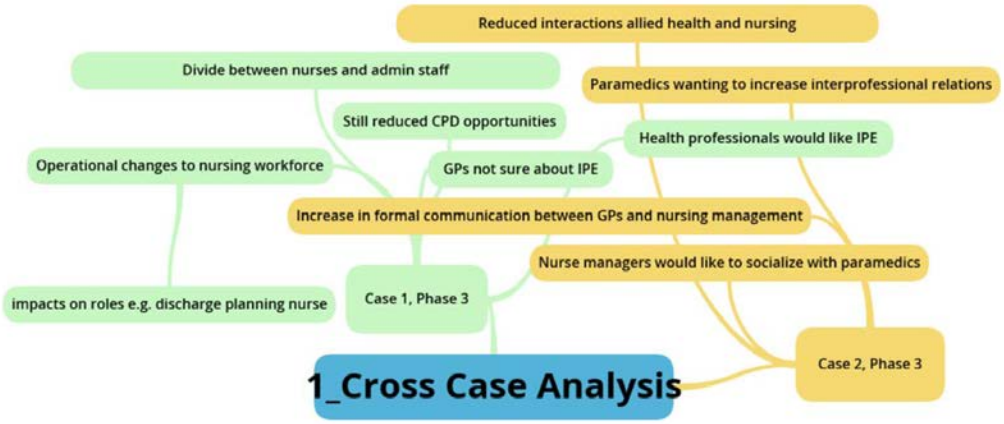
Appendix 14. Hours of Observation – Phase Three

Date	Interviews undertaken	No. of hours of observation
Hospital 1		
26 March	2 x nurses	3
27 March	1 x GP 1 x discharge planning nurse 1 x inpatient physiotherapist and 1 x community health physiotherapist (together)	7
28 March	2 x theatre nurses (together)	5
TOTALS	**4 x individual** **2 x pairs**	**15 hours**
Hospital 2		
2 April	–	3.15
3 April	1 x social worker 2 x clinical nurse managers (together)	7.5
4 April	1 x paramedic 2 x GPs 1 x director of nursing	4.45
TOTALS	**5 x individuals** **1 x pairs**	**15.5 hours**
Hospital 3	0	0
Phase Three Total	**9 individual interviews** **3 paired interviews**	**30.5 hours observation**

Appendix 15. Cross-Case Analysis – Phase One



Appendix 16. Cross-Case Analysis – Phase Three



Appendix 17. Cross-Case Analysis: Coding – Level 2 (All Phases)

Category	CASE ONE	CASE TWO	CASE THREE	Interpretations
TEAMWORK	Reduced interactions and communication between health professionals Divide between admin and nurses	Increased interactions between admin and health professionals – seen as part of the nursing team Nurse managers wanting to increase communication with GPs Lack of respect between GPs and nurses	GP – inclusive approach More mutual respect between GPs and nurses	Practising independently means that it is more difficult to negotiate roles, systemic changes, build IP relationships or consider IPE. Increased interdependence was evidenced by increased mutual respect in Case 3
Notes	Reduced interactions and divide between allied health, community health and nursing. Many allied health were part time. Paramedics felt undervalued			
ROLES/ RESPONSIBILTY	Task-focused Nurses have unique role in rural health settings – different expectations of role (first responder) and not always acknowledged	Lack of role clarity Discharge planning not supported Decreased referrals between GP and social worker	Increased scope and decision-making of nurses	Sharing of responsibilities would require single system or better connection between organizations, shared budget. Discharge planning role provided connections in rural practice but where to locate?

COMMUNICATION	Reduced communication in nurses stations Case 1 and Case 3 (physical)	Ad hoc Midwifery quite separate Paramedics and nursing want to increase interprofessional relations	More isolated health service	Working in rural is unique, more complex to communicate with other health professionals Communication is affected by co-location and lack of face-to-face interactions
LEARNING/ CRITICAL REFLECTION	Decreased opportunity for CPD (and dissatisfaction) GPs not sure about IPE		GP interested in IPE Thirsty for education	Overall lack of understanding of IPL IPE not valued
RELATIONSHIP WITH PATIENT	Impact of role of discharge planning nurse Not a shared approach to patient care (orientation, joint education)	Paramedics have control over information passed on to hospital staff Reduced input by GP at discharge planning meetings		Issues of professional autonomy in relation to patient care and decision-making
Notes	Knowing the patient and close relationships outside of work.			The smaller the workplace the more challenging relationships become
ETHICAL PRACTICE	History of rivalry (GPs) Nurses frustrated at impact of changes	Operational changes	Divide between hotel services and nurses	Policy change is not supportive of collaborative practice and can reinforce traditional subservient nursing roles

Appendix 18. Cross-Case Analysis: Coding – Level 3 (All phases)

Collaborative Practice	Consolidated findings	Points of difference	Main conclusions
Power issues	Threats to power Midwives perceived to interrupt care of women by GP Yelling at nurses over phone Use of language Control of information by GPs and paramedics Evidence of doctor–nurse game Differing views about organizational change from GP, may threat their autonomy One nurse challenged the hierarchy by using constraining emotion to be more in control of the information given to the doctor	Positional power of GP in Case 3 resulted from history and value placed on role Use of language Nurses wanting to be harmonisers or silent	Historical and community influences affected relationships Degree of autonomy/power was reflected through language and behaviour
Conceptualising collaborative practice and teamwork	Working in separate buildings with different management systems Multiple teams Teams were dynamic and fluid	Paramedics and nurses wanted to get to know each other better – i.e. connecting communities of practice	Difficult to share information or responsibility when separate teams Can be viewed though communities of practice
Impact of physical spaces	Corridor conversations – spontaneous Extra space, private space conducive to collaborative practice Social conversations	May have impacted admin/nursing relationship	Corridors were important for information-sharing – a flexible and dynamic space

Sharing educational experiences	Concerns about how to get health professionals together No evidence of current IPE Lack of understanding of IPL	GP in Case 2 – GPs may not want to be inclusive of all health practices. Denotes that may need to be specific about who is invited with clear learning aims/purpose	IPE was competing with organizational change and must be fostered by the organization Work-based IPE requires policy-level financial support Needs analysis and leadership
Rural influences	Rural practice – closer relationships with patients. Nurses tolerant and resilient. Live my work Power differences found	Different GP model – more immersed in practice	Organizational changes can impact collaborative practice

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