FLIGHT NURSING IN AUSTRALIA:

A HIDDEN PROFESSION

A critical qualitative inquiry into the work of Flight Nurses in Australia

By

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Abstract

Everyone recognises the iconic Australian organisation, the Royal Flying Doctor Service. However, the general public and most healthcare providers are completely unaware that 85% of the time the person caring for you in the back of the aircraft is a Flight Nurse, not a doctor. In 2014/15, 52,000 patients across Australia were cared for by a Flight Nurse working alone in the aircraft. The work of these registered nurse midwives remains a concealed, underexplored area of the nursing and midwifery professions.

In this study, I investigated the work of contemporary Australian Flight Nurses because Flight Nurses hold the key to the esteemed international reputation of excellence enjoyed by Australian aeromedical healthcare providers.

The literature review revealed several particularly noteworthy facts. But of the greatest importance was that globally, in both historical and contemporary times, Flight Nursing and air ambulance work have been pioneered and championed by women. While Flight Nursing has its origins in war, the Australian context of this nursing specialisation arose in response to the difficulties of providing medical care to people living in remote areas. The first Australian Flight Nurses commenced work intermittently from 1938, with employment of the first official Flight Nurse recorded in 1945. Interestingly, one Australian aeromedical organisation commenced in 1969 with Flight Nurses working as the sole clinician in the aircraft. This remains the case today.

I selected critical qualitative inquiry (CQI) as the methodology for this study because it is a method of inquiry that utilises multiple research genres and ways of analysis to develop a critical investigation that is constantly evolving as new theoretical insights, problems and social circumstances are revealed. The plethora of perspectives that CQI draws upon, allows for the investigation of the phenomena of interest, to be conducted from diverse frames of reference. CQI allows investigation of the ways organisations exercise their power and control via texts and language to coordinate and regulate people's lives, as it is primarily concerned with issues of power and justice, economy, race, class, gender and other social institutions. Critical qualitative inquiry allowed me to investigate what the study informants wanted explored, situationally plotted and illuminated from their standpoint. It enabled me to dispel the invisibility and myths that surround Flight Nurses and their work – glamour, romance, excitement and heroism – and replace these with facts regarding the real work of the contemporary, professional Flight Nurse in Australia today.

I found that gender and class have impacted Flight Nurses' work from the very beginning of

the speciality. In 2017, women continue to struggle for recognition of their work and equality of working conditions against the ingrained societal values of patriarchy, the Australian Government's contemporary neoliberalist policies and new public management strategies, and the influence of regulatory capitalism. My analysis revealed Flight Nurses to be highly autonomous, competent, registered nurse midwives whose work has been impacted deeply by the political climate of the last 30 years in Australia, which continues with the additional political challenges occurring across healthcare today. Flight Nurses' scope of practice is extensive and variable, inclusive of all ages across the population and multiple specialities, encompassing pre-hospital, trauma, emergency and intensive care; mental health; midwifery; and primary healthcare, to name a few.

Flight Nurses' work is affected by intensive and extensive work intensification, resulting from the Australian Government's macro and micro economic policies. Organisational expectations that Flight Nurses will work longer hours at a more intense pace, with fewer rest breaks and variable remuneration, provide a competitive edge to the organisation. Furthermore, work intensification affects Flight Nurses' work life balance, fatigue management, and ability to meet the organisations' and independent regulatory authorities' mandatory competencies.

The features of work intensification are compounded by the increasingly tight regulation of Flight Nurses' work. One example of this is the auditing of Flight Nurses' work occurring at numerous levels, both by the organisation and by the independent regulatory authorities.

In conclusion, Flight Nurses must be recognised as those who provide the majority of patient care in the back of an aircraft. Flight Nursing is not, as the image portrays, glamorous, romantic and heroic. Flight Nurses are highly competent, professional, experienced registered nurse midwives who provide the highest level of evidence based care in the air. Flight Nursing is challenging; however it is very rewarding for those involved.

Statement of Originality

Flight Nursing in Australia: A hidden profession

A critical qualitative inquiry into the work of Flight Nurses in Australia

Genevieve Mary Brideson

I certify that this thesis does not incorporate without acknowledgement 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 written in the text.

Genevieve Mary Brideson

28th March 2017

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There are several other colleagues and friends who have made the journey interesting and assisted with my completion. I have really appreciated having friends with whom I could discuss ideas and issues. I especially wish to acknowledge the support and friendship of academic, nursing and midwifery friends and work colleagues.

Thanks must also be given to my informants, Flight Nurses from across Australia. It is a pity they must remain anonymous for their contribution cannot be measured by simply thanking them for their time. Their willingness to share their stories, insights and frustrations was a gift no democratic research project can hope to repay. Moreover, their continuing endless enthusiasm for the project throughout its production was inspirational and motivated me to reach for greater summits in the completion of this work.

List of Abbreviations

ACCCN	Australian College of Critical Care Nurses
ACHS	Australian Council on Healthcare Standards
ACSQHC	Australian Commission on Safety and Quality in Health Care
AHPRA	Australian Health Practitioner Registration Authority
AIHW	Australian Institute of Health and Welfare
AIM	Australian Inland Mission
ALS	Advanced Life Support
AMS	Aerial Medical Service
ANAS	American Nurses Aviation Service
ANCOA	Aerial Nurse Corps of America
ANP	Aeromedical Nurse Practitioner
APNA	Australian Practice Nurse Association
ARC	American Red Cross
ASA	Australasian Society of Aeromedicine
ASIC	Aviation Security Identity Card
ASQFHC	Australian Safety and Quality Framework for Health Care
ATS	Australasian Triage Score
ATSB	Australian Transport Safety Bureau
BLS	Basic Life Support
CASA	Civil Aviation Safety Authority
CCATT	Critical Care Air Transport Team
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CPD	Continuing Professional Development
CQI	Critical Qualitative Inquiry
CRANA	College of Remote Area Nurses Australasia
CSAT	Clinical Skills Assessment Test

CSCF	Clinical Services Capability Framework
EBA	Enterprise Bargaining Agreement
ECG	Electro Cardio Gram
FN	Flight Nurse
FNA	Flight Nurses Australia
FNs	Flight Nurses
FWCA	Fair Work Commission Australia
FWA	Fair Work Australia
GP	General Practitioner
GRADE	Grading of Recommendations, Assessment, Development & Evaluation
HUET	Helicopter Underwater Escape Training
ICD	International Classification of Diseases
ICN	International Council of Nurses
ICU	Intensive Care Unit
ISO	International Standards Organisation
JBI	Johanna Briggs Institute
KPI	Key Performance Indicator
MAETU	Medical Air Evacuation Transport Unit
MAStARI	Meta Analysis of Statistics Assessment and Review Instrument
MDT	Multi-disciplinary Team
NETS (NSW)	Neonatal Emergency Transport Service
NETS (VIC)	Newborn Emergency Transport Service
NHMRC	National Health & Medical Research Council
NHPC	National Health Performance Committee
NHISSC	National Health Information Standards & Statistics Committee
NMBA	Nursing & Midwifery Board of Australia
NPM	New Public Management
NSW	New South Wales
NSWAA	New South Wales Air Ambulance

NT	Northern Territory
PALS	Paediatric Advanced Life Support
PHTLS	Pre Hospital Trauma Life Support
PRISM	Preferred Reporting Items for Systematic Reviews and Meta Analyses
QARI	Qualitative Assessment Review Instrument
QLD	Queensland
RAAF	Royal Australian Air Force
RAAFNS	Royal Australian Air Force Nursing Service
RIPRN	Rural and Isolated Practice Registered Nurse
RFDS	Royal Flying Doctor Service
RSI	Rapid Sequence Induction
STAR	Specialised Training in Aeromedical Retrieval
TNCC	Trauma Nursing Core Course
TOIL	Time Off In Lieu
USA	United States of America
US	United States
WA	Western Australia
WANTS	Western Australian Neonatal Transport Service
WGEA	Workplace Gender Equality Agency
WO	Western Operations
WW2	World War 2

Candidate's List of Publications Generated during this PhD

2015

- Rushton, M, Clark, R, **Brideson, G** & Damarrell, R 2015, 'The effectiveness of non-pharmacological interventions on the management of cardiotoxicity: a systematic review protocol Joanna Briggs Library 2015. Published Online. [http://dx.doi.org/10.11124/jbisrir-2015-2011]. http://joannabriggslibrary.org/index.php/jbisrir/article/view/2011

- Rushton, M, Clark, R, **Brideson, G** & Damarrell, R 2015, 'The effectiveness of non-pharmacological interventions on the management of cardiotoxicity: a systematic review. University of York Centre for Reviews and Dissemination 2015. Published on-line. http://www.crd.york.ac.uk/PROSPERO/

- **Brideson, G**, Willis, E, Mayner, L and Chamberlain, DJ 2015 'Images of Flight Nursing in Australia: A study using Institutional Ethnography' *Nursing & Health Sciences,* [10.1111/nhs.12225/epdf] <http://onlinelibrary.wiley.com.ezproxy.flinders.edu.au/doi/10.1111/nhs.12225/epdf>

- **Brideson, G**, Gebbie, K, Mayner, L 2015 Disaster Nursing Catalogue *International Catalogue of Nursing Practice.* ICN Geneva, Switzerland.

- Chamberlain, D., Willis, E., Clark, R. and **Brideson, G** 2015 'Identification of the severe sepsis patient at triage: a prospective analysis of the Australasian Triage Scale' ***Emergency Medicine Journal,*** [10.1136/emermed-2014-203937]

2013

- **Brideson, G**, Willis, E and Clark, R 2013 'The clinical decision making frameworks and clinical experiences of aero medical nurses: A systematic review of Qualitative Evidence title' – Johanna Briggs Institute of Systematic Reviews. Joanna Briggs Library 2013. Published Online.

2012

- **Brideson, G**, Glover, P and Button, D 2012 'Flight Nurses in Australia maintaining their midwifery competence: A case study'. *Contemporary Nurse* Vol 43, No 1 pp 121-130.

Unpublished Manuscripts (planned for review and resubmission different journal)

2014

- **Brideson, G**, Pront, L and Gillham, D 2014 'Ready, set and safe to go: Strengthening our undergraduate nursing students' clinical practice development' – submitted November 2014. Peer Reviewed Journal Publication – Nurse Education in Practice.

- **Brideson, G**, Willis, E and Clark, R 2014 'The clinical decision making frameworks and clinical experiences of aero medical nurses: A systematic review protocol' – submitted September 2014. Peer Reviewed Journal Publication – Johanna Briggs Institute of Systematic Reviews.

- **Brideson, G**, Mayner, L and Willis, E 2014 'Air Medical transfers in Australia: A five year comparison' – submitted February 2014. Peer Reviewed Journal Publication - Air Medical Journal.

Presentations – conference and poster

2016

- **Brideson, G,** Mayner, L and Willis, E 2016 'Flight Nursing: An Undisclosed Profession' Flinders University Research Week, Bedford Park, 27th – 30th June 2016, **Symposium speaker**

2015

- *Rushton, M, Clark, R, **Brideson, G** & Damarrell, R 2015, 'The effectiveness of non-pharmacological interventions on the management of cardiotoxicity: a systematic review. Joanna Briggs Institute Methodology Symposium 2015. Adelaide, September 1-3 2015. (*Symposium speaker)

- **Brideson, G,** Mayner, L and Willis, E 2015 'A vision of Flight Nurses through the Literature' Flinders University Research Week, Bedford Park, 29th June-2nd July 2015, **Symposium speaker**

- *Rushton, M, Clark, R, **Brideson, G** & Damarrell, R 2015, 'The effectiveness of non-pharmacological interventions on the management of cardiotoxicity: a systematic review. Australian Medical and Scientific Research 2015 Conference. Adelaide, June 1st 2015. (*Poster Presentation)

2014

- **Brideson, G** 2014 'Flight Nurses and Continuing Professional Development – Do we really need it?' New Zealand Flight Nurses Association Aeromedical Conference and Flight Nurses Annual General Meeting, Hawkes Bay, New Zealand, November 14-16th 2014, **Invited speaker**

- **Brideson, G,** Mayner, L and Willis, E 2014 'Images of Flight Nursing in Australia: A study using Institutional Ethnography' 3rd Asia Pacific International Conference on Qualitative Research in Nursing, Midwifery and Health, Newcastle, Australia, 1st-3rd October , 2014, **Symposium speaker**

- **Brideson, G** & Mayner, L 2014 'The development of an International Classification for Nursing Practice (ICNP) catalogue for Aviation Nursing' 26th International Aeromedical Conference of Aerospace Medicine Association / Aeromedical society of Australasia / Flight Nurses Australia 10th-13th October 2014, **Symposium speaker <**http://assets1.aeromedconference.com/assets/ASAM-ASA-FNA2014-PROGRAMME_2593_15.pdf>.

- **Brideson, G** 2014 'Launching our replacements- introducing clinical practice development to undergraduate nursing students' 15th National Nurse Education Conference, Adelaide, April 30th-May 2nd 2014, **Symposium Speaker**

2013

- **Brideson, G** and Stephenson, J 2013 'Ready, set, and safe to go: commencing the clinical practice development of our undergraduate nursing student cohort. Health Workforce Australia National Conference, Adelaide, November 18-20th 2013. **Unsuccessful poster submission**

- **Brideson, G**, Mayner, L and Willis, E 2013 ' Images of Flight Nursing' 25th Scientific Meeting, Aeromedical Society of Australasia and Flight Nurses Australia, Melbourne, August 28th – 30th 2013. **Poster Presentation**

- **Brideson, G** 2013 'Institutional Ethnography: the method' Research Week, SoNM, Adelaide, July 2nd 2013. **Symposium Speaker**

- **Brideson G** 2013 'Beyond the Hospital Walls: Australian Aviation Nursing' Australian College of Nursing Educational Meeting, Adelaide, April 29th 2012. **Invited Speaker**

- **Brideson G** 2013 'Beyond the Hospital Walls: Aviation Nursing in Australia' RN Symposium week presentation to NURS1002 student cohort (approx. 500 students), Adelaide, April 2012. **Invited Speaker**

2012

- **Brideson, G** 2012 'Flying Angels – The threads that bind safe patient transport' Inaugural History Conference, Australian College of Nursing, Melbourne, November 15th – 16th 2012. **Symposium Speaker**
- **Brideson, G** 2012 'Aviation Nursing in Australia: A world of post graduate opportunities' Health First Network Education Evening, Adelaide, July 9th 2012. **Invited Speaker**
- **Brideson, G** 2012 'Beyond the Hospital Walls: Flight Nursing in Australia – Research Week, SoNM, Adelaide, July 3rd 2012. **Symposium Speaker**

Book Chapter Review

2014

- McKenna, L and Lim, AG 2014, McKenna's Pharmacology for Nursing and Health Professionals. Lippincott, Williams and Wilkins, North Ryde, NSW.

Interviews / Reports -Radio, Newspaper, Magazine

2016

- Health & Medicine Week, August 5, 2016, p.2213 Flinders University Reports Findings in Nursing Research (Images of flight nursing in Australia: A study using institutional ethnography).(Report)
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2015

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2014

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2013

- Health & Medicine Week, August 23, 2013, Nursing Research; New Nursing Research Findings from Flinders University Described. p.5304

2012

- Interviewed by Belardi, L 2012 'Flying into the public gaze' July 3, Nursing Review <http://www.nursingreview.com.au/2012/07/flying-into-the-public-gaze/>

Chapter 1 Setting the Scene

1.1 Introduction

This thesis is a sociological study that seeks to highlight Flight Nursing, a small, highly specialised area of nursing and midwifery where patients are cared for in a completely different environment from all other healthcare provision – the aviation environment. This speciality area of nursing is virtually unknown to the public, nursing and midwifery colleagues, and other healthcare professionals.

My personal interest in Flight Nursing commenced in 1988 when a colleague said they were positioning their career to work with the Royal Flying Doctor Service (RFDS) one day. I thought this was something I would also like to do and planned my career, gaining all the necessary skills. After completing midwifery, I worked with an anaesthetist transferring patients via commercial airline across long distances from remote and rural Australia to tertiary level hospital care. The opportunity presented early in 1993 to commence work as a Flight Nurse (FN) with the then Eastern Goldfields Section of the RFDS in Kalgoorlie, Western Australia (WA). I continued to work as a FN for the next seven years at the Kalgoorlie base, after which they became Western Operations. Following this, I commenced work at the Adelaide base of Central Operations RFDS between 2002 and 2007. The way the two organisations worked, the systems in place, and the FNs' remuneration and working conditions were vastly different despite providing the same service.

On commencing my honours research in 2009, I decided to investigate how FNs maintained their midwifery skills. In a preliminary examination of published academic literature, I found very little peer reviewed research in this field of nursing in Australia. Most of what has been published is historical and commentary, such as newspaper and magazine articles (*Australian Women's Weekly* Dec 1945), oral history accounts (Barclay 1998 a,b, Malone 1990, Newlands 2003), and chapters or a few references in books (Halstead 1994, Page 1977, Rudolph 2002). While countless books and articles have been written about the RFDS over the last 80 years, the research community does not appear to recognise the work FNs perform in providing this iconic Australian aeromedical healthcare service (Bilton 1961, Langford 1994, Langford 2015, Page 1977, Persson 2007, RFDS website, Rudolph 2001 & 2002). The professional group (FNs) that provides the majority of in-flight patient care (85–94%) has little documented peer reviewed evidence regarding their work (Anderson 1998, Barclay 1998, Brideson et al 2016, Brideson Glover & Button 2012, Malone 1992, Newlands 2003, Pugh 2000, 2002). Hence began my quest to increase the public's knowledge and

recognition of FNs' work.

Consequently, this study investigates all that is obscure about Flight Nursing, illuminates the multi-faceted work that FNs perform, and challenges the popular but incorrect media images of this profession. My aim is to present the actualities of contemporary Flight Nursing work, dispel the myths surrounding that work and critically analyse how the current healthcare political and economic climate impacts upon it.

1.2 Aeromedicine in Australia: An Abbreviated History

It can be said that in Australia, the concept of aeromedicine commenced during the late 1920s as a solution to the tyranny of distance and the difficulties of providing quality medical care to the small, brave, rural and remote population (Bilton 1961, Page 1977). While the idea of moving casualties to safety by air commenced with the Franco-Prussian war and the hot air balloon in the 1870s, the Wright brothers developed the first powered aeroplane in 1903. By 1910, they had developed an aircraft to fly further and carry more than one person. Even though the idea of moving casualties was suggested at the time, it was abandoned soon after (Air Ambulance Service 2014, Dahl 2009, Grimes & Mason 1991, Prendergast 1981). The two World Wars (WW1 1914-1918 & WW2 1939-1945) advanced aircraft travel to a much greater and more sophisticated level than civilian designs and development would have done over such a short timeframe. Moving casualties of war by air became the popular ideal during WW2. In Australia, the combined developments of aircraft and radio communications meant that an aeromedical service could be provided to people living and working in the outback (Bilton 1961, Page 1977). Flight Nurses commenced work internationally from 1935 in France and from 1938 in Australia (Lam 2003, Malone 1990).

Since its humble beginnings, the current level of sophisticated, streamlined, highly technological aeromedical healthcare provision available in Australia has brought this country to international attention (Barker & Ross 2014, Margolis & Vpinazar 2009, Minh et al 2003, Read & Ashford 2004, Thiruchelvam et al 2008, Tran et al 2003). However, the same type of system is available in many countries, whereby state-of-the-art healthcare is brought to the person in need at the location where they are situated (Reimer & Moore, 2010, Stewart et al 2011, Teichman, Donchin & Kot 2007, Thomas et al 1994). The difference is that in Australia, it is a FN, as the only clinician in the aircraft, who provides this required healthcare service 85–94% of the time (Anderson 1998, Barclay 1998 a,b, Brideson et al 2012). Internationally, there are usually two or more clinicians present in the aircraft (Reimer & Moore, 2010, Stewart et al 2011, Teichman, Donchin & Kot 2007, Thomas et al 1994).

1.2.1 Organisations with Flight Nurses delivering aviation based healthcare

A number of organisations in Australia deliver aviation based healthcare services. These include the Royal Flying Doctor Service (RFDS); Medstar (South Australia [SA]); Victorian Air Ambulance; Queensland retrieval services; CareFlight Queensland, CareFlight International, CareFlight New South Wales, CareFlight Northern Territory; Air Ambulance New South Wales (AANSW); the Neonatal Emergency Transport Service (NETS, New South Wales); the Newborn Emergency Transport Service (NETS, Victoria); and the Western Australian Neonatal Transport Service (WANTS). The RFDS has six operational sections that cover various parts of Australia – Western Australia [WA], Queensland [QLD], Central [SA and lower Northern Territory (NT)], South Eastern [Western and central New South Wales, part of SA], Tasmania [TAS, aircraft and pilots only] and Victoria [VIC, aircraft and pilots only] – which all operate as independent entities under a federated umbrella organisation. There are also a number of smaller providers, such as Wingaway and Skymed, and those who service only a specific type of patient (e.g. paediatric). These organisations employ a number of different healthcare professionals, such as doctors, FNs, flight paramedics, special operations paramedics, intensive care paramedics, retrieval practitioners (both nurses and paramedics) and an aeromedical nurse practitioner. The only organisations discussed throughout this thesis are those that employ FNs, because FNs and Flight Nursing are the focus of this research.

Approximately 250 FNs are employed within the above organisations. This total is approximate because numbers of FN employees cannot be verified. Not all FNs belong to Flight Nurses Australia (FNA, their professional organisation) and the Nursing and Midwifery Board of Australia (NMBA) does not collect data regarding Flight Nursing as a speciality (Flight Nurses Australia website, NMBA 2016d). Another consideration is that although there are a number of aviation health service providers throughout Australia, not all employ FNs, and some nurses who work as FNs see themselves as belonging to a separate group of nurses (e.g. Retrieval Nurses Australia), even though they perform their role in the context of the aeromedical transport environment.

The RFDS, the CareFlight Group, Medstar (SA) and Air Ambulance New South Wales (AANSW) are the four main providers currently sharing the quasi-market of aeromedical service provision. Small speciality market services for children are provided only in NSW (Newborn and Paediatric Emergency Transport Service – NETS and PETS NSW), Victoria (Newborn Emergency Transport Service – NETS Vic) and South Australia (Medstar Kids). In 2010, NTAMS (Northern Territory Air Medical Service), the last government based aeromedical service in Australia, was devolved from the NT government and put out for

tender. The contract was awarded to the CareFlight Group, which is in direct competition with the RFDS in multiple areas of the business of patient transfer, and has won a number of government based contracts to provide services in both the metropolitan area and the rural and remote community across Australia.

Both the RFDS and AANSW are unique across Australia because they utilise only fixed wing aircraft (not helicopters) and the aeromedical crew configuration is solely FNs up to 94% of the time (Anderson 1998, Barclay 1998, Brideson et al 2016, Brideson, Glover & Button 2012, Docker 1984, Malone 1992, Newlands 2003, Pugh 2000; 2002). The others use a variety of transport modes – rotary wing (helicopter), fixed wing and road transport (CareFlight Group, Medstar SA, NETS Vic, NETS and PETS NSW). These services principally remain under their respective state health department banner, are based in metropolitan areas and only provide services within state borders. They form the majority of the quasi-market and as such are services that must compete for resources and funding, and demonstrate innovative, competitive, efficient and effective business practices (Chester 2012, Spies-Butcher 2012, Cahill Edwards & Stillwell 2012). As part of the aims and objectives of new public management (NPM), AANSW, Medstar SA, NETS & PETS NSW and NETS Vic remain essentially government based services, albeit devolved to ambulance services, which are funded by state governments in most states except WA.

The multiple organisations that provide aeromedical healthcare services in Australia traverse all states and some cross territory boundaries. However, as stated above, each organisation tends to use different transport options (helicopter [rotary wing], large [international] or small [interstate] jet, fixed wing [Pilatus PC12 or Beechcraft King Air 250 or 300], and/or ground ambulance) and different crew configurations (sole FN; FN and doctor; FN/ paramedic/or second FN and doctor – commonly called retrieval teams; paramedic and doctor; retrieval practitioner and paramedics). There does not appear to be any consensus within the research literature or the organisations regarding the most cost and outcome effective crew option (Bjoernsen 2009, Garner 2004, Lees & Elcock 2008, Mason, Eadie & Holder 2011, Venkatesh & Freebairn 2013, Wirtz et al 2002).

The choice of transport option usually relates to the distance (kilometres) travelled to the patient (e.g. Marla-far north SA versus metropolitan roadside versus international retrieval) and the difficulties of reaching them (e.g. small hospital or clinic versus station (farm) homestead, versus outback tourist attraction or roadside).These considerations also dictate which organisation performs the transfer, again dependent on the patient location and whether intra or interstate, and the way the healthcare professions travel to, and return with, the patient. For example, in SA, if a patient is located at Ceduna Hospital and needs

immediate assistance which the hospital cannot provide on a long term basis, the hospital will notify the RFDS, which sends a FN to collect the patient who has been assessed as category 2. The RFDS model of healthcare provision uses a FN to transfer all category 2–5 patients as the sole clinician This is also called an “interhospital transfer” because the patient is moving from one healthcare facility to another better resourced facility. Patient categorisation and prioritisation, and interhospital transfer are explained in more detail in the next two sections.

In aeromedical circles internationally, the RFDS of Australia enjoys a universal reputation for excellence in the provision of aeromedical healthcare (Barclay 1998 a,b, Newlands 2003). I argue that FNs hold the key to this reputation of excellence because the FN is the primary clinical decision-maker while taking sole responsibility for the patient (Anderson 1998, Barclay 1998 a,b, Brideson et al 2012, Houliston 2007, Pugh 2002). Clinical decision-making is a complex process that influences the quality of care provided to the patient and, subsequently, patient outcomes while they are in the aircraft. Communication with another clinician or doctor is frequently unavailable due to technological difficulties, which makes FNs’ work more isolated. I argue that by functioning as the sole clinician in the aircraft, the individual FN has an increased level of responsibility and accountability placed upon her/him for the provision of quality and safe patient care during transport. This is purely because there are no other healthcare professionals available with whom to discuss clinical decisions and actions to ensure patient safety.

1.2.2 Prioritisation of patients/aeromedical triage

There are from 1–5 categories/priorities of patient depending on which aeromedical organisation is involved. These categories follow the Australasian Triage Scale (ATS) to a certain extent but instead relate to the time /urgency for the aircraft and crew to depart or “wheels off” (the ground), rather than the maximum waiting time for clinical assessment and treatment of the patient (Australasian College for Emergency Medicine 2013 a,b, Evans et al 2017, RFDS 2011). According to the ATS policy, the tool is designed for use within Australian emergency departments to describe patient urgency (Australasian College for Emergency Medicine 2013 a,b). Aeromedical services utilise this tool as above because in the main, the patient is located at a healthcare facility of some type and the initial patient assessment has been performed. If the patient is located in the outback, on a roadside, at a tourist attraction, or at a remote station/farm, they are automatically categorised as a priority 1/category 1 due to their location and the dearth of healthcare professionals and resources available to assist them (Evans et al 2017, Margolis & Vpinazar 2009, RFDS 2011, 2013). Priority 1/category 1 (P1) patients are termed “primary evacuations”, which are performed

when a person is ill or injured at a location with minimal or no medical facilities. Patients transferred as P1 are in the main significantly unwell and present with little assessment and no differential diagnosis. Trauma accounts for a large number of these patients, thus time is always a very important consideration when the crew and aircraft are tasked (directed) to perform a P1 (Evans et al 2017, Margolis & Vpinazar 2009, RFDS 2011, 2013); a primary evacuation/emergency or retrieval. The key performance indicator (KPI) regarding departure times for this type of patient depends on where the aircraft base is located, and whether the staff are all present at the base or on call at home. However, the timing is usually limited to 30–45 minutes wheels off. The crew usually consist of the FN and pilot, plus a doctor for priority 1/category 1 patients and at times a retrieval team (doctor and another nurse – so the medical team is a doctor, FN, and intensive care or emergency department based nurse). In the main, a doctor is always present on primary retrieval flights if for no other reason than to provide another pair of hands and someone else with whom the FN can discuss clinical decision-making and patient care as part of a team.

Priority /category 2 patients are assessed as sick but are generally FN only flights. The departure time is 60–120 minutes from notification of the patient needing transfer, depending on which organisation is responsible. An example of a priority / category 2 patient is post anticoagulation acute myocardial ischaemia (AMI), nausea and vomiting of unknown origin, trauma with injury (e.g. broken leg) and women in early labour. Priority /category 3 patients are non-urgent. Depending on the organisation, they can wait for transfer from 24–72 hours, for example nursing home patients being transferred to tertiary care for a procedure or cancer patients requiring further planned treatment. Priority /category 4 and 5 patients fill the 48–72 plus timeframes or can wait until the next time a particular service is sending through a more urgent patient. For example, someone needing to be transferred home by air to a remote community not usually serviced by commercial aircraft often waits in a hospital until the next person from that particular community needs to be transferred out for a higher level of care.

Flight Nurses regularly perform triage of patients as part of their work routine. They use a set of standardised forms developed by the organisation to guide their assessment (for two examples of these forms, see Appendices 1 & 2). There is space within the forms to ask further in-depth questions of the referring doctor or health facility regarding the patient, their presentation and their care. It is a requirement of the organisation for FNs to ensure they garner answers to the questions posed and complete the required documentation.

The following exemplar is taken from the FNs' position and duty description for AANSW. This textual direction comes from the organisation and directs the way FNs work, how they

will triage patients and with whom they must liaise if certain requirements for patient care must be met. For example, a FN may escort a patient to the receiving facility (hospital) as part of the ambulance crew to continue the provision of patient care at a level higher than the paramedic crew member can provide. Midwifery patients present a clear example of this. They require a midwife to provide care because paramedics are not qualified midwives.

> A Flight Nurse will be assigned escort/triage duties between 1200–2000 hours each day. Sign on procedures are the same as any shift, with a mobile telephone to be collected and Aeromedical Operations Officer (AMOO) advised for liaison and communication purposes. Ascertain status of all fixed wing activity including ETA [estimated time of arrival] and known escorts.
>
> - Triage **all** bookings for the same evening and next working day, excluding patients being collected from home addresses. **NB: Triage must include multi-resistant organism status to minimise patients being exposed and avoid flights being altered during the late stages of coordination.**
>
> Include:
> - ***Current episode of medical care and treatment***
> - ***Past medical history***
> - ***Current status-observations if relevant***
> - ***Infusions and treatment***
> - ***Current history of multi-resistant organisms***
> - ***For neonatal & paediatric transfers request weight of relative***
> - ***Reiterate luggage limitation 5kg/patient***
>
> - Liaise with AMOO for logistical and clinical requirements and Duty Retrieval Consultant for clinical advice.
> - Contact AMOC [AeroMedical On call Consultant] **only** if single patient transfer required & if Flight Nurse Escort [FNE] required at either end of transfer and phone through triage priority alterations based on clinical requirements.
> - **Heparin infusions**: If a heparin infusion is the only reason for a prospective FNE, when triaging, ascertain if there is any clinical reason for the infusion as compared to low molecular weight (LMW) heparin. Ask the referring medical officer if the treatment can be changed. If the referring doctor disagrees, the AMRS Consultant can be contacted (in the second instance) should the FN still believe there is no clinical contraindication
>
> AIR AMBULANCE SERVICE of NSW 2012a.

1.2.3 Interhospital transfers

Interhospital transfers encompass the transfer of a patient from a lower level of healthcare service to a higher level of healthcare service (i.e. from secondary to tertiary), where the level of service needed by the patient cannot be provided at the patient's current locality (Margolis & Vpinazar 2009, RFDS 2013). Similarly, interhospital transfers also occur in reverse (from a higher level of healthcare service to a lower level). However, the numbers of patients transferred in this direction are much fewer (RFDS Australia Council 2016).

Interhospital transfers (priority/category 2–5) make up the bulk of the work of aeromedical

services and therefore the bulk of FNs' work (approximately 90%), with 10% primary evacuations or retrieval transfers (RFDS QLD 2015). The statistics for patients flown, gathered from the various aeromedical organisations' annual reports, align with these numbers and substantiate the fact that the FNs perform the bulk of the work (interhospital transfers), with doctors' present in the main only for P1 flights (RFDS Australia Council 2011, 2012, 2013, 2014, 2015, 2016).

1.3 Revealing the True Face of Flight Nursing

Gender and class, power and control remain features that impact the delivery of modern healthcare (Andersson & Liff 2012, Aranda 2015, Buresh & Gordon 2013, Gordon 2006). In 2017, these influences are covert rather than overt (as in previous decades), but continue to impact women's work with as much strength as previously (Australian Government Workplace Gender Equality Agency [WGEA] 2016, Chamberlain 2016, World Economic Forum 2016). While nursing remains a predominantly female profession, 30% of FNs are men (NMBA 2016d) who are equally affected by gender, class, power and control purely because they work within this profession (Dahle 2005). It is argued within the literature that women's work is invisible, therefore nursing is invisible (Armstrong & Armstrong 1990, Bella 2009, Buresh & Gordon 2013, Davies 1995, DeVault 1991, Doyal 2006, Dracup & Bryan-Brown 1998, Edmond & Fleming 1975, Gordon 2010, Johnstone 1994, Merrick 2012). Nevertheless, what becomes evident throughout this study is that women have pioneered and championed air ambulance and Flight Nursing work, beginning in 1910 with Marie Marvingt, the French woman who founded Flight Nursing (Lam 2003).

In Australia, Flight Nursing is still promoted to the public as pioneering, heroic and adventurous through visual images shown in Australian aeromedical organisations' marketing campaigns: an azure blue sky peppered with cotton wool clouds against a backdrop of raw red ranges; a small plane suspended in smooth flight, cutting through the clouds with a dashing pilot at the helm; and a picture perfect patient in the back, all under the caring and competent control of a handsome male doctor (CareFlight website images 2014, 2015, 2016, RFDS Annual Reports front cover visual images 2010-2016). Another image shows a competent and confident woman, a nurse perhaps, placing her foot on the bottom step of the aircraft. She appears autonomous, adventurous, heroic, brave and pioneering, yet beautifully coiffured (complete with lipstick), flying off to rescue an injured person (CareFlight website images 2014, 2015, 2016, RFDS Annual Reports Front Cover visual images 2010-2016, RFDS Central Operations 2014). I know from my experience working as a FN that both of these images are incorrect.

The work in this thesis shows a totally different picture. It acknowledges that contemporary Flight Nursing is complex work. Flight Nurses are experts in the provision of patient care in the aeromedical setting, which combines an unstructured mix of both hospital and pre-hospital environments, with limited availability of support, equipment and supplies (Brideson et al 2016, Pugh 2002, Reimer & Moore 2010). Varied and flexible approaches to patient assessment are required because care is provided to patients both in the air and on the ground. Moreover, expert practice in many nursing specialties is advantageous to ensure FNs perform safely, effectively and autonomously (Anderson 1998, Barclay 1994, Barclay 1998 a,b, Bader et al 1995, Barger 2013, Brewer & Ryan Wenger 2009, Brideson et al 2016, Brideson et al 2012, Burtnyk 1992, Dahl 2009, Edwards 1992, Holleran 2002, 2004, Malone 1992, Newlands 2003, O'Connor 2001, Pugh 2000, 2002, Reimer & Moore 2010, Topley et al 2003). Flight Nurses exhibit their expert skills by demonstrating a strong foundation of theoretical knowledge, advanced clinical skills, experienced clinical decision-making and additional education, along with an understanding of the obligation to remain current across many areas of practice, including midwifery (Anderson 1998, Barclay 1994, Barclay 1998 a,b, Bader et al 1995, Barger 2013, Benner Tanner & Chesla 2009, Brideson et al 2016, Brideson et al 2012, Burtnyk 1992, Dahl 2009, Edwards 1992, Holleran 2002, 2004, Malone 1992, Newlands 2003, O'Connor 2001, Pugh 2000, 2002, Reimer & Moore 2010, Topley et al 2003).

Flight Nurses overcome a number of inherent challenges on a daily basis in order to perform the required level of expert clinical practice that leads to quality and safe patient care (Brideson et al 2016, Brideson et al 2012, Pugh 2000, 2002, Topley et al 2003). These challenges include providing care to patients of all ages with diverse clinical conditions in a variety of environments (Edwards 1992, Jarvis 1995, Malone 1992, Pugh 2002). The inside of the aircraft is very compact. Flight Nurses must cope with limited space, excess noise and vibration, changing altitude and gravitational forces, temperature variations, and weight and safety restrictions. On the ground, FNs provide care in unfamiliar hospitals, in the back of road ambulances, in hotel rooms, in extremes of weather and terrain, and with unfamiliar clinical teams who have a variety of skill levels (Brideson et al 2016, Edwards 1992, Jarvis 1995, Malone 1992, Pugh 2002). However, purely by the nature of their work environment, FNs' expert practice is largely invisible, unwitnessed, self-contained and performed in isolation from other healthcare professionals, particularly in Australia (Houliston 2007). This has resulted in sparse accounts within the literature of FNs' expertise in performing this work. In this thesis, I plan to redress this gap in knowledge and make visible FNs' expert practice.

1.4 Research Aims

The aims of this research were three fold:

i) To investigate the possible rationale behind the invisibility of Flight Nurses' work in Australia.

ii) To investigate the organisation of aeromedical health services in Australia in order to understand the work of Flight Nursing.

iii) To explore whether gender and class explain the invisibility of Flight Nurses and impact on the contemporary work of Australia's Flight Nurses.

1.5 Research Questions

To fulfil the research aims, I sought answers to the following questions:

i) What are the historical images of Flight Nursing in Australia, and to what extent do these images influence current popular understandings?

ii) What types of work do contemporary Flight Nurses perform in their workday?

iii) What are the forces that affect Flight Nurses' work, from their perspective?

iv) Does the way aviation health services operate in Australia impact upon the way Flight Nurses work?

1.6 The Methodological Approach Used in the Study

The methodological approach selected as the most appropriate with which to answer these questions was critical qualitative inquiry (CQI). Critical qualitative inquiry is a title that characterises a method of inquiry which gathers a plethora of research genres and traditional schools of analysis, into a constantly shifting and developing conglomerate of contemporary critical thought. The plethora of perspectives allows for the investigation of the phenomena from diverse frames of reference and allows the in-depth examination of power relations, while looking for areas of social justice within Neoliberalism (Cannella 2015, Denzin 2015, 2017, Kincheloe & McLaren 2005, Orlikowski & Baroudi 1991).

I introduce critical qualitative inquiry in Chapter 3 as the methodological approach and methods chosen to address the research questions. This approach looks for the the research question/s in the everyday world inhabited by the informants. Once the researcher has identified the research questions, he/she investigates from the informants' stance (point of view), and then builds a situational plot to make evident to the informants the everyday power interactions that structure their lives.

The incorporation of textsas part of the analysis in CQI is essential because texts (in the form of individual documents, words, sounds or images) enable the external setting of the institution or culture to become resident (in both an individuals' consciousness and their native setting). This is possible because any person within the institution can read, see and hear the same words, images or sounds, and thus the same message is communicated to all. However, the lived experience of those in the resident area may be vastly different from the message conveyed and received by someone who moves in and out of the setting/organisation Adams, Carryer & Wilkinson 2015, Sinding 2010, Smith 1990b, 1992, 1999, 2001, 2005, 2006).

Language is a central feature of CQI because the forms of coordination that constitute institutions occur in, and through, language (Bartlett 1991, Bisaillion 2012, Denzin 2015, 2017, Hall 2013, Smith 2001). Smith emphasised the importance of language as the medium in which thoughts and ideas move equally between individual people and the social realm (Bisaillion 2012, Deveau 2008, Howard Risman & Sprague 2005, Smith 2001). Thus, language provides the means for application of the ruling apparatus in any particular society: domination and subordination; the tone of the communication; rich description; and promotion of the imagery that paints the picture, which in turn shapes the way the issue is understood (Adams Carryer & Wilkinson 2015, Bisaillion 2012, Campbell & Gregor 2004, Denzin 2015, 2017, DeVault & McCoy 2006, Deveau 2008, Hall 2013, Smith 1987, 1990, 1990b, 1992, 2001, 2005).

An example of the use of language and text as a form of domination and subordination in Flight Nursing relates to Australia's best-known iconic aeromedical organisation, the Royal Flying Doctor Service (RFDS). At the time of its inception in 1928 until the employment of the first FN in 1945, the service was staffed by doctors. However, in 1945, one of the stated roles of the first FN was to fill in for the doctor in the aircraft when he was on holidays, unwell or considered not to be required (Barclay 1998 a,b). As noted previously, today 90% of the time it is an unaccompanied FN who provides the medical care in the aircraft, yet, 72 years after the first FN role was introduced, the text referring to the organisation at any level and the language used in reference to the organisation maintains the medical hegemony and status of doctors; *Royal Flying Doctors.* This evidence demonstrates power relations at work through the language used and text provided in that the name of the organisation represents a misnomer.

A number of researchers claim that gender is a powerful organising force that pervades all levels of society and shapes people's identities and perceptions (Bisaillion & Rankin 2013, Burchell & Fagan 2004, Campbell 2011, DeVault 1991, Deveau 2008, Johnstone 1994,

Smith 1987, 1990, 1990b, 1992, 2005, 2006, Thornton 2016, Witz 1992). The acknowledgement that people experience gender in specific ways related to their class position or race increases as the understanding of gender as a principle of social organisation becomes clearer (DeVault 1991, Smith 1990). The texts and processes used by institutions to maintain a preponderance of male orientated thinking are mainly invisible, much like the work of women, because society remains controlled by men (Smith 1990, 1992, 2001). It is significant to recognise this and analyse social institutions from a gendered perspective to help us understand how the modest, insignificant, daily functions of our society are tied to a series of institutional power relations beyond the individual informant (Smith 1990, 2001). Therefore, the data collection methods used in this study also explore a variety of texts and language.

1.6.1 Data collection and analysis in CQI

In critical qualitative inquiry, data collection and analysis occur simultaneously. Data collection takes several forms (including informant interviews, textual documents, discursive language, visual images) and involves different levels. Level one data collection and concurrent analysis are where the research question/s for study are identified by the informants (usually cryptically). The researcher, as an insider and hence part of the research, usually has an idea of what the informants may want investigated from their standpoint. However, attention must be paid to the language used and the context of what is being said by the informants during the interviews, so as to clarify with them what they think are the important issues for investigation. Consequently, I began with interview questions that looked to elicit this information from the informants. Accordingly, as the informant interviews increase in number, this beginning level analysis of the collected data makes clearer what the informants are interested in gaining further knowledge about in relation to their social situation (at work in the case of this investigation). If possible, different levels of staff in the organisation's hierarchy and beyond are needed as informants because they bring a different view and approach issues from an alternative angle according to their position within the organisation. Thus, the interview questions are semi-structured and do not necessarily follow the same format as the interviews' progress and further data is collected. This is important because the issues need deeper probing as they are identified to build a larger picture regarding the research question/s with the different information garnered from each interview (Smith 2005, 2006).

I interviewed line FNs, retrieval nurses, senior FNs, retrieval nurse coordinators, FN educators, aeromedical nurse practitioners and FN managers/directors of nursing within the context of the methods dictated by the theoretical framework for critical qualitative inquiry.

The research questions identified from the informant data and my insider knowledge as a researcher and former FN were: the invisibility of Flight Nursing; intensive (an increased pace of work during the working day = working faster with less downtime) and extensive (an increase in the length of time at work = longer working day) work intensification (in line with Green 2002); and increasing regulation.

The level one analysis is utilised as the foundation for the level two data collection and analysis, which involves the tracking and tracing of the documents that illustrate both the ruling and state apparatuses at work, within an organisation. Level two data sources are in the main textual and visual documents, including historical books, articles, images and meeting minutes; popular media in the form of newspaper articles and pictures, films and their advertising posters, comic books and popular fiction book covers; published papers; peer reviewed studies; state government and federal government policy and directives; organisational memos, directives, guidelines, policy and procedures; and other general organisational paperwork that requires completion (Campbell & Gregor 2004, DeVault & McCoy 2006, Smith 2001, 2005). Links in the documents connected to the research questions are tracked and traced to identify how they are connected to the organisation, how they describe the research questions and how, or if, it all links together. The data is also analysed looking at the language and sentence structure used within the documents, and how that is connected to the identified research questions.

The research questions identified in this study of invisibility, intensive and extensive work intensification, and increasing regulation are explored and debated in much greater depth in chapters 4, 6, 7 and 8. The second level analyses of the research questions are then assembled into situational plots for the informants (Figure 6-1 and Figure 7-1) to see how the social relations are applied and interact with each other, and how they impact upon the informants' everyday world, which in this study, is FNs' work.

1.7 Importance for Future Research

This research represents only the third study exploring an aspect of contemporary FNs' work in Australia. The first study reviewed FNs' clinical decision-making in an emergency (Pugh 2002). The second study, which I undertook as my honours project, investigated the ways in which FNs maintain their midwifery skills and knowledge (Brideson et al 2012). This third study, in which I investigated the work of contemporary FNs in Australia, and critically analysed the rationale behind the invisibility of that work and the impact of the current Australian political and economic climate upon it, represents the next step in building a future body of research into FNs' work and how it affects patient outcomes.

1.8 Organisation of the Thesis

There are nine chapters in this thesis. In this chapter, I have set the scene for the thesis by providing a context and background for FNs' work. I have described the study, its aims and the research questions posed to address them; provided a short introduction to the chosen research methodology; explained how data collection and analysis were conducted; and stated the importance of this study for future research.

In Chapter 2, I outline the existing peer reviewed literature reporting on Flight Nursing following the frameworks for systematic reviews outlined by the PRISMA Group [Preferred Reporting Items for Systematic Reviews and Meta Analyses] (Moher Liberati Tetzlaff Altman 2009) and the Johanna Briggs Institute (2014). I also review the historical development of the concept of aeromedical evacuation in Australia and internationally over the last 100 years, and how this has shaped and reinforced current day aeromedical organisational culture. I demonstrate that this history and the existing peer reviewed literature fail to adequately document the work of FNs, and the significance and contribution of their work towards the high level, sophisticated, streamlined provision of aeromedical services that occurs today.

In Chapter 3, I outline the chosen methodology of critical qualitative inquiry, which, with its methods, forms the basis/framework upon which this study sits. It underpins everything from the initial framing of the research questions through to data collection and analysis on multiple levels.

In Chapter 4, I discuss the images used over the last 70 years to portray Flight Nursing, illustrating the social context of FNs' work. Using CQI analysis of text and images, I reveal then dispel the myths and untruths that have been generated within the public imagination by the use of propaganda in both the visual and textual popular media.

In Chapter 5, I describe the real work of the contemporary FN. Missing are the glamour, hype, romance, adventure and heroisms that feature in the media images of Flight Nursing from earlier times. Chapter 5 is an exposé of real life FN work.

In Chapter 6, I begin to disclose the current influences upon FNs' work. Drawing on informant data, supported by document analysis, I demonstrate how the last 40 years of political and economic change in Australia has created the current climate in healthcare, which has far reaching consequences for Flight Nursing work (Australian Commission on Safety and Quality in Healthcare [ACSQH] 2011a, ACSQH 2011b, AIHW 2009, AIHW 2016, American Society for Quality 2016 a,b, Australian Government 2016, Braithwaite, Healey &

Dwan 2005, Cahill 2007, Chester 2012, Edwards Cahill & Stilwell 2012, Fenna & Tapper 2012, Ferlie et al 1996, Germov 2005, Green 2002, Hansson 2014, Painter 2011, Pollitt 2003, Queensland Health 2016, Selberg 2013, Stanton, Young & Willis 2003, White & Bray 2003, Willis 2002, Willis & Weekes 2005). Successive neoliberalist Australian Government policies implemented through the strategies of new public management (NPM) have led to increased labour market flexibility and the imposition of performance management targets through the use of enterprise bargaining agreements (Cairney 2002, Ferlie et al 1996, Halligan 2007, Hood 1995, Pollitt & Bouckaert 2011, Stanton Young & Willis 2003, White & Bray 2003, Willis 2002, Willis & Weekes 2005). This has led to both intensive and extensive work intensification in this nursing speciality (Green 2002, Stanton Young & Willis 2003, White & Bray 2003, Willis 2002, Willis & Weekes 2005). The situational plot of the social relations of work intensification for FNs appears in Figure 6-1 in Chapter 6, section 6.5.3.

In Chapter 7, I continue this discussion, illustrating how the growth of regulatory capitalism (and thus the increasing number of independent regulatory authorities/agencies has intertwined with work intensification, doubling the impact upon FNs' work (Affara & Styles 1992, Allsop & Saks 2002, Ayres & Braithwaite 1992, Black 2003, Braithwaite 2005, Braithwaite 2008, Duncan, Thorne & Rodney 2015, Gilardi 2005, Healey & Braithwaite 2006, May 2007, Levi-Faur & Jordana 2005, Post 2005, Toombs 2002, Willis & King 2011). Again, I use exemplars from informant data and documentary analysis to demonstrate how this has occurred. The situational plot of the social relations of increasing regulation for FNs' work appears in Figure 7-1 in Chapter 7, section 7.5.

In Chapter 8, I critically analyse the previous chapters using a gender and class framework. This allows me to foreground the issues that have arisen from the analysis of work intensification and increasing regulation undertaken in chapters 6 and 7. The issues discussed include work life balance, fatigue management, remuneration and working conditions, and tightened regulation through the organisation's use of auditing down to the level of colleague-to-colleague. In appendices 8 and 9, I present a comparison of certain sections of all the Australian FNs' enterprise bargaining agreements (EBAs) and awards that have identified these issues.

In the final chapter, I conclude this thesis with a discussion of recommendations arising from the study and areas for future research, as well as identifying the study's limitations.

***Note: Throughout the thesis I have used text boxes to highlight documentary evidence, indented italics for informants' evidence, indented block quotes for citations from literature and italics for the titles of visual and print media evidence.

1.9 Summary

This introductory chapter provides an overview of the thesis and outlines my interest in this nursing speciality. I have given a glimpse into the history of Flight Nursing and FNs' work, questioned media and organisational portrayals of this profession as glamorous and romantic, and outlined the methodology and methods used to find answers to the following questions:

i) What are the historical images of Flight Nursing in Australia, and to what extent do these images influence current popular understandings?

ii) What types of work do contemporary Flight Nurses perform in their workday?

iii) What are the forces that affect Flight Nurses' work, from their perspective?

iv) Does the way aviation health services operate in Australia impact upon the way Flight Nurses work?

As such, I have set the scene for the following chapters. The next issues I discuss, in Chapter 2, are the history of Flight Nursing and the scant peer reviewed literature relating to this speciality healthcare provision and FNs' work. This history and scarcity of peer reviewed literature, along with the image of Flight Nursing from its inception to the present day, has assisted in shaping current day organisational culture and perceptions of this nursing speciality.

Chapter 2 The State of Knowledge in Flight Nursing

2.1 Introduction

Safety and quality in Flight Nursing practice require a combination of specialised knowledge, clinical skills, theory, education and expertise within both hospital and pre-hospital environments (Anderson 1998, Barclay 1998 a,b, Bader et al 1995, Brideson et al 2016, Brideson Glover & Button 2012, Grimes & Mason 1991, Pugh 2000, 2002, Reimer & Moore 2010, Topley et al 2003). This expert level of knowledge and skills allows the Flight Nurse (FN) to overcome a number of inherent challenges that present across the 24 hour day to provide safe patient care, both in the aircraft and on the ground. Despite these necessities, contemporary research provides little insight into the work of Flight Nursing.

I have organised this chapter in two distinct sections. In the first section (Section A), I provide an historical background to both international and Australian aeromedical service provision, and make two arguments: the first about the literature sources; the second addressing the origins of this nursing speciality. Firstly, I argue that until 1980, most of what was published came from the popular media and lacked the usual integrity of scholarly publications. Secondly, I argue that while the origins of Flight Nursing have their beginnings in war, in the Australian context this nursing specialisation arose in response to the difficulties of providing medical care to people living in remote Australia.

In the second section (Section B) of the chapter, I provide a systematic literature review that traces the scholarly publications about Flight Nursing as a speciality, showcasing the available literature over the last 106 years up to 2016 – since Marie Marvingt (a French woman) commenced campaigning for air ambulance services and FNs in 1910. I argue that while research on Flight Nursing has increased, the speciality remains largely unrecognised within nursing and healthcare circles in Australia and internationally.

SECTION A HISTORICAL BACKGROUND

2.2 Current Knowledge of Flight Nursing

The majority of the available 'evidence' detailing Flight Nursing work is not referenced, which makes the checking of sources very difficult. Most of the available evidence regarding FNs' work consists of non-peer reviewed publications (Boston 2010, Manchester 2013) and unpublished works in the form of theses (Dahl 2009, Newlands 2003, Pugh 1999); transcribed oral historical accounts (Barclay 1998 a,b); fiction (Harley 1963, Lansing 1946, Miller 1946) and non-fiction historical books (Barger 2013); and chapters (Halstead 1994) or a paragraph or two contained in journal articles (Margolis & Vpinazar 2009), historical texts (Dille 2000) and organisation meeting minutes (Bilton 1961). Newspaper articles (*The Argus* 1944), films and their posters (Republic pictures 1953), television series and advertisements (Crawford Productions 1986), and comic book covers and comic books (Grand comics database 1963) provide many of the popular media sources. Web based blogs (Kargillis 2012) and internet websites (CareFlight 2015, Keast 2014, RFDS 2016) provide supplementary information.

I located a few chapters scattered across a number of historical texts and document accounts of World War 2 (WW2), the Korean War and the Vietnam War (Beauman 1971, Halstead 1994, McCullagh 2010, Vuic 2010), which discuss FNs' work in terms of where they flew (Adam-Smith 1984), the types of casualties transported (Mills Link & Coleman 1955) and their living conditions (Barger 2013, Halstead 1994). In the last three years, a number of historical accounts have been published outlining Flight Nursing's early years in the United States (US) and FNs' work during WW2 (Barger 2013, Polette 2015). These books recount the experiences of FNs' work from oral history interviews conducted by the authors (Barger 2013, Polette 2015). While Barger's (2103) work is well referenced, Polette (2015) uses oral history interviews and writes the FN accounts in a narrative style without references, other than listing the FNs' names, making it difficult to trace her sources.

Available evidence is plentiful regarding the importance of aeromedical services both internationally and in Australia (Barker & Ross 2014, Jones et al 2001, Margolis & Vpinazar 2009, McMonagle et al 2007, Minh et al 2003). However, there is scant acknowledgement of FNs' work within this literature. This may be explained partly by the fact that in many countries the aircraft medical crew are paramedics and doctors. The notable exceptions to the almost exclusive doctor/paramedic model used in aeromedicine by most countries are Australia (Anderson 1998, Barclay 1998 a,b, Pugh 2000), the US (Bjoernsen 2009, Burney et al 1992, Hoyle Loos & Jones 2003), Sweden (Ahl et al 2005), Norway (Wisborg & Bjerkan

2014) and New Zealand (Boston 2010, Hiko 2002, Manchester 2013). These countries have always employed FNs as part of the crew. Other countries, for example Canada (Gagne Lavole & Frechette 2006, McNab & Fryer 1991), South Africa (Exadaktylos et al 2005), the United Kingdom (UK) (Martin 2009, Stewart et al 2011), the Netherlands (Wiegersma et al 2011), Scotland (Fried et al 2010) and Germany (Hilbert et al 2009) employ a mix of crew types – doctors, nurses, therapists or paramedics – but all crews are tasked depending on what mix of skills the patient needs for optimal care.

2.3 War as the Catalyst for Aeromedicine

The establishment of aeromedical evacuations had its origins during war. As early as 1870 during the Franco-Prussian war and the siege of Paris, the French retrieved casualties by hot air balloon. At this time, 160 wounded soldiers were evacuated from the battlefield to safety (Air Ambulance Service 2014, Dahl 2009, Grimes & Mason 1991). I found no further reference to the movement of war casualties by air evacuation until 1910, when members of the US Army Medical Corps suggested that air evacuation of wounded soldiers from war zones could happen (Air Ambulance Service 2014). An aircraft was built specifically for the task but it crashed soon after take off during its maiden flight. Therefore, the idea was abandoned (Air Ambulance Service 2014). Nevertheless, it must be remembered that 1910 was only seven years after the Wright brothers had undertaken the first powered flight, and only two years since they had invented an improved plane that had upright seating for two people and a better quality 30 horsepower engine (Prendergast 1981).

Given that France was the first country to utilise hot air balloons for the evacuation of casualties, it was not surprising that someone in France had a vision of powered aeromedical transport. This was the pioneering French woman Marie Marvingt, who championed air ambulance services and was the first ever FN.

2.4 Flight Nursing Begins 1910-1950

2.4.1 Marie Marvingt: the first Flight Nurse

Marie Marvingt makes the ordinary woman feel quite inadequate due to all she achieved in her 88 years. A ground-breaking pioneer and leader for women in all areas of life, Marvingt was a decorated, committed sports woman, pioneering aviatrix in both ballooning and fixed wing aviation, a World War 1 (WW1) bomber pilot, aircraft designer, dedicated red cross surgical nurse, successful journalist and war correspondent, actor, director and film maker (Air Ambulance Service 2014, Dille 2000, Lam 2003, Maggio 2010, Naughton 2002).

Marvingt first qualified as a balloon pilot in 1907. In early 1909, she was the first female to

pilot a balloon across the North Sea and English Channel from Europe to England (Dille 2000, *Sydney Morning Herald* 1939). In September 1909, Marvingt had her first flight in a fixed wing aeroplane; the Antoinette (one of the first monoplanes with a light powerful engine designed and built in 1909). In early 1910, she commenced studying to be a fixed wing pilot with Hubert Latham and was the first woman to solo fly the difficult Antoinette (Lam 2003). In November 1910, she was the third woman in the world to earn her pilot's licence (Lam 2003, Naughton 2002, *Sydney Morning Herald* 1939). Unlike many of her contemporaries (87% died in aircraft crashes), she never crashed any aircraft and had 900 successful landings without "breaking wood" (i.e. damaging the aircraft) (Lam 2003).

Marvingt is credited as being the "godmother" of medical aviation (Dille 2000, Lam 2003). As early as 1910, she recognised the potential capability of aircraft to improve the outcomes of wounded soldiers, and so began her lifelong efforts to convince the French military, government and physicians of the importance of an air ambulance service (Air Ambulance Service 2014, Dille 2000, Lam 2003, Maggio 2010). Her vision saw aircraft carrying nurses and surgical supplies to where they were needed; performing battlefield reconnaissance for casualties, and evacuating disaster victims and wounded French soldiers from the combat zone (Air Ambulance Service 2014, Moolman 1981). Being a woman in any society during that time put her at a distinct disadvantage as she tirelessly lobbied the French military, in particular, to create a medical aviation branch. It took considerable effort by Marvingt to make the case to instigate air ambulance services in the face of male criticism and lack of belief (Lam 2003), because early 19th century aircraft were considered dangerous and unreliable.

Marvingt worked with Bechereau of the Deperdussin aircraft factory throughout 1911 to design the first practical ambulance plane, which carried the patient on a litter inside the aircraft rather than on the wing (Air ambulance Service 2014, Lam 2003). She then set about raising the funds to ensure the aircraft was built (Naughton 2002). However, this did not happen due to embezzlement of the money from the Deperdussin aircraft factory (Lam 2003). This setback did not deter Marvingt in her efforts to have the plane built and she set about raising additional money (Lam 2003, Naughton 2002).

Marvingt associated with a number of people in France who agreed with her vision and were enthusiastic for "L'Aviation Sanitaire" – medical aviation (Naughton 2002). They included Senator Doctor Reymond and Doctor Duchaussoy. In 1912, these men demonstrated to the military that an aircraft would be extremely useful for locating battlefield casualties. They organised a meeting of government officials after the demonstration to discuss the construction of an air ambulance (Lam 2003). In 1917, another of Marvingt's allies, Dr

Eugene Chassaing, finally convinced the French Government to allow him to test the air ambulance concept during combat on the Aisne Front. Only three flights were made due to the danger of the aircraft being shot down, but this test signalled the beginning of the French air ambulance service (Lam 2003).

In 1914, French artist Emile Friant recognised Marvingt's work in promoting air ambulance services with a painting that depicts her and a physician providing medical care to a casualty, with the air ambulance parked close by (Lam 2003, Moolman 2001).

Figure 2-1 Marie Marvingt, Doctor and War Casualty

Source: <http://www.ctie.monash.edu.au/hargrave/marvingt.html>

Marvingt recognised that aircraft represented only one part of the equation behind air ambulance services. Therefore, she worked to develop a number of educational courses for FNs and pilots (Lam 2003), establishing the Corps des Infirmieres de l'Air (Aerial Nurse Corps) within the auspices of the Aero Club of France in 1932, under the leadership of two French nurses – Madames de Venduvre and de Noailles (Lam 2003, *Sydney Morning Herald* 1939). This was the first organisation of FNs anywhere in the world, with formal education for FNs commencing in 1934 and covering such topics as Flight Nursing theory, practical skills and physiology (Lam 2003). The first class graduated in 1935, with Marvingt the first to receive her diploma. In 1937, the corps joined the French Red Cross, which

expanded the education provided to FNs (Lam 2003).

Marvingt was instrumental in establishing air ambulance services due to her tireless efforts. As a pilot, nurse and woman, she recognised the value aviation could bring to medicine and the lives it could help save in both the military and civilian arenas. Unlike many others of her time, Marvingt lived to see her vision for air ambulances come to fruition. In 1934, the French Government finally recognised her service to air medicine and her ideals of nurses providing care and transporting casualties by air, by asking Marvingt to organise a civilian aeromedical service in Morocco, which was then a French colony. She received a medal from the government for the work she did in establishing this service (Dille 2000, Lam 2003, Prendergast 1981). During her life, Marvingt earned over 34 awards and decorations; she was the most decorated woman in France. Sadly, she died an unrecognised pauper in 1963 (Maggio 2010).

Marie Marvingt was not the only woman pilot to promote the benefits of nurses caring for patients prior to evacuation or in-flight, and to strongly encourage the advances to air ambulance services and aircraft. In America, Lauretta Schimmoler (another aviatrix) promoted the need for FNs to be educated and available to care for casualties during flights. In late 1932, she formed the Aerial Nurse Corps of America (ANCOA) (Barger 2013, Skinner 1984), which I discuss in the next section.

2.4.2 International Flight Nurses – civilian

Prior to the beginning of WW2, a number of airline companies formed in North America with the purpose of moving large amounts of people quickly between cities and internationally (Barger 2013, Gimple 1933, Stevens 1994). Interestingly, many of the newly formed North American airline companies required their air attendants to be registered nurses (Barger 2013, Gimple 1933, Stevens 1994). This idea appears to be an obvious choice because if a passenger had a medical problem while on the plane, there was someone with medical knowledge available to provide assistance. According to Barger (2013, p.3), Ellen Church, a nurse, formed the first cadre of registered nurse stewardesses for Boeing Air Transport in 1930. In her presentation to the fifth annual meeting of the Aeromedical Association in Chicago, Gimple (1933) stated that United Airlines commenced using air stewardesses (nurses) in June 1930. These nurses were tasked with providing safety and comfort for the travelling public in the form of food and drink, pillows and blankets, and pointing out the sights of interest during their flight (Gimple 1933). Nursing care was provided when needed but mainly involved caring for people suffering from air sickness (Barger 2013, Gimple 1933).

As discussed previously, Marie Marvingt strongly advocated for the role of FNs on air ambulances in France and in the French colonies for many years (Lam 2003). At the same time, Schimmoler, another aviatrix, is credited with advocating for the concept of a specially trained FN in America (Barger 2013, Grimes & Mason 1991, Skinner 1984). The military was the centre of aviation development and innovation in North America in the 1930s. Therefore, Schimmoler first approached the army about educating and equipping nurses to fulfil air ambulance duties, just as Marvingt had in France (Skinner 1984). Again, being a woman did not help Schimmoler's efforts and after a disparaging result from her approaches to the army, she decided to form the "emergency flight corps" in January 1933 without their support. This organisation represented a group of civilian nurses who were interested in researching and developing the concept of an aerial nurse (Barger 2013, Skinner 1984). In 1936, the emergency flight corps was renamed the Aerial Nurse Corps of America (ANCOA) and organised along military lines. Members of ANCOA received "essential aeronautical education" and initially volunteered ground based nursing services at air shows and other aviation events (Barger 2013, Grimes & Mason 1991, Skinner 1984). The members of ANCOA gained exposure in the press through these activities and by accompanying patients on flights when the need and opportunity arose (Barger 2013). This led to various aviation associations recognising the organisation as a FN unit. However, recognition of the organisation by the American military did not occur, supposedly due to ANCOA's lack of official ties to the American Red Cross (ARC). The ARC was a very strong nursing organisation and found it unacceptable that ANCOA was led by a pilot, not a nurse; thus, the ARC refused to link with ANCOA (Barger 2013, Grimes & Mason 1991, Skinner 1984).

The American Nurses Aviation Service Inc. (ANAS) was formed in New York in 1931. Membership of this organisation was limited to those who had graduated, or were registered nurses and physicians, in North America. The organisation's object and purposes included fostering and promoting "airmindedness" by familiarising members with flying conditions through experience and instruction, and to give courses and lectures in aeronautics and allied subjects (Aviation Medicine 1931). This was followed by actual flying experience for members. A further aim of the organisation was to stimulate public interest to encourage and support research (Aviation Medicine 1931). These aims were similar to ANCOA. However, ANAS suffered a setback in 1932 when the executive committee were all killed when their training plane crashed. Many students were half way through courses but, due to this accident, there was no access to ongoing training (Aviation Medicine 1932). Active members formed another committee in 1933 and decided to continue with the organisation's work (Aviation Medicine 1933). However, ANAS never really regained its momentum and faded into the background as ANCOA gained in popularity and recognition (Barger 2013).

2.4.3 Australian Flight Nursing – civilian

Whilst these advances were occurring internationally, since the early 1900s the Australian visionary, Reverend John Flynn, recognised the value of nurses and the care they could provide (Page 1977, Rudolph 2000). Flynn acknowledged that medical services in rural and remote areas of Australia were very thinly spread across thousands and thousands of kilometres (Page 1977, Rudolph 2001, 2002). Thus, while founding the Australian Inland Mission (as part of the Presbyterian Church) in 1912, Flynn decided that nursing posts should be established across the outback to supply much needed nursing and medical care to the people (Frontier services 2011). Nurses ("sisters") were seen to be the initial answer to the problem of providing medical care in the outback (Bilton 1961, Page 1977, Rudolph 2000, 2001, 2002, Wilson 1989) because they were held in high esteem, able to provide quality medical and nursing care to people, available in larger numbers and cost much less to employ than doctors. The first nursing post was built at Oodnadatta (a small very remote town, about 1,050 km north of Adelaide in South Australia) in 1913 and staffed by two nursing sisters (Bilton 1961, Page 1977, Rudolph 2000, 2002, Wilson 1989). Meanwhile, Flynn continued with his ideal of a flying doctor service (which over time has become the Royal Flying Doctor Service [RFDS]), which came to fruition in May 1928 (RFDS 2016).

The first reported evidence of flying nurses in Australia appears to have come from a small community outside of Adelaide, South Australia (SA), in 1937 in response to a call for ideas linked to the SA Women's Centenary Council (*The Advertiser* 1937). The Australian Inland Mission's (AIM) Aerial Medical Service (AMS) had only commenced in May 1928 (the RFDS), yet pioneering women had already recognised that a FN would make a great addition to the team to support the women of the outback. They also thought a FN would be a living memorial to SA's pioneering women (*The Advertiser* 1937). Post the reporting of this fact, accompanied by noting that a large amount of money had been raised by the SA Women's Centenary Council, Flynn spent a number of hours with their executive committee. He argued that the money would be better used for the establishment of the Alice Springs Nursing Post and Base for the Aerial Medical Service rather than the employment of FNs (Bilton 1961, Page 1977). After much discussion, the organisation finally agreed to Flynn's request in November 1937 and announced they would support his plan (*Australian Women's Weekly* Dec 1937, Bilton 1961). Nevertheless, eight years later in 1945, the SA Women's Centenary Council finally had their plan realised with the employment of the first FN (Barclay 1998 a,b, Malone 1990, Newlands 2003).

There is historical narrative evidence (although no peer reviewed studies) of the presence of FNs in Australia working with patients in the civilian arena in 1938 (Barclay 1998 a,b, Kettle

1991, Malone 1990, Page 1977, Rudolph 2001). This comes as no surprise given the faith John Flynn placed in nurses, assuming that they would provide competent patient care (Page 1977, Rudolph 2001, 2002, Wilson 1993).

2.4.3.1 Myra Blanch – first Australian Flight Nurse

Myra Blanch was the first officially recognised appointed FN in Australia. She commenced employment with the New South Wales (NSW) section of the RFDS in 1945 (*Australian Women's Weekly* Dec 1945, Barclay 1998 a,b, Malone 1990, Newlands 2003). Blanch's scope of practice at the time was determined by the RFDS board (Bilton 1961). She was told to follow the doctor's direction and work with him, to accompany him on emergency flights, and to replace him whenever he went on holidays or if the RFDS were "between" doctors. She also filled the telephone medical consultation role (Barclay 1998 a,b, Bilton 1961, Malone 1990, Newlands 2003).

A pamphlet issued to the public by the RFDS NSW Section Board provides evidence of the work Blanch performed in 1953 as a FN (Bilton 1961). This pamphlet listed a number of FN duties, including: relieving hospital nursing staff in emergency cases anywhere in the geographical area in which the RFDS provided services; giving advice and assistance with matters of public health and disease prevention whenever and wherever needed; dispensing ante and postnatal advice, and medical advice when necessary; immunising children within the RFDS service area; providing health education, promotion and information broadcasts over the radio network on subjects of RFDS interest at set times; providing visits, health education and health promotion to local schools; and performing population health surveys of the residents within the 250,000 square miles the RFDS NSW section covered at the time (Barclay 1998 a,b, Bilton 1961, Newlands 2003).

The pioneering work of Marie Marvingt, Lauretta Schimmoler, ANCOA, ANAS and Myra Blanch demonstrates that women can perform essential work in the aeromedical arena independently of men or medical supervision (Barger 2013, Bilton 1961, Kiel 1947, Mills Link & Coleman 1955, Newlands 2003).

2.5 Women Aviators: Nursing and Air Ambulance in the Outback

2.5.1 Nancy Bird Walton

Australia contained a number of pioneering aviatrix who championed the requirement for aeromedical services. These women provided aviation and nursing services much like Marvingt and Schimmoler. One example is Nancy Bird Walton. Nancy was born in Sydney and earned her pilot's licence in 1933 at 17 years of age – the youngest woman in Australia

to do so at that time (Land 2009, Naughton 2009, Nicholson 2014). Two years later, she earned a commercial pilot's licence, giving her the distinction of being the first woman in Australia to hold a licence to carry passengers (Land 2009, Naughton 2009, Nicholson 2014, Veitch & Brown 2009). Fortuitously, she met up with the Reverend Stanley Donaldson later that year, who commenced the Royal Far West Children's Health Scheme in the far western area of NSW (Naughton 2002). He contracted Bird Walton to set up an air ambulance service and provide emergency aeromedical evacuations at the same time as transporting local nurses to remote and rural areas of outback NSW to conduct infant health clinics (Dellit 2006, Naughton 2009). This provided Bird Walton with the distinction of becoming the first Australian woman to work commercially as a pilot (Dellit 2006, DeVries 2003, Veitch & Brown 2009). When this contract finished due to a lack of funding, Bird Walton moved to Queensland (QLD) and provided similar aviation and air ambulance services to the Bush Children's Health Scheme (Dellit 2006, Veitch & Brown 2009).

2.5.2 Robyn Dicks (nee Miller): the 'Sugar Bird Lady'

Robyn Dicks was born in 1940. Her achievements included qualifications as both a triple certificate registered nurse (RN) and a pilot (she gained her commercial pilot's licence in 1966). Due to her dual qualifications, in 1967 the Western Australian (WA) Department of Health contracted her to deliver Sabin oral vaccine (immunisation against polio) to remote and rural communities across WA (Lewis 1996, Miller 1971, 1979, Negus 2004, Persson 2007, Wilson 2010). The Aboriginal children gave Dicks the nickname 'The Sugarbird Lady' because the vaccination was administered on sugar cubes by someone alighting from a small aircraft (Bonar, 2014, Lewis 1996, Negus 2004, Persson 2007, Wilson 2010). When Dicks eventually completed the immunisation program in 1969, she had administered 37,000 doses of vaccine and had flown 69,200 km (Lewis 1996, Miller 1971, 1979, Wilson 2010).

Dicks was then employed by the RFDS in WA as a pilot/nurse. She often flew unaccompanied and performed the roles of both pilot and FN due to her dual abilities (Miller 1979). Up until two weeks prior to her death from cancer, Robyn Dicks continued organising emergency flights to collect patients from along the WA coastline (Miller 1979).

Both Bird Walton and Dicks were pioneering Australian women, both pilots and one a nurse, who combined their love of flying with their ideals of civic duty and the care of others. They both dedicated the majority of their working careers to helping those in need in the Australian outback. Bird Walton was rewarded for her work with the Order of the British Empire and the Order of Australia Medal (*Sydney Morning Herald* 2009). Dicks is remembered through an enduring memorial at the entrance to Jandakot airport (an airport for light aircraft, and where the RFDS head office and main base are located in WA) and with the naming of one of Perth

Airport's roads in her honour (Dellit 2006, Lewis 1996, Negus 2004, Persson 2007, Wilson 2010).

2.5.3 Other early Australian aviatrix

When Bird Walton commenced her flying career in the early 1930s, there were a number of other women aviatrix in Australia – Millicent Bryant, Maude (Lores) Bonney, Freda Thompson and later Helen Blackburn (Cannon 2001, Mattingley 2009, *Sydney Morning Herald* 1927, Wilson 2010). However, only two of these (Freda Thompson and Helen Blackburn) were involved with pioneering air ambulance work. Thompson was appointed commandant of the Women's Air Training Corps, forerunner of the Women's Australian Air force, in 1940 (Cannon 2001). In 1942, she became an ambulance driver with the Australian Women's Army Service and the following year ferried ex-Royal Australian Air Force planes interstate (Cannon 2001).

Lady Helen Blackburn (1918-2005) learnt to fly in the US in 1944. She gained her US commercial licence in 1945 and her Australian commercial licence in 1947 (Mattingley 2009). After her husband was appointed a judge of the Supreme Court of the Northern Territory (NT) in 1966, Blackburn did some charter work in the NT carrying mail and stores to remote communities, and made several mercy flights. The most dramatic of these involved flying from Darwin to the rugged WA coast where she collected a very ill 15 year old girl, and, despite thunderstorms, delivered her to the Darwin hospital just four hours after the first call for help was received (Mattingley 2009).

Along with many male pilots, these pioneering women were ambitious, daring and vivacious, and wanted to fly faster and further than their peers (Bonney 1990, Cannon 2001, Lappin 1995, Mattingley 2009, Moolman 1981, Prendergast 1981, Wilson 2010). This was often achieved through competitions for prizes, trophies and breaking world records. However, Bird Walton and Dicks were in the main unique because they both used their aircraft, experience and flying skills to supply aeromedical evacuation and clinic services at a time when many Australians would otherwise have been without vital healthcare (Dellit 2006, DeVries 2003, Mattingley 2009, Naughton 2002, Persson 2007, Veitch & Brown 2009).

The advent of WW2 and the bombing of Pearl Harbour forced the US to join the war (Barger 2013, Mills Link & Coleman 1955). The Chief Air Surgeon recognised that the numbers of casualties would be very large, particularly after the example of WW1. He also recognised that air evacuation of these casualties away from the battlefield to definitive care would be a way to save many of their lives (Barger 2013, Mills Link & Coleman 1955). Nurses were seen as the way forward because there was a shortage of available doctors to perform in-

flight medical care (Barger 2013, Mills Link & Coleman 1955).

2.6 Military Flight Nursing

2.6.1 International beginnings

The first ever official aerial evacuation involving a FN alone occurred on 17 January 1943 and was performed by second lieutenant Elsie Ott after a brief orientation to, and scant education for, her new role (Barger 2013, Bassingame 1967, Dahl 2009, Mills Link & Coleman 1955, Polette 2015). The flight Ott undertook with five casualties was epic in distance and all the more notable due to the lack of advanced planning and resources (Barger 2013, Dahl 2009). The fact that all casualties survived was testament to her personal organisational skills and abilities. It also demonstrated that women working as FNs had the skills and abilities to fulfil the role and work successfully without medical supervision (Barger 2013, Dahl 2009, Ford 2004, Mills Link & Coleman 1955).

The formal education of FNs in the US commenced in January 1943 at Bowman Field, Kentucky (Barger 2013, Dahl 2009, Ford 2004, Mills Link & Coleman 1955). The four-week course included aeromedical nursing, physiology and classification of patients; air evacuation records, operations and logistics; tropical and arctic medicine; tactics of air evacuation, field sanitation and hygiene; and special studies (Barger 2013, Dahl 2009, Ford 2004, Mills Link & Coleman 1955). The special studies were the largest part of the curriculum and included the transport of patients with mental health issues, desert medicine, the use of in-flight oxygen, the climate in all the various areas where the war was being fought and world air routes (Barger 2013, Mills Link & Coleman 1955). While the nurses employed as FNs were mainly experienced RNs, they had not necessarily come from a military background. Many had no knowledge of military courtesies and customs (e.g. saluting), so this information was included in their education (Barger 2013, Mills Link & Coleman 1955).

The FN scope of practice in WW2 was expanded because FNs were the only medically trained professionals in the aircraft. This fact represented ground-breaking progress in itself because nurses (women) had not previously been responsible for the total care of patients anywhere in the world (Baran 1946, Barger 2013, Benson 1944, Kiel 1947, Mills Link & Coleman 1955). Making decisions about required patient care, using knowledge and skills to problem solve patient care issues, leading the ‘team’ in the back of the aircraft in the provision of patient care, and following the pilot’s direction quickly and calmly when an emergency arose with the aircraft were all part of the FN’s scope of practice (Baran 1946, Barger 2013, Benson 1944, Kiel 1947, Mills Link & Coleman 1955). General Eisenhower is

often quoted as stating that aeromedical evacuation was one of the three most important medical advances of WW2, with blood transfusions and penicillin being the other two (Barger 2013, Bassingame 1967, Lam 2003, Mills Link & Coleman 1955, *The Argus* 1944).

Depending upon the patients' medical condition, FNs usually spent the available flight time changing dressings, administering analgesia (which mainly consisted of aspirin tablets but some morphine), administering oxygen, administering blood plasma via an intravenous line and listening to patients. Provision of food (sandwiches or rations) and drink (water, orange juice, tea and coffee) occurred when time and the patients' medical condition allowed (Baran 1946, Barger 2013, Benson 1944, Kiel 1947, Mills Link & Coleman 1955). However, care provision was often limited due to a chronic lack of medications, supplies and available in-flight time (Barger 2013, Mills Link & Coleman 1955).

The Korean War introduced the first dedicated use of helicopter air evacuation by the US army, which had a major impact on aeromedicine (Dahl 2009, Howard 1991, Mills Link & Coleman 1955, Pletcher 1968, Thomas 1986). Helicopters were able to perform two roles: transporting the injured from the battlefield to field hospitals; and from field hospitals to medical ships for more extensive treatment (Howard 1991, Pletcher 1968). However, until larger versions of the helicopter were made, casualties were transported outside on the helicopter skids, thus not requiring a FN (Dahl 2009, Howard 1991, Mills Link & Coleman 1955, Pletcher 1968, Thomas 1986). By 1969 and the Vietnam War, specially trained medical corpsmen were providing in-flight care to casualties in helicopters. The issues of gender and society's patriarchal stance again interfered with FNs' work. At this time, military command had decided that the job of collecting casualties under fire was much too dangerous for any women to perform (Howard 1991, Pletcher 1968, Thomas 1986). Thus, FNs did not staff helicopters in the military.

However, FNs remained as medical crew on the fixed wing, long haul, high altitude flights that took casualties to more definitive care in hospitals in other countries, which was obviously viewed as a "safer" area of work for women (Biederman 2004, McCullagh 2010, Vuic 2010). Interestingly, military command had put aside this stance in WW2 and allowed FNs to perform their work under very dangerous conditions; but there had been a change in command during the 1960s and pre-WW2 societal ideals returned within the military. This stance did not change until January 2013 in Australia and in 2015 in the US, whereby women are now allowed to be involved in all combat roles within the military (Australian Government Dept. of Defence 2014, Rosenberg & Philipps 2015).

2.6.2 Australian beginnings

In Australia, the work of nursing in the army was well established by the 1940s because nurses had participated in military service as part of the Australian Army Medical Corps since the Boer war (Adam-Smith 1984, Dahl 2009, Halstead 1994, McCullagh 2010). However, the availability of nursing within the air force only commenced in July 1940 with the formation of the Royal Australian Air Force Nursing Service (RAAFNS) (2009), and only then due to the suggestion of Air Vice-Marshal Victor Hurley, the Director-General of Medical Services (Adam-Smith 1984, Dahl 2009, Halstead 1994, Kiel 1947). The formation of the RAAFNS meant Australia was able to establish its own air evacuation unit – the No 1 Medical Air Evacuation Transport Unit (MAETU) – but not until 1944 (Dahl 2009, Kiel 1947). However, Flight Nursing with the MAETU was very similar to that performed by the Americans, as described in the previous section (Dahl 2009).

The bulk of evidence regarding Flight Nursing work in Australia from 1944–1950 is primarily in the form of newspaper articles and their accompanying pictures (*Sydney Morning Herald* 1945, *The Argus* 1944, 1945 & 1949, *The Western Mail* 1945). While this literature is not part of the usual convention of scholarly work, these articles and pictures demonstrate an accurate account of what was happening at that time compared to other international historical texts and photos (Baran 1946, Barger 2013, Beaumann 1971, Benson 1944, Mills Link & Coleman 1955, Skinner 1981, Polette 2015). They provide documented evidence that FNs in Australia worked in an advanced nursing role, independent from men and medical supervision, assessing and implementing the required care to the sick and wounded with only one assistant who was not an RN (*Sydney Morning Herald* 1945, *The Argus* 1944, 1945 & 1949, *The Western Mail* 1945). These points are highlighted in comments such as:

> The sisters have complete medical charge of the wounded on the plane. (*Sydney Morning Herald*, 18 May 1945)

Moreover, that Flight Nursing is:

> New work with attendant new problems that has to be met, often for the first time in medical history. (*The Western Mail*, 7 June 1945)

'Flying Nurses from Nadzab' – a small but strategically important village in the Marobe Province, Papua New Guinea – an article published in the *Sydney Morning Herald* in 1944, records the reality behind the work of FNs with the Australian MATEU. This article presents FNs' work as a strenuous, tough lifestyle involving long hours, with an implied high number of flights undertaken in unpressurised aircraft and the requirement to remain vigilant of the sick and wounded (*Sydney Morning Herald*, 27 September 1944). Each of these factors alone would have caused significant fatigue for these nurses due to the stressors of flight (temperature, vibration, hypoxia, laws of motion, humidity, noise and gas laws); in

combination, they would have been particularly difficult to manage**.** As the reporter notes:

> Their usual routine is rise at 2:30 am, breakfast 3.30 am, take off 4.30 am, travel to forward lines with a freight of medical supplies, parts, food supplies or anything needed in the area and return with the most precious cargo in the world – sick and wounded fighting men. Their day finishes at about 5.30 pm. (*Sydney Morning Herald* 27 September 1944)

A further reference to the Australian military FNs' work, published in 1944, reads:

> They will soon be doing dangerous work flying in and out of forward areas tending casualties in transport planes converted into air ambulances. (The *Argus*, 26 July 1944)

This reference conjures up pictures of austerity and a lack of comfort and facilities in the aviation environment (Baran 1946, Barger 2013, Beaumann 1971, Benson 1944, Mills Link & Coleman 1955, Skinner 1981).

Even though the military strengthened the foundations of Flight Nursing work in Australia and internationally during WW2, FNs' scope of practice continued to develop in the civilian arena through the work of people like Myra Blanch and Marie Marvingt. Civilian aviation remained a somewhat fledgling industry, with the advances to aircraft and aeromedical evacuation brought about during WW2 still filtering through to the civil sector. Time was the catalyst for the further development of all areas of aeromedical transportation, including FNs' work and scope of practice (Baran 1946, Barger 2013, Beaumann 1971, Benson 1944, Mills Link & Coleman 1955, Richardson 1944, Skinner 1981).

2.7 Summary Section A

As demonstrated in this section, the evidence regarding the beginnings of Flight Nursing is drawn from commentary, historical texts, meeting minutes, newspaper articles and unreferenced sources. Gender discrimination has obstructed Flight Nursing work in numerous ways and with varying degrees of impact since its inception. The timing and strength of these views links to the depth of impact upon FNs' work. However, as is also demonstrated, strong pioneering women such as Marie Marvingt, Loretta Schimmoler, Nancy Bird Walton, Myra Blanch and Robyn Dicks have championed aeromedical services both in Australia and internationally, and held chief roles, making these services become an actuality.

SECTION B SYSTEMATIC LITERATURE REVIEW

2.8 Flight Nurse Literature across the Decades: Introduction

As noted in Chapter 1, there is little research literature on Flight Nursing in Australia. Scholarly literature, particularly from the US, increased tenfold from the 1980s compared to the previous 60 years. There is negligible literature on Australian Flight Nursing until 1990, and in the main, this work is published outside the scholarly arena. In order to adequately demonstrate this point in the discussion, I first appraise the type and number of publications I located across the decades from both Australia and internationally that deal with FNs' work. I then commence a review of the literature following the frameworks for systematic reviews outlined by the PRISMA Group (Preferred Reporting Items for Systematic Reviews and Meta Analyses) (Moher Liberati Tetzlaff Altman 2009) and the Johanna Briggs Institute guidelines for quantitative and qualitative studies (JBI 2014 a,b).

2.8.1 Australian literature

While the number of publications dealing with aeromedicine has increased steadily across the decades, the number of research studies regarding FNs' work remains very small, particularly in Australia. There is scant published evidence of civilian FNs' work in Australia until 1990. Advances to civilian Flight Nursing in Australia can be credited entirely to the military, post the establishment of the RAAFNS and MAETU. Military FNs, by taking sole responsibility for large numbers of patients in the back of aircraft during WW2, demonstrated that nurses (women) alone were able to provide competent, outcome focussed healthcare without medical (male) supervision. The popular media demonstrated the position of FNs and the need for their work to the Australian public through publishing credible newspaper stories and pictures in major Australian cities (*Sydney Morning Herald* 1945, The *Argus* - Melbourne 1944, 1945, 1949, 1950, *The Examiner*-Launceston 1951, *The Western Mail*-Perth 1945), and via the *Australian Women's Weekly* (1937–1948). The steady improvement to aircraft and the willingness of a number of women to take great personal risk, learn to fly and put those skills to use for other people meant that all these women were quite unique.

I could not locate any full papers published regarding FNs' work in Australia from 1920 through to 1990. The majority of the literature regarding Australian FNs and their work is not located within the scholarly literature but in the popular press, as demonstrated in Figure 2-2, which reveals that much of the current state of knowledge of Australian FNs' work comes from narrative, commentary, opinion, historical and text sources rather than conventional scholarly publications. Nevertheless, these sources of evidence have degrees of credibility.

In the main, they appear to represent unequivocal[1] or credible[2] levels of evidence (JBI 2014 a,b).

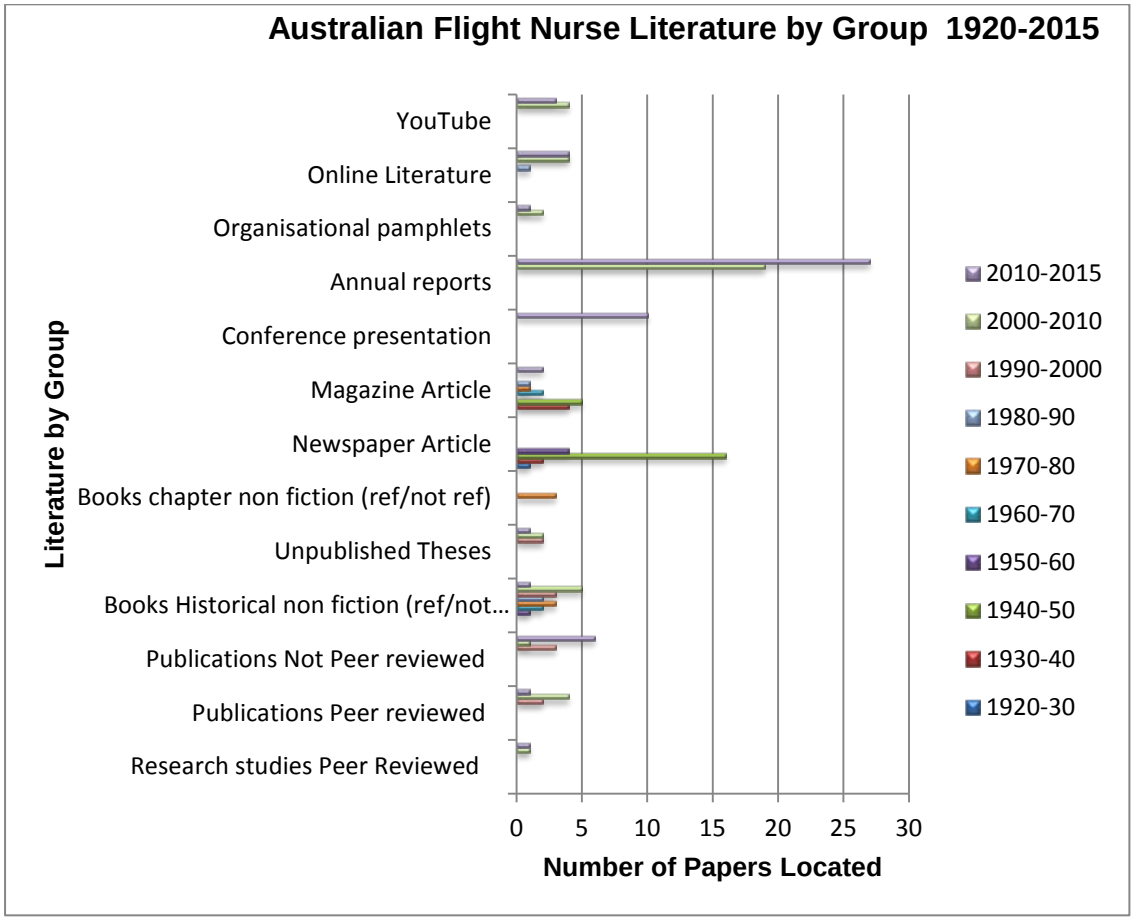

Figure 2-2 Numbers and Types of Literature Located that Discuss Australian Flight Nurses and their Work from 1920–2015

The main focus of the published literature regarding Australian FNs appears to be non-peer reviewed publications written by journalists and published in newspaper articles (*Sydney Morning Herald* 1944 &1945, The *Argus*-Melbourne 1944, 1945 & 1949, *The Examiner*-Launceston 1950, *The Western Mail*-Perth 1945, *The Perth Daily News* 1950); professional association literature (Barclay 1998b, D'Alessio 1995, Edwards 1992, Malone 1990, 1992); union literature (Hannon 2014, Hood 2006); magazines (Bisset 1967, Keavney 1966, Rait 1976); and recruitment agency advertisements (Field 2012, Keast 2014). In most of these publications, the journalist has conducted an interview with the person of interest – usually a FN – then written this up depending on his/her interpretation and perspective of what the FN has told them about FNs' work (Kargillis, 2012). These publications may link to written notes

[1] Evidence beyond reasonable doubt which may include conclusions that are a matter of fact, directly reported/observed and not open to challenge.

[2] Conclusions that have been logically inferred from the data and are plausible in the light of the theoretical framework, but are open to challenge.

or tape recordings taken at the time, but generally they are not referenced.

In recent times (2010–2015), conference presentations looking at aspects of FNs' work in Australia have increased significantly (Bell 2015, Beattie 2015, Brideson 2012, 2013, 2014, Brideson & Mayner 2014, Brideson, Mayner & Willis 2013, 2015, 2016, Holmes 2014, King 2014). Unfortunately, these presentations have not become peer reviewed publications, which is to the detriment of Australian FNs and their work.

Books and novels describing FNs' work in Australia are mainly historical and range from fiction to non-fiction (Harley 1963, Page 1977); not referenced to referenced (Heelan 2016, Wilson 1993); historical to current (Bilton 1961, Brayley 2014); popular fiction to text books (Richardson 2008, Seminon-Holleran 1996); and books written from the author's imagination to books written after research (Marsh 1999, Rudolph 2001, 2002). Moreover, a number of books have included chapters about the history of FNs that are not referenced (Docker 1984, Halstead 1994). There can also be one or two sentences on different pages about FNs throughout an entire book (Bilton 1961), a sentence referring to "sister" caring for the patient in-flight on several pages (McKay 1995) or a chapter dedicated to FNs as part of a book on a number of varying subjects (Adam-Smith 1984). Most books about FNs' work in Australia appear to fit these categories.

Organisational annual reports, government reports and fund raising magazines/pamphlets often contain narratives about Australian FNs' work, discussed in a couple of paragraphs or as part of a case study presentation about a patient's care. Flight Nurses are the most prevalent healthcare professionals presented in the vignettes that assist in demonstrating the organisation's work to its members (CareFlight 2008, 2012–2015, RFDS Australia Council 2010–2016). Much of the various organisations' promotional material also contains these types of narratives, often accompanied by a request for a monetary donation (RFDS 2016, RFDS Central Operations 2014a, 2014b, 2015).

There has been a growth in information over the last 10 years from the internet on websites (AANSW 2012, Hyde 2011), web blogs (Kargillis 2012, Negus 2004) and short films on YouTube™ (RFDS 2012 a,b, Waterbyrd Films 2008), which appear to have been used mainly to serve the various aeromedical organisations' FN recruitment strategies. Flight Nurses Australia (FNA), the professional organisation representing Australia's FNs, has also become more active on the internet (www.flightnursesaustralia.com.au) and via social media (Facebook™ & Twitter™) in the last couple of years.

While a small number of articles regarding Australian FNs and their work have been

published (n=15), dissemination of this knowledge has been very limited (Anderson 1998, Barclay 1998 a,b, Brideson et al 2016, Brideson et al 2012, D'Alessio 1995, Edwards 1992, Hannon 2014, Hood 2006, Jarvis 1995, Malone 1990, 1992, Pugh 2000, 2002). There may be a number of reasons for this, not the least of which is the journals where the articles have been published. Malone's article titled 'A history of nursing in the RFDS' (1990) was the first factual article I located regarding Australian FNs' work that was not printed in the *Australian Women's Weekly*, newspapers or historical unreferenced books/book chapters. However, this article, historical in nature, was published in *Air Doctor* (the RFDS Central Operations magazine), which is provided only to their members; it is not easy to obtain if you are not a member. Furthermore, this magazine is not circulated widely, nor is it recognised by the healthcare audience. Barclay's foundational work on the first Australian civilian FN (1998 a,b) was published in two relatively unknown, very hard to retrieve journals; the *Oral History Journal of Australia* and *AvMedia* (Journal of the Aviation Medical Society of Australia and New Zealand).

A search of the popular literature revealed a number of magazine and newspaper articles. I have already discussed the newspaper articles. I searched the *Australian Women's Weekly* 1940–1982 (nla.gov.au) using the terms "flying doctor service" and "flying sister". The search returned 1118 and 58 titles respectively. My review of these titles found 42 relevant to aeromedicine and four to FNs' work (Bisset 1967, Douglas 1981, Matheson 1944, Rait 1976). Amusingly, romantic and heroic adventurous fictional short stories about doctors and nurses, pilots and flying, and people being rescued were the main focus of all 1176 titles (National Library Australia 2014). Popular magazine articles on topics related to aeromedicine (e.g. disaster) also featured a sentence or two, and up to a paragraph regarding the "flight sisters" (McDonald 1995, Rait 1976).

2.8.2 International literature

Internationally, scholarly literature regarding FNs' work presents in much larger numbers. Nevertheless, there is not a significant amount of literature regarding FNs' work compared to other areas of nursing practice for the timeframe covered. Although present, literature regarding FNs' work that represents the lower levels of evidence (unequivocal and credible, as discussed earlier) does not appear to be so evident internationally, except for New Zealand (Allen 2010, Boston 2010, Fuller 2012, Hiko 2002, Manchester 2013).

Many of the early publications regarding FNs' work have been published in 'Aviation, Space, and Environmental Medicine' (the Journal of the AeroSpace Medicine Association) and the 'American Nurses Journal' (the Journal of the American Nurses Association). These two journals published the most articles regarding FNs' work up until 2000. The earliest articles

published on Flight Nursing from 1931 and 1933 were published in 'Aviation, Space, and Environmental Medicine' (called 'Aviation Medicine' at the time) (American Nurses Aviation Service Inc. 1931, Gimple 1933), as have the bulk until 1980. However, dissemination of this published information regarding FNs' work may be limited because access to 'Aviation, Space, and Environmental Medicine' is restricted to members only, therefore any articles of interest must be purchased.

I traced four papers from the 1950s relating to US FNs and their work (Albert 1956, Johnson 1952, Lay et al 1952, Strickland 1951). These are descriptive, revealing the authors' personal thoughts regarding an individual FN's required characteristics and the tasks covered during their working day. Interestingly, each of these papers outlines the importance of quality patient care and how the FN affects this outcome (Albert 1956, Johnson 1952, Lay et al 1952, Strickland 1951). Other published literature I found from the 1950s was of the popular genre; it took the less traditional form of Hollywood films and promotional advertising posters (Republic pictures 1953).

The 1970s heralded only two papers regarding international FNs' work (Bruce & Jones 1979, Ford & Lake 1979). The paper by Ford and Lake (1979) is a discussion detailing the establishment of audit systems for aeromedical evacuation by the US military. The second paper (Bruce & Jones 1979) is a narrative about the history and achievements of the FN section within the AeroSpace Medicine Association, with no discussion of FNs' work.

The preponderance of published literature regarding FNs' work from 1980 onwards appears to be peer reviewed, as demonstrated in Figure 2-3, although again research studies are not present in large numbers. This point is particularly relevant if, for example, you consider the large amount of literature available that investigates nursing and nurse education.

Since the advent of online electronic sources such as websites (Air and Surface Transport Nurses Association [ASTNA] 2012), web blogs (Aspen Medical 2014) and YouTube™ (Global Medic 2013, Keast 2014, Nurse Talk 2012, Pennington 2015, Waterbryd Filmz 2008), Flight Nursing and FNs' work have had a much greater presence in the public sphere, which has meant greater dissemination of information regarding this work. Social media access via Twitter™, Facebook™, Instagram™ and Snapchat™, along with multiple mass media visual images (Google Images 2015) accessible via these forums and the web, have similarly meant greater dissemination of information regarding FNs' work. However, these sources are not peer reviewed research studies and are low level evidence (NHMRC 1999), although unequivocal in most cases (JBI 2014 a,b).

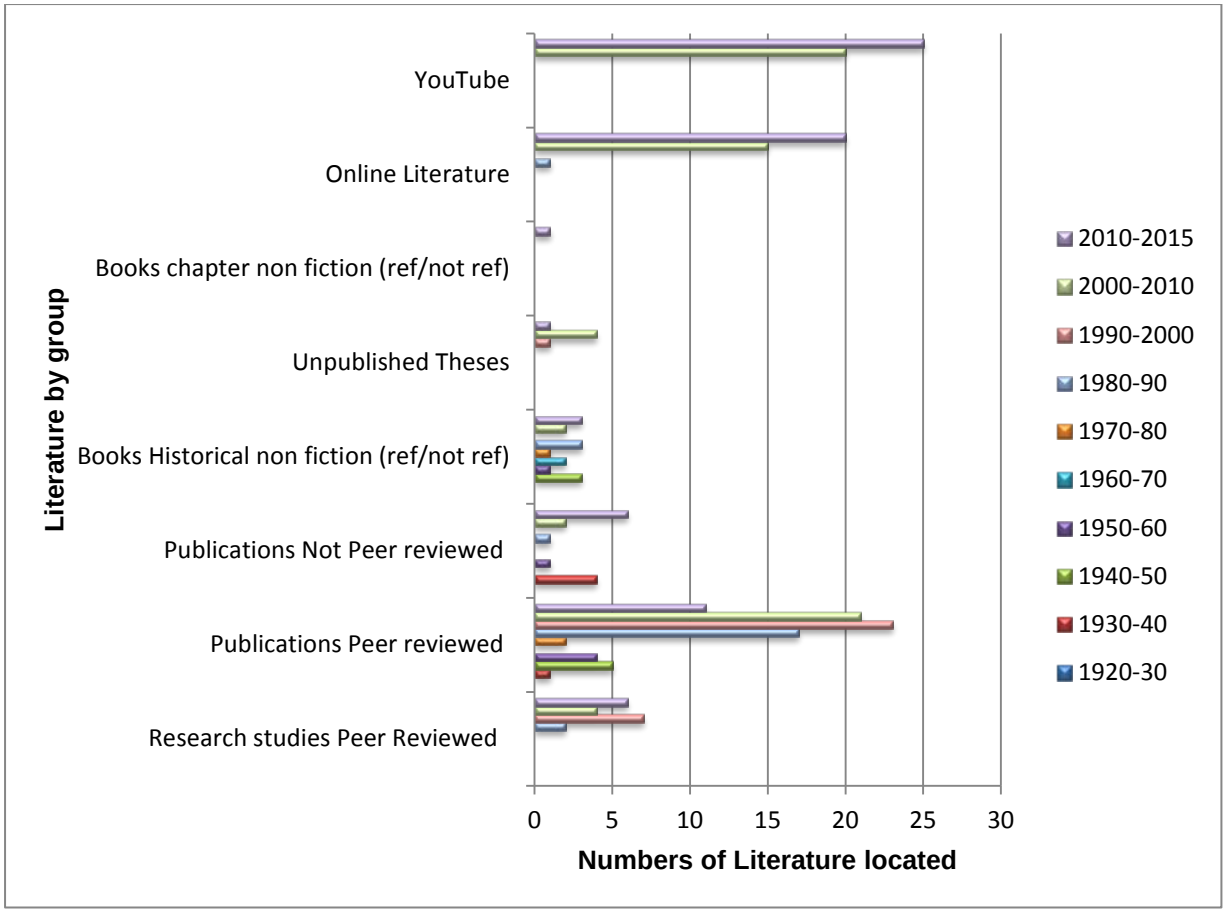

Figure 2-3 International Flight Nurse Literature 1920-2015

2.9 Search Strategy: Peer Reviewed Literature

I conducted an in-depth search of the English literature from 1900-2015 for evidence of research in the domain of FNs and Flight Nursing. Search terms included: *flight nurse; aviation nurse; aeromedical nurse; ambulance nurse; critical care transport; critical care transport team; aeromedical transport;* and *aviation critical care transport/transfer*. I used truncation and combinations of the search terms with and/or. CINAHL, MedLine, Proquest, Ovid SP, TROVE, Web of Knowledge and Web of Science database searches revealed a number of studies (n=426). Figure 2-4 represents the flow diagram of the search strategy for peer reviewed literature regarding FNs' work according to the PRISMA flow chart (Moher D, Liberati A, Tetzlaff J, Altman DG, PRISMA GRP 2009).

Systematic searching of the grey literature exposed a large amount of material about aeromedicine, as did changes to the search words and terms that evolved constantly across this study. However, quality research based studies regarding FNs' work have not increased in number. I also searched reference lists from the peer reviewed literature, targeted journals' article lists, non-fiction books, historical texts, and published and unpublished

theses, and followed up any relevant data. Annual reports, newspaper articles and advertising, e-newsletters, government reports, popular magazines, organisations' promotional fund raising magazines and pamphlets, and visual images were all resources I used in this literature search. Alerting friends, family and colleagues that anything they found or read about aeromedicine and FNs was of interest to me was a final strategy in my search. I evaluated all data returned from the above strategies for inclusion, looking to increase the database of evidence about FNs and FNs' work (n=199).

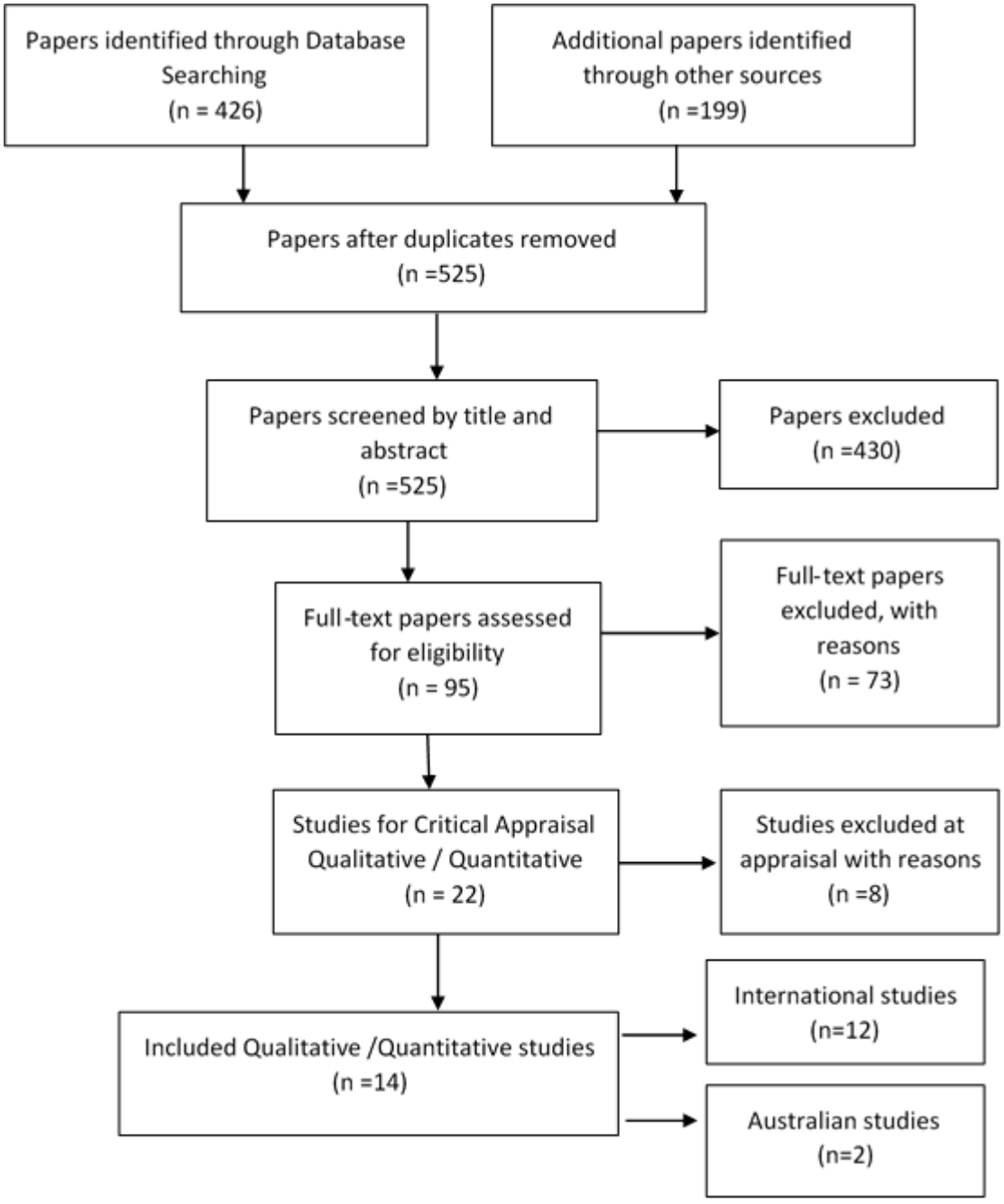

Figure 2-4 Flight Nurse Literature Flow Diagram

Structure taken from: Moher D, Liberati A, Tetzlaff J, Altman DG, PRISMA GRP 2009

After I removed duplicates, 525 articles required critical review for the topic of interest by title and abstract. I discarded 430 that did not address the phenomena of interest – FNs' work. Ninety five (n=95) peer reviewed publications addressing various aspects of FNs' work remained for assessment. Studies I included for review were any that examined or investigated FNs' work, were published in a peer reviewed journal, used either qualitative or quantitative research methodology, were written in English and were full papers.

2.9.1 Distribution of peer reviewed literature

Eighty seven (n=87) of the 95 peer reviewed publications I assessed for inclusion in the review were international, with eight (n=8) from Australia (see Figure 2-5).

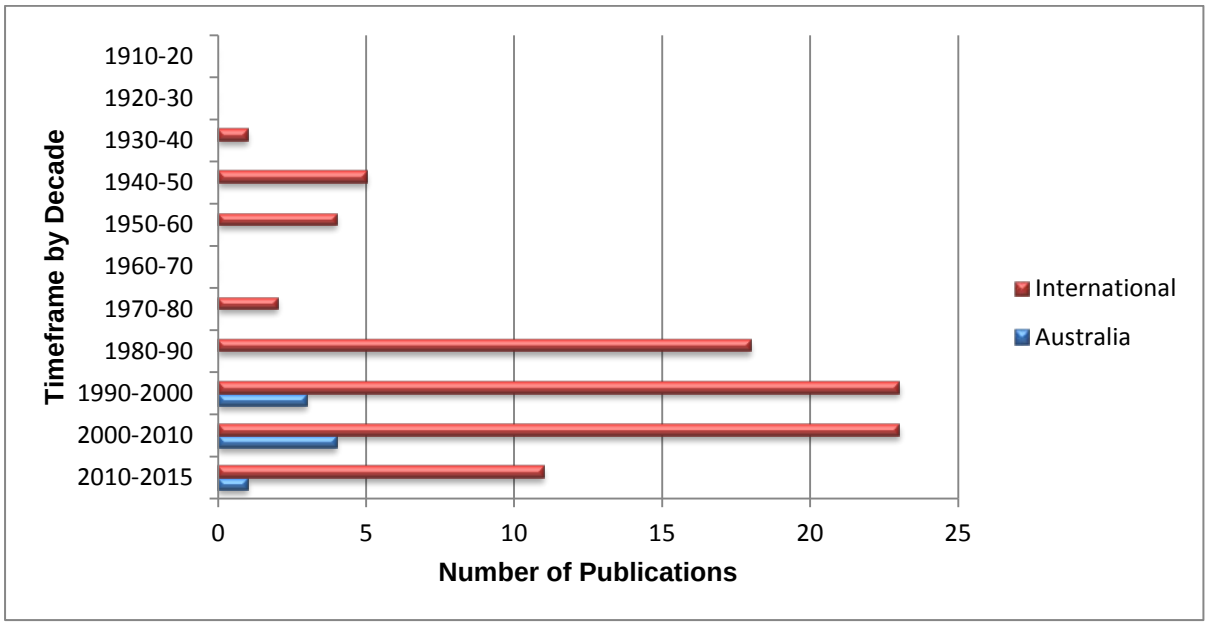

Figure 2-5 Peer Reviewed Publications by Origin: International or Australian

2.9.2 Excluded papers

Seventy three (n=73) of the 95 assessed publications within the scholarly literature were not research based studies on FNs' work. I excluded 65 international and 6 Australian papers (n=73) from the initial 95 full text papers assessed for eligibility. Figure 2-6 reveals the excluded publications grouped into seven categories that did not meet the criteria of research based studies into FNs' work. Papers were also excluded if they only contained a few sentences or a couple of paragraphs regarding FNs' work (Lees & Elcock 2008, Margolis & Vpinazar 2009) because I was interested in full paper research based studies that looked solely at this topic.

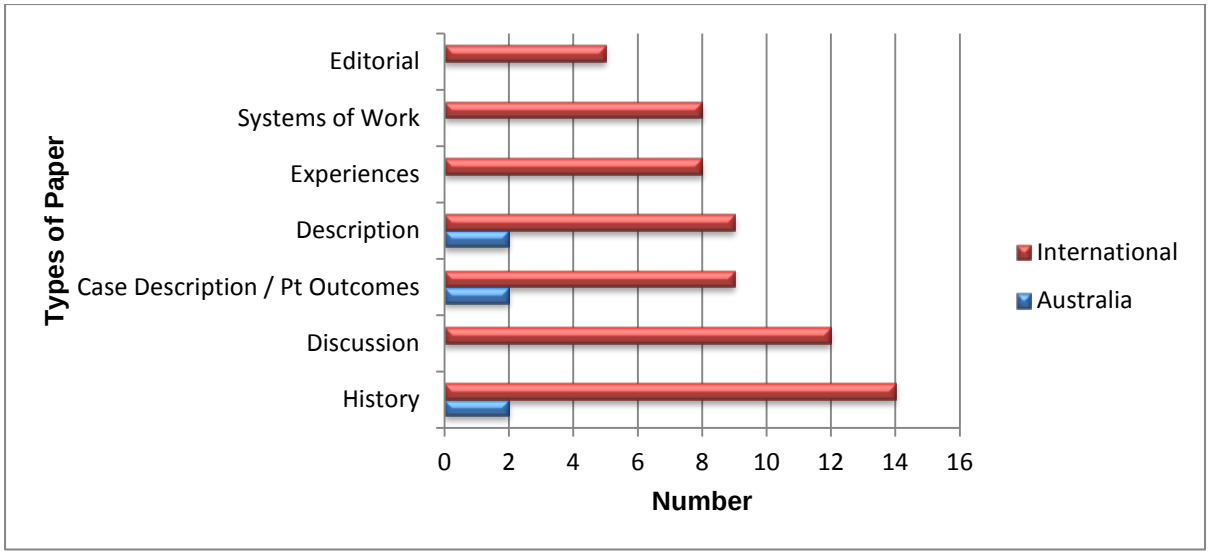

Figure 2-6 Excluded Papers

2.9.3 Included studies pre critical appraisal

The main context of FNs' work is in the air, but FNs also work on the ground in pre-hospital and hospital contexts (Holleran 2004, Margolis & Vpinazar 2009, Semonin-Holleran 1994, Smith & Goldwasser 2003). I have included eight international studies that examine the work of ambulance nurses in the critical appraisal because the numbers of studies investigating FNs' work are small (Ahl et al 2005, Gunnarsson & Stromberg 2008, Holmberg & Fagerberg 2010, Larsson & Engstrom 2013, Suserud & Haljamae 1997, Suserud & Haljamae 1999, Wihlborg et al 2013, Wisborg & Bjerkan 2014).

Ambulance nurses work in the pre-hospital context as part of the ambulance service; a relatively new nursing field that has come about in Sweden since Swedish National Government legislation in 2005 (Ahl et al 2005, Holmberg & Fagerberg 2010, Suserud & Haljamae 1997, Suserud & Haljamae 1999, Suserud 2005, Wihlborg et al 2013). This government is noted to be of the opinion that RNs are the most appropriate health professionals to be involved in ambulance pre-hospital care, and so have tasked RNs with leading the team in the ambulance (Ahl et al 2005, Holmberg & Fagerberg 2010, Suserud 2005, Suserud & Haljamae 1997, Suserud & Haljamae 1999, Wihlborg et al 2013). The work of these nurses compares favourably with FNs' work, particularly in the US, because FNs work mainly in the pre-hospital context without physicians in nurse/nurse, nurse/paramedic or nurse/technician teams (Duke & Clark 1981, Mason Eadie & Holder 2011, Williams Rose & Simon 1999, Wirtz et al 2002). Interestingly, only one study identified the ambulance nurse as also working in the aviation context. That study is from Norway (Wisborg & Bjerkan 2014).

This differs from the Australian context in that FNs in Australia work across both pre-hospital

and interhospital areas, mainly as a sole clinician or as part of a physician/nurse, paramedic/nurse practitioner team, so they perform a range of duties (Anderson 1998, Brideson et al 2012, Pugh 2000, 2002). I located 20 international and 2 Australian studies (see Figure 2-7) representing scholarly research that address various aspects of FNs' work (Ahl et al 2005, Bader et al 1995, Brewer & Ryan-Wenger 2009, England 1986, Gunnarsson & Stromberg 2008, Gustafsson Wennerholm & Fridlund 2010, Holmberg & Fagerberg 2010, Kiefer Schwartz & Jacobs 1993, Larsson & Engstrom 2013, Ravella 1995, Reimer Clochesy & Moore 2013, Seften & Engstrom 2015, Stohler 1998, Suserud & Haljamae 1997, Suserud & Haljamae 1999, Topley et al 2003, Whitley et al 1989, Wihlborg et al 2013, Wisborg & Bjerkan 2014, Wroblenski & Vukov 1996) (Brideson Glover & Button 2012, Pugh 2002).

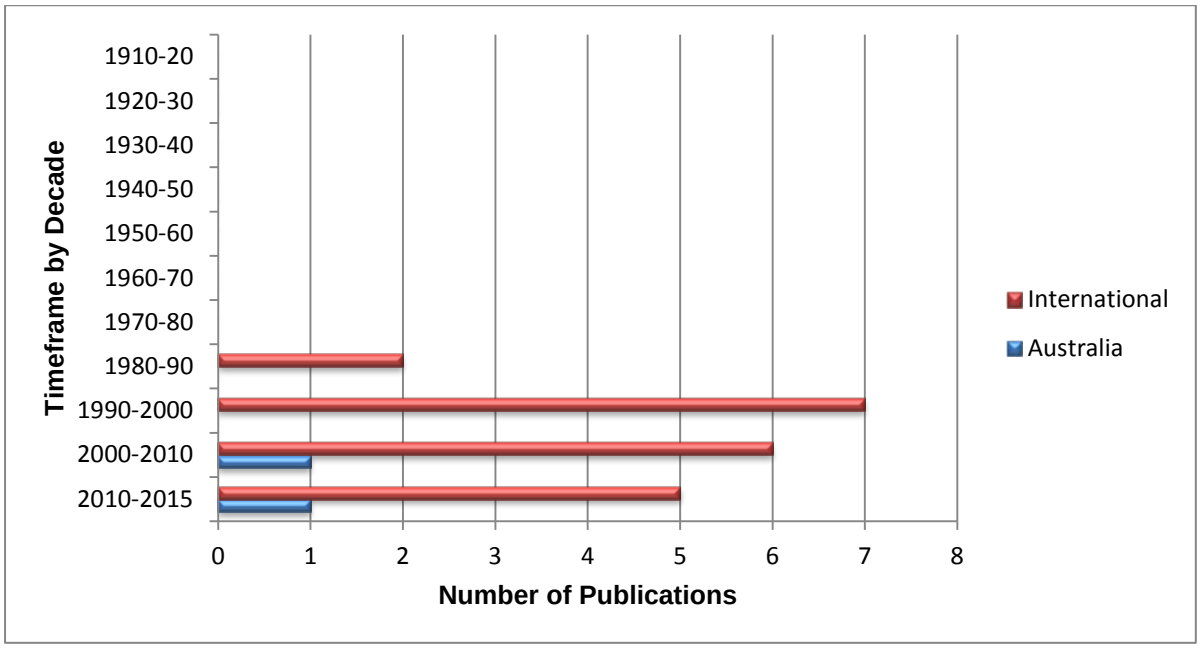

Figure 2-7 Included Studies pre Critical Appraisal

2.9.4 Critical appraisal of the studies

In recent years, the research community has made an undertaking to improve the assessment of the quality of each study included in a systematic review (JBI 2014 a,b, NHMRC 2009). This review of the literature on FNs' work is a systematic review (following the JBI guidelines discussed in this section), without the metasynthesis component. Although most of the literature is based in the qualitative paradigm, the quality of the included studies and the assessment of the level of evidence they contribute to the knowledge of FNs' work is significant.

The Australian National Health and Medical Research Council (NHMRC) levels of evidence hierarchy is concerned specifically with the risk of bias to a study's results, which is related

to study design (NHMRC 2007). Traditionally, the NHMRC has focussed on looking for evidence in intervention studies, and since 2007 they have included diagnostic accuracy, prognosis, aetiology and screening interventions (NHMRC 2007). The quantitative studies included for critical appraisal in this review (Bader et al 1995, England 1986, Kiefer Schwartz & Jacobs 1993, Whitley et al 1989, Wisborg & Bjerkan 2014, Wrobleski & Vukov 1996) have been assessed as presenting evidence at level IV according to the NHMRC levels of evidence hierarchy (NHMRC 2007). Level IV is the lowest level of evidence in the hierarchy table and represents case series studies with either post test or pre and post test outcomes (NHMRC 2007).

The remainder of the studies in this review are qualitative in design (Ahl et al 2005, Brewer & Ryan-Wenger 2009, Brideson et al 2012, Gunnarsson & Stromberg 2008, Gustafsson et al 2010, Holmberg & Fagerberg 2010, Larsson & Engstrom 2013, Pugh 2002, Ravella 1995, Reimer et al 2013, Senften & Engstrom 2015, Stohler 1998, Suserud & Haljamie 1997, Suserud & Haljamie 1999, Topley et al 2003, Wihlborg & Engstrom 2013). At this time, there appears to be no level in the NHMRC evidence hierarchy that looks at meaningfulness (NHMRC 2007).

The Joanna Briggs Institute (JBI) has developed a level of evidence document that sits alongside their quality assessment tools and is based on the Grading of Recommendations Assessment, Development and Evaluation (GRADE) manuscript, which a number of evidence based healthcare organisations have endorsed (JBI 2014 a,b). The JBI level of evidence document (JBI 2014 a,b) assigns a level of evidence for both meaningfulness (qualitative studies) and effectiveness (quantitative studies). These levels are designed to be used alongside the JBI critical appraisal tools. Thus, critical appraisal tools from both areas were required for this review because it includes studies from both the quantitative and qualitative paradigms. The critical appraisal tools from JBI are called the Qualitative Assessment Review Instrument (QARI) and the Meta Analysis of Statistics Assessment and Review Instrument (MAStARI)–Descriptive/Case Series Studies (JBI 2014 a,b). The majority of studies examining FNs' work that I included for critical appraisal are qualitative in design. Given this, I used the critical appraisal tools and level of evidence document from JBI because JBI recognises qualitative studies as having a level of evidence for meaningfulness (JBI 2014a,b).

2.9.4.1 Critical appraisal: quantitative studies

The quantitative studies I included for critical appraisal were all international in origin (Bader et al 1995, England 1986, Kiefer et al 1993, Whitley et al 1989, Wisborg & Bjerkan 2014, Wrobleski & Vukov 1996). I did not locate any quantitative studies of FNs' work from

Australia. After critical appraisal using the MAStARI critical appraisal tool from JBI (2014 a,b, I excluded all except one study (Kiefer et al 1993) because they did not meet the critical appraisal questions' criteria (see Table 2-1).

The studies were conducted mainly from 1986–1996, so in 2017 are regarded as quite old. However, with the proliferation of scholarly literature regarding FNs' work really only commencing in the 1980s, these studies represent foundational work in the area. The excluded studies discuss various areas of FNs' work, including FNs' level of education, qualifications, role, background and levels of medical supervision of their work (Bader et al 1995, Wrobleski & Vukov 1996); and occupational stress, job satisfaction and reasons for leaving Flight Nursing (England 1986, Whitley et al 1989). Four of the five excluded studies stated that they utilised surveys and statistics (Bader et al 1995, England 1986, Whitley et al 1989, Wrobleski & Vukov 1996). However, only nominal level data was collected, descriptive at best, correlational statistics were used, and non-randomised or pseudo-randomised convenience sampling was used. Three of these studies similarly did not pilot test or validate their surveys (Bader et al 1995, England 1986, Wrobleski & Vukov 1996). Ethical considerations were also not discussed in three of the studies (England 1986, Whitley et al 1989, Wrobleski & Vukov 1996)

Interestingly, Wisborg and Bjerkan (2014) did not meet any of the critical appraisal criteria. Their study reports advanced care services provided by FNs, when required, to the local, geographically remote, resource poor communities situated near their flight base in Norway. There is no discussion of criteria for inclusion in the study or ethical considerations. The study sample includes all services provided by air ambulance nurses, with retrospective data collection of nominal level data reported as percentages (Wisborg & Bjerkan 2014). The study by Kiefer et al (1993) also did not meet a number of the critical appraisal criteria, but it remained as an included study because it was the strongest study after critical appraisal.

Table 2-1 Critical Appraisal: Quantitative Studies

Study Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Critical Appraisal Questions	Was the study based on a random or pseudo-random sample?	Were the criteria for inclusion in the sample clearly defined?	Were confounding factors identified and strategies to deal with them stated	Were outcomes assessed using objective criteria?	If comparisons are being made, was there sufficient description of the groups?	Was follow-up carried out over a sufficient time period?	Were the outcomes of people who withdrew described and included in the analysis?	Were outcomes measured in a reliable way?	Was appropriate statistical analysis used?	Is the research ethical according to current criteria or for recent studies is there evidence of ethical approval by an appropriate body
Bader et al, 1995	**N**	**Y**	**N/A**	**Y**	**N**	**N/A**	**N/A**	**U**	**U**	**N/A**
England, 1986	**N**	**Y**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Kiefer et al, 1993	**Y**	**Y**	**N/A**	**Y**	**N/A**	**Y**	**N/A**	**Y**	**Y**	**N**
Whitley et al, 1989	**N**	**Y**	**N**	**Y**	**N**	**N/A**	**N**	**Y**	**U**	**N**
Wisborg & Bjerkan, 2014	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Wrobleski & Vukov, 1996	**N**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N**
Key							**YES**	**NO**	**N/A**	**Unclear**

2.9.4.2 Critical appraisal: qualitative studies

I included 14 international and 2 Australian qualitative studies for critical appraisal (Ahl et al 2005, Brewer & Ryan-Wenger 2009, Brideson et al 2012, Gunnarsson & Stromberg 2008, Gustafsson et al 2010, Holmberg & Fagerberg 2010, Larsson & Engstrom, 2013, Pugh 2002, Ravella 1995, Reimer et al 2013, Senften & Engstrom 2015, Stohler 1998, Suserud & Haljamie 1997, Suserud & Haljamie 1999, Topley et al 2003, Wihlborg & Engstrom 2013). Using the QARI critical appraisal tool from JBI (2014 a,b), I excluded three studies (n=3) (Ahl et al 2005, Suserud & Haljamie 1997, Suserud & Haljamie 1999) because they did not meet the critical appraisal questions' criteria (see Table 2-2).

The three excluded qualitative studies lacked methodological and methods rigour (Ahl et al 2005, Suserud & Haljamie 1997, Suserud & Haljamie 1999). There appeared to be confusion over the research paradigm within two of the studies (Suserud & Haljamie 1997, Suserud & Haljamie 1999) because there was no mention of methodological approach and no proper discussion of data analysis. These two papers did not meet either the qualitative or quantitative critical appraisal criteria (Suserud & Haljamie 1997, Suserud & Haljamie 1999). There was no philosophical approach discussed in all three papers, no ethics considerations mentioned and sampling was not well constructed (Ahl et al 2005, Suserud & Haljamie 1997, Suserud & Haljamie 1999). In one of the studies, participants were not free to enrol if they wanted but were expected to participate because the study was conducted in work time at their workplace (Ahl et al 2005). Study enrolment considerations were not cited by the other two studies (Suserud & Haljamie 1997, Suserud & Haljamie 1999).

Table 2-2 Critical Appraisal: Qualitative Studies

Study Author/Date	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
	Congruity between the philosophical perspective & research methodology	Congruity between research methodology and research question or objectives	Congruity between the research methodology and methods used to collect data	Congruity between the research methodology, representation and analysis of data	Congruity between the research methodology and interpretation of results	Statement locating the researcher culturally or theoretically	Influence of the researcher on the research and vice-versa addressed	Adequate representation of participants and their voices	Are research ethics addressed; evidence of ethical approval for recent studies	Research report conclusions flow from the data analysis or interpretation
Ahl et al 2005	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**Y**
Brewer & Ryan-Wenger 2009	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**U**
Brideson et al 2012	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Gunnarsson & Stromberg, 2008	**U**	**U**	**Y**	**Y**	**Y**	**N**	**N**	**Y**	**N**	**Y**
Gustafsson et al 2010	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Holmberg & Fagerberg 2010	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Larsson & Engstrom 2013	**Y**	**Y**	**Y**	**Y**	**Y**	**U**	**U**	**Y**	**Y**	**Y**
Pugh 2002	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Ravella 1995	**U**	**Y**	**Y**	**N**	**Y**	**N**	**U**	**Y**	**Y**	**Y**
Reimer et al 2013	**Y**	**Y**	**Y**	**Y**	**Y**	**U**	**U**	**Y**	**U**	**Y**

Study Author/Date	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Senften & Engstron 2015	**Y**	**Y**	**Y**	**Y**	**Y**	**U**	**U**	**Y**	**Y**	**Y**
Stohler 1998	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Suserud & Haljamae 1997	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**Y**
Suserud & Haljamae 1999	**N**	**N**	**N**	**N**	**N**	**N**	**U**	**N**	**N**	**N**
Topley et al 2003	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Wihlborg et al 2013	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
KEY				**Yes**	**No**	**Unclear**	**N/A**			

2.9.5 Included studies post critical appraisal

Post critical appraisal, 14 of the original 22 studies remained in the review, comprising 1 quantitative study (Kiefer et al 1993) and 13 qualitative studies (Brewer & Ryan-Wenger 2009, Gunnarsson & Stromberg 2008, Gustafsson et al 2010, Holmberg & Fagerberg 2010, Larsson & Engstrom 2013, Ravella 1995, Reimer et al 2013, Seften & Engstrom 2015, Stohler 1998, Topley et al 2003, Wihlborg et al 2014), of which 2 are Australian (Brideson et al 2012, Pugh 2002). Figure 2-8 highlights the included studies by research design and the timeframe over which they were conducted.

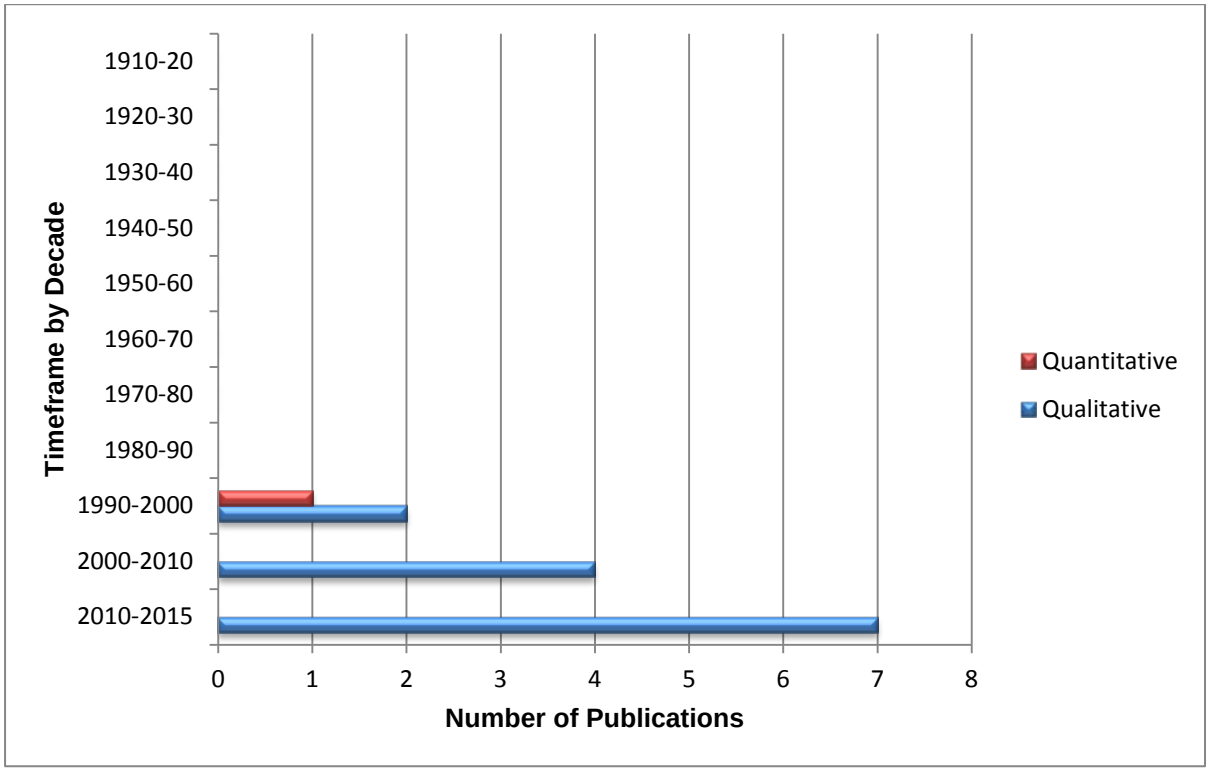

Figure 2-8 Included Studies by Research Design and Timeframe

2.9.6 Phenomenon of interest

Figure 2-9 demonstrates five broad areas of FNs' work in which the investigators of the included studies are interested: competence (Brewer & Ryan-Wenger 2009, Brideson et al 2012, Kiefer et al 1993, Topley et al 2003, Wihlborg et al 2014); clinical practice/role (Holmberg & Fagerberg 2010, Larsson & Engstrom 2013); worries and concerns (Gustafsson et al 2010, Ravella 1995, Seften & Engstrom 2015); clinical decision-making (Gunnarsson & Stromberg 2008, Pugh 2002, Reimer et al 2013); and team interaction (Stohler 1998). Competence has been investigated in the most depth, followed by clinical practice. Flight Nurses' worries and concerns while at work appear to have become a larger area of interest to investigators since 2010 because these were the foci of 2 studies in this

category (Gustafsson et al 2010, Seften & Engstrom 2015).

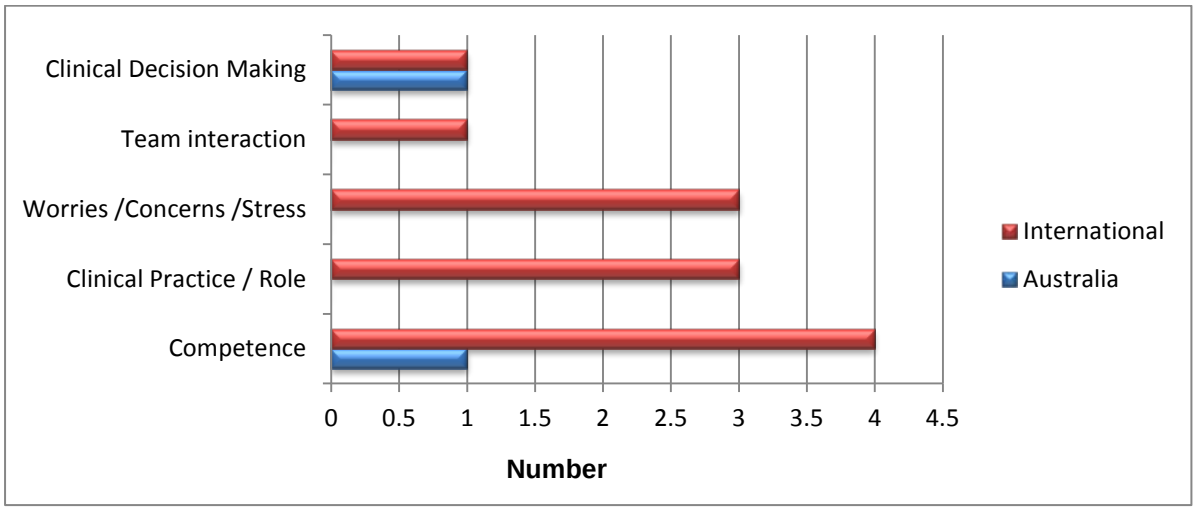

Figure 2-9 Included Studies' Phenomenon of Interest

2.9.6.1 Competence

Brewer and Ryan-Wenger (2009) utilised multiple methods of data collection and analysis in their study to demonstrate the knowledge, skills and abilities required by FNs involved within Critical Care Air Transport Teams (CCATT), a feature of the military. The findings were multiple and varied in focus, including such things as competence, leadership, aircraft air and evacuation familiarity, and certain nursing abilities including the ability to improvise and work flexibility. These FNs are always part of a high performing team by nature of their work, thus their views regarding work performance by all team members come from this perspective. If competence is not maintained, FNs do not retain their position on the CCATT, however, at this level of work, this is not a consideration. Interestingly, physical, mental and emotional fitness, a "can-do" positive attitude and the ability to be able to work for 24 hours straight with little food, water and rest were also seen as important for working as part of this team (Brewer & Ryan-Wenger 2009).

Brideson et al (2012) reviewed the ways FNs in Australia maintain their midwifery competence while working full time as a FN because approximately only 5% of patient transfers involve midwifery patients. The opportunity to maintain competence that comes about through regular provision of care to midwifery patients is not an option. Flight Nurses reported there were a number of other challenges that also prevented them from easily maintaining their midwifery competence, but they overcame many of these with individual professionalism and awareness of the need to personally ensure they maintained a high level of clinical competence to assure high quality patient outcomes (Brideson et al 2012).

Kiefer et al (1993) focussed on quality improvements to FN documentation when FNs were exposed to a structured quality improvement program. This pilot study was only conducted at one organisation but demonstrated that improvements in FN documentation can be achieved when this becomes a focus of the organisation.

Topley et al's (2003) study appears to be the precursor to Brewer and Ryan-Wenger's (2009) study because both studies focussed upon the experiences of care provision by FNs who work as part of a CCATT within the military. Themes developed from the findings of Topley et al's (2003) study included pre-flight preparation, in-flight nursing assessment and environment, and characteristics of the CCATT nurse. Given that this was the first study to investigate the work of the CCATT nurses, it is interesting to note a sentence stating that the work of a CCATT nurse extends beyond that of a traditional FNs' work regarding responsibilities for care provision, skills and abilities. In Australia, FNs work mainly in isolation and are the sole clinicians in the aircraft 85–94% of the time, therefore it could be suggested that Topley et al (2003) are describing Australian FNs' work. Pre-flight preparation, in-flight nursing assessment and environment, and characteristics of the FN are all vitally important in the Australian context of FNs' work.

Wihlborg et al (2014) focussed on the desired characteristics and competence of the Swedish ambulance nurse, as decided by a variety of experts within the field. This study chronicled a number of the characteristics and competencies these experts expected to find in, and practised by, ambulance nurses, including leadership, professional skills and judgement, technical skills, possession of relevant knowledge and a high level of communication skills. The study concluded that ambulance nurses place a high demand upon themselves in these areas of their work.

2.9.6.2 Clinical practice/role

Holmberg and Fagerberg (2010) discussed the experience of ambulance nurses taking the responsibility (lead) for both directing and providing care to the patient and their family, much the same as that of Larsson and Engstrom (2013) but using a different framework. The high level skills and abilities expected of nurses working in this area of pre-hospital care, preparation before giving care, and performing in the role of team leader, were all demonstrated to be the keys to ensuring a caring approach.

Larsson and Engstrom (2013) discussed the lived experience of ambulance nurses providing care to a patient who was suffering from a cardiac arrest, and also providing care to the patient's family. Again, the nurse relies upon their level of knowledge, skills, abilities and clinical decision-making, reinforced by regular education and practice, to work competently

and confidently. The ethics of making the right clinical decisions concerning the care provided to a patient and their family were also discussed. Maintenance of high level skills and abilities through regular education was stressed as important. This was the first paper in this literature review to state this point.

2.9.6.3 Worries and concerns

Gustafsson et al (2010) described the worries and concerns felt by FN informants in Sweden while they were in the process of transporting critically ill patients. Situations out of the ordinary (lack of prior preparation) and the feeling of being unable to care safely for the patient (again lack of prior preparation) caused the most concern. While not mentioned, the level of autonomy, clinical skills, ability and knowledge held by FNs came to the fore as lack of preparation concerns were usually addressed by seeking advice from colleagues, and utilising their own knowledge and experience. Internationally, FNs work as part of high performance teams, and as such have colleagues available with whom to discuss clinical decisions for optimal patient care (Reimer et al 2013, Stohler 1998). In Australia, FNs mainly work in isolation but can communicate with a senior colleague in most cases (as long as there is no problem [black spots] with access to satellite telephone links, aircraft radios or 4 G technology) should they want to seek advice.

Ravella (1995) described the stress responses and coping strategies of FNs who worked in the Vietnam War. They outlined the duties FNs performed, working hours, responsibilities, challenges and expectations; and the link between the type and intensity of work performed and the degree of stress felt by participants. Interestingly, critical survival skills were listed as social support, maturity, prior nursing experience, humour, religion and effective use of relaxation (Ravella 1995). It may be extrapolated that FNs' work in the civilian arena also requires these types of survival skills because critical incidents are part of most FNs' ordinary workday.

Seften and Engstrom (2015) described the work of the helicopter based FN, dealing with critically unwell patients. Again, the high level of autonomy, clinical skills, ability and knowledge held by FNs was discussed, as well as the importance of prior preparation. The findings presented were interesting. Although this study is qualitative in nature and therefore not generalizable per se, numerous findings could be extrapolated to being present for considerable amounts of FNs' work. They included such things as experiencing the care environment as an Intensive Care Unit (ICU) with limited space; a loud environment complicating communication, planning and checking to minimise risks; previous experience and good cooperation; and the dilemma of whether to allow relatives to accompany.

2.9.6.4 Clinical decision-making

Pugh (2002) conducted the first Australian based research study into FNs' work, identifying how FNs make clinical decisions in an emergency as a sole clinician and outlining a number of the type of emergency situations encountered. While not exhaustive, this gives the reader a sense of the types of clinical emergencies FNs encounter during their work day. Various types of knowing were discussed as part of FNs' clinical decision-making; intuitive, experiential and objective knowing, and then the context of the knowing – the fact of working as an isolated clinician but consulting colleagues and others when required; of knowing when to trust colleagues' and others' knowledge; the level of experience that can be brought to the decision-making; of having no or minimal input regarding the patient's care at triage and how this affects decision-making; and the sense of responsibility and accountability for the patient's care. Reflective practice and self-critique of personal skills and abilities as a FN are seen as vital because this allows for changes in personal work practices if needed, leading to safe, quality patient care at all times.

Gunnarsson and Stromberg (2008) discussed the factors that influenced clinical decision-making amongst ambulance nurses and how the level of experience of the nurse making the decision is a factor in the process. Although different language and levels of analysis have been used between this and Pugh's (2002) study, essentially both authors apply the same meaning. Gunnarsson and Stromberg (2008) discussed many of the same points as Pugh (2002) regarding how the emergency, level of experience, skills and knowledge, other people present in the environment, and whether working as part of a team or as the team leader all affect the nurse's decision-making processes.

In 2010, Reimer and Moore developed the middle range theory of Flight Nursing, examining the development of a decision-making framework that described the ways FNs made clinical decisions during flights (Reimer & Moore 2010). In Reimer et al (2013), this theoretical framework was tested for robustness and rigour regarding whether or not it correctly predicted how FNs make clinical decisions while in the air. Some interesting observations were made during the analysis of this study, including the fact that FNs in the US always have another air medical crew member with them to discuss a patient's differential diagnosis, as is the case with most international FNs (Gunnarsson & Stromberg 2008, Gustafsson et al 2010, Seften & Engstrom 2015, Stohler 1998). This gives FNs the ability to double check the clinical decisions that ultimately affect the provision of patient care (Reimer et al 2013). In Australia, FNs work mainly in isolation (Barclay 1998a, Brideson et al 2012, Pugh 2002) and do not always have the easy availability of another air medical crew member with whom to check their clinical decisions (as stated previously, it depends on the

availability and reliability of the communication technology).

2.9.6.5 Team interaction

Internationally, FNs work as part of a flight team transferring patients and acting as the team leader 91% of the time (Reimer et al 2013, Stohler 1998). Patients transferred in the aircraft are mainly critically unwell, therefore team interaction is extremely important to achieve the best outcomes (Reimer et al 2013, Stohler 1998). Stohler (1998) reported the elements FN participants perceived to be present in a high performance team: collaboration; mutual respect and trust; fitness standards; and synergy. Although small, Stohler's sample was widely distributed, with participants working at six different organisations in six different states of the US. Interestingly, what participants had to say about high performance teams was congruent among them all. As I have stated several times previously, this differs 85–94% of the time in Australia, where FNs are the sole clinician in the back of the aircraft (Barclay 1998a &b, Brideson et al 2012, Pugh 2002). However, on those occasions when there is another clinician present, high performance team interactions are just as important as they are in the international arena.

2.10 Summary Section B

The findings from the study by Seften and Engstrom (2015) are discussed by many of the other study authors included in this review, using different concepts or language but with the same meanings. It appears a number of assumptions have been made behind all the studies reviewed; that FN are highly skilled, educated and knowledgeable nurses who function competently and confidently to achieve the aims of safe, quality patient care. They are autonomous in their work, are flexible and can improvise, and often lead the high performance team while also holding the ability to function as a team member. They critically reflect upon their work and make changes as appropriate to maintain competence and high level performance. Evidence based practice provides the cornerstone of their work, while clinical decision-making occurs at a high level, and consultation is undertaken with appropriate senior level staff if the FN is unsure or unclear regarding the correct direction to take for safe, quality patient care (Brewer & Ryan-Wenger 2009, Brideson et al 2012, Gunnarsson & Stromberg 2008, Gustafsson et al 2010, Holmberg & Fagerberg 2010, Kiefer et al 1993, Larsson & Engstrom 2013, Pugh 2002, Ravella 1995, Reimer et al 2013, Seften & Engstrom 2015, Stohler 1998, Topley et al 2003, Wihlborg et al 2014). Although separated into individual categories within the review, these studies could be meta-synthesised into one.

2.11 Conclusion

The work of FNs is specialised and expert, but broad in its approach. Safety and quality are the keys to superior patient outcomes. This is an expectation of FNs themselves and other health professionals who work with them.

In this chapter, I have provided an historical background to both international and Australian Flight Nursing, and made two arguments: the first about the literature sources; the second addressing the origins of this nursing speciality. Firstly, I have argued that up until 1980, most of what is published has come from the popular media and lacks the usual conventions of scholarly publications. Secondly, I have argued that while Flight Nursing has its origins in war, in the Australian context this nursing specialisation arose in response to the difficulties of providing medical care to people living in remote areas.

I have also addressed the current state of knowledge of Flight Nursing as proffered by the scholarly literature. This literature review establishes that there is an insignificant amount of peer reviewed published literature and negligible peer reviewed research studies investigating FNs' work for the timeframe involved – 106 years from 1910–2016. This highlights that contemporary research provides little insight into the work of FNs.

In the next chapter, I discuss critical qualitative inquiry (CQI) the methodology and methods used in this research.

Chapter 3 Methodology and Methods

> The powerbase of a profession must lie within the evidence of its effectiveness. (Bishop 2009 p. 28)

3.1 Introduction

This study is about Flight Nurses (FNs) and Flight Nursing in Australia; the image and culture of FNs and the work they perform. As established in Chapter 2, nurses perform a range of tasks when working in the aviation environment, including patient triage and assessment, care planning and implementation, evaluation of the care provided, then reassessment and re-evaluation, which all improve patient outcomes (Bader et al 1995, Brewer & Ryan Wenger 2009, Barclay 1998 a,b, Brideson Glover & Button 2012, Pugh 2000, 2002, Reimer & Moore 2010, Stohler 1998, Topley et al 2003). However, as revealed in the previous chapter, there is little published evidence regarding the work of Australian FNs.

The quote opening this chapter makes comment regarding evidence as the basis upon which society judges a profession's effectiveness (Bishop 2009). Evidence provides credibility and recognition of the health profession and the professionals involved within and outside the healthcare arena. Evidence of work performed comes in all forms – written, verbal, observational and anecdotal – and is communicated by a variety of forms, including visual, written, pictorial, verbal, non-verbal and within popular culture. Published, recognisable evidence provides the professionals involved with a level of power that is agreed upon and bestowed by society. Flight Nursing, however, lacks evidence as a sub-speciality within the profession of nursing. It remains invisible. My primary aim in this thesis is to detail the work of Flight Nursing and FNs to make it visible.

As I argued in Chapter 1, it is clear from the exploration of the literature in Chapter 2 that there is a paucity of recognised academic work available for use as background evidence for this study. In over 106 years, there have been only 12 international and 2 Australian peer reviewed research studies examining FNs' work. This number alone provides strong evidence that the important work of Australian FNs requires investigation. There is a need to increase the knowledge of FNs' work. Therefore, one of my main intentions in undertaking this study was to improve the knowledge base regarding FNs' work. In addressing this aim, it was important to consider an appropriate methodology and theoretical framework that could be used to answer the research questions that follow.

In this chapter, I outline the methodology and methods of critical qualitative inquiry (CQI) and discuss the rationale behind my choice of this methodology for the study. I also discuss the methods undertaken to complete the study and present the research design with regard to setting and informants, the recruitment process, data collection, rigour, ethical considerations and the two levels of CQI analysis undertaken.

3.2 Study Aims

The aims of this research were three-fold:

i) To investigate the possible rationale behind the invisibility of Flight Nurses' work in Australia.

ii) To investigate the organisation of aeromedical health services in Australia in order to understand the work of Flight Nursing.

iii) To explore whether gender and class explain the invisibility of Flight Nurses and impact on the contemporary work of Australia's Flight Nurses.

3.3 Research Questions

I sought answers to the following questions to fulfil the research aims:

i) What are the historical images of Flight Nursing in Australia, and to what extent do these images influence current popular understandings?

ii) What types of work do contemporary Flight Nurses perform in their workday?

iii) What are the forces that affect Flight Nurses' work, from their perspective?

iv) Does the way aviation health services operate in Australia impact upon the way Flight Nurses work?

I deemed critical qualitative inquiry (CQI) to be the most appropriate research methodology to answer the research questions.

3.4 Critical Qualitative Inquiry: Theory and Method

Critical qualitative inquiry is a title that characterizes a method of inquiry which gathers an eclectic mix of multiple research genres and traditional schools of analysis, into a constantly shifting and developing conglomerate of contemporary critical thought. As no one discreet tradition holds sway over the criticality of the research, critical theory is never static, and is constantly evovling in light of both new theoretical insights and new problems and social circumstances, as the contemporary critical focus is not impacted (Kincheloe & McLaren 2005).The theorists who work within this area of inquiry and hold critical socio-political and epistemological beliefs, include such people as Marx, Kant, Hegel, Weber, Foucault, Habermas and the Frankfurt School theorists (Kincheloe & McLaren 2005). However, critical theory does not represent the universal language of revolutionary thought that has been attributed to it and thus should not utilised in a reductionist piecemeal way.

Critical qualitative inquiry has been re-conceptualised by the 'post'- discourses (postmodern, critical feminism and post structuralism) of the 21st century. This re-conceptualisation has led the critical theorists to greater depths of understanding regarding the influence of societal and historical forces upon individuals (Kincheloe & McLaren 2005). The assumptions, research methodologies and adherents of the various CQI research designs are complex, thus the plethora of perspectives allows for the investigation of the phenomena from diverse frames of reference (Orlikowski & Baroudi 1991).

3.4.1 Critical qualitative inquiry as theory

Kincheloe & McLaren (2005) noted that critical qualitative inquiry is predominantly concerned with questions of power and justice, and the ways that the economy, race, class, gender, ideologies, education, religion, other social institutions and cultural dynamics all interact to construct a social system /reality (Cannella 2015, Denzin 2015, 2017, Denzin & Lincoln 2005, Kincheloe & McLaren 2005). Reimer-Kirkham et al. (2009) also supported this in their work on critical inquiry. The central idea is the belief that social reality is historically constituted and hence human beings, organisations and society are not confined to existing within a particular state. Everything possesses an unfulfilled potentiality which can be utilised to change one's material and social circumstances. However, the recognition is also present that this change is constrained, due to peoples' alienation from their potential by the prevailing systems of economic, political and cultural authority. Social reality is understood to be produced and reproduced by individuals but holds properties that dominate human experience, thus leading to inequalities and conflicts from which new social forms emerge (Orlikowski & Baroudi 1991). Totality also features in that things can never be treated as isolated elements -there is an essential relationship between totality and the elements which

are shaped by history and contextual conditions (Orlikowski & Baroudi 1991). For these reasons, an important objective, is an awareness and understanding of the existing social conditions, along with the various forms of social domination and oppressive social relations, so these can be eliminated (Orlikowski & Baroudi 1991). The role of the researcher is to bring consciousness to the restrictive conditions of the status quo, thereby initiating change in both social relations and practices, to help eliminate alienation and domination.

Scholars of critical qualitative inquiry are committed to showing how critical research practices can help change the world in positive ways. Thus, CQI represents the pursuit of social justice transformations that challenge prevailing forms of inequality, poverty, human oppression and injustice (Denzin 2015, 2017, Hall 2013, Kuntz 2015). CQI scholars are united in the commitment to expose and critique the forms of inequality and discrimination that operate in daily life demonstrating that critical inquiry is a useful intervention in the name of social justice (Bailey & Fonow 2015, Denzin 2015, 2017, Kinchloe & McLaren 2005, Kuntz 2015, Orlikowski & Baroudi 1991).

Critical researchers regard their work as the first step towards forms of political action that may assist to redress the injustices found within society. A critically focussed researcher uses their work as a form of social or cultural criticism, while utilising certain basic assumptions:

- All thinking is fundamentally mediated by social and historically constructed relations of power
- Facts cannot be isolated from the domain of values or ideological thought from whence they were constructed
- The social relations of capitalist production and consumption mediate a fluid relationship between the concept and object, signifier and signified
- Language is a central tenant to subjectivity
- Certain societal groups are privlidged over others, leading to oppression
- Contemporary societies are characterised by oppression most strongly when the oppressed subordinates accept their position in society as natural, necessary or inevitable
- Oppression is portrayed by multiple forms that all require focus, otherwise the connectedness between them disappears
- Mainstream research practices unwittingly reproduce systems of class, race and gender oppression (Kincheloe & Steinberg 1997, p.20).

As Orlikowski & Baroudi (2002, p.72) note in their critique of advanced societies, '*critical researchers examine capitalist economies and find a contradictory relationship between socialised labour and the private appropriation of capital'*. Because contradictory elements may be masked or concealed, the role of the research is to expose the hidden contradictions and thereby attempt to reframe the basic oppositions, potentially enacting a different social order (Orlikowski & Baroudi 1991).

Critical research demonstrates the reality that organisations cannot be studied independently to the world in which they exist – industrial, social, national, historical, economic and political (Orlikowski & Baroudi 1991). Orlikowski & Baroudi (2002, p.72) state further that '*Contemporary critical researchers' view of contradiction is thus closely tied to their critique of class-based societies and capitalist forms of production. In this view contradiction in social relations can only be removed by transforming the basis of society and the forms of organisation and production'* - a state only attainable with the transcendence of capitalism.

3.4.1.1 Power and Critical Qualitative Inquiry

Critically based perspectives facilitate an environment that supports diverse epistemologies and ontologies. Thus, critical scholarship is embedded within centuries of struggle for socio economic, gender, and racial justice. The science of critical scholarship has as its first concern the existence, performance and impact of power relations, so power needs detailed study within critical theory, as it is power that dominates overall (Canella 2015).

CQI research highlights both the oppressive and productive aspects of power. The thought that if only we had better research we could challenge power structures is naïve. Better understandings about how power is diffuse, how everyone is complicit in the social relations of domination and the production of knowledge, is necessary (Bailey & Fonow 2015). Critical research reshapes these and is always concerned with issues of fairness, equity and social transformations of the power relations (Cannella 2015).

Critical qualitative inquiry as an academic endeavour examines power relations and looks for areas of social justice within that very invasive form of capitalism Neoliberalism. Neoliberal saturation has invaded all areas of life and this is a strong counter to any form of transformation that privileges social justice and equity (Cannella 2015).

Institutions /organisations are structured in terms of power and status, and they distribute money, power and status as rewards (Bartlett 1991). This resource allocation is a means of exercising power. Power is a major part of the social formation of institutions /organisations

and is related to interests and ideology. Power is endowed on a person by virtue of their membership in the institution, and thus it is exercised through this membership, in the pursuit of particular interests. If the interests of persons within institutions are uncovered, their ideology is uncovered (Bartlett 1991).

The ideology of a group of people may ensure the continuation of their dominance and control over the manner in which resources (money, power and status) are allocated. Structural conditions generally ensure that certain groups occupy the dominant institutional position so that the prevailing ideology is commonly a legitimation of the status quo (Bartlett 1991). Critical theorists understand there are multiple forms of power that dominate, especially economic. Economic factors can never be separated from other forms of domination (Kinchloe & McLaren 2005).

Kincheloe & McLaren (2005, p. 385) noted that in the context of oppressive power, Gramsci posits: '*power in the 20th century was not always exercised by physical force, but also through social psychological attempts to win peoples consent to domination through cultural institutions such as the media, church, family and schools. Gramasci's hegemony recognises that winning popular consent is a very complex process, as we are all situated in the same power filled space. The privileging of power, domination and subordination and the inequality of such, is proffered as a natural and normal part of legitimate social relations'.*

The researcher in this context is constantly looking for new theoretical insights that lead to a greater understanding of power and oppression, and the ways that power and oppression shape the informants' everyday experiences (Kincheloe & McLaren 2005). Therefore, criticality and critical research is always evolving, looking to provide enlightenment to those who are oppressed by the action of power. Critical enlightenment can be described as the analysis of competing power interests between individuals and groups within society that highlights who gains and who loses in various situations. Those who gain advantage – the privileged groups- have an interest in protecting the status quo within society, as the status quo protects their advantages.

Hegemony represents an effort by the powerful to win the consent of their subordinates to be dominated, thus ideological hegemony represents the cultural forms, meanings, rituals and representations that produce consent to the status quo. It is the coercive manipulation of citizens by political, educational, media and other socio-political ways. Dominant discourses shape our reality and occur concurrently across all levels of society. As these are "seen" as natural, they are privileged, and those in society who are privileged want to maintain the status quo (Kincheloe & McLaren 2005). Critical inquiry allows the researcher to expose the

neo-liberalist, political power currently being used by Western governments to privlidge their capitalist new public management strategies across the globe. Advocates of critical inquiry argue that this oppressive use of power needs to be exposed, so that people can oppose it (Kincheloe & McLaren 2005).

3.4.1.2 Critical Qualitative Inquiry -a gendered ontology

The organisation of society by a gendered ontology is an important principle in this study. Gender is a major central organising principle in all social systems, including work, politics, everyday interaction, families, law, education, economic development and many other social domains, and plays a leading role in the race and class specific organisation of these social systems (Armstrong Armstrong & Messing 2009, Davies 1995, 1996, Henswood Green & Balka 2009, Smith 1987, 1990b, 1992, 1999). Gender is a powerful organising force that pervades all levels of life and shapes people's identities, perceptions and relationships (Armstrong et al 2009, Davies 1995, 1996, Henswood et al 2009, Smith 1987, 1990b, 1992). There is a specific link between the dynamic advance of the distinctive forms of organising and ruling of contemporary capitalist society, and the patriarchal forms of our experience (Campbell 2011, 2014, Campbell & Gregor 2004, Cheek et al 1996, DeVault & McCoy 2006, Smith 1987, 1992, 2005). As the understanding of gender as a principle of social organisation becomes clearer, so does the understanding that people experience gender in class specific and race related ways (Jones 2017, Kincholoe & McLaren 2005, Smith 1987, 1992). The lived experiences of informants reveal the gendered workings of power (Bailey & Fonow 2015).

Looking at the world through the "gender lens" means recognition that gender inequality is inextricably intertwined with other systems of inequality (Allen 2017, Bowden 2016, Chen & Binfield 2017, Conifer 2016, McMahon 2016, Sedghi & Ong 2016, World Economic Forum 2016). Central assumptions across society about gender continue to organise the world in which we live, regardless of the reality of that world and the way that society likes to present itself. Furthermore, assumptions about gender pervade life in general.

Unquestioned ideas about gender affect the words we use, the questions we ask and the answers we envision (Jones 2017, Smith 1987, 1992). Society has the unrelenting view that women are the carers and nurturers, and need patriaichal direction because this has been the case historically (DeVault 1991). Women are socialised to fit the patriaichal, stereotypical role of the woman, to remain viewed as a "good woman", a "good mother" and a proper person to be given respect (Anritha & Pearson 2013, Chen & Binfield 2017, DeVault 1991, Glenn 2009, Gordon 2005, Jones 2017, Jordan 1999). The public in Australia are continually subjected to subliminal messages by the media, news outlets, social media and at work

regarding men as the household head and major breadwinner (Australian Broadcasting Commission [ABC] 2016, Chamberlain 2016, Edwards 2016, Gartry 2016, Wade 2016). Men mainly give commentary as recognised experts on the television and over the radio, and, as mentioned in Chapter 1, the Royal Flying Doctor Service (RFDS) is assumed to be male doctors, not female nurses.

What is the main issue regarding gender? It is about the power and control of one's life and work, and comes back to the critical discussion of one group being privileged over another – in this case men over women. The dominant views of reality and truth in our everyday world, are the creation and construction of euro-western thought. This thought is white, male orientated and privileges particular socioeconomic positions. This dominant view is put forward as the truth, the only truth about our world (Cannella 2015). Critical inquiry supports social change, thus positioning it 'outside' the norm, as the researcher is looking to uncover and highlight areas of social structures, discourses and ideologies that prop up the 'status quo' and support forms of privlidge. For example, white male, class elitist, heterosexual, imperial, colonial privlidge operates by asserting the power to claim objectivity and neutrality, reason and rationality. But the proponents of criticality possess the tools to expose these oppressive power politics (Bailey & Fornow 2015, Kincheloe & McLaren 2005, Pasque & Perez 2015).

Women want to have power over, and be in control of, directing their own lives, making their own choices (Armstrong & Armstrong 1990, Armstrong et al 2009, Johnstone 1994, Jones 2017, Montgomery 1992). However, the reality of life is that to achieve these goals, women must have the economic means available to do so (ABC 2016, Allen 2017, Armstrong & Armstrong 1990, Bowden 2016, Chamberlain 2016, Chen & Binfield 2017, Clay 1987, Conifer 2016, Edmond & Fleming 1975, Edwards 2016, Gordon 2005, James 1975, Matthews 1974, Stuart 1974).

Society maintains the view that the natural order of things is that women mainly provide the care and nurturance the family requires in the domestic unpaid domain of society (Armstrong & Armstrong 1990, Australian Government Workplace Gender Equality Agency [WGEA] 2014, 2015, 2016, Chamberlain 2016, Glenn 2009, James 1975, Johnstone 1994, Jordan 1999, Matthews 1974, Stuart, 1974, Thornton 1994, World Economic Forum 2016). Looking after the children and elderly, while performing the multitude of tasks required to keep a home running smoothly have not been, and still are not, viewed as work because they attract no economic payment (Armstrong & Armstrong 1990, Australian Government WGEA 2014, 2015, 2016, Bella 2009, Davis 1995, Edmond & Fleming 1975, Edwards 2016, Gartry 2016, Hartnell 2016, James 1975, Matthews 1974, Stuart 1974, Wade 2016). When women go

outside the home to work to relieve their economic dependency, it is their "second" job. Their "first" job awaits their return – the societal expectation of women's work – cooking, cleaning, washing, child rearing, home financial management and provision of care to elderly relatives (Armstrong & Armstrong 1990, DeVault 1991, Jones 2017, Kinnear 1995, World Economic Forum 2016). The amazing thing is that this view still prevails across various sectors of global societies in 2017 (Allen 2017, Aranda 2015, Chen & Binfield 2017, Jones 2017, Wade 2016, World Economic Forum 2016).

Unpaid work equals invisible work (Armstrong & Armstrong 1990, James 1975, Johnstone 1994, Jordan 1999, Matthews 1974, Stuart, 1974, Thornton 1994). Furthermore, as is demonstrated by current statistics, women are paid less for the same work, and achieve a lesser status within the workplace than men (Australian Government Workplace Gender Equality Agency [WGEA] 2014, 2015, 2016, Chamberlain 2016, World Economic Forum 2016). However, at the same time within modern society, women are also seen as an integral part of the workforce, and therefore have required duties within the paid employment sector.

Dorothy Smith, a theorist in the methodology of institutional ethnography, developed a strongly feminist stance through recognition of society's complete lack of attention to how things worked in the everyday world of women. She comments that the majority of social relations operate from the male view of the everyday world. Smith noted that many sociological studies in the 1970s, such as those looking at families and children's school achievements, discounted and ignored women's work within the family; it was invisible (Smith 1987,1990,1990b,1992). She argued convincingly throughout her work that society and the social relations within it are prejudiced towards men's standpoint, experiences and self-interest, and bestow relevance to men, their opinions and actions alone (Smith 1987, 1990, 1990b, 1992). She argued that women needed a sociological theory that examined society from their standpoint – through women's eyes and experiences – to garner their unique perspective (Smith 1987, 1990, 1990b, 1992, 1999, 2001).

3.4.1.3 Marxism and the ruling apparatus

In the following discussion, I explore the influence of Marxism and feminism on the theoretical positioning of critical qualitative inquiry. My argument in this thesis is that while theoretical positions have shifted over the last 30 -40 years, contemporary versions of these theories remain relevant to a CQI analysis of FNs in the Australian context.

Marx's ideas contained within the 'Manifesto of the Communist Party', 'A Contribution to the Critique of Political Economy' and 'Capital' had far reaching consequences and impacts

upon general society (Marx & Engels 1849 / 1968, 1859 / 1968, 1872 / 1968). While Marx's works had a distinctly patriarchal stance (most likely due to the timing of his writings), his ideas are useful for any discussion of FNs' work, particularly on the issues of organisations and class.

Marx argued that modern bourgeois society grew out of feudal society, but the old class antagonisms and oppression of the people did not disappear with this change; they changed form (Marx 1872/1968, p.36). He discussed the growth of modern markets and the implementation of free trade – how nations lost their self-sufficiency and became a "universal interdependence of nations" (which can be translated into globalisation) – and the populous chasing ever greater rewards in the form of cash payments to try and satisfy their "naked self-interest" (Marx 1872/1968, p.39). Marx also discussed how modern society, capitalism and the bourgeois changed the focus of society from people's "personal worth into exchange value" (Marx 1872/1968, p.38).

While Marxism may no longer appear to have currency, as time has progressed, so have the ways in which power can be applied to our social world and our everyday activities by the ruling apparatus. In Marx's time, he predicted that there would be social impacts from the growth of capitalism, and the struggle between the classes would progress in different forms through class struggle, revolution and socialism (Marx 1872/1968). While society has not followed the trajectory of his analysis to date, it does not mean his definition of the problem is inaccurate. While workers in the 18th and 19th centuries were controlled in the workplace through the speed of machines and long hours of work, workers remain controlled and coordinated in 2017. Only currently, control is achieved in a different way – both textually and discursively by organisations and the ruling apparatus they apply. The ruling apparatus now shapes an individual's everyday activities. For example, the government regulation/s and policy that must be obeyed; the requirement workers will change practice to abide by and follow an organisation's policy and procedure; the number of hours worked and breaks taken; the pace at which people work; the completion of organisational and government paperwork; and changing practice to assist the organisation meet its accounting goals.CQI researchers plot these social relations, thus making visible the practices of institutional power and their effect upon individuals' lives.

Marx, with Fredrick Engels, provided an analysis of the ways capitalism separated society into firmly defined classes (Cheek et al 1996, Marx & Engels 1872/1968). In all societies, men and women must work to produce goods and services to provide for their material needs. In contemporary societies, these products and services are exchanged for money (cash), which enables people to satisfy their basic needs for shelter, water, food and

clothing. Marx posits there are two main groups of people or classes that inhabit capitalist society – the bourgeois and the proletariat (Marx & Engels 1872/1968). The bourgeois represents the owners of the means of production – the land, factories, machinery and basic merchandise required to produce goods and services for society. The proletariat represents the major, larger class of people in society who have only their personal labour to sell to the bourgeois in exchange for money to satisfy their basic needs (Cheek et al 1996, Marx & Engels 1872/1968). The proletariat has several different stratifications because it represents such a large group of people. These stratifications are based on education and control over the labour process. For example, professionals and managers have power over other people, are viewed as higher on the social scale given their qualifications and education, and have greater access to wealth; but they do not own the means of production and so remain part of the proletariat. This stratification is dynamic, changing over time, but essentially remains a two-tiered system (Cheek et al 1996).

The term “capitalism” underscores the way wealth is distributed and work is organised in contemporary society (Bannock Baxter & Davis 1987). Members of the bourgeois (capitalist class), as owners of the means of production, hold a greater amount of society’s wealth and investment drawn from the proletariat’s labour. Members of the proletariat (workers) are limited in the amount of wealth they can generate and therefore the lifestyle they can lead, because they only have their personal labour to sell. Also, as purchasers of the workers’ labour, the bourgeois have power over how much wealth the workers can earn by controlling the ways their labour is used (Cheek et al 1996, Marx & Engels 1872/1968).

The bourgeois have learnt how to exploit the proletariat better as capitalism has grown. Workers are now directed while at work as to what they will do and how they will do it, by, amongst other things, organisational texts and language. Moreover, many jobs have been eroded and broken into smaller pieces so that unskilled, cheaper workers can substitute those who previously represented a higher class group who could demand higher remuneration for their work. In an effort to earn and own a larger portion of the means of production, the bourgeois are constantly looking for ways to cut production and other economic costs, and to keep the proletariat within their own class (Cheek et al 1996, Crouch 2013).

While dominating and subordinating all genders situated within the proletariat, the ruling apparatus emphases the domination and subordination of women (Holstein & Gubrium 2015, Smith 1987, 1990, 1990b, 1992). Power imbalances occur at all levels and within all classes across society, but some people are more powerless than others. Women have been identified as occupying mainly the proletariat class in society -being subordinated,

dominated, and experiencing a greater level of powerless and inequality (Smith 1987, 1990, 1990b, 1992). Accordingly, there is a specific link between the dynamic advance of the distinctive forms of organising and ruling of contemporary capitalist society and the patriarchal forms of our experience (Campbell 2003, Campbell & Gregor 2004, DeVault & McCoy 2006, Smith 1987, 1992, 2005).

The ruling apparatus represents the powerfilled, complex, extraordinary, yet ordinary, textually mediated system of relations between people that connect us across space and time and that organise our everyday lives (Campbell & Gregor 2004, Hall 2013, Johnson 2013, Smith 1990, 1990b, 1992). Individuals' experiences of their everyday life reveal the ruling apparatus; the ways an organisation shapes individuals' experiences through power, control and coordination. At this point, individuals internalise textual discourses and forms of knowledge at the local level. Forms of consciousness are then created within the individual employees, which make up the organisation's properties. This internalisation results in people altering the ways they work to fit with the organisation's goals, aims and objectives. Critical qualitative inquiry builds knowledge of how these power relations operate from the standpoint of the people participating in them (Denzin 2015, 2017, Hall 2013, Johnson 2013, Kinchloe & McLaren 2005). It creates situational plots whereby people can see the workings of an organisation and their own position within it (Denzin 2015, Hall 2013, Johnson 2013, Kinchloe & McLaren 2005).

Power, organisation, direction and regulation in present-day society are structured more ubiquitously than can be expressed in the traditional concepts provided by the discourses of power (Denzin 2015, 2017, Hall 2013, Johnson 2013, Kinchloe & McLaren 2005, Smith 1987). The 'rule' comes about in the context of a contemporary global, capitalist society with organised practices that include all areas of everyday life: government; law; business and financial management; professional organisations and educational institutions; and the discourses in the texts (documents, policies, protocols, guidelines) that interpret these multiple sites of power. This ruling involves increased use of textually based forms of communication and language, whereby power is generated and held. Thus, the everyday world as we know it has a reliance on text based discourses and forms of knowledge as a central feature (Campbell 2001, Campbell 2006, Campbell & Gregor 2004, Corman & Melon 2014, Denzin 2015, 2017, DeVault & McCoy 2006, Griffith & Smith 2014, Hall 2013, Johnson 2013, Kinchloe & McLaren 2005, MacKinnon 2008, Smith 1987, 1990, 1992, 2001, 2005, 2006).

In contemporary global, capitalist society, external social relations organise the local setting in powerful ways. The external social relations pass through local settings and shape them

according to a dynamic transformation that begins and gathers speed and power elsewhere. These relations carry and accomplish organisation and control. As such, they are the ruling apparatus (Denzin 2015, Hall 2013, Johnson 2013, Kinchloe & McLaren 2005, Smith 1987). This mode of ruling has become dominant in our society. It involves the continual transcription of the local and particular activities and actualities of our lives into abstracted and generalised ones, which are no longer personal and local but objectified and impersonal. Forms of organisation vested in, and mediated by, texts, rule us. Whether on paper or electronically, we become part of the creation of a world of texts as a site of action – email, blogs, social media, internet and phone texts (Campbell & McGregor 2004, Corman & Melon 2014, Griffith & Smith 2014, Janz et al 2014).

3.4.2 Texts and language

Texts document institutional knowledge, making them central to ensuring good communication flow and management within the organisation (Hamilton & Campbell 2011, Janz et al 2014, Kuntz 2015). Therefore, examination of texts, documents and the language utilised within is essential to a critical qualitative inquiry. The knowledge of language use by informants is important, but interpretation of their social world is not enough. The material conditions of domination need to be understood and critiqued. Thus, CQI researchers critically analyse these through a theoretical framework (Orlikowski & Baroudi 1991).

It is the texts, in the form of individual documents, words, sounds or images, which enable localisation, within an individual's consciousness, of the institution's external setting. These textual discourses and forms of knowledge authorise the organisation of the local setting by external social relations (Cannella 2015, Denzin 2015, 2017, Hall 2013, Johnson 2013, Kinchloe & McLaren 2005, Kuntz 2015, Pasque & Perez 2015). For example, in recent years in aeromedicine, the Commonwealth and state governments have decided that single, state wide retrieval services are to be formulated in each state across Australia. This is a decision that has been made elsewhere (e.g. in Canberra) and ultimately applied locally (across each state). These were not local decisions but were based on ideas put forward and supported elsewhere by centralised government, influenced by global ideas of neoliberalism. These ideas gained momentum, power and action, which were then applied at the local level.

Language is another central feature of CQI because the forms of coordination and power that constitute institutions and their documents, occur in, and through, language (Austin 2013, Bartlett 1991, Corman & Melon 2014, Griffith & Smith 2014, Kinchloe & McLaren 2005, Orlikowski & Baroudi 1991, Smith 1992, 2005, 2006). Power laden messages are embedded in language, texts and documents. Media messages and images are laden with meanings used for social control and to perpetuate stigmatisation and stereotyping. Much

speech is privileged to the dominant discourse of society (Austin 2013). Darville (cited in Campbell & Gregor 2004, p.12) argues that knowledge is constructed for different purposes, of which technical skill is only one. He notes the importance of experience and argues that anyone can become illiterate and powerless when they face writing that is constructed for a purpose that is mysterious to the reader (cited in Campbell & Gregor 2004). This is particularly the case for the language used to convey the rules of organisations and bureaucratic processes, which requires organisational literacy.

Organisational literacy is a specific form of literacy that particularly large organisations employ to get their work done. It utilises written materials as a special kind of insider knowledge (Corman & Melon 2014, Griffith & Smith 2014) 4). For example, organisational memos may read like a foreign language when they are not related to an employee's work. Organisational literacy collects, categorises and uses knowledge for organisational purposes. Thus, language provides the access and the means for the application of the ruling apparatus. When this distinction is recognised, workers can begin to understand why organisational texts and textual processes are incomprehensible to most outsiders. Gaining the skills to see how power works through these special institutional forms of knowing allows people to learn the skills needed to successfully engage with the organisation and perhaps avoid domination (Campbell & Gregor 2004, Corman & Melon 2014, Denzin 2015, Griffith & Smith 2014, Hall 2013, Kinchloe & McLaren 2005, Kuntz 2015)

As part of this thesis, I argue that the utilisation of targeted texts, documents and language surrounding Flight Nursing has put FNs at a great disadvantage. This use of specialised language promoting imagery and myths regarding FNs' and their work are of an ideal nurse, and have been formulated externally outside the local actuality of FNs experience. A larger external authority – the government via the armed forces – formulated the myths, which were then applied to local settings. The local setting adopted and absorbed the myths as their own, with the assistance of imagery, created by language. Flight Nursing was essentially disadvantaged from its beginnings because FNs were viewed through the coloured lens of romance, glamour and adventure – being non-essential and fluffy – images that had been promulgated by the external setting. The reality of Flight Nursing as highly skilled and professional nursing care was lost as the romantic, glamourous image of Flight Nursing evolved. This disadvantaged the women involved because their work was hidden and invisible within the provision of aviation healthcare. Secondly, as will become clear in chapters 6 and 7, I argue that the Marxist analysis of organisations goes beyond private capitalist interests to the very heart of the government. While government funded welfare state services may not be obvious parts of capitalism, their operations are dominated by

neoliberal, capitalist interests.

3.5 The Researcher in Critical Qualitative Inquiry

As previously stated, researchers utilising CQI generally have critical, liberatory or emancipatory goals by virtue of their experience, level of knowledge and the lens through which they view their research (Bailey & Fornow 2015, Bartlett 1991, Campbell & Gregor 2004, Cannella 2015, Corman & Melon 2014, Denzin 2015, 2017, Denzin & Lincoln 2005, Griffith & Smith 2014, Hall 2013, Kinchloe & McLaren 2005). Critical research looks to empower individuals by addressing injustice within either a particular society or a sphere of society. Thus, critical researchers are unafraid to proclaim their stance toward researching and working for a better world. The research is therefore transformative and unembarrassed by being labelled political and emanicipatory.

Therefore the way the research is undertaken is used to reveal the ideological and social processes that produce experiences of domination and subordination in ordinary people's everyday world. Organisations utilise particular language and texts as a way of exercising their power. Analysing this feature of organisations enables us to see how organisational literacy dominates employees' lives ((Bailey & Fornow 2015, Bartlett 1991, Campbell & Gregor 2004, Cannella 2015, Corman & Melon 2014, Denzin 2015, 2017, Denzin & Lincoln 2005, Griffith & Smith 2014, Hall 2013, Kinchloe & McLaren 2005). Subordination, domination and knowledge relate to power issues; all knowledge is power. However, the level at which this power is exercised depends upon who, and what, people know (Campbell & McGregor 2004).

Critical researchers draw upon their own experience as a resource. They think reflexively, historically and biographically. They seek strategies of inquiry that allow connections to be made between social injustices and lived experience and larger social and cultural structures. Eg critical theorists examine systems and material conditions that reproduce dominant class and economic structures (Denzin & Lincoln 2005).

Critical research represents self conscious criticism and self aware research as noted by Kincheloe and McLaren (2005). They then state that researchers bring their own subjective, normative frames of reference, ideological imperatives and epistemological presuppositions to the research. In this way, the researchers assumptions and political baggage are clearly visible to informants (Kincheloe & McLaren 2005). Ambiguity and flexibility are associated with the post positivist and non-positivist designs utilised in CQI research (Denzin 2015, 2017).

The researcher in CQI takes the view of the people whose experience provides the starting point of the investigation. For example, in this research project, I have established that FNs want three things explored: why they remain invisible within the workforce; the increasing intensity of their work with the absence of a work life balance; and the increasing amount of regulation directing their work. These issues are illuminated by the informants' data and reinforced by my experiences.

Having discussed the basis of the methodology of CQI, the gendered ontology of society, and the influences of Marxism and feminism upon CQI, I now move to discuss the methods used in this study.

3.6 Critical Qualitative Inquiry as Methods

Research is acknowledged as a power orientated activity that creates new power relations. But this work is not always transformative, as multiple complications abound, including the neoliberalist stance infused throughout our everyday world. Government has developed an increased focus on value for money research and placed an emphasis on how social research might better serve policy. Return on investment is very important to funding bodies and sways their decisions regarding which research to fund. The trend is towards increasingly corporatized and nationalised research moving towards large scale data bases, inter disciplinary, inter institutional networked research teams, leading to a concentration of power. There is much rhetoric towards collaboration as capacity building, however narrow the focus. (Cannella 2015, Johnson 2015). Thus, critical considerations must be at the forefront of research activities as this creates the correct environment for transformation and social justice (Cannella 2015).

When informants participate in CQI research, all learn to see more critically, think at a more critical level and to recognise the forces that subtly shape their lives. Critical researchers usually regard their work as the first step towards forms of political action that can redress the injustices found or constructed during the research process. The statement that "critical theory and research are never satisfied with merely increasing knowledge" is made by Kincheloe & McLaren (2005, p. 305) demonstrating that critical qualitative inquiry is a good fit for this research project, examining the work of Australian FN.

I now discuss the research design, data collection, ethics and data analysis utilising the IE research sequence.

3.7 Research Design

The research design included interviews, and the ethical collection of documents and literature relevant to the field of study. Many FN colleagues and I have often discussed why Flight Nursing and FNs are invisible in the literature and to the public when we are the sole health professional present in the aeromedical aircraft 85–94% of the time (Anderson 1998, Barclay 1998 a,b, Brideson et al 2012, Pugh 2000, 2002). This query became even clearer as I conducted the extensive literature search for both my honours project and this PhD, exposing that there was little published literature. I collected and collated the available published literature, both popular and historical, in textual and visual form. I then performed a CQI analysis of the language and images contained within this literature, the results of which are discussed in Chapter 4.

3.7.1 **Informant recruitment and selection**

In CQI, descriptive reporting of a particular population's focus is not the intent. Therefore, informants are not considered as a "sample" (DeVault & McCoy 2006, p.32). However, informants still need to be sought who can report on the research questions of interest. All FNs who work for aeromedical organisations across Australia were eligible for inclusion in this study – full time, part time, casual, both genders and all levels (line FNs, senior FNs, FN educators, aeromedical nurse practitioners and FN managers/Directors of Nursing). Following ethics approval (see Appendix 3), I accessed informants using purposive sampling techniques that involved the deliberate selection of individuals (Australian FNs) based on predetermined inclusion and exclusion criteria, and who could provide me with the information I sought (DePoy & Gitlin 1994). Thus, to fit with CQI philosophy and methods, I made efforts to ensure all FNs from across Australia were invited to participate because all would have different perspectives and could add valuable data to the discussion of their work, as well as assisting with the further identification and clarification of the research questions for investigation.

3.7.1.1 Inclusion criteria

The four key elements that formed the parameters for inclusion in the study were current full time, part time or casual employment as a FN; reside and practise within Australia; have access to a phone, email and the internet; and speak and write English.

3.7.1.2 Recruitment

CQI researchers seek groups, individuals and settings that are most likely to participate in the activities under review (Denzin & Lincoln 2005). Therefore, I distributed flyers advertising the research study (see Appendix 4) via the Flight Nurses Australia (FNA) Newsletter,

website and facebook pages to all members across Australia. 'Critical Times', the quarterly newsletter of the Australian College of Critical Care Nurses (ACCCN), also agreed to place the advertisement because many FNs are ACCCN members. I spoke about the study at the 2014 Annual General Meetings of both FNA and the Aeromedical Society of Australasia (ASA), and at the 2014 annual conference of FNA/ASA. Another strategy involved the Principal Nursing Officer from RFDS Queensland and the Flight Nurse Managers/Educators of Air Ambulance NSW, Careflight and RFDS South Eastern Section emailing flyers to all FNs on staff to make them aware of the study.

3.7.1.3 Selection

Qualitative researchers employ non-probability techniques to search for those who can provide information rich data and constantly compare informants' data to ensure the cases for review are uncovered. For this reason, a number of non-probability sampling techniques including extreme, homogenous, critical case (those who will provide the most information regarding the topic under study), and opportunistic can be used. Most often used are snowball (word of mouth and networks), convenience (weakest cases usually), and theoretical (Grbich 1999). This study utilised critical case, opportunistic and snowball techniques.

Selection of the informants occurred by enrolment of any FN who met the inclusion criteria and who contacted me after learning about the study. I emailed potential informants an information letter, letter of introduction, a consent form and details of counselling services that were available should they be needed (see Appendices 5, 6, 7). The information letter formally introduced the study, outlining its aims, the research questions for which I was seeking answers and what the informant might experience by being involved in the study, while the consent form provided written confirmation of their consent to participate.

These efforts resulted in the recruitment of 30 Australian informants who granted their permission to be interviewed either face to face or by telephone (due to the difficulties of where in Australia informants lived and their availability), and for audio recording of the interviews. The issue of data saturation in CQI is not straight forward because new information regarding the research questions is sought from each informant while interviewing. Each informant has a different perspective to add. So, when informants no longer contacted me, and no further original information on the research questions could be elicited, I deemed the saturation point to have been reached and closed enrolment in the study.

3.7.2 Data collection

I utilised a number of different data collection methods to remain true to CQI.

3.7.2.1 Interviews

We live in a society that believes interviews generate useful information about lived experience and its meanings. They are a taken for granted feature of the mass media culture. Social researchers also consider interviews a source of information that provides evidence and learning about an individual's experience, and they represent conversations – the art of asking questions and listening. The direction of this conversation and the questions asked often changes with each informant, so that further depth and clarity can be sort regarding interesting points. However, interviews are a negotiated text – a site where power, gender, race and class intersect (Denzin & Lincoln 2005).

In this study, interviewing is used as an approach to investigate the powerful organisational and institutional administration and governance processes that link to, and organise, an individuals' everyday life, (DeVault & McCoy 2006, Denzin & Lincoln 2005). Consequently, the analytical processes involved in CQI commences at the very beginning of data collection (Campbell & Gregor 2004, Denzin & Lincoln 2005, Gbrich 1999, Kinchloe & McLaren 2005, Smith 1992).

Selection of interviewees/informants is not as structured as usual but is driven by the work processes that connect individuals and activities in the various parts of an institutional complex (DeVault & McCoy 2006, p.33). Work activities of multiple people and organisations usually intersect at some point along the continuum of social relations. Denzin & Lincoln (2005) propose that CQI researchers have "conversations" or "talk to people" rather than conduct structured interviews with informants. The process of "talking to informants in conversation" reveals the research question/s to be investigated as the researcher/interviewer seeks to share insights with the informant throughout the interview process to check their understandings of how the activities and institutional processes are connected, and how they work. As data collection continues, this revelation directs the inquiry and allows a situational plot of the social relations to be built. As the research study progresses over time, interviews with managers and people based higher within the organisation offer valuable further insights from an alternative perspective to that of the frontline workers, building greater depth into the situational plot of social relations (DeVault & McCoy 2006, Denzin & Lincoln 2005). Hence, all levels of FNs from across Australia were invited to be part of my study; to be part of an exploration of contemporary Australian FNs' work.

I audio recorded the data I collected from informants in either face to face or telephone interviews, and explored their everyday world and work experiences. The informants were employed in a range of positions and salary levels in Flight Nursing – line FNs, retrieval nurses, senior FNs, retrieval nurse coordinators, FN educators, aeromedical nurse practitioners and FN managers/Directors of Nursing. The FNs were employed by various aeromedical organisations across Australia, therefore they all had a different perspective to add; each person's experiences were unique.

In the CQI interview, informants' experiences illuminate the ruling apparatus that shapes local /resident understandings (Bartlett 1991, Campbell & Gregor 2004, Denzin & Lincoln 2005, DeVault & McCoy 2006, Hall 2013, Holstein & Gubrium 2005, Kincheloe & McLaren 2005). Informants' work is compelled in certain directions by the texts that currently organise their working lives; these texts change the ways in which work is performed. Therefore, the interview questions are not as structured as in other research approaches and, as stated previously, a conversation occurs between informant and interviewer. The interview questions in CQI follow a specific line of enquiry once the research question/s are revealed, meaning the conversation may, and usually does, change with each informant to elicit additional information to further clarify the research question/s.

In this study, as I followed the CQI interview progression, the FNs identified three research questions: two that directed their work processes, which they wanted investigated further (work intensification and the increased regulation of their work); and one that affected the recognition of FNs' work and their image – the issue of invisibility.

3.7.2.2 The researcher's experiences

In CQI, the researcher's own experiences matter to the research and how the research process is learned (Bartlett 1991, Campbell & Gregor 2004, Denzin & Lincoln 2005, DeVault & McCoy 2006, Holstein & Gubrium 2005, Kincheloe & McLaren 2005). The researcher is required to see themselves as a knower located in the everyday world, and to find meaning there rather than in library research and the application of theories (Bartlett 1991, Campbell & Gregor 2004, Denzin & Lincoln 2005, DeVault & McCoy 2006, Holstein & Gubrium 2005, Kincheloe & McLaren 2005). Reflection on your own experiences and knowledge is an important part of the CQI process. The researcher's insider knowledge is recognised and viewed as valuable and significant to the study. The CQI approach utilises the researcher's knowledge of the situation of those whose experiences are being plotted (Bartlett 1991, Campbell & Gregor 2004, Denzin & Lincoln 2005, DeVault & McCoy 2006, Holstein & Gubrium 2005, Kincheloe & McLaren 2005). Consequently, reflection on my experiences and journal entries provided additional data that supported what the FNs related of their

experiences. I used my diary reflections and the FNs' interviews to contemplate the similarities and differences in informants' understandings of the research questions.

3.7.2.3 Documents

Documents are an integral part of data collection in CQI because the incorporation of texts is essential (Denzin & Lincoln 2005, Kichenloe & McLaren 2005, Smith 2006). It is the texts in the form of individual documents, words, sounds or images that enable localisation of the institution's external setting in an individual's consciousness. As stated by DeVault and McCoy (2006), institutional processes that shape an informant's experience of their everyday world need identification and investigation to describe analytically how they operate as the grounds of the experience (DeVault & McCoy 2006, p.20). Thus, texts are identified as the second level of data collection because during the analysis they expose the external sites from where the ruling apparatus is applied to the research questions identified by informants, and to their work. Gaining an understanding regarding how the texts coordinate and control all aspects of work is vital to the research analysis (Campbell 2010, Denzin & Lincoln 2005, Kichenloe & McLaren 2005).

I have utilised many different types of texts from different timeframes as an integral part of the second level analysis investigating contemporary FNs' work in Australia. Post the informant interviews and first level analysis, the research questions were identified, which then required the collection of textual data demonstrating how the ruling apparatus was applied both locally and externally. To do this, I accessed many types of visual, print and electronic media to explore the images of FNs and Flight Nursing. These were texts of an historic nature – newspaper articles and images, documents, fiction and non-fiction books and book chapters, cartoon book covers, movie posters and documentaries. I again drew on informants' interviews, documents and texts from the organisations themselves, from industrial agreements and from agencies responsible for regulation as a key part of investigating the research questions (see chapters 4, 5, 6 and 7). Additional texts used in the analysis included peer reviewed published papers; government documents and directives; private sector and government individual organisational policy and procedure; government and private sector organisational annual reports; government websites; aeromedical organisational websites; organisational meeting minutes; individual organisational documents; and information gathering methods (set forms requiring completion). I also collected organisational blank documents and forms used by FNs in their everyday work and any freely available public domain institutional documents referring to Flight Nursing work. In addition, I reviewed electronic databases, International Classification of Diseases (ICD 9 and 10) coding, electronic documents, Apps relating to IPhones, IPads and any generic device

that can convey and receive information as part of my exploration of, and investigation into, FNs' work processes.

Smith recommends that texts should not be analysed separately from how they are used within the workday (2006, p.67). This theorised process of discovery allows researchers to see "how it works" so that important elements can be tracked. It allows the researcher to inquire into topics that are meaningful to the informants and to make the inquiry a process of discovery. In the context of this study, FNs use charts and documents to record the care they give patients. These charts are a product of, and make accountable, the coordination of multiple institutional functions such as FNs' work in relation to providing care for a patient. The CQI methods I used as the framework for this study also drew on these documents, forms, policy and procedure, but I only collected blank documents to ensure patient confidentiality and to protect informants.

The issues of FNs' invisibility, work intensification and increased work regulation emerged during the informant interviews. Accordingly, remaining true to CQI methods, I altered the interview questions to follow these lines of enquiry as more information was revealed. Therefore, the focus of this investigation came to be identified as the invisibility, work intensification and increasing regulation of FNs' work. Consequently, document collection and collation moved to the exploration of these issues because the second level of data collection required building the situational plot of social relations to demonstrate how these issues affected FNs' work and how FNs' work changed to accommodate the issues.

3.7.3 Ethical considerations

The age of social media has changed and challenged many previously held beliefs regarding research and the way it is conducted. The influence of the neoliberalist agenda of government has meant a huge deficit in social justice in society, and new ways of conducting research relevant to the time are needed (Denzin 2015, 2017). However, the principles of autonomy, beneficence and justice remain as the guiding feature of ethical research (Kostas-Polston & Hayden 2006). CQI research requires an ethical framework that is rights and social justice based, and gives precedence to those in society who are the least advantaged (Denzin 2015, 2017). By virtue of being mainly women, FNs fit this research agenda.

Researchers who utilise the methods and theoretical framework of CQI often encounter difficulties with research ethics committees (Adams & Carryer 2016). This is because in CQI the interview structure and questions change as further information regarding the research question/s is revealed, as does the direction of the research study at times, and the type and

number of informants who may need to be accessed.

Campbell and Gregor (2004, pp.61-66) discuss the difficulties of gaining ethical approval from institutional ethics committees and organisations involved in studies due to the different research processes undertaken by researchers utilising the various methodologies of CQI. They discuss using “research relations” to ensure completion of the required documentation – a modification of the research approach to meet ethics committees’ terms (Campbell & Gregor 2004, p.62). For this study, meeting this requirement meant the provision of a list of the possible questions to be asked of informants at the beginning of the interviews, before they elaborated upon any issues of interest to them.

All researchers need to be ethical. For informants to willingly participate in research, the researcher must cultivate sensitivity and judgement in recognition of ethical issues as they arise. Power imbalances need to be considered throughout the research process thus, researchers need to recognise and identify potential conflicts and act to minimise or avert them (Austin 2013).

Aware of the constraints of gaining ethics approval for this study, I recruited informants via professional organisational membership, at conferences and professional association annual general meetings, and via word of mouth of other informants rather than through their workplaces. No informants were contacted at their work sites, so FNs’ anonymity and confidentiality was maintained; nor could they be identified alongside any particular organisations. Austin (2013) discusses the inherent responsibility of the researcher to minimise any threats to the confidentiality of informants, and that confidentiality remains of the utmost importance to gaining genuine consent.

Advertisement of the study by flyer took place as per point 3.7.1.2. After advertisement, all possible informants were supplied with an information sheet about the study (see Appendix 5) and a consent form (see Appendix 7). If they were interested in taking part, they returned the signed consent form and agreed to a suitable time for interview. Informants chose how and when they completed the interview; either face to face or by telephone. All agreed to be audio recorded for audit purposes and to be contacted at another time if I needed to ask further questions to clarify any point. I also gave all informants the contact details of a national counselling service they could contact if their interviews raised any psychological or emotional issues, or if I asked questions pertaining to a difficult time in their lives that had remained unresolved.

I conducted and audio recorded all interviews confidentially in a quiet and private area of the

informant's choosing, not visible to other people, or in a private office via telephone. The data supplied is kept in a confidential area on my computer at the university, and printed transcripts are kept in a locked filing cabinet in my home office.

3.7.4 Rigour

Rigour refers to the rigidity that the researcher has utilised with the study design, and their judgement during the conduct of the study, so that the findings and insights provided may be trusted by others as representing the truth of that context, at that time. Researchers using critical qualitative inquiry (CQI) believe that people and events are tied together in ways that make sense of things such as institutional power relations, knowledge, capitalism, race, patriarchy and culture, which affect their lives and work (, Adams, Carryer & Wilkinson 2015, Campbell & Gregor 2004, Denzin 2015, 2017, Denzin & Lincoln 2005, Kincheloe & McLaren 2005, Smith 2005). Research in CQI looks to find how the power relations of institutions direct people's lives and then situationally plot them. Thus, rigour in CQI comes from the accuracy of the developing situational plot of social relations, along with a clear decision trail that establishes the trustworthiness (rigour) of the research study (DeVault & McCoy, 2006, Koch 2006).

Trustworthiness encompasses the credibility, transferability, dependability and confirmability of the research, and is established when the study is able to be audited and replicated by other researchers or readers (Koch 2006, Sandelowski 1986). Credibility involves the presentation of data from the informant, in such a way that they recognise it as their own (Sandelowski 1986). In this study, informants were shown excerpts of their data and asked to review and either agree or disagree with what had been transcribed. In addition, short discourses have been displayed throughout the thesis to assist with illustrations of the findings and ensure the interpretations are credible to informants and readers. Credibility also encompasses the researcher and their presence within the research. Within this study, the researcher was recognised by informants as a "knowing" participant – being a former flight nurse. Thus, the researchers personal bias', behaviour and experience towards the research was visible to and known by the informants.

Transferability or fittingness refers to the applicability of the study's findings to other contexts outside of the study setting. Fittingness is met when the findings of the study are well grounded in the data (Sandelowski 1986). The findings from this study of work intensification and increased regulation could be added to theoretical propositions for other healthcare workers, and then tested in other settings within the healthcare arena.

Dependability is demonstrated when another researcher can clearly follow the decision trail

used by the investigator, and that the same or comparable conclusions could be reached given the investigator's data and perspective (Koch 2006, Sandelowski 1986). In this study, I have developed situational plots of the social relations for both work intensification and increased regulation that display how powerful institutional forces influence the lives and work of FNs. These plots were developed from the second level analysis to demonstrate how the forces intersect with and influence the work of FNs. The situational plots are available for review in Chapter 6, section 6.5.3 and Chapter 7, section 7.5 respectively. Confirmability is verified when the criterion of credibility, transferability and dependability are all demonstrated (Koch 2006, Sandelowski 1986).

Lather (1986) discusses further methods of ensuring validity in CQI. She notes that triangulation of multiple data sources, methods and theories is crucial in establishing data trustworthiness (Lather 1986, p.67). In this study informant data, institutional, historical, and government documents, and texts were critiqued and compared to ascertain what was being said by all, and if there was alignment. This is demonstrated throughout the findings in chapters 4, 5, 6 and 7.

3.7.5 Data analysis

The analytic goal of CQI is the detection and explanation of the specific organisational power practices that make a setting work as people know it, talk about it and work within it. When plotting the social relations, CQI researchers aim to make visible the application upon, and manipulation of, individuals by institutional power, which is usually accepted as neutral or even beneficial (Campbell 2010). Hence, as I have stated earlier, the analytic enterprise in CQI is paramount and commences at the beginning of the study with the informant interviews (DeVault & McCoy 2006, Kincheloe & McLaren 2005).

Two levels of data are required for CQI analysis: Level 1 entry-level data collected from the informants and the researcher's personal experience; and Level 2 data (texts) that is used to elucidate and plot the power relations. Level 1 data identifiy the research question/s and explicate the informants' experience (Campbell & Gregor 2004, Denzin & Lincoln 2005, DeVault & McCoy 2006, Kincheloe & McLaren 2005, Smith 2006). It is about the local setting and those who experience their life and work in that space (Adams, Carryer & Wilkinson 2015, Denzin & Lincoln 2005). I detail Level 1 data regarding contemporary Australian FNs and their work in Chapter 5 of this thesis.

Level 2 data is collected from the broader setting of the organisation and the external arena to explore and investigate how that works; to explain what the power relations are and how power is enacted from the external to the local area (Campbell & Gregor 2004, Denzin &

Lincoln 2005, Smith 2006). Both levels of data are connected but often those who experience the problem/s are unaware of other forces influencing the local /resident setting. Level 2 CQI analysis reveals these power relations and situationally plots them to increase informants' awareness of the ruling apparatus working within and across the organisation. These maps provide a guide to the complex ruling apparatus (DeVault & McCoy 2006). I discuss the data analysis of the power relations relating to FNs' work intensification and increasing regulation in chapters 6 and 7. The situational plots I developed from the CQI analysis for FNs' work intensification and increasing regulation appear in those chapters.

3.7.5.1 Critical Qualitative Inquiry analysis of historical visual and print media data

My CQI analysis of historical visual and print images, contemporary visual images, accompanying texts and language, undertaken to answer the research question regarding FNs' invisibility (discussed in depth in the next chapter), led to the emergence of a number of themes. These are the glamorous nurse; the adventurous nurse; the heroic nurse; the independent nurse; the pioneering nurse; the hidden nurse; and the eccentric nurse.

All forms of the media use richly descriptive language, which is a feature of CQI. Language connects and intersects the ways people live their everyday lives (Adams, Carryer & Wilkinson 2015, Bisaillion 2012, Campbell & Gregor 2004, Corman & Melon 2014, Denzin & Lincoln 2005, Griffith & Smith 2014, Kinchloe & McLaren 2005, Orlikowski & Baroudi 1991, Smith 1992, 2005, 2006). Richly descriptive language is very evident in the non-fiction newspapers, the black and white films released by the armed forces during WW2, the historical data, and the cartoon illustrations on books and comic covers. These pictorial images, verbal commentary and written texts speak a language of their own, and provide strong evidence for the themes identified in the analysis. The use of these sources of evidence is appropriate because this is where foundational information regarding both historical and contemporary Flight Nursing can be found.

The dearth of peer reviewed literature regarding Flight Nursing, and the proliferation of popular print and visual literature in a variety of forms, has led to the building and strengthening of the myths around these nurses' work. As with all myths, there are some truths, but the portrayal is not accurate. Interestingly, contemporary images of FNs at work do nothing to dispel these myths.

3.7.5.2 Level 1 data – entry

During data collection to discover the study's research question/s, I raised a variety of questions with informants. I asked about their workday, the types of patients they transferred and what denotes 'work' in Flight Nursing. I loosely grouped this and other information

gathered through our conversation under various headings of the possible research questions the informants outlined (Campbell 2006, Denzin & Lincoln 2005, DeVault & McCoy 2006, Kincheloe & McLaren 2005). I read, re-read, thought about and organised the interview data per the informants' descriptions (that had been clarified during our conversation). This process ensured that the data was placed under the correct headings. Secondary and tertiary researchers reviewed the grouping of the informants' data under these headings to enhance the validity of this approach to data analysis. This process ensured that I was very familiar with the interview data. At the same time, I analysed the informants' demographics. I outline all the results of the analysis of contemporary FNs' work in Chapter 5.

3.7.5.3 Level 2 data

As I have stated previously, analysis inCQI takes place at two levels (Campbell & Gregor 2004, DeVault & McCoy 2006, Smith 2006). Once the research question is established, data collection and analysis look to the next level above the resident setting to see where and how the power relations are applied across this setting (Campbell 2006, McCoy 2006, Smith 2006). The research questions in this study identified by the informants' entry level data were:

i) The image and invisibility of Flight Nurses.

ii) Work intensification.

iii) Increased regulation of FNs' work.

I investigate these three issues in depth in chapters 4 (image and invisibility), 6 (work intensification) and 7 (regulation). Class and gender have played an important role in these questions (Burawoy 2009, Buresh & Gordon 2013, Forseth 2005, Glenn 2009, Merrick 2012, Selberg 2013, Witz 1992, World Economic Forum 2016). In order to uncover and make visible the situational plot of power relations, I have drawn upon economics, industrial relations and politics to explain the research questions. For example, the political ideology of neoliberalism underpinning public policy in Australia and the implementation of new public management (NPM) over the last 30 years required exploration within the power relations of work intensification. Multiple issues are at play within each question. I explore these more fully in chapters 4, 6 and 7.

3.8 Summary

In this chapter, I have discussed the methodology and methods of CQI as used within the research study, 'Flight Nursing in Australia: A hidden profession'. As an CQI researcher, I

believe that people and events are tied together in ways that make sense of things such as institutional power, knowledge, capitalism, race, patriarchy and culture. Critical qualitative inquiry offered me the capacity to look at the everyday world of Flight Nursing, and analyse how and why things happen the way they do. In other words, to connect FNs' experiences at work to the external landscape of the ruling apparatus applied from afar.

My discussion of CQI as being founded upon a power laden, class based, gendered ontology has highlighted the class and gendered organisation of society. Gender bias remains in nursing, so much so that even though men are now part of nursing – albeit mainly the exciting, adrenaline fuelled areas such as critical care, emergency and Flight Nursing – the profession is presumed to be primarily for females. Moreover, being female in a male orientated and prejudiced society makes life and work all the harder as the struggle for equality continues.

In the next chapter, I discuss the image and invisibility of Flight Nursing. This research inquiry arose out of FNs questioning why their names and designation did not appear in Australian aeromedical organisation advertisements; why Australian aeromedical organisations do not acknowledge that FNs work as sole practitioners in the back of the aircraft 85–94% of the time; and why Australian aeromedical organisations' marketing campaigns do not feature FNs.

Chapter 4 The Image of Flight Nursing

4.1 Introduction

Having discussed the methodology and methods of critical qualitative inquiry (CQI) that I used throughout this study, I commence the use of the CQI method in this chapter by focussing upon the texts and documents produced by the popular media, the army and other organisations at the beginning of Flight Nursing history. These documents relate to both the speciality of Flight Nursing and the women who performed the work in the aircraft – the Flight Nurses (FNs). Critical qualitative inquiry (CQI) allows for in-depth examination of the language, visual images and texts to demonstrate how FNs' work is directed externally utilising power and control. It also allows for demonstration of how the myths concerning FNs' work have been constructed and strengthened from the external area, far from the reality of the actual work processes; and for the identification of gender and class divisions, again used to strengthen the myths. The language used within the texts and documents is sculpted in such a way as to disguise the realities and dangers that actual Flight Nursing work poses to the individual FN.

In this chapter, I explore the image of FNs. As I noted in Chapter 2, the speciality of Flight Nursing commenced properly both internationally and within Australia during World War 2 (WW2). However, there had been activity within this nursing speciality earlier in Australia due to the difficulties of providing quality healthcare to Australians living in remote and rural areas in the mid-1930s, and internationally as an area of opportunity for future nursing work. Interestingly, one of the research questions identified from the participants' data within this study was the invisibility of, and absence of recognition for, FNs' work. This problem required further investigation, providing the starting point for the CQI analysis of the images of this work.

There is a paucity of peer reviewed published literature about Flight Nursing and FNs' work (see Chapter 2). Myths have been generated in the public imagination due to the absence of factual evidence and the deficiency of named images of real Flight Nursing work. Pictures speak a thousand words and where there is no provision of evidence, the gap is filled by the public imagination, which has been fuelled by the visual and print media. The mere mention of aviation based healthcare provision to the general public, particularly within Australia, immediately brings to mind the iconic Royal Flying Doctor Service (RFDS), and with it the

ruggedly handsome, competent male doctor, and the young, striking pilot winging their way across the wide blue yonder, landing in the red outback dust to perform a miracle rescue. No mention anywhere of the FN, “Oh, maybe to bring the doctor a cup of tea mid-flight” (Crawford Productions 1986).

However, having located and accessed Australian newspaper articles, reports and pictures of FNs from 1944-1950, and military documentaries, I found that a number of these actually discuss the real work of FNs (referenced and discussed in depth later in this chapter). Nevertheless, this work is couched in language and visual images that minimise the risks to which these women were exposed by being actively involved in war, and as part of aviation at the time. A number of the FN portrayals in films, comic books, comic book covers, fiction and non-fictional novels, and television programs appear to use this scant background literature as their basis for constructing and strengthening the myths around Flight Nursing.

I argue that these images of Flight Nursing presented firstly by military propaganda, then built upon by the general media, have become deeply embedded within popular culture, particularly in Australia. Since the beginning of Flight Nursing, these images have portrayed FNs’ work as romantic, glamorous, exciting and pioneering. The nurses are depicted as young, pretty, adventurous, brave and heroic. Interestingly, in 2017, both the military and aeromedical organisations continue to convey these images to the public; images that remain unchallenged by FNs themselves. Perhaps the motivation for this type of portrayal, from the earliest images in 1927 to the present time, is for recruitment purposes, because both previously and currently, a special type of nurse is needed to perform this work.

Data I collected for this chapter has come from both visual and print media sources, such as historic newspaper articles, historical reviews, fiction and non-fiction books, popular magazines, cartoons and comics, film posters and advertisements. The search strategy I used to locate this data included an in-depth search for visual and print media images of Flight Nursing in the following databases: CINHAL, Embase (OvidSP), Pub Med, Pro Quest (health subset) and Web of Science. I also searched the National Library of Australia digital archive, Google Scholar, Google images (advanced search), TROVE and the Networked Digital Library of Theses and Dissertations (NDLTD). The search terms included: *Flight Nurse; aviation nurse; flight nursing; aviation nursing; critical care air transport nurse; air force nurse; aeromedical nurse; emergency transport nurse; royal flying doctor service.* The inclusion criteria were any image or text referring to FNs or Flight Nursing work that was located within the databases published from January 1920 to January 2016.

In this analysis of the image of Flight Nursing, I argue that the visual images portrayed by the

popular media, combined with the richly descriptive language of headlines, text, labelling and narrative contribute to building and sustaining the stereotypical and inaccurate prevalent cultural myths regarding Flight Nursing and FNs. In presenting this analysis, I reveal three contradictory but evolutionary images of FNs. I demonstrate how these images have their origins in the early pioneering work of the Australian Inland Mission (AIM) and are consolidated during WW2. Firstly, I argue that initially FNs were presented as heroic outback nurses, flying the plane, killing the snake and performing medical feats under trying conditions in a fashion similar to the iconic Australian drover's wife (Cronin 1984); heroic in all areas, lacking the fear that a normal person would feel, portrayed as "bullet-proof". This FN was brave, unwavering, stoic in the face of any problems that came her way and always able to find a solution to any problem (Cronin 1984).

Secondly, I argue that during and immediately post WW2, Flight Nursing and FNs were portrayed as glamorous, romantic, exciting women, seeking adventure in remote terrains while maintaining a well coiffured hair style, immaculate personal presentation and an hour glass shaped, doll type figure. However, while the newspaper journalists of the mid-1940s to the early 1950s presented elements of truth regarding FNs' work (establishing the fertile ground for myth building), the richly descriptive language and imagery promoted by the narration disguised the risks and dangers inherent in this work. Moreover, the use of truthful elements in building these initial images has led to the construction and strengthening of the myths over time due to the dearth of further factual information.

Thirdly, I argue that the popular image of the iconic Australian organisation, the RFDS, deeply embedded within in the Australian public's imagination, is that of a service staffed by rugged, handsome, competent doctors, as the name of the service implies. Again, due to scant peer reviewed published literature, the public's imagination is fed by television programs and other promotional marketing campaigns run by the aeromedical organisations and designed to raise funds. Moreover, deeply embedded within this promotional material used to raise funds for the RFDS is the assumption that the work is always performed by doctors, presumably male. This is far from an accurate account of the service; 85–94% of the work is done by FNs (Anderson 1998, Barclay 1998 a,b, Brideson et al 2012, Brideson et al 2016, Pugh 2002).

I commence this chapter with a commentary on more general stereotypical images of nurses, drawing on the work of Kalisch and Kalisch (1982, 1983, 1985), and Hallam (2000), and then move on to explore the images promoted by the Australian Inland Mission (AIM).

4.2 Flight Nurses: Stereotypical Images of Nursing

Visual portrayals of nurses, such as wearing the cape and white uniform, are readily recognisable in Western media. Kalisch and Kalisch (1982, 1983, 1987) have produced an extensive body of work exploring these images and nursing stereotypes; how they are produced, supported and changed over time using the popular cultural mediums of newspaper, television, film and novels (both fiction and non-fiction), and more recently the internet (Hallam 2000, Kalisch & Kalisch 1982,1983, Kalisch Kalisch & Petrescu 1985, Kalisch Kalisch & Benner 2005, Kalisch, Begeny & Neumann 2007). Kalisch and Kalisch argue that these images serve to shape public opinion regarding the incumbent government's funding decisions, and importantly to ensure recruitment of the "right" kind of women to the nursing profession (Hallam 2000, Kalisch & Kalisch 1982, 1983, 1987, Kalisch et al 1985, Kalisch et al 2005, Kalisch et al 2007).

Kalisch and Kalisch (1982, 1983, 1987) posited that there are two popular cultural images of nursing that have arisen as a result of the clustering of a number of stereotypes. The first cultural image is of a single, white, childless female under 35 years of age; angel of mercy; girl Friday; heroine; mother/wife; and sex object. The second cultural image is once again that of a single, white and childless woman, only this woman is middle aged with personal qualities that lead to her being thought of as a "battle-axe" (Kalisch & Kalisch 1982, Kalisch et al 2007, Stanley 2008). These images have arisen partly as a result of the lack of evidence demonstrating the work nurses actually perform. The silent and invisible majority of nurses who calmly and quietly get on with the job of improving patients' lives, ensuring quality care and outcomes, are missing from the mass media (Gordon 2006, Kalisch et al 2007). Members of the public appear to continue to hold stereotypical imagines of nurses, even when they have experience of the professional care nurses provide (Cabaniss 2011, Duffy 2005, Emeghebo 2012, Kreitzer 2005, Takase Kershaw & Burt 2002).

Cartoons, comic books, posters advertising films and characters in novels such as Sarah Gamp (Dickens 1843) and Nurse Ratched (Kesey 1962) have been used to promote stereotypical images of nursing with high rates of success (Stanley 2008). For example, the cartoon figure (Figure 4-1) graphically represents the image of the super nurse (www.googleimages.com), who may well be the FN. This cartoon illustrates a nurse in the customary sensible shoes, white uniform and nurse's cap, the latter two being universally recognised symbols of the profession that allow the public to quickly identify a nurse (Hallam 2000, Lehna et al 1999). This is despite the fact the white uniform and nurse's cap are no longer worn by nurses in most Western countries (Lehna et al 1999). The long unattractive nose, crossed eyes, clenched fist determination and of course the superman or superwoman

cape makes for instant recognition. This nurse is depicted as a middle-aged woman; the stereotypical formidable battle-axe, going at full speed, as depicted by the little doughnut cloud. She is always in a hurry to render assistance. This cartoon both epitomises and strengthens the stereotypical negative public image of nurses.

Figure 4-1 Flight Nursing
Source: www.googleimages/flightnursing

However, images of FNs do not share these humorous but negative stereotypical portrayals that are associated with acute care. Rather, Flight Nursing is represented as an occupation for young, attractive, adventurous, independent women. The history of Flight Nursing imagery appears to have its origins in the recruitment of women to the war effort and military service in the early years of WW2 (Carpan 2009, Parry 1997). In the Australian context, the seeds of this imagery were established well before WW2 and can be found in the descriptions of outback nursing, particularly with the work of the AIM and its aeromedical service. I now discuss the recruitment of nurses to the Australian outback, with the natural extension to Flight Nursing.

4.3 Recruitment of Nurses to Aeromedical Services: Promoting the Heroic

Nurse recruitment for the outback prior to the 1920s was sponsored mainly by the AIM in magazines and their own newsletter published by Reverend John Flynn (Page 1977). The AIM needed nurses to staff their nursing posts across vast inland Australia. Flynn actively recruited young women involved with the church and other charitable works (Page 1977). The first newspaper article written independently of the AIM, but in support of their work,

appeared on Friday 11 November 1927 in *The Horsham Times*, entitled 'Aeroplanes for Doctors – to reach the Interior'. This article noted the heroic character of the AIM outback nurses, focussing on these women's isolation and courage. Already, in 1927, the myths of the romance, glamour, adventure, excitement and pioneering spirit of those who resided in outback Australia – termed the "never-never" – were evident. The primary focus of this 1927 article was on the heroic nature of the work, not just of the doctors and nurses, but of all people living in the outback. Any person who came to live and work in the never-never was viewed as dedicated and special due to their isolation and lack of access to normal services that were part of city life. The AIM (and most noticeably Reverend Flynn) was noted to be "helping to solve the medical problems of the frontiers **by placing nursing sisters** out in the isolation" (*The Horsham Times,* Vic. 1882-1954, Friday 11 November 1927, p.9).

This early article from *The Horsham Times* is part of the popular print media and demonstrates that nurses were the pioneers of healthcare provision in the outback. Nurses were the heroic, brave women providing medical assistance to the scattered population in the remote areas where distance and cost made the employment of doctors an impossibility (Page 1977, Rudolph 2000). Despite their skill and heroic work, however, the limitations of nurses, both as professionals and as women, is part of the reporting. *The Horsham Times* reporter noted the need for a doctor in these areas because some cases were "too much for the nurse", and reiterated the importance of an aerial medical service to bring a doctor to the patient's rescue (*The Horsham Times* 1927). At the time of reporting, the AIM had yet to institute the flying doctor service and was still fund raising in the hope they would be able to commence operations (Page 1977, Rudolph 2000).

Figure 4-2, a picture taken by John Flynn in the 1940s, illustrates the AIM nurses at work in the outback, helping to unload a sick, stretcher bound patient from the aircraft. In the red outback, these nurses are immaculately coiffured and dressed in white – the symbol of purity but not very practical. The way they are dressed represents the nursing uniform of the time but also looks not unlike a nun's dress.

The media focus changed in the 1940s, however, due to the beginning of WW2; little attention was paid to the isolation of nursing work in the outback. Recruitment of nurses for both civilian and military work shifted attention towards adventure, romance and glamour, but the heroic motif continued.

Figure 4-2 AIM Nurses Assist the Unloading of a Stretcher Patient, 1940s
Source: National Library of Australia archives (www.nla.pic-an24205812)

4.4 Flight Nurses – Constructing the Myths

4.4.1 Flight Nurse recruitment: the war years

The promotion of Flight Nursing accelerated in mid-1942 when the United States of America (USA) joined WW2. Suddenly, there were large numbers of casualties needing to be evacuated over long distances in a timely manner (Barger 2013). Transport by air was proposed as the answer but the increase in casualties led to an unprecedented need to increase the number of available medical personnel to staff the aircraft. There were not enough doctors to fill all the positions needed (Kiel 1947, Mills Link & Coleman 1955), therefore, commanding military officers decided that nurses would be the next best option to staff the flights (Dahl 2009, Grimes & Mason 1991, Kiel 1947). Military nurses would be educated to take on dangerous and difficult work (Dahl 2009, Grimes & Mason 1991, Kiel 1947).

Part of the war effort recruitment strategy was to portray the speciality of Flight Nursing as romantic, exciting, glamorous and adventurous to increase the available numbers of nurses. In the beginning, the military used popular media – novels written for young girls and women, and films – in an endeavour to recruit young professional women who were already qualified nurses or those who were keen to become nurses (Carpan 2009, Parry 1997, Stanley 2008). Young women portrayed in the popular novels of the time were heroines who had the freedom to do anything they liked, without societal restrictions or condemnation (Carpan 2009, Hallam 2000, Parry 1997).

This type of promotion of Flight Nursing (using text based formats) to young girls dreaming of becoming a nurse was firstly an imaginative marketing and recruitment strategy for the armed services, and secondly a way to counter any negative publicity for the war effort (Carpan 2009). Furthermore, as more workers were needed, young girls in the books and media became career women with exciting, fulfilling careers (Carpan 2009). These young women could do anything the authors imagined, and proud, patriotic American teens shared all the highs and lows war brought to their country (Carpan 2009). The stories promoted the glamour, excitement and adventure of the military and Flight Nursing, and downplayed the risks, danger and drudgery of war and service in the military. Authors constructing the myths included Helen Wells (1944/2007, *Cherry Ames* series), Elisabeth Lansing (1946, *Nancy Naylor* series) and Basil Miller (1946, *Patty Lou* series). Consequently, these fictional nurses were depicted in popular culture as knowledgeable heroines; young women who could conquer any mountains set before them. Life was very different for these women from how society usually treated women (Carpan 2009, Parry 1997).

A classic example of the progression of the armed services recruitment drive and development of the young heroine's nursing career, along with the inception of FNs, is that of Cherry Ames (Wells 1943/2007), central character in a popular and widely distributed international fictional series.

4.4.1.1 Cherry Ames, Flight Nurse

Cherry Ames was presented as a pretty, romantic, patriotic, adventurous, self-sacrificing, mystery solving young woman. She starred in her own series of adventure novels, taking on a number of senior, responsible, important nursing positions while still very junior in her career. This displayed her ambitious nature and demonstrated to young women that quick career progression was possible while nursing as part of the military (Carpan 2009). Obviously written to appeal to younger women, Cherry's career covered a number of nursing specialities, starting out in 1943 with *Cherry Ames Student Nurse* (Wells 1943/2007, White 2012). Four of the 27 novels written revolved around Cherry's active military service, placing our heroine in senior nursing roles in the military. The timing of the publishing of these novels and the way they were presented strongly suggests they were part of the armed forces' planned recruitment drive to encourage young women to become nurses, and those who already were nurses to become involved in WW2 as part of the military (Barger 2010, Carpan 2009, Forman 2007, Parry 1997). Cherry Ames is portrayed in all the novels as a strong willed, independent, ambitious and resourceful woman, while losing none of her youthful trust and enthusiasm, feminine wiles, glamour and charm. She defers to the male characters, as may be expected by society at the time, but with a twist; no matter what they

say, whatever Cherry had thought at first always ends up being the correct interpretation (Carpan 2009).

In *Cherry Ames Flight Nurse* (book 5), Cherry and her friends complete their FN training at one of the American Air Force bases just in time to be transferred to England to serve their country. Already a military nurse, Cherry completes this training in just six weeks, which is historically correct for this era. Parry (1997), cited in Carpan (2009), commented that the portrayal of military nursing training given in all the Cherry Ames books is an accurate representation of how things happened (Carpan 2009).

Cherry is visited by a long-time friend and mentor at her graduation, and presented with a mystery to solve while she is in England. The book describes the camaraderie between the flight teams, work mates and colleagues of different social and military standing, again thought to be an accurate, truthful description (Parry 1997). Short vignettes are littered throughout the pages, describing the patients and care Cherry provides at various times when the tempo of the story slows. However, the risks and effects of the war upon people are not stressed as the main thread of the story; Cherry's adventures are. The story describes many of Cherry's antics while she is attempting to get to the bottom of the mystery, which of course she eventually solves satisfactorily. Her love interest also plays out. The handsome pilot she flies with romances her and one of her best friends gets married while still serving in the military. All ends happily. Cherry returns home after her service in England with no regrets, and of course looking forward to the next posting and adventure.

The visual images the novel conjures in the readers' minds are strengthened by the way Cherry is pictured on the front cover. Dressed immaculately and proudly in her Air Force FN uniform, she is thoughtful and pensive, but remains immaculate and very pretty. Her uniform hat is angled in just the right position to expose her dark, wavy, immaculately dressed hair to good effect. Her eyebrows are beautifully contoured, her lipstick is just the right colour to highlight full luscious lips and her eyes are turned skyward as if she is watching an aircraft fly over. Her uniform jacket is correctly buttoned to allow her white shirt and perfectly knotted tie to be seen along with her FN wings on both lapels. In the background is the fuselage of an aircraft, with a wounded soldier being off loaded under the watchful gaze of another FN checking the documentation, with two young men performing the lifting.

This is a very powerful picture. When combined with the richly descriptive language in the novel it presents an irresistible image of all that is patriotic and "right". Volunteering to do your bit and be part of winning the war by helping "our wounded boys" return to health is a

strong, underlying theme of the novel.

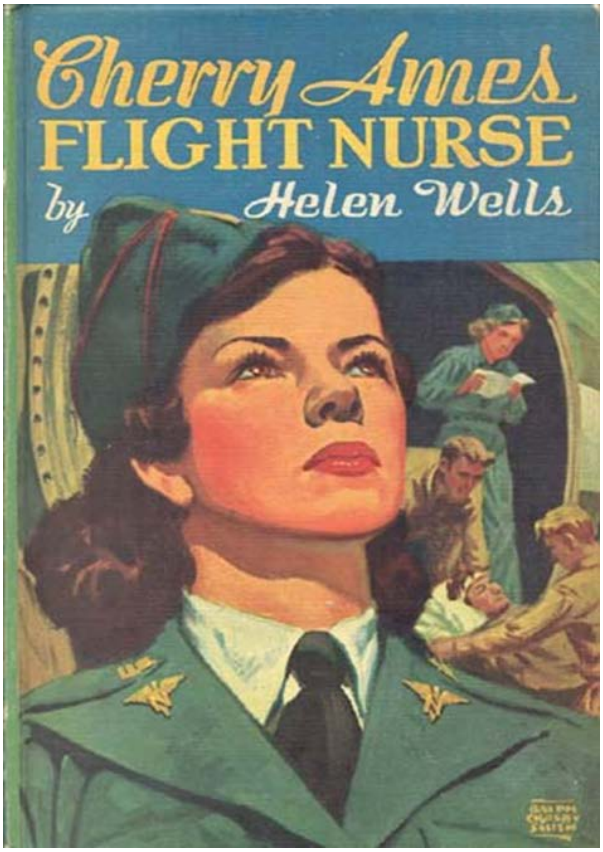

Figure 4-3 Cherry Ames
Source: www.googleimages/cherryames.com

The next novel in the Cherry Ames series has Cherry demonstrating her patriotism and strength of character while nursing returned servicemen, all of whom have variations on the theme of serious wounds, both physical and psychological. Cherry comes to the rescue with her good humour, strength of character and superior nursing skills, and helps the soldiers regain their health and love of life; even those missing limbs. Again there is a mystery present that requires Cherry's superior sleuthing skills to solve, which of course she does successfully. She is portrayed as hard working, but always remains unruffled and takes it all in her stride. There are elements of truth buried within the novel – the descriptions of some of the soldiers' injuries and the treatment given for them – but these truths are scattered through the pages again as vignettes, mainly to keep the reader interested and provide background for Cherry's super sleuthing.

The Cherry Ames series of novels and newspaper articles cleverly appealed to the emotional side of young women who wanted to contribute to the war effort in a meaningful way and help heal the soldiers so they could return to pre-war normality. A number of other

methods that achieved this included the filming and wide distribution of Hollywood style army documentaries (Stanley 2008). Filmed in black and white, these documentaries came complete with an inspirational, patriotic commentary and a rousing musical score; but once again, they down-played the danger inherent in Flight Nursing. The *Army Nurse, Flight Nurse, Part 1* is one such example.

4.4.1.2 Army documentaries and newspaper articles

The *Army Nurse, Flight Nurse, Part 1* of 2 was an official film released by the United States War Department in the 1940s and coded as Misc. 1173. It was produced by the Army Pictorial Service Signal Corps (Nurses of Los Angeles 2011)

The film commences with actual images of bombs going off over the landscape and soldiers kitted out in full battle dress, with rifles, metal helmets and large backpacks, climbing out of trenches and running across the landscape under machinegun fire. At the same time as a rousing musical score plays in the background, a voice over gives an oral description of one million soldiers involved in the war. The picture then morphs to become one of an injured soldier being carried in a litter by four other soldiers across the barren landscape to a waiting vehicle to be transported back to the nursing post. The many virtues of the army nurse waiting at his side to nurse him back to health are expanded upon forthwith:

> A woman who means safety, comfort and home to thousands of men before you. A nurse who brought another American's blood to your side to pour new strength into your veins. A nurse handed clamps to the surgeon and counted sponges. A nurse prepared and administered the anaesthetic and watched you constantly for any tell-tale change in your breathing or blood pressure. All working with the same purpose, to ease the pain of War, to help save lives. (http://www.youtube.com/watch?v=7-Yl7ZFu5jI)

While this commentary on the nurse's virtues continues, the images display a smiling, pretty nurse, a nurse hanging an IV and working in the operating room, a nurse giving a patient an anaesthetic and a nurse looking directly at the camera, with the camera zooming to a close up of the overall scene of the field hospital's interior. This powerful, patriotic imagery demonstrates that as women, these nurses are filling a vital role caring for the injured male soldiers. Dramatic rousing music continues in the background behind the commentary. Romance, drama, heroism and patriotism all come to the fore to the audience, directed by the richly descriptive text and strong imagery. While elements of reality grace these images, the reality disappears amongst such strong propaganda. The text and images are produced externally, outside of the nurses' and FNs' experience. The media transfers them to the local area of the nurses' experience.

Meanwhile, within the commentary, there is no mention that the nurses are also exposed to

many of the same dangers as the soldiers they are nursing. The fact that army nurses are exposed to exploding bombs and bullets is completely glossed over by its absence, with no mention of the dangers of being present in a military zone. Interestingly, FNs themselves took little account of the danger inherent in their work. When a FN in the 801 MAES experienced the first death of one of their colleagues six months after they had commenced air evacuation duties, they are quoted as saying, "We never thought this could happen to us. We had been so lucky, and we just never dwelled on it until it happened" (Lee Holtz, FN, cited in Barger, 2013, p.149).

While there is no discussion or acknowledgement during this documentary of the risks and dangers involved for both FNs and their patients, there is a short focus on the harshness of the work. For example, the long hours on duty for FNs are alluded to with a couple of lines in the commentary: "The hours were long and the demands never ending …Duty times were 0700-2100, but continued into the night as long as needed" (http://www.youtube.com/watch?v=7-Yl7ZFu5jI). Nevertheless, there is no mention of how the nurses coped with little relaxation and rest time cut into by extended duty times. Were they provided with food and toilet breaks? Extended duty times and a lack of food and water make for tired nurses, more prone to making mistakes (American Nurses Assoc 2016, Barnes & Miller 1985, Cipriano 2016, Rogers 2008, Scott et al 2006). Nurses require food, rest and relaxation time to rebuild and replenish to enable them to perform nursing work swiftly, with efficiency and quality, and make expert clinical decisions.

Interestingly, the work of these FNs is presented as having "no glamour"; their life is described as "far from spectacular". As the commentary denotes, "Nurses lived a life ***completely stripped of luxuries*** and yet they asked for ***'no more luxury than a patients' smile when he was free of pain'"*** (http://www.youtube.com/watch?v=7-Yl7ZFu5jI).

Despite the claims of hard work, long hours and lack of luxuries, the pictorial images completely negate the commentary. The young Caucasian women featured in this black and white film are beautifully coiffured, slim, pretty and always smiling, even though they are dressed in the drab work uniform of the Army/Air Force, sleep under canvas and live a life "***stripped of luxury"***. There is a distinct absence of reality demonstrated by both the pictures and the commentary; the focus is on the slight "inconveniences" of no luxuries, no glamour and the far from spectacular but exciting work, with no mention of the dangers of living and working in a war zone.

This nine minute documentary touches directly on Flight Nursing work towards the last 30 seconds. In a telling quote that provides the most accurate evidence of the FNs' work at that

time, the commentator notes:

> While in the air the Flight Nurse was in complete charge, ready to handle every emergency and doing **everything a doctor would have to do except operate**. Air evacuation was (is) difficult and required specialised skill and training. The Flight Nurse had to be prepared for the unexpected, for the next moment it might have and often did happen. (http://www.youtube.com/watch?v=7-YI7ZFu5jI)

This is an interesting observation and remains true of Flight Nursing work in 2017. As I have noted previously, FNs in Australia are the sole clinician in the aircraft 85–94% of the time (Anderson 1998, Barclay 1998 a,b, Brideson et al 2012, Brideson et al 2016, Pugh 2002). Therefore, the level of qualification and clinical skills required to be able to handle these emergencies is very high (Bader et al 1995, Brewer & Ryan Wegner 2009, Topley et al 2003).

Remarkably, back in the mid-1940s, here was a nursing position that was handed the very responsibility for patient care usually reserved for doctors. Nurses – women – were being trusted to make use of their education and training, and care for patients without the direct supervision of either a more senior nurse or a doctor (Barger 2013, Dahl 2009, Montgomery 1992). Flight Nursing was promoted as adventurous, self-fulfilling and heroic; the nurse made her own clinical decisions and cared for the patient undirected and unsupervised, with only a technician's help (Barger 2013). She was rescuing wounded soldiers from the battlefront, literally flying in and removing them from danger, and really making a difference to people's lives. Lieutenant Colonel Ralph Stevenson, a doctor and commandant of the 349th Air Evacuation Group, noted:

> As nurses, they have never before been made to stand on their own feet – there has always been a doctor or chief nurse they could go to for instructions. But not where they are going. Once the plane with its load of patients takes off, those girls are in absolute charge and the lives of the men are in their hands. The speed and sureness of their decisions may make the difference between life and death to more than one boy. So we concentrate on mental discipline and the ability to command. (Cited in Barger 2013 p.44)

He is also quoted as stating in a radio interview in December 1942 that, "The trick of being a good nurse in air evacuation is to be able to make decisions calmly even in the most critical situations" (cited in Barger 2013, p.44).

These were insightful comments from a doctor. They provide evidence of the level of work the FNs were expected to perform during this time and that the total care of the patient was indeed the FNs' responsibility. The facts are presented without the rich description that has been a feature of the way FNs and Flight Nursing are usually presented to the public. I now discuss Australian Flight Nursing and the snippets of reality the media initially presented to the public in Australia.

4.5 Flight Nurses' Work: Evidence of Reality

4.5.1 Australian Flight Nurses

In Australia, FNs' work was described much less emotively than in America. Recruitment of women to the military as nurses was still on the agenda but was pursued much less aggressively. Thanks to the outback nurses, the pioneering, heroic, independent nature of Flight Nursing was promoted rather than its glamour and adventure.

The published articles from 1944–1950 can be posited as building and strengthening the early images of heroic, pioneering, adventurous FNs within the Royal Australian Air Force (RAAF). It is important to remember that the No. 1 MAETU (Medical Air Evacuation Transport Unit) was formed in mid-1944 due to the identified need to move increasing numbers of casualties over longer distances (Dahl 2009). "Flying nurses" were seen as the elite part of nursing in the forces and in Australia they were very proud of their achievements. They wore their uniforms with pride (see the description of their clothing related to Figure 4-4, for example) but at the same time were extremely capable, efficient and effective as they provided nursing care in isolation: "There is one sister in an aircraft with one medical orderly and 20 patients" *(Sydney Morning Herald* 1944).

There was a high level of responsibility and accountability in providing care as the lead clinician at 15,000 feet above the ground, making all the clinical decisions. These nurses displayed courage, confidence and competence, and I have not located any evidence of poor patient outcomes during the transport process.

'Flying Sisters for Air Ambulances' (*The Argus* Melbourne, Vic. 1848-1956, Thursday 20 April 1944, p.8) is a short story reporting on how "selected RAAF nursing women" were being trained with their United States Air Force (USAF) counterparts in "air evacuation methods, reactions of patients suffering from certain diseases to varying altitudes, aviation medicine, tropical hygiene and aircraft recognition" *(*http://nla.gov.au/nla.news-article1091971). This short report from *The Argus*, a major Melbourne newspaper of the time, demonstrates to the public that the first FNs chosen to be part of the RAAF No. 1 MAETU were being educated to provide the best care possible to the wounded soldiers. The subjects being taught were not part of the usual training for Australian nurses, as demonstrated by the joint training with USAF counterparts.

Several other newspaper articles of varying length over a one year timeframe provide further sketchy evidence of Australian FNs' work with the no. 1 MAETU. In the *Sydney Morning Herald*, Friday 22 September 1944, a lengthy article discussed the work and living conditions

of two FNs originally from Melbourne but now stationed in Nadzab. The *Sydney Morning Herald* published further writing about the FNs' work and life in Nadzab the following Wednesday, 27 September 1944. Amusingly, the opening sentences of both articles discuss the romance and gallantry of being involved with Flight Nursing and of being stationed in far off lands. Both articles describe in depth the FNs' uniforms and how they were growing their own plants. Although evidence of FNs' work and working hours was reported, this was brushed over and buried within the exciting and adventurous details. Both articles portray FNs in richly descriptive language:

> To most people the RAAF 'flying nurse service' is the most romantic service of all. To the 15 Australian sisters in the service it is the finest job in the world. Would they change places with any other service woman? The answer is no!

These words convey the glamour, adventure and heroism of Flight Nursing, painting a rosy picture designed to delight the imagination of the general public, and disguise the risks and danger to the women performing this work. In both articles, the FNs were very smart figures in their Air Force blue lambs-wool-lined flying jackets and jaunty forage caps, which are worn on service with khaki slacks, gaiters and mosquito boots (*The Argus* Melbourne, Friday 22 September 1944, p.8; http://nla.gov.au/nla.news-article11362275).


"Flying Sisters" of the RAAF

SOME OF THE SPECIALLY SELECTED NURSES OF THE R A A F who are undergoing training for duty with the first complete Australian unit formed to evacuate casualties from forward areas by air. It is known as the Medical Air Evacuation Transport Unit, and is modelled on the US Flying Nurses Corps.

Figure 4-4 Flying Sisters of the RAAF

Source: http://nla.gov.au/nla.news-page626716

The Figure 4-4 picture appeared in *The Argus* on 22 April 1944 (p.11) with the accompanying text:

> Some of the specially selected nurses of the RAAF who are undergoing training for duty… It is known as the MAETU, and is modelled on the US Flying Nurses Corps. (*The Argus* Melbourne, Vic. 1848-1956, Saturday 22 April 1944, p.11)

The picture is in black and white, showing 15 women dressed in a male, business-like manner, with Air Force shirts and tie tucked into wide legged pants with gaiters and boots, and all wearing their hair short or tied up. It is difficult to distinguish if they are wearing makeup or any other feminine touches of glamour because the photograph is lacking sharp clarity; but all have very wide smiles.

'RAAFNS four years old today' (*The Argus* Melbourne, Vic. 1848–1956, Wednesday 26 July 1944, p.8) talks about the fourth anniversary of the formation of the RAAF Nursing Service and provides a short history. It speaks about nurses continuing their work in dangerous areas of the war, then discusses the "Pride of the RAAF Nursing Service" – the flying nurses of the MAETU who "are likely be in action soon". It continues:

> Carefully picked, these are young nurses (their ages must be between 21 and 30) with excellent nursing experience, who will evacuate wounded and sick from the battle areas by air. (http://nla.gov.au/nla.news-article11353831)

Why did they all need to be so young? It is difficult to imagine that someone who is 21 and just graduated would hold "excellent nursing experience". The time has not been long enough for that required for a nurse to obtain such experience. This quote makes these nurses sound very special and brings images of pretty young women glamorously flying off into the wide blue yonder to rescue the sick and wounded. Was the fact that young and pretty filled the glamorous romantic image of FNs and supported the patriarchal ideals of that time? Was image the most important part of the MATEU and the work performed by FNs secondary? "Carefully picked" is also an interesting part of this quote. In what way would the nurses have been chosen? Would they have all volunteered or been approached by the matrons? Were they required to be of a certain stature, so that if not, you were not chosen to be a FN? A clue is given in the following quote:

> At No 2 RAAF Hospital at Ascot Vale are 10 members of the RAAF nursing service, all weighing under nine stone four pounds, all measuring not less than five feet four, who call themselves MAETUs. They have just finished training and will leave shortly for duty as Flying Sisters. (*The Argus* Melbourne, Vic. 1848–1956, Saturday 28 April 1944 http://nla.gov.au/nla.news-article1105806)

No explanation is given as to why there are physical requirements for this job. It would be very easy to misconstrue the rationale for these physical requirements as being part of the glamour myth. However, weight and height are important for ensuring the balance

requirements of the aircraft. The pilot works out the number of passengers, and amount of equipment and fuel that can be taken on the aircraft so it will take off – not too heavy, but holding enough fuel for the return trip without refuelling if necessary. The public, however, are not privy to this knowledge and are left to work it out for themselves. Again, the language and lack of an explanation is misleading.

Another quote that brings images of the adventurous, exciting, heroic and pioneering actions of these FNs as they expose themselves to danger comes from an additional news article: "they (FN) will soon be doing dangerous work flying in and out of forward areas tending casualties in transport planes converted into air ambulances" *(The Argus* Melbourne, Vic. 1848–1956, Wednesday 26 July 1944 http://nla.gov.au/nla.news-article11353831).

However, this quote poses the question: are not all the personnel involved in the war exposing themselves to danger? The part about transport planes being converted into air ambulances brings mental pictures of austerity, and a lack of comfort and facilities in the aviation environment as opposed to that of a hospital again provides an element of truth, as does the following description of FNs' work routine:

> Their (FN) usual routine is rise at 2:30 am, breakfast 3.30 am, take-off 4.30 am, travel to forward lines with a freight of medical supplies, parts, food supplies or anything needed in the area and return with the most precious cargo in the world – sick and wounded fighting men. Their day finishes at about 5.30 pm. (*Sydney Morning Herald*, 27 September 1944 http://nla.gov.au/nla.news-article17922222)

Thus, while a considerable amount of the descriptive language paints a very romantic, glamorous, heroic and adventurous picture, in actuality this work involves very long hours with an implied high number of flights undertaken within an austere environment in unpressurised aircraft, and the need to remain constantly vigilant of the sick and wounded. Individually, each of these factors would have caused significant fatigue for these nurses, let alone all factors combined.

The overall tone of the newspaper articles becomes more realistic and factual in mid-1945, commencing with an article from *The Western Mail* based in Perth Western Australia (WA). While the headline of this article remains fanciful, 'Nursing above the clouds', this is the first article I located whereby the voices of the FNs who have been working in the MATEU for approximately one year are heard (*Western Mail* Perth, WA. 1885–1954, Thursday 7 June 1945, p.39). The article commences by stating the "benefits" of air medical evacuation to the recent war effort and continues by calling the FN:

> Pioneers in a new branch of medical science ... these young Australian women have voluntarily undertaken one of the most gruelling and certainly the most hazardous task open to the RAAF nursing service. (http://nla.gov.au/nla.news-article38563707)

The journalist who wrote this article, while maintaining the imagery of heroism, pioneering nature and "specialness" of these nurses through use of a small inference, "this picked nursing squad", within the text, has been truthful to the nurses' voices by writing that they:

> Dislike anyone referring to members as 'Flying Angels', 'Angels of Mercy', or 'Ministering angels'. They see nothing angelic in the sight of a modern young woman in trousers wearing a 'Mae West' and wielding a hypodermic needle in a transport plane flying 10,000 feet above enemy territory … they say they have a job of work to do like any other unit of the services, and claim there is nothing particularly heroic or glamorous about it. As one nurse put it, "Angels indeed! Why all we're concerned with is keeping the men from the angels and returning them to normal health and life". (http://nla.gov.au/nla.news-article38563707)

This is a much more accurate description and depiction of the FNs' work. It reveals their attitude to the work they are doing, with a distinct lack of the flowery, richly descriptive language mainly used up to this date to describe their work.

The journalist also comments on the disposition of the FN and how she is always seen as calm and in control, no matter the flying conditions. An episode of pure heroism is recounted whereby a calm and in control FN, with the assistance of the medical orderly, evacuated a plane full of casualties that had to ditch in the sea due to mechanical problems. All were safely evacuated under the FN's serene control, with no loss of life (http://nla.gov.au/nla.news-article38563707). This particular article concludes with a mixture of images – excitement, bravery, heroism, adventure, glamour – and then the last few sentences contain the everyday reality.

July 1945 saw an article written and published in *The Argus* (Melbourne Vic. 1848–1956, Wednesday 25 July 1945, p.8) regarding the fifth anniversary of the RAAFNS. In one paragraph, this article factually describes the work of the MATEU as a highlight of the service, and states that a second unit had been formed, leading to a doubling of FN numbers within the RAAFNS (http://nla.gov.au/nla.news-article970103).

Another more factual article published in *The Argus* (Melbourne, Vic. 1848–1956, Friday 21 September 1945, p.16) gave an account of the MATEU evacuation of prisoners of war from Singapore. The Wing Commander in charge of the MATEU was quoted talking about the FNs' disposition and efforts, while those in charge of the British Rescue of Allied POWs and Internees were quoted as giving high praise to the RAAF pilots and FNs who performed the evacuations (http://nla.gov.au/nla.news-article967772). There is a noticeable lack of the usual colourful descriptive language that paints a rosy picture of the FN.

The vast majority of published newspaper articles located from the mid-1940s through the 1950s provide documented evidence that FNs worked in an advanced nursing role,

independent from a doctor, providing care to sick and wounded men, and with only one assistant, usually an orderly (www.awm.gov.au). This has been demonstrated by the number of published articles that report "the sisters have complete medical charge of the wounded on the plane" (*Sydney Morning Herald* 1945 http://nla.gov.au/nla.news-article27935530); "an MAE Flight team consists of one nurse and a sergeant medical orderly"*;* the nurses and orderlies "have flown nearly two million miles" and "evacuated more than 8,000 patients from forward areas"; and that Flight Nursing is "new work with attendant new problems that have to be met often for the first time in medical history" (*The Western Mail* Perth 1945 http://nla.gov.au/nla.news-article38563707).

If the timing of the construction of myths regarding FNs' work is examined closely, the published newspaper articles and military propaganda described here represent the beginning. They provide just enough factual information to maintain a semblance of reality but mix this together with all the ideals – romanticism, glamour, adventure, heroism and a pioneering spirit. Combined with the use of emotive, descriptive language, this propaganda captured the public and potential recruits' imagination. Moreover, to ensure the general public remained firmly behind the war effort, only what was deemed worthy information or offered as good news stories from the military was printed, thus ensuring a steady stream of recruits for FN positions (Barger 2013).

Propaganda selling the virtues of Flight Nursing during the war was not restricted to newspapers or documentaries; it extended also to films and their accompanying promotional posters (Stanley 2008). Post WW2, the Air Force nursing services were initially wound down in both numbers of staff and activity (Adams-Smith 1984, Dahl 2009, Halstead 1994). Society returned to its pre-war assumptions and modes of thinking. It expected the women who had stepped up into a greater role during the war to return to their "proper place" and give the jobs back to the men returning from war (Fox 2001). Gender and class as issues affecting women again raised their heads as the threats to society from war abated. However, FNs remained working, albeit in greatly reduced numbers, as the military nursing services were wound back and civilian aeromedical services in Australia only provided a skeleton service due to funding restrictions (Adam-Smith 1984, Dahl 2009, Halstead 1994).

Not too many years later, both America and Australia became involved with the conflicts in Korea and Vietnam. Thus, recruitment of nurses to the military again became paramount. This time, Hollywood came to the rescue with a number of films designed to recruit nurses through both advertising posters and the films themselves. A classic example is the 1953 film *Flight Nurse* and the accompanying advertising poster (Republic Pictures 1953). Thus, the building and strengthening of the myths surrounding Flight Nursing continued.

4.6 Flight Nurses – Strengthening the Myths

4.6.1 Hollywood films and advertising posters: post WW2

The myths that commenced with the small truths and evidence provided of FNs' work by the 1940–1950 newspaper articles already discussed were strengthened by the richly descriptive language, poetic licence, twisting of facts, recruiting and marketing that all came to the fore with Hollywood's involvement. Hollywood held great power in shaping the public imagination regarding FNs' work. In 1953, Republic Pictures released a 90-minute film called *Flight Nurse* starring a number of well-known Hollywood actors of the time (Joan Leslie, Forrest Tucker, Arthur Franz, Jeff Donnell, Ben Cooper) (http://www.youtube.com/watch?v=n8oSMYvSuLE). This film contains a mix of both realistic and unrealistic images of FNs at war. It has scenes that demonstrate FNs assessing patients and organising the loading of the aircraft, then providing care to the injured soldiers being transported. However, the majority of the film is devoted to promoting a romantic triangle between the heroine, the transport pilot and a helicopter pilot to whom she is supposedly engaged. The FN's social life is the main focus of the film. The message is that life for a FN is neither hard nor dangerous, but filled with romance, intrigue, excitement and adventure. The richly descriptive images, text and musical score combine to make the film memorable to the general public.

The obvious narrative is that even though there is a war going on, as a woman and a nurse, meeting a handsome pilot who will whisk you away to a happily ever after of marriage, children and contentment remains the main goal. Looking after the man and raising children as the next generation of workers is her main responsibility (Marx & Engels 1872/1968). These were the societal values in the early 1950s; marriage and children were paramount to women before a career (DeVault 1991, Edmond & Fleming 1975, James 1975, Jordan 1999, Kinnear 1995).

The coloured poster promoting the film (http://www.lovingtheclassics.com/flight-nurse-1953.html) displays a number of descriptive images of war in the background (see Figure 4-5). Prominently in the foreground, however, a woman and man representing the FN and pilot are in a firm embrace, about to kiss. The descriptive text on the poster states: "In this war drama, set during the Korean War, an Air Force nurse gets involved in a love triangle on the front lines" (http://www.lovingtheclassics.com/flight-nurse-1953.html). You can almost hear the romantic music building to a crescendo as you gaze at the poster. The FN is depicted as glamorous, sexy, slim, desirable and eligible, but at the same time adventurous, pioneering and obviously heroic because she is at the battle front. Romance, glamour, excitement, adventure and heroism all feature in the poster. These Hollywood images fed the popular

cultural understandings of FNs' work during the 1950s and again ensured a steady stream of FN recruits for the military because remarkably few (16) FNs lost their lives during the war (Sundin 2013).

Figure 4-5 'Flight Nurse' Poster

Source: www.googleimages/flightnurse.com

4.6.2 Newspaper articles in Australia: post WW2

At the end of WW2, the RAAFNS reverted to a reserve unit of the RAAF (Dahl 2009, Halstead 1994). However, late in the 1940s, the unit was reinstated as a regular part of the Air Force, albeit with a smaller number of FNs (Dahl 2009, Halstead 1994). Two Australian newspaper articles I located from 1950 appear to reassure the general public that the RAAFNS still had the capacity to conduct aeromedical evacuations and that the nurses were retaining their air medical skills through regular training drills. In September 1950, the Perth *Daily News* featured an article titled 'Six nurses jumped into a pool' (*The Daily News* Perth, WA. 1882-1950, Saturday 16 September 1950, p.5). This article outlined the education of six RAAF nurses dealing with search and rescue operations, aircraft evacuation, and jungle, desert and arctic survival methods, but in particular water survival while in full flying kit

(http://nla.gov.au/nla.news-article84486642). It is noticeable that the usual colour filled, richly descriptive language that paints the rosy picture of the FN is missing from this article.

'Air nurses train over city' was the headline of another short article that described the training drills three FNs – "three R.A.A.F. flying sisters" – underwent while situated at Laverton and Point Cook training bases in Victoria (http://nla.gov.au/nla.news-article22826597). Published in *The Argus* (Melbourne, Vic. 1848–1956, Thursday 4 May 1950, p.20), this short commentary kept the public advised of the fact that the RAAFNS FNs were maintaining their educational status and not losing their nursing skills. Again, there is a noticeable absence of the usual colour filled, richly descriptive language.

Interestingly, two distinctly different pictures continue to be painted regarding FNs' work: that which happens in Australia (where FNs are presented as heroic, outback, pioneering, stoic and brave); and that of the US (where FNs are portrayed as glamorous, romantic, exciting and adventurous). Literature other than newspaper articles regarding FNs' work was published intermittently from 1944–1956, and included journal articles and book chapters (Albert 1956, *Australian Women's Weekly* 1944, Baran 1946, Benson 1944, Corbet & Nelson 1955, Johnson 1952, Kiel 1947, Lay et al 1952, Mills Link & Coleman 1955, Richardson 1944, Strickland 1951). These are factual accounts of actual FNs' work, missing the description and imagery usually painted by the popular media.

The next timeframe where I located evidence regarding the images of FNs was the early 1960s, when the US was at war in Vietnam. Comic books as a form of reading entertainment were part of adolescent culture at this time (Benton 1993, Wright 2001, University of Iowa Libraries 2009).

4.6.3 Flight Nurses, comic books and comic book cover images: Vietnam War

Nursing staff were desperately needed at the beginning of the Vietnam War (Vuic 2010). Their numbers within the armed forces had decreased after the Korean War and there were problems recruiting nursing staff (Vuic 2010) because the Vietnam campaign was such an unpopular war with the American public. Nurses were, in the main, women, and could not be conscripted into the war effort; they needed to volunteer to be part of the available forces (Vuic 2010). Thus, other methods of recruitment had to be found. Once again, appealing to young women through the popular culture of the time was seen as a way to do this. One such example is the *Sue and Sally Smith Flying Nurses* comics.

4.6.3.1 Sue and Sally Smith

Charlton Press Inc. published the *Sue and Sally Smith Flying Nurses* comic book series bi-monthly in the early 1960s (Charlton comic books 1963 #49). Between 1962 and 1963, Sue and Sally were promoted as beautiful, young, sexy, inspirational FN heroines. None of these comic books are now in stock or available, so the data I analysed for this section came from the Grand Comics Database website, courtesy of the Creative Commons license.

The cover of *Sue and Sally Smith Flying Nurses*, issue 49, published in January 1963 (see Figure 4-6), displays inspirational text along with the cartoon images of two young Air Force nurses about to jump out of a large aircraft's cargo door, parachuting to the rescue of an injured man and child. These FNs are portrayed as heroic and adventurous through richly descriptive language and the pictorial image. The young women are beautifully coiffured, with immaculate hair, lipstick and armed forces' uniform, hats placed at just the right jaunty angle. They look sexy and glamourous, no matter that they are standing in the aircraft doorway, in the slipstream, at altitude, complete with parachutes about to leap out of the plane. The entire cover has an aura about it regarding how "special" these nurses are, purely by the way it is fashioned and the language used:

> Defying death and flaunting danger at every turn, two sisters of mercy bring their medical skills and compassionate hearts to the injured and ill no matter where they may be! Be with them for every thrilling moment. (Front cover, issue #49, January 1963)

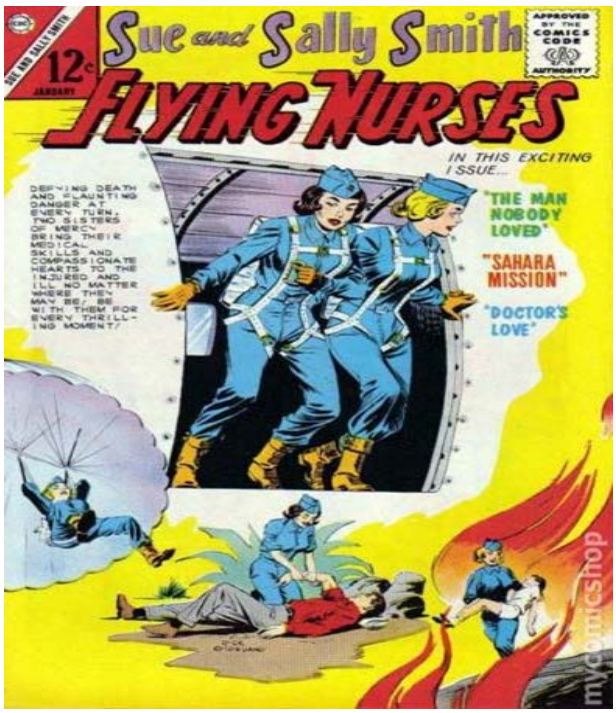

Figure 4-6 Sue and Sally Smith Flying Nurses, Front Cover, Issue #49, January 1963

Source: http://www.mycomicshop.com/search?TID=372431

Young women were caught up in the unrealistic images as they day dreamed about what it would be like to do this type of job. Moreover, the day dream was dangled as a possibility because this was the 1960s when the opportunity was available to escape parents, become adults and indeed perform this type of work, even though they were women. This was a very clever marketing strategy used to recruit young, fresh FNs to the military.

A further example of the *Sue and Sally Smith* comics comes from July 1963, issue 52 (see Figure 4-7). Again, the sisters are pictured in the foreground with two parachutes and one lone figure behind them, both obviously having leapt out of the receding aircraft. Again, the sisters are beautifully coiffured, with perfect makeup and Air Force uniform hats sitting at just the correct jaunty angle. The richly descriptive language on the cover, and headings for stories such as ‘a thread of life’ and ‘no right to love’, would engage any teenager with thoughts of romance and adventure. Again, the text written next to the picture in bold states:

> The sisters of mercy once again defy danger and find romance. Join them for every thrilling moment. (Front cover, issue #52, July 1963)

Figure 4-7 Sue and Sally Smith Flying Nurses, Front Cover, Issue #52, July 1963
Source: http://www.mycomicshop.com/search?TID=372431

All the covers of this comic series that were available for viewing appear to follow the same themes and promote the same images of Flight Nursing. The genre is romance, with “the

sisters of mercy" joining the Air Force to "help the boys". While this denotes nun like qualities, Sue and Sally are not promoted that way. They defy all danger, manage risk with the click of their fingers, are heroic and adventurous, sexy and slim, exciting, glamorous and very appealing to men (Charlton comic books 1963).The language intimates that all men would be very happy to meet and marry a FN. Interestingly, contained within one issue of the comics, according to the cover, there is an advice column on how to catch a husband (http://www.mycomicshop.com/search?TID=372431). This provides further evidence that the comics are aimed at young female readers.

These comic books present a particular feminine ideal. A more telling portrayal is to examine the material used by the military to see to what extent the romanticised version prevails. The following black and white photo (see Figure 4-8) depicts real life FNs in the original US FN uniforms. These FNs are wearing pencil skirts and high heels, are thin and again have beautifully coiffured hair. There are a number of contradictions accompanying this photo, not the least of which are the occupational health and safety issues within the aircraft. It would have been difficult to climb the aircraft stairs, maintain balance on the floor, wear a parachute correctly or perform other tasks, such as accessing the lower stretcher, in this uniform.

Figure 4-8 US Flight Nurses at Work, Early 1943
Source: www.googleimages/flightnurse.com

However, in July 1943, the FNs' uniform was changed from skirts to trousers after a visit

from Colonel Florence Blanchfield, the appointed superintendent of the Army Nurse Corps (Barger 2013). It is said she was taken on a demonstration flight by a FN and needed to put on a parachute when the aircraft suffered simulated engine failure. She soon discovered that it was not possible to fasten the parachute's obligatory leg straps gracefully while wearing a pencil skirt. Not long after this visit, the FNs' uniform changed (Barger, 2013). But these images of FNs at work were out in the public sphere, thus strengthening the glamour myth surrounding FNs as they provided patient care in the aircraft in pencil skirts and high heels. It is also of interest to note that the chief nurses of the various US Army medical air evacuation squadrons (MAES) decreed that their FNs be neat, well groomed, look nice and know how to wear their hair (Barger, 2013). Jo Nabors (a FN in the 812 MAES) is quoted as saying:

> No matter how long a flight, before landing and picking up patients or offloading them at their destination, the FN was expected to "freshen up" – reapply her makeup, comb her hair and be the most beautiful woman that the wounded are going to rest their eyes on …it is an Army regulation that FNs look attractive and fresh when they bring their hospital ships into land. (Cited in Barger, 2013, p.194)

This demonstrates how closely the day to day demands on FNs mirrored the picture portrayed in the popular media.

In Australia, after newspapers ceased publishing articles regarding Flight Nursing, the *Women's Weekly,* a very popular cultural magazine in Australia, was the other place to locate small snippets of information. The *Women's Weekly* published many Mills and Boon type stories regarding FNs and doctors, usually in some type of romantic entanglement. I propose that this type of popular cultural image of FNs resulted from the dearth of factual information, leading to a lack of knowledge of FNs' work amongst the public, other healthcare providers, and even their nursing and midwifery colleagues. The imaginations of the authors of these narratives replaced the factual information that had been available regarding FNs' work. This led to maintenance of the myths surrounding Flight Nursing via popular cultural mediums, including television.

4.7 Flight Nurses: Maintaining the Myths

4.7.1 One television series and its advertising poster: 1980s

The RFDS is very popular in Australian culture. Most rural and remote centres across Australia fund raise to "keep the flying doctor flying" (www.flyingdoctor.org.au). Founded in 1928 by the Reverend John Flynn, who actively campaigned to raise funds from the Australian public to establish the service, it has grown to become an Australian national icon. Therefore, it is not surprising that the RFDS became the topic of a television series titled *The Flying Doctors* in the 1980s. The popular Crawford Brothers Productions drama, aired from 1985–1991, starred several well recognised Australian actors of the time, including Andrew

McFarlane, Steve Bisley, Lenore Smith, Maurie Fields and Val Jellay (http://www.australiantelevision.net/flyingdoctors/). The plot revolved around factual evidence of the everyday life saving efforts of the RFDS, but held an undercurrent of romance, excitement, glamour and adventure. The show utilised some of the most recognisable Australian countryside as a backdrop to ensure it projected a believable reality focus to the viewing public (e.g. the opening credits show Castle Rock and Kata Tjuta, both tourist destinations south of Alice Springs in the Northern Territory).

The careful scripting of the main plots behind each episode and the actors' performances presented this series as a believable representation of the actual work performed by the RFDS. However, again the FN is presented as the doctor's love interest, and little more than his hand maiden and tea lady on each flight.

At the time this series had just completed regular weekly screening on television, I met up with a very senior executive involved in an international manufacturing firm in Tasmania. This man knew I was a very senior registered nurse who had been working in intensive care and was now working for the RFDS (1992). He was interested in my RFDS work and while questioning me about it, he stated, "Well, don't you just give out cups of tea like they do on the flying doctors?" This exemplar demonstrates how, as late as the 1990s, people working in very senior executive positions in Australia held a completely incorrect image of FNs' work.

Figure 4-9 shows the poster that was part of the marketing plan to advertise the mini-series, but which also fulfilled the RFDS organisation's recruitment and fund raising strategies (Crawford Productions 1986, Persson 2007). Interestingly, the organisation is closely linked to the mini-series by its use of the original pet name from the 1930s of the 'Flying Doctors' rather than the Australian Inland Mission Aerial Medical Service or the Royal Flying Doctor Service, which were the service's designated names. All the free advertising and flow on effects for fund raising for the RFDS from the series would have struck a chord with the organisation because the public was getting weekly reminders about the service's good work for the people of the outback.

The images presented in the poster intimate the ideals of romance, glamour, heroism, excitement and adventure. The woman, representative of the FN, is being held in a firm embrace by the man who is representative of the Doctor. They are obviously happy and smiling. Both are thin, sexy and glamorous, and pictured amongst the red dust of the remote Australian outback. This is an austere, hot, desolate environment, as demonstrated by the landscape and full sun pictured behind the aircraft that is flying through the wide blue yonder

– all completing the rugged outback romantic image.

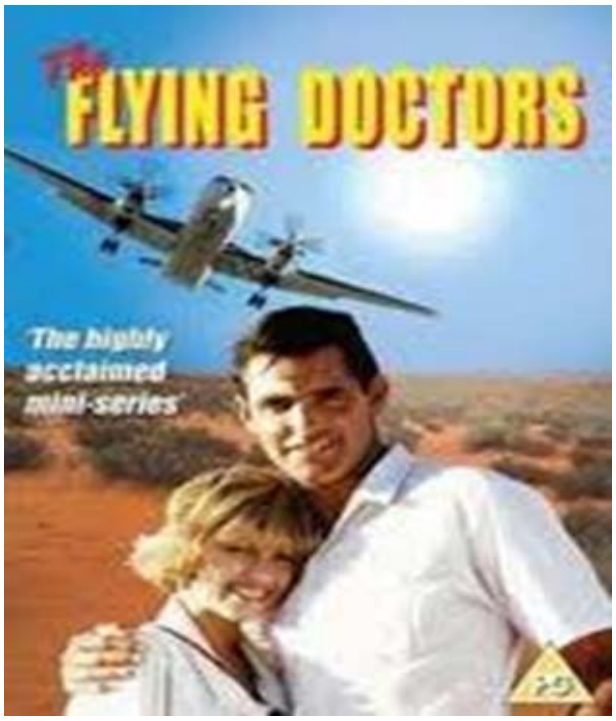

Figure 4-9 Advertising Poster for Flying Doctors Television Mini-series
Source: www.australiantelevision.net/flyingdoctors

The poster and mini-series resonate with the popular image of 'The Flying Doctor', which is internationally recognised as helping people in need in the outback, along with the romance, glamour, excitement, adventure and a pioneering, generous spirit likely to lead young doctors and nurses to feel inspired to volunteer and become part of the service.

4.8 Discussion

I could discuss in depth all the evidence presented in this chapter in relation to analysis using CQI . However, for the following reasons I have chosen to discuss only one example – four comic book covers from *Sue and Sally Smith Flying Nurses* from the 1960s.

These comic book covers support the themes of glamour, romance, heroism, independence, adventure and the pioneering spirit identified through the use of IE. They represent an example of the gendered ontology of our society and the ruling apparatus within it (Adams, Carryer & Wilkinson 2015, Bartlett 1991, Campbell 2003, Campbell & Gregor 2004, Denzin 2016, DeVault & McCoy 2003, Kincheloe & McLaren 2005, Smith, 1987, 1992, 2005). They are a historical demonstration that influences the present. In contemporary capitalist society, we are ruled by forms of organisational power that are vested in, and mediated by, texts, whether on paper or electronic devices; and this creation of a world of texts provides

organisations with a focussed area of powerful action in the ordinary lives of everyday people (Adams Carryer & Wilkinson 2015, Bartlett 1991, Campbell 2003, Campbell & Gregor 2004, Denzin 2015, 2017 DeVault & McCoy 2003, Kinchloe & McLaren 2005, Smith 1987, 1992, 2005).

The series of fictional comic book covers produced in 1962–1963 by Charlton Press Inc. continued the positive visual media portrayal of the FN's work. However, when analysed usingCQI, these covers held overtones promoting the organisational power of the military, demonstrated by the elusive/stealthy recruitment of young women to the armed forces as nurses. Sue and Sally Smith are always pictured wearing military style uniforms, particularly the jaunty little hats of the era that symbolised the armed forces. The written text on the covers supports their life saving mission, which always encompasses romance, excitement, adventure and a deft avoidance of danger. The undertone provided by these subtle images suggests that these comics encouraged recruitment of young women to the armed forces while reinforcing the message that women are productive members of the armed forces and of patriarchal society at large (Barger 2013).

What is not so obvious, but illustrated subtly in the background, is the overarching harshness of all the environments pictured on the comic book covers. There are illustrations of mountains and snow; jungles with "unfriendly natives"; the Western frontier; fire; dirt; distance; and an overall demonstration of the austere geographical environment. Then there is making use of an aircraft to travel to where the patient is located and perhaps transport the patient to safety using the aircraft. Whilst these two sisters, who are FNs, are pictured as glamorous, thin, sexy and appealing, underlying this image is the possible analysis that these nurses are made of steel. Right from the beginning, it could be posed that they are not docile young women or nurses but very assertive women who solve whatever problems assail them. They work alone in isolation and are always pictured coming to the rescue. They work in unstable environments and perform a wide diversity of skills, from high tech to primary healthcare. This is the direct opposite of women's patriarchal experience of contemporary society and its overarching view of women (Campbell 2001, DeVault 1991, DeVault & McCoy 2006, Smith 1987, 1990).

The alternate view is the romance, excitement and adventure that this type of work ensures. The gendering of society squarely features with this view as the comic book covers are quite overt when they discuss columns within the comic that give advice on "catching an eligible husband" (Charlton comic books 1963 Issue 51). Flight Nursing is offered as a glamorous, exciting, adventurous career choice for a young woman that ensures she is appealing to the opposite sex, and will always be wanted and chased by men even if she chooses not to

marry.

Using the CQI stance of the ruling apparatus (Bartlett 1991, Denzin 2015, 2017, Kinchloe & McLaren 2005, Smith 1987, 1992), I have established that those who were providing the illustrations and storylines for the *Sue and Sally Smith Flying Nurses* comics – Charlton Press Inc., based in Derby, Connecticut – were based externally to those who were actually living their experience of being a FN. The ideas had been put forward and supported elsewhere, and gained momentum, power and action, which were then applied at a resident level . There is no realistic voice of the women who were actually performing the work of the FN. The impressions demonstrated by the covers were most likely far removed from the reality of the situation and were written by men. The FNs shown on the comic covers were exposed to harsh, austere environments. Those writing the stories and illustrating the comics were no doubt quite comfortable living and working in the metropolitan area with all modern conveniences available to them, and certainly no harsh austere environments to accommodate into their work and life.

At the time these comic books were published, the Korean War had finished but involvement in a war in Vietnam was on the horizon for the USA. The ruling apparatus involved in Americans' experience of their everyday world promotes the organisational power of the government and the military through many avenues, including any textually mediated discourses that could pose as supposedly harmless comic book covers and the text introducing the stories contained within. I argue that the power of the ruling apparatus applied externally through the vehicle of the popular media could be what is occurring here; the use of comic book cover images to recruit young women to join the military as nurses, with the dream of being a FN the basic driver.

While these comic books are fiction, I argue that they leave a lasting impact on the impressionable psyche of those in society who are looking for some romance, excitement and adventure with which to bolster their lives.

4.8.1 Diminishing or adjusting the myths?

A search of the World Wide Web from early 2013–2015 revealed that the image of FNs is under review and a considerably more balanced visual image is emerging. There are now photographs available via the internet of FNs at work in both military and civilian settings. These photos depict FNs at work in the back of the aircraft, and in the main provide the FN's name and title so there can be no misconception by the public; they are viewing a nurse who specialises in Flight Nursing. Acknowledgement is also given (in most instances) to the organisation from which the photos originated. These photos are of both women and men,

with no observed appearance of romance, enhanced beauty, sexuality or sexism. There is no visible lipstick on the women, who are not extraordinarily thin with large breasts and the typical hour glass shaped figure.

A number of reality television programs or series have been produced that have also assisted with advising the public of the reality of Flight Nursing. In Australia in 2008, Waterbyrd Filmz produced a reality series called *Nurse TV.* One program in this series was about Flight Nursing and starred a FN employed with the Royal Flying Doctor Service's South Eastern Section (RFDS SE). There have also been a number of other documentaries and reality programs filmed and shown on commercial free-to-air television over recent years involving the RFDS SE section and their FNs (Fact Not Fiction Films 2013, Oliver 2007).

In the US, a great number of reality programs have been produced about Flight Nursing (Healthcare heroes 2013, Mary Greeley medical centre 2013, Nurse talk 2012, Nurse TV 2007, OTV104 2014, Pennington 2015, WQED_TV 2013). There are a number of similarities between Australian, New Zealand (NZ) and US FNs' work, but also a number of notable differences, for example the models of health services provision; the geographical distances; crew configurations (US nurses can fly as a sole practitioner, with a paramedic, with a crewman and/or with a doctor); aircraft types (both fixed and rotary wing); and weather conditions (e.g. US FNs deal with snow much more often than FNs in Australia). However, patient assessment, quality care and quality outcomes are always the aim of every FN whether in Australia, NZ or the US (Air and Surface Transport Nurses Association [ASTNA] 2012, Flight Nurses Australia [FNA] 2017, New Zealand Flight Nurses Association [NZFNA] 2014).

Reality television series aim to provide accurate visual images of the FNs' working environment and allow possible recruits to Flight Nursing to imagine working as a FN (Fact Not Fiction Films 2013, WGED TV 2013). Although the programs provide only small snapshots, they have running commentary from actual FNs performing the work in the back of the aircraft, and demonstrating the complexity and impact of the environment and some of the work performed. However, these programs are limited to the extent that the organisation for which the FN works must agree to the script, what the FN has to say about their work, where the filming occurs, and editing processes that occur after filming is completed and the crew have returned to the studio. The organisation's Chief Executive Officer (CEO) then needs to agree again to the whole program. While reality TV shows are unscripted by definition (www.electronics.howstuffworks.com/reality-tv.htm), in this instance the aeromedical organisation's CEO and marketing department are involved. They need to provide permission for the film crews to be present on the tarmac or in the aircraft, and for

filming. Thus, in essence, the reality TV program is really an exercise in marketing, fund raising and staff recruitment for the organisation (Fact Not Fiction Films 2013, Oliver 2007).

Some aeromedical organisations provide up-to-date information on FNs' work and how to become a FN via their web pages. Ambulance New South Wales has a FN recruitment web page that outlines the work of a FN within their organisation, the qualifications required and the education program that potential employees can expect to undertake on joining (Air Ambulance Service NSW 2016). Examples of the continuing education program include in-house advanced life support in adults, paediatrics and neonates, and access to external courses for advanced life support obstetrics and foetal, obstetric and neonatal training. A full time clinical nurse educator supports all programs and continuing education (www.ambulance.nsw.gov/employment).

The print media contribute in small ways to increasing the public's knowledge of FNs' work. Non-peer reviewed articles written by journalists who have interviewed FNs feature in a number of different nursing journals and at times in popular magazines (*Nursing Review*, *Australian Nursing and Midwifery Union Journal*, *Air Doctor*). These articles give a narrative view, usually from an individual FN, about their daily work, including descriptions of some patients to whom care has been delivered. However, again this appears to be part of the recruitment drive for staff because nothing is written that will challenge the entrenched image of FNs' work.

Flight Nurses have done little to dispel the images promoted by various popular cultural methods since the inception of their work in the 1940s. In published articles, narratives and conference presentations, the opportunity is always taken to promote exciting, adventurous, heroic images. New FNs are recruited by these images of "sexy" nursing work; work that is not boring and mundane or repetitive. Flight Nurses always say each day brings a new challenge and a different place; and although the work area is the back of the aircraft, they land in a different geographical area with different weather patterns each flight. They do not care for the same patients day after day; the patient changes with each flight. Nursing care is provided to the patient to the best of the FN's ability, but after a few hours the patient's destination is reached and another nurse takes over the nursing care.

Flight Nurses never discuss the mundane, routine parts of their work: the long hours or the occasions when things have gone wrong (equipment has malfunctioned or been left behind); when they have desperately needed some assistance from another FN, but have been working alone; or when they have been frightened or lacked confidence in their own abilities to provide the necessary comprehensive care to the patient. The representation of their work

is always upbeat, interesting, adventurous, glamorous and manageable. Flight Nurses themselves have not challenged the general public's image of their work. Thus, they remain invisible.

4.9 Summary

It would be very difficult, as a member of the public, to separate fact from fiction with the way Flight Nursing and FNs have been portrayed across the visual and print media since the speciality's inception. Critical examination of this literature indicates that little has changed and nursing remains mostly invisible in the mass media in 2017. Such a specialised area of practice as Flight Nursing suffers invisibility to an even greater extent due to the shortage of published peer reviewed literature and unrealistic media portrayals. The marketing departments of the largest aeromedical organisations in Australia (AANSW, CareFlight and RFDS) seldom mention or promote Flight Nursing. Their media campaigns lead the general public to believe that their services are staffed solely by doctors, with some paramedic input; easily done because all the healthcare professionals wear the same uniform and the name of the organisation is 'Flying Doctor' or 'CareFlight'. This promotes an incorrect perception of who provides the care.

The richly descriptive imagery of FNs and Flight Nursing promoted by popular cultural fiction (novels, comics, films and film posters) demonstrates that the illustrations and story lines bear no resemblance to those who actually live the experience of being a FN. My investigation in this chapter of the myths and images of Flight Nursing from the 1940s to 2017 highlights a reality gap between the imagery and fictional writing produced, and the voice of the nurses who perform the work. The public absorbs the created mass media image rather than the lived experience of FNs as a consequence of their invisible work.

However, the myth of Flight Nursing may be diminishing in 2017 with a slow trend towards more realistic images. A search of the World Wide Web reveals that visual images of FNs now offer a more balanced representation (www.googleimages.com/flightnursing). Photographs of FNs at work in military and civilian settings now accompany many articles demonstrating Flight Nursing work in the aircraft. But, FNs themselves need to take a more active stance and stop the promotion of the popular cultural images of their work that occur through their silence and lack of challenge; and by not providing a true picture of their work at every opportunity.

The absence of a true picture of the complexity of FNs' work means that this work must be investigated and illuminated to correct the popular cultural ideal. The situation supports the need for an in-depth exploration and investigation of FNs' work, which I begin in the next

chapter by reporting on data collected from FNs in Australia in 2014 about their work and its complexity. Flight Nurses may struggle with recognition at the general public level but are vital to the successful outcomes of the patients for whom they care.

Chapter 5 Who are these nurses?

> *Everyone has multiple facets to their role as a Flight Nurse. Flight Nurse work is not just nursing work. It's not just the clinical work. It's the admin and the education and research. That is because nurses are the ones that hold the organisations together.*
> Informant 46

5.1 Introduction

The romantic, glamorous, quietly heroic images of Flight Nurses (FNs) I discussed in Chapter 4 carry with them a starkly different reality from actual FNs' work. Flight Nurses are senior registered nurse midwives who have many years' experience as nurses and midwives, and often hold additional qualifications (e.g. operating room, child health, cardiac and ICU paramedic). Flight Nurses are accountable and responsible for their actions from the moment the request for a patient transfer arrives (via electronic pager, a text on a mobile phone, a fax, an email, a telephone call or just being alerted to a patient transfer when in the workplace) to the time they deliver the patient to the next care provider in a different location.

In this chapter, I introduce contemporary Australian FNs' work, as a comparison to the images I discussed in Chapter 4. There is neither glamour nor romance in FNs' work. I demonstrate that the images promoted to the general public of a perfectly groomed and glamorous heroine, who works as the doctors' handmaiden providing cups of tea to the patients, are inaccurate. I use vignettes from FNs working for different aeromedical organisations across Australia to illustrate the work of the contemporary Australian FN in all its complexity. These vignettes commence with a discussion of a FN's "routine" day, encompassing those duties that must be performed within a day at work. A sample of the different areas of work that FNs perform follows: the FN midwife; the emergency FN; the primary healthcare FN; the mental health FN; the international retrieval FN; the logistical FN; and the FN educator. The vignettes demonstrate the depth and breadth of an Australian FN's workday.

Flight Nurses' work at all levels is directed by, and strongly linked to, organisational policy and procedures, and the Nursing and Midwifery Board of Australia (NMBA) standards of professional practice (NMBA 2016 a,b). The language of organisational policy and procedures, particularly within aeromedical organisations, has evolved externally from outside the FNs' resident work reality and has then been applied to the FNs' resident work settings. Critical qualitative inquiry (CQI) has its basis in powerfilled language and the ruling apparatus, which are aptly demonstrated by FNs' work. I have examined documents to

provide evidence for this point, including policy and procedure documents from the aeromedical organisations providing services in three states of Australia, the NMBA standards of professional practice and the professional standards expected of FNs by Flight Nurses Australia (Flight Nurses Australia 2017), their professional organisation.

*****Note:** From this point forward I have used this symbol # to demonstrate areas where I have removed various informant quotes and document references due to confidentiality.

5.2 Solo Clinicians

There are 230 FNs in Australia. However, this number cannot be ratified because not all FNs belong to FNA and the numbers of FNs are not collected by either the NMBA or the Australian Nursing and Midwifery Federation (ANMF). Data from this study demonstrates that most FNs are women, in line with current long term employment trends in nursing and midwifery. It is noteworthy that while the overall population of male nurses in nursing in Australia has remained steady at around 9% for 20 years, Flight Nursing has a much higher representative sample of men at approximately 30% (NMBA 2016d). Also, demonstrated by the collected data is that FNs are highly experienced and a very stable workforce, with most working with one employer across their Flight Nursing career.

As I have stated previously, Australian FNs are the sole clinician on aeromedical flights 85–94% of the time (Anderson 1998, Barclay 1998 a,b, Brideson Glover & Button 2012, Brideson et al 2016, Pugh 2002). While this is not usually an issue, it means there is no-one else available to discuss patient diagnosis, observations, diagnostics, blood results or variations to the "normal" course of a clinical condition (Barclay 1998, Brideson et al 2012, Brideson et al 2016, Pugh 2002). Furthermore, in other international aeromedical services, clinicians do not work alone; there is always a second clinician available on the flight with whom to check clinical decisions and medical treatments (Brewer & Ryan Wenger 2009, Holleran 2004, Reimer & Moore 2010, Reimer Clochesy & Moore 2013, Stohler 1998). In Australia, communication with ground based medical staff is usually available via satellite phone, aircraft radios or through Air Services Australia (ASA). However, this infrastructure setup is not always reliable due to black holes (areas where telephones and other communication devices lose signal) and other technical issues outside FNs' control.

I have taken the following exemplar from the policy manual of one aeromedical organisation to demonstrate that the organisation's senior clinical managers recognise that communication issues occur and that they may fail. This policy directive is very clear regarding what is expected of FNs if they encounter unexpected medical problems with a patient and experience communication problems. The policy and accompanying clinical

guidelines cover the FNs' actions as long as they remain working within their defined scope of practice, as deemed by the organisation, should they find themselves in this situation.

> On occasions Flight Nurses may encounter unexpected medical problems. Advice should always be sought from an RFDSWO doctor by telephone or aircraft radio. However, in the event that communication is not possible, these clinical guidelines should be used. Flight Nurses must always practise within the scope of RFDSWO Flight Nurse Competency Standards and RFDSWO Nursing Practice Standards. Emergency actions in accordance with these clinical guidelines that are within the scope of the individual's medical or nursing practice, will be endorsed by the Director of Medical Services and the Director of Nursing and Primary Health Care.
>
> RFDS WESTERN OPERATIONS 2013.

This exemplar also demonstrates that to ensure safe, quality, evidence based patient care, Australian FNs require advanced levels of knowledge, clinical skills, critical thinking and clinical decision-making so they have the ability to function safely as a sole practitioner in the aircraft (Brideson et al 2012, Brideson et al 2016, Pugh 2000, 2002).

5.3 A 'Routine' Day for Flight Nurses

A 'routine' day in the life of a contemporary FN in Australia shares many similarities and differences, depending on where each FN is based, the characteristics of the population they serve and the physical environment. Flight Nurses are based in both metropolitan and rural areas, and no two days are the same, with rarely a quiet moment spent on the ground:

> *As you know, there is no such thing as an ordinary day.* (Informant 8)

5.3.1 Flight nurse duty hours

When a FN is on call for a morning shift (Day 1), 0600 is the usual time on call commences. However, at times the organisation negotiates different on call times with FNs through the Enterprise Bargaining Agreement (EBA) process:

> *You can get called anytime from five am on a day shift.*
>
> (Informant) #

Whether the FN is called or not depends on what time they go into the hangar to complete checking and cleaning and other routine chores before "going flying" (transferring patients). Shifts usually commence by 0800 for most organisations and once present at work, FNs typically commence transferring patients. They must be ready to commence work as soon as they begin on call; but even the timing of starting on call varies, dependant on where the FN works across Australia and which organisation they work for. The following example, taken from one organisation's EBA, demonstrates this point. Flight Nurses' rostered hours are

averaged out across the entire year. Rostered shifts are from 8-12 hours each, with the expectation that if the shift becomes longer than 8 hours the time is just worked. An example could be 3x12 hour shifts = 36 hours, then 2x8 hour shifts = 24 hours. Therefore, the FN may work 60 hours or longer in a 5-day week. It appears the organisation seeks to meet its own objectives and FNs' rosters must fit within this. FNs are expected to be present at the hangar when rostered on duty because nothing is stated. Therefore, as an employee, the individual FN would need to take careful note of their hours each day/week to ensure they do not attend work more than the stated hours for the 52-week year. It is also obvious that there is the possibility for the FN to present for work and be expected to work many hours back to back each day because times are averaged. In addition, FNs are allocated six weeks' leave each year, leaving 46 weeks across which their hours at work need to be averaged. I argue that annual recreational leave should not be included.

> While it is acknowledged by all parties that actual working hours will vary depending upon the operational needs of the RFDS, it is anticipated that a Flight Nurse's actual working hours will not exceed an average of 38 hours per week over a 52-week cycle.
>
> All Flight Nurses shall work a seven-day roster.
>
> Flight Nurses shall work shifts, as determined by the roster, varying from eight to 12 hours. A full-time Flight Nurse and SFN will be rostered for 1,976 hours of work per annum: 38 hours' x 52 weeks = 1,976 hours (inclusive of 228 hours for annual leave)
>
> Fair Work Commission Australia 2015c

In the next example, the agreement states that FNs will be rostered from 6am-6pm and from 6pm-6am, but the expectation is that they will be present at the hangar performing ground work (cleaning, checking, patient triage), ready for immediate take-off Monday-Friday from 0900-1400 (5 hours). The rest of their rostered hours are on call but they must be available and ready to be called within those times.

> The ordinary hours of work for full-time Flight Nurses shall be 180 hours per 42 day cycle, as rostered by the RFDS.
>
> Flight Nurses shall be rostered free from duty for 14 days in each 42 day cycle. Rostered shifts shall be from 6 am-6 pm and 6 pm-6 am. Flight nurses shall only be regularly required to attend the base during rostered periods between 0900 and 1400 Monday to Friday. All other rostered hours shall be done on a call-in basis.
>
> Rostered "on call" hours will not contribute to the accrual of overtime. The Flight Nurse shall continue to be contactable and available for duty at all times during their rostered on call period.
>
> Fair Work Commission Australia 2015d.

This means that in the 42-day timeframe, actual hours worked are supposedly less, and so allow for FNs to be rostered on for longer timeframes (e.g. shifts of 4x12 hours = 48 hours availability, or 5x12 hours = 60 hours availability, but supposedly not all at work). Thus,

personal time remains limited; the FN needs to be available to present to work immediately and cannot go too far away or get too involved in something of a personal nature (e.g. go to movies).

Although both examples come from the RFDS, this organisation is a federated entity, so each operating section has its own Chief Executive Officer (CEO), marketing and fund raising managers, human resources (HR) personnel, policy and procedures, EBA, work health and safety policies, clinical guidelines, and rules and regulations. This illustrates that although all these rules have been shaped to fit the local level, they have been formulated externally by people not actually present at the resident level. The variety of EBAs that FNs work under is a prime example.

5.3.2 Equipment checking

A routine workday may or may not start in a similar fashion to other days. However, there is a set pattern at the very beginning of every FN's workday – to check equipment located on the aircraft, then to check the additional equipment that is routinely taken on a flight. Additional equipment includes items such as battery based syringe drivers and fluid pumps, monitoring equipment, defibrillator, medication bag and fresh water. This activity is directed by organisational policy and procedure (as illustrated in the next text box), but is also a self-directed activity adhered to by the individual FN.

Part 5 – Standard Aircraft Equipment List

This section lists the minimum equipment on each aircraft, irrespective of the different storage options and configuration of different aircraft types.

RFDS WESTERN OPERATIONS 2013.

Part 3 – Equipment

3.1 Restock aircraft before and after flight, including cleaning and checking the serviceability of equipment used.

3.2 Facilitate the return of equipment utilised by the Service for the continuity of patient care.

3.2 Document equipment movement.

3.3 Ensure minimum equipment set packed on aircraft for the management of patients.

AIR AMBULANCE SERVICE NSW FLIGHT NURSES HANDBOOK 2012b.

Stringent adherence to organisational policy and procedure is a compulsory organisational requirement for FNs. This includes such things as restocking the aircraft after each flight, monitoring patients according to the documented clinical guidelines (even if it makes no difference to their nursing care), completing hazard and incident reports at the direction of management (even if no actual hazard or incident of any gravity occurred), and documenting

all aircraft movement times (e.g. doors closed, wheels off, landed at destination). The organisation has put these forward as a way of fulfilling their responsibility to ensure FNs are providing safe, quality patient care at all times. However, faithfulness to policy and procedure does protect the FN; by meeting their organisational obligations, FNs are covered by the organisation's indemnity insurance. Interestingly, the ways FNs' adherence to policy and procedure is checked includes the auditing of FNs' work and documentation by their colleagues on a daily basis, as well as randomly by their line managers.

Risk management strategies adopted by organisations are very strict with ensuring employees comply with their policy and procedures. Therefore, FNs adjust their work routine to ensure they fulfil the combination of policy and procedure, regulation, professional responsibility and accountability required to ensure patient safety at all times. As per the next example, it is deemed to be part of the FN's daily work to restock, check, and clean the aircraft and equipment before and after every flight. It is also part of their work to recover equipment from whatever hospital it has been sent to with the patient. When a patient is particularly unwell, equipment often accompanies them into the acute care setting, even if the FN does not. However, this leaves the aeromedical service without that piece of equipment until it is returned, so documentation of what hospital it went to, and with which patient, is very important to assure its retrieval. Ensuring a minimum set of equipment is present on the aircraft is of vital importance (and also part of organisational policy) so that when the next FN goes to transfer the next patient, they have all the equipment they require. In 2017, it has become more difficult for FNs to meet this part of their work and position description due to work intensification.

Administration/Ground Duties

6.1 Perform ground duties as described in G-1 Flight Nurses Operational Manual. These duties include cleaning, checking and restocking of equipment and aircraft.

6.2 Computerised data entry of patient's flight and clinical details after each flight.

6.3 Daily checking of data entry.

6.4 Maintenance of equipment.

6.5 Assist by ordering of stores, drugs and linen

6.6 Participation on workplace committees relating to OH&S, Quality Management, Development of Flight Nurse Manuals, Equipment, Infection Control.

AIR AMBULANCE SERVICE of NSW 2012c.

5.3.3 Alternative extra routine duties

Other routine duties FNs perform when not flying involve daily aircraft checks; equipment checking, cleaning and tagging (whereby equipment has a tag with a date and time checked

on it so everyone knows when it was last checked and was fully operational); continuing professional development packages; and completing any work on additional portfolios that involve pharmacy checking and ordering for the base (Schedule 8 [state government poisons regulations] medications [e.g. morphine, fluids, general medications, immunisations]; base stores (things like needles, syringes, linen, vomit bags, documentation of various sorts [e.g. blank observation pads]); and equipment (equipment that needs calibration, organisation of broken equipment to be fixed, evaluation of new equipment). However, finding the time to attend to these duties is difficult because FNs are mainly called to transfer patients as soon as they commence on call or rostered shifts.

Informant data echoes the organisations' expectations displayed in their policy and procedures documents, demonstrating how this shapes FNs' work flow:

> *We have a set list of what we have to do. We come in and find out what's going on; any pending flights or any jobs out there that we might need to do or that are brewing out in the communities; obviously then go and check our aircraft. Make sure everything is stocked and then we have our medical store room base check… We go through and make sure all the bags are sealed; do the drug counts; check the immunisation fridge temperature; rotate our blood – that kind of thing and then we also have weekly checks which incorporate, for example, pulling out our airway intubation bag and going through that and making sure that there is no expired stock; all the equipment is there and over a month period every bag gets checked a couple of times.* (Informant) #

5.3.4 Flight nurse communication

Flight Nurses use a variety of different forms of communication during their workday. This depends on the organisation for which the FN works or may even change depending on the base at which the FN is located. An example of one organisation's directions is as follows.

Communication

4.1 Liaises closely with all professional groups within the Air Medical & Medical Retrieval Service to ensure an efficient and effective service

4.2 Liaises with medical and nursing staff from health facilities and other retrieval services.

4.3 Communicates with Ambulance Officers for the handing over of patient care/ management and the loading and unloading of aircraft.

4.4 Maintain daily flight data sets and patient records, including the minimum data required for the preparation of transport accounts.

4.5 Participate in a quality management program to achieve optimal practices.

4.6 Enter information on the Flight Nurses Data Base.

. #

Most FNs carry a mobile phone so they can be contacted immediately to get organised for a patient transfer:

> *We've all got our own mobiles. All the nurses have got their own mobiles.* (Informant 5)

The provision of a mobile phone by the organisation ensures the FN is easily contactable during the oncall timeframe. It also means FNs can easily assess patients while not present in the workplace. This is part of the organisational expectations to be fulfilled by the FN, whose duty statement and position description clearly define the organisation's expectations in regard to communication processes.

Communication also includes paper based and electronic documentation, for example the health communication record (HCR) completed by the medical practitioner (initial consultation records and all the paperwork to follow has the same number); faxed patient transport records or requests; observation record sheets; S8 (scheduled medications controlled by the poison's act) drug book; controlled medications request book; and immunisation fridge temperature. FNs are constantly completing paperwork.

> *Assessment forms are faxed out*

(Informant 20) #

As Informant 20 demonstrates, FNs are provided with patient information by fax, electronically by iPad or mobile phone text or email, or by direct phone communication with the doctor, medical retrieval consultant, the logistics people or the retrieval clinical consultant (a nurse working for the retrieval services in either South Australia [SA] or Queensland [QLD]). When the area ambulance service, police, local hospital doctor or nursing staff, remote area staff or, in an emergency, a member of the public initially contact the aeromedical service, a medical practitioner is usually the person with whom they speak. The patient is assessed as best as possible over the phone (unless telemedicine is available) and initial decisions are made regarding patient priority, how urgently they need to be transferred and the best crew configuration (RFDS 2011). The following example gives a FN's experience of this process.

> *Yeah, you do definitely get those red flags,*

(Informant 31) #

These decisions are then passed to central communications. All large aeromedical organisations have a central communications area that is staffed 24 hours per day, 7 days per week, and these people provide the coordination, matching transport platforms, crews and any other requirements together.

We have coordination.

(Informant 59) #

This nurse notes that they miss the half hour key performance indicators (KPIs) when they take other health professionals on the flight who are not based at the aircraft hangar with them. Key performance indicators link to the government's (funder's) contract funding requirements. If the compulsory time for departure of a priority/category 1 (triage categories have been explained in Chapter 1) is missed, the FN needs to provide an explanation. Each time something different to the expected occurs, an explanation must be provided so the aeromedical organisation's funding is not affected due to not meeting their KPIs as per the government contract.

Having outlined some of the requirements of contemporary Australian FNs during their working day, I now showcase the variety of work FNs perform.

5.4 The 'Ordinary' Flight Nurse

Aircraft: Pilatus PC12/Beechcraft Kingair

Crew: Flight Nurse and Pilot

The day to day realities of a FN's work involve ensuring that a high standard of quality, safe, patient care is provided no matter the patient's age, diagnosis or location. They also involve a degree of routine because performance of certain duties as directed by the organisation and the profession must be fulfilled. The routine day of flights involves mainly the interhospital transfer of patients of higher or lower acuity between destinations to obtain either tertiary or secondary level care. This movement of patients assists with the bed management at acute care tertiary level facilities and allows better care provision to country based patients (Dixon, Church & Pratt 2010).

While *there is no such thing as an ordinary day* (Informant 8), there are organisational policy and procedure documents that guide the ways FNs care for their patients on a daily basis. The NMBA guidelines, organisational policy and procedure, and the professional standards applied from professional organisations all contain expectations of how a nurse/midwife, indeed a FN, works to fulfil their expectations of the required level of patient care, as discussed in the previous section. An example of these expectations contained within the FN duty and position statement from an organisational level is as follows.

Patient Care:

1.1 Assessment of patient's details on booking slip and communicating patient's pre-transportation requirements to referring hospital medical staff.

1.2 Assist with triage of patients as appropriate.

1.3 Assessment of patients prior to flight.

1.4 Initiates actions to reduce or prevent actual and potential risks to patient.

1.5 Performs and documents nursing actions, procedures and patient condition/observations as per protocol and procedure manual.

1.6 To take initiative in emergency situation without an immediate medical officer available then seeks out additional knowledge or information when practical or available as per protocol and procedure manual.

1.7 Assist retrieval doctors/teams in the stabilisation of patients prior to transport as requested and continuing management during transport.

1.8 Communicate with pilot to ensure optimal physiological environment for maintenance of patient's condition with no compromise to aircraft safety.

1.9 Prioritise the appropriate level of care required between the airport and receiving hospital.

1.10 Escort patients to receiving hospital as medical condition and resources demand.

AIR AMBULANCE SERVICE NEW SOUTH WALES 2012b.

This policy and procedure statement demonstrates the routine actions regarding patient care that the organisation expects FNs to include in their workday. It is interesting that with such a senior group of nurses, these duties need to be written into policy and procedure, almost as a reminder that they must be attended to.

The following vignette demonstrates an 'ordinary' workday for an Australian FN. This 'ordinary' day occurs at aeromedical organisations across Australia, in either fixed or rotary wing aircraft. Fixed wing aircraft are configured with two stretchers and three seats; one for the FN, leaving two free to carry patients if needed. The most usual number of patients is two (one on each stretcher), but at times there is also a sitting patient or two. Children who are transported usually have an escort (parent or relative), but not always. Rules regarding how many patients are carried on a flight relate to the aircraft's weight and balance, which the pilot works out. He or she looks at the combined weight of patients, equipment and fuel, assesses where the weight will be distributed across the aircraft and how this will affect take-off and landing. The aircraft has a maximum weight under which it will perform; adhering to this must be the most important consideration. The clinical condition of the patients expected to be transferred together and their infection control status are the next most important considerations. If a patient has a highly infectious clinical condition or if they are critically ill, they are usually transferred on the aircraft alone. If not, the number of patients transferred is determined by the aircraft's weight and balance. Rotary wing aircraft (helicopters) usually carry one stretcher patient and can carry one seated patient – but having a seated patient is unusual. Their pilots, too, must consider the weight and balance issue.

On departure from the aircraft home base for a routine flight, often a FN working in the fixed wing environment will care for two or three patients on any one sector (for example Adelaide to Pt Pirie), with a changeover of the patients at either one or several destinations. Additional patients needing care who are located in other geographical areas are often picked up during the flight. The following vignette features the FN transferring non-urgent, routine type patients, designated as a category 3 (RFDS 2011).

> *We were called at 0500 to transfer a category 3 patient who was scheduled for routine surgery that day. There were no free beds available in the metropolitan area days prior, so the patient needed to stay in the regional hospital. For various clinical reasons, the patient required transfer by air ambulance. As today was the day for the surgery, this patient had to be transferred to the metropolitan area without delay, so for these logistical reasons we were called very early. Prior to flying out to collect the patient, I quickly ran through the aircraft check and other emergency equipment checks, so if anything was missing I could replace it before we left the base. I also collected the equipment we always take on the aircraft, that doesn't remain in situ when not flying due to needing to charge the battery or meet the state poisons restrictions etcetera. So this involved collecting the medication bag, iPad, telephone, monitoring device, syringe driver, fluid pump, my personal flight bag and the refreshments (tea, coffee, biscuits). We departed within 45 mins – the requirement for a category 3 flight. #*

> *The pilot and I work as a cohesive team, so he directed the patient's relative to a seat in the aircraft, stowed the luggage, climbed aboard and shut the aircraft doors, while I attached the monitoring devices to the patient – Sp02, ECG, BP cuff – so I could monitor their condition in-flight, documented their observations, provided a safety briefing to both the relative accompanying the patient and patient, ensured seatbelts were correctly fitted to all, and we departed for home base. During flight, any care the patient needed was provided, observations were documented regularly and the overall situation constantly monitored. Vigilance of patients and their relatives during flight is important as due to the noise, temperature variations, gravitational forces, gas laws and other environmental considerations, including the fact we are on a small aircraft more easily affected by turbulence, it is not as easy as usual to ensure all are ok. On landing at home base, the reverse occurred with unloading the patient and relative.*
>
> (Informant) #

While each 'ordinary' day basically follows the routines just outlined, the diversity of FNs' work goes beyond emergency retrieval to providing a range of health services to Australians living and working in remote regions, as follows.

5.4.1 Flight Nurse Midwife

Aircraft: Pilatus PC12/Beechcraft Kingair

Crew: Flight Nurse and Pilot

Flight Nurses currently employed by all the aeromedical organisations in Australia are required to be midwives (Flight Nurses Australia 2009, AANSW 2016, RFDS 2015) because there are many geographical areas across Australia where women have no access to a midwife, general practitioner (GP) or obstetrician. Midwifery and child health clinics are a common feature of the primary healthcare work performed by FNs depending on the base at which the FN is located. The FN midwife sometimes works as part of the shared care model whereby the woman's antenatal care is shared between the doctor (typically a GP, such as those employed by RFDS), the FN midwife and the local hospital (Better Health Victoria 2016, Government of Western Australia 2013, Raising children network 2016). Other situations may present when the FN is the first health professional with expertise in childbirth to have contact with the pregnant or labouring woman. This is often the case with remote clinics and Aboriginal women (Kornelsen Stoll & Grzybowski 2011). FNs are responsible and

accountable for the required midwifery monitoring and care provided to antenatal, labouring and postnatal women while they are on the aircraft and, at times, when they are at their home community (NMBA 2016, Say Souza & Pattinson 2009).

If the woman commences labouring more than four weeks prior to her due date, it is better to move her while the baby remains in utero for the safety and quality care of both the woman and the baby (Akl Coghlan Nathan Langford & Newnham 2012). If no other complicating factors are present, often medications (oral sublingual nifidepine, intravenous salbutamol) are given to try to slow or arrest the progress of labour so it can occur safely. However, this means a midwife must always accompany the woman (Barker Costello & Clark 2013).

Depending upon which aeromedical service is involved, the medical practitioner on call is usually the first person to receive information a patient needs transfer, and the patient's diagnosis (Akl et al 2012, Barker et al 2013). At times, the request goes to the communications or logistics department, which often contacts a nurse to assess the patient. These health professionals contact the sending person, clinic or hospital regarding the care the patient will require and to assess the patient's status. Where a FN is involved in the initial patient assessment, they can contact the medical practitioner on call and receive advice if needed. Also, at this point, a priority/category is allocated. In the following example, the patient was assessed as priority/category 2 and a decision was made to continue with the current plan of returning another patient to the same destination. Multiple policies, procedures and other factors are considered when making decisions about the category assigned to the patient, including input from the pilot regarding the weather and airstrip conditions (RFDS 2011).

In the following vignette, the midwives at the regional centre had no GP, obstetrician or neonatal backup available. Thus, the aeromedical service was called for assistance and the FN assessed the labouring woman by speaking to the midwife currently providing her care.

> *We (pilot and FN) were at the base waiting for a patient who was being returned to their home town for further care (an interhospital transfer) when we received notification of a woman G4P2 in premature labour at 33/40. She had been at the regional hospital in the town we were already going to for 3 hours, during which time her contractions had increased. Her membranes remained intact, she was currently on the CTG machine [cardiotocograph machine – measures contraction strength against the baby's heart rate] and the foetal heart rate was regular 140bpm with good variability. The baby was cephalic presentation – ROA (head down, back anterior) and she had been given the first dose of celestone (to begin to mature the baby's lungs) and nifidepine (to slow or stop the uterine contractions). Her and the foetus' observations were satisfactory, so the decision was made to still return the elderly gentleman going home and then to bring this woman to the tertiary centre for further care, in particular of her baby, if she delivered. #*

After handover of both patients, we quickly closed the aircraft doors as the rain pelted down. Dealing with rain water in the aircraft, wet linen on the patient and wet staff is not pleasant!

After conducting a quick assessment of our labouring woman, the pilot started the engine and we took off. Due to the awful weather, I had to remain seated with the seatbelt still fastened, so I didn't hit my head due to the turbulence throwing the aircraft around (when usually after take-off the FN can remove the seatbelt and move around the aircraft). This limited my ability to conduct a full assessment, but it was obvious that her labour was progressing. Mid way through the flight, the woman said she felt like she needed to push! Not a good situation as I would be alone to care for the woman while in active labour, then a premature baby most likely needing resuscitation and a possible postpartum haemorrhage in the woman (she had a past history of this condition post delivery). I encouraged her to huff and pant to try and avoid pushing. Although I had not done a VE [vaginal examination], and this was her 3rd delivery, I believed that she was probably in transition (at about 8 cm rather than fully dilated) – another reason not to push.

(Informant) #

5.4.2 Emergency Flight Nurse

Aircraft: Pilatus PC12/Beechcraft Kingair

Crew: Flight Nurse and Pilot

Provision of patient care commences wherever and whenever the FN receives the patient. This can be at the aircraft doors on the airstrip, in the back of the ambulance, at the hospital bedside in a ward area, in one of the emergency areas of a hospital (recovery, intensive care, operating theatres, emergency department), on the roadside, in a hotel room, the front bar of a rural or remote hotel, in a station lounge room ... anywhere the patient is located. In the next vignette, the FN describes her work providing emergency services to rural and remote patients.

I provide care to

(Informant) #

5.4.3 Primary Healthcare/Emergency Flight Nurse

Aircraft: Pilatus PC12/Beechcraft Kingair

Crew: Flight Nurse, Pilot, Doctor, Dentist

A large attraction to most FNs is the variety of work they fulfil, but separation of the areas of work on a daily basis is difficult. In cases requiring two areas of work (primary healthcare and emergency care), the FN must be flexible and competent in their practice to be able to move their thinking into different realms. The provision of GP clinic services, immunisations, minor procedures, dental services, midwifery services, and allied health services such as mental health, psychology, and dietary and exercise education are some of the ways today's aeromedical services are meeting their contracts locally to provide primary healthcare services in the remote and rural regions of Australia, and abiding by the external direction of government.

The two largest aeromedical service providers in Australia have won state government contracts to provide these services as part of the ways state governments are meeting the *National Healthcare Agreement (NHA) 2016* requirements. The following text from the NHA 2016 demonstrates the actions governments want service providers to undertake to meet the agreement's outcomes for the health of all Australians, including those whose level of affordability is low (they cannot pay for their health services) and regardless of where people live within Australia.

The National Healthcare Agreement affirms the agreement of all governments that Australia's health system should:

1. be shaped around the health needs of individual patients, their families and communities;
2. focus on the prevention of disease and injury and the maintenance of health, not simply the treatment of illness;
3. support an integrated approach to the promotion of healthy lifestyles, prevention of illness and injury, and diagnosis and treatment of illness across the continuum of care; and

(continued next page)

4. provide all Australians with timely access to quality health services based on their needs, not ability to pay, regardless of where they live in the country.

The objective of the Agreement is: 'Through this Agreement, the Parties commit to improve health outcomes for all Australians and ensure the sustainability of the Australian health system' (clause 12).

The outcomes of the Agreement are:

1. Australians are born and remain healthy;
2. Australians receive appropriate high quality and affordable primary and community health services;
3. Australians receive appropriate high quality and affordable hospital and hospital related care;
4. Older Australians receive appropriate high quality and affordable health and aged care services;
5. Australians have positive health and aged care experiences which take account of individual circumstances and care needs;
6. Australians have a health system that promotes social inclusion and reduces disadvantage, especially for Indigenous Australians; and
7. Australians have a sustainable health system.

AUSTRALIAN GOVERNMENT 2016b.

The following vignette initially demonstrates the work the FN performs towards assisting the organisation to meet the contract, and thereby, from a distance, the Australian Government's objectives. It also demonstrates the flexibility and broad scope of practice of FNs' work.

This base has

(Informant 18) #

The clinic work occurs along the lines of the role of a general practice nurse/midwife (Australian Practice Nurse Association 2016). All equipment and supplies need to be taken

with the FN due to the nature of the work, as demonstrated in the vignette. Access to Wi-Fi is important for accessing pathology reports, for example, but if Wi-Fi is unavailable at the clinic, downloading of all the pathology reports, immunisation statuses and any other important information must happen prior to the FN going to the clinic. Health promotion and health education pamphlets and other materials also need to be printed and taken with the clinic supplies because this information is not easily available to rural and remote patients.

When things do not run smoothly, FNs often have the day commence with one type of work that metamorphoses into another, as demonstrated in the next vignette.

This particular day I had a large amount of women booked in to see me.

(Informant 17) #

The fact that the (GP) clinic had completed early would make the next week's clinic fully booked, so the organisation allocated extra time, meaning a longer day next week for the FN. The medical practitioner also needed to complete a myriad of paperwork because he had made the decision to leave the clinic early. However, due to the severity of the young ringer's injuries, and the fact that he was a priority 1 patient, no penalties would be applied for the early clinic completion.

This vignette demonstrates the diversity of FNs' work and the dual role whereby the FN must be multi-skilled and prepared to change their work direction during the day. It demonstrates this FN's ability to work at both primary and secondary healthcare levels with confidence and competence: one minute well women's, antenatal and postnatal clinics, immunisation provider service and GP practice nurse work; next minute full blown emergency work whereby the patient's outcome was based on the speed, ability, competence and professionalism of the aeromedical team, who all performed with autonomy and competence.

When FNs work in dual settings (e.g. primary and secondary healthcare provision), they get to know the community they work within and the community gets to know them. This builds community confidence in the care the FN provides and a trusting relationship. The next vignette illustrates the benefits that come from working in dual settings in a small community.

Another service we provide

(Informant 30) #

A further benefit of holding the dual role of primary and secondary healthcare provider occurs when critical incidents happen. The FN can follow up with the same people and support and counsel them in a meaningful way. For example:

> *You have confidence in saying to the people who were involved in the emergency from the community, "It was pretty awful the other day but you coped really well".* (Informant) #

Providing clinic based services four days of the week, the FNs at this base perform more work as a general nurse than emergency based work. However, they are still required to function in the emergency role.

5.4.4 Mental Health Flight Nurse

Aircraft: Pilatus PC12/Beechcraft Kingair/Bell Helicopter

Crew: Flight Nurse, Pilot [at times], Policeman

Mental health nursing is yet another domain of work performed by FNs. A number of FNs have completed short specialist education packages in mental health, while others with an interest in this area have completed further formal qualifications such as masters' degrees (pers. Comm. J Martin 2014). Mental health issues are difficult to handle at the best of times when the patient is located in a metropolitan area with multiple resources available to help care for them. When these patients are located in remote and rural communities where there are no resources other than perhaps a local policeman or GP, but always a remote or rural area nurse, their care becomes even more challenging. The patient, their family, the community and the health services are all at risk.

These patients are very unpredictable and dangerous to transport by air. However, transfer by air is often the only available resource, especially when patients are located hundreds of kilometres from the nearest mental health specialists and facilities. Looking back at the primary healthcare/emergency FN discussion and the principles and outcomes the Commonwealth Government expects of the states through the *National Health Agreement 2016*, ensuring equal access to healthcare services no matter where in Australia people live is one of the main objectives. Thus, to fulfil their contractual requirements (providing both primary and emergency care, and transport to rural and remote communities), aeromedical organisations must transfer these patients out of their communities when resources are not

available for them to stay. This requires a number of risk reduction strategies, as exemplified in the following organisation's (RFDSWO) policy and procedure.

> In-flight violence or behavioural disturbance is clearly a safety issue made all the more acute by the vulnerable environment in which we work. Every effort must be made to ensure the right personnel and armamentarium of chemical and physical restraint is available where required.
>
> Behavioural disturbance may occur for psychiatric, organic and criminal reason. Whatever the cause, the pilot has an obligation to ensure the safety of the aircraft and is legally entitled to request restraint of a patient or passenger where required. Medical authorisation for this restraint is not a pre-requisite, rather an aviation safety duty of care if directed by the pilot. Patients referred under the mental health act will generally have medical authorisation for physical restraint in-flight
>
> RFDS Western Operations 2013.

A second organisation uses different risk reduction strategies as part of their policy and procedure to ensure the safety of the aircraft and all aboard, as follows.

> **Patient History**
>
> Relevant information relating to the patient's medical and behavioural history should be obtained when triaging. Patients with a history of violence or a fear of confined spaces are not transported by Air Ambulance without adequate input from a mental health worker and appropriate sedation to minimise the risk of harm to themselves, other patients, aircrew and the aircraft. Some patients, especially those that are under Section 19 Mental Health Order, may require another Flight Nurse, Corrective Services Officer or escort, which will be arranged by contacting the Senior Flight Nurse. Inform the pilot of the general nature of the case without breaching confidentiality.
>
> AIR AMBULANCE SERVICE NEW SOUTH WALES 2012c.

I propose that the last sentence of this policy – "to inform the pilot of the general nature of the case without breaching confidentiality" – could be interpreted as implying this organisation does not meet the Civil Aviation Safety Authority (CASA) regulations by not adequately informing the pilot so he/she can ensure the safety of the aircraft or veto the flight if he/she deems the safety issue is not being addressed. This clause is very generalised and could be actioned in a variety of ways by the clinicians involved.

I argue that it is important for policy and procedure documentation to be extremely clear in its meaning, given that aeromedical services are called in to assist and manage mental health patients on multiple occasions, as demonstrated by the following vignette.

We're flying out

(Informant 22) #

Interestingly, this FN has investigated the costs of the aeromedical resources to transfer patients and the number of times they are transferred out of the community against the costs of employing specialist mental health workers. The outcome produced evidence that patients and their families would receive better, more cost effective care if they were supported to manage their illness where they live (Soomaroo Mills & Ross 2014).

5.4.5 International Retrieval Flight Nurse

Aircraft: Lear Jet / Gulfstream Jet / Boeing varieties (i.e. 737, 747, 767, A300)

Crew: Flight Nurse; Anaesthetist or Retrieval Medical consultant

I have already established that Flight Nurses work in a number of areas that involve extra skill sets. One of these is international retrieval work, usually of critically unwell, intubated and ventilated patients. This type of work occurs outside Australia, so passports are a required item. The types of aircraft flown in for this work are jet engine powered rather than turbo prop because the distances to be covered for patient transfer are much greater and occur at much higher altitudes. Therefore, if the patient has a requirement for a sea level or no greater than 2,000 feet cabin altitude due to gas expansion difficulties, they need to be transferred via a private jet. Commercial jets have a minimum cabin altitude of 8,000 feet, and if air is trapped within the patient's skull, for example, when it expands under pressure, as per Boyle's law, problems occur (Semonin-Holleran 2003). Limited space is an issue in both the private jets and the commercial aircraft.

The crew that performs interstate and international transfers in Australia is usually a FN and a specialist medical practitioner (either an anaesthetist or retrieval medical consultant). Many aspects of international patient transfers require careful deliberation and planning to ensure everything happens smoothly to provide quality, safe patient care (Holleran 2004). Consideration must be given to the medical supplies needed for the patient, such as oxygen and medications, because these must be taken with the team. When crossing international borders, it is the FN's responsibility to ensure that letters are organised on the receiving organisation's letterhead to cover the transport of all medications. The next vignette illustrates the preparations required for one of these international retrieval flights.

Thankfully your colleagues are your best help to prepare for these jobs.

(Informant) #

5.4.6 Logistical Flight Nurse

Aircraft: Not required – on-ground work

Crew: Flight Nurse

Flight Nurses utilise advanced skills in assessment, planning, implementation and evaluation in all areas of their work (Brewer & Ryan Wenger 2009, Reimer & Moore 2010, Topley et al 2003). These skills are applied not only to patient care but also to the logistics involved in

transferring patients from point A to point B. More than 10 people may be involved in the transfer of one person, for example: the initial call to the doctor or retrieval coordination centre (staffed by FN); contacting the duty FN, pilot, other crew and aircraft refueller; finding a bed and accepting medical team; ambulance crew to transport the patient to the air strip; ambulance crew to transport the patient from the air strip; and re-triage of the patient being transferred. This part of FNs' work is best demonstrated by the following description.

We don't have a separate number for each type of patient

(Informant) #

The process is very complicated and requires specialist coordination. Having an understanding of the pathophysiology/physiology of the condition of the patient requiring transfer ensures accessing the correct care at the correct time. While the vignette describes what happens in one instance with one patient, it is possible that several patients requiring further specialist care and transfer are being coordinated at once.

I have included the following demonstration of FNs' work because although this FN does not fly in the aircraft any more, this organisation only employs those who have done so because they understand the logistics involved.

No, I don't go flying anymore, although some of my colleagues do. Essentially the nurse

retrieval coordinators work purely in the emergency operations centre (EOC), which is situated of course with ambulance and we're under the broader umbrella of ambulance these days. We're, if you like, part of the communication staff within … and we receive calls, we coordinate retrievals … in South Australia, including Broken Hill and Mildura. We also coordinate retrievals out of Darwin, Alice Springs and the transfer of infants, neonates to Melbourne; the Royal Children's Hospital. There is also involvement in the transfer of potential organ donor patients to Sydney, Melbourne or Brisbane. Essentially we liaise with nursing or medical staff in peripheral/country hospitals providing them with clinical advice and that can be nursing, or in fact medical advice, and obviously we have a link to a specialist medical officer in EOC. That medical specialist could be an emergency department (ED) or intensive care unit (ICU) consultant. We liaise with the teams, obviously Flying Doctor Service regarding provision of flight assets. We move retrieval teams essentially within metropolitan or country, and that can be by road, fixed wing or rotary wing. We liaise with those agencies for flight access at the time, and continue to liaise with referring hospitals, particularly those hospitals that are receiving patients with timely clinical information. In regards to in-hospital transfers … the RMC [retrieval medical consultant] contact individual hospitals when a request for patient transfer comes through the system. The format has changed a couple of times over the last 12 months. It focuses on the number of patients that can be brought back in any one trip and obviously prioritises. (Informant 60)

5.4.7 Flight Nurse Educator

Aircraft: Pilatus PC12/Beechcraft Kingair/Bell Helicopter

Crew: Flight Nurse and Pilot

Nurses who are employed as Flight Nurse educators (FNE) have a background in Flight Nursing. Due to the specialist nature of this work, there are no trained and available agency staff to be called upon to fill empty roster slots. While most aeromedical organisations have a roster of casual staff, there are times when no-one is available to fill a shift other than the FNE or the Flight Nurse Manager/Director of Flight Nursing (FNM).

I work

(Informant) #

The FNE's work is very thorough to ensure the FNs remain competent and meet the standards and requirements of their position. The following vignette outlines the work involved at this level, remembering that the FNE remains able to cover the line FN's work,

unlike the usual acute care educators that fill dedicated education positions.

Okay, so my work involves

(Informant) #

As demonstrated in this vignette, the FNE's work is very detailed and carries great responsibility.

5.5 Summary

In providing an overview of contemporary Australian FNs' work, I have demonstrated that the images of Flight Nursing marketed to the public (described in Chapter 4) are incorrect. There is neither glamour nor romance in FNs' work, but these highly qualified, autonomous registered nurse midwives work in a diverse, unforgiving environment providing quality, evidence based care to patients across all ages. There are no agency staff educated and available to call on due to the specialist nature of FNs' work. Therefore, even the FNEs or FNMs are called upon to fill the roster, highlighting that all levels of FNs must retain their clinical as well as management skills. Vignettes from my interviews with FNs have demonstrated the depth and breadth of their work across many roles in their own words, from "ordinary" FN, to the FN midwife, to the emergency FN, to the primary healthcare/ emergency FN, to the mental health FN, to the international retrieval FN, to the logistical FN, to the FNE.

Using CQI, I have revealed the ruling apparatus within FNs' work, demonstrating these with excerpts from professional standards (NMBA and FNA), and organisational policy, procedure and guideline texts that have evolved from locations outside the FNs' work reality to organise and direct FNs' resident work.

I have juxtaposed vignettes of contemporary FNs' work against the organisational texts under which they work to illustrate the pressure that FNs and whole flight crews are under to meet the powerfilled organisational and government demands while accomplishing quality, safe outcomes for their patients.

The ruling apparatus' as actually applied to FNs' work are revealed from both resident and external perspectives. Organisational texts encompass a list of directives that FNs must follow. These texts demonstrate the power of the organisation in that they are compulsory; they compel FNs to change their work processes to obey or consequences are applied. The language of organisational texts is markedly different from the FNs' vignettes, which are spoken in everyday language and demonstrate the everyday performance of FNs' work. This everyday work is pressured on multiple levels; time, speed, coping with unexpected events, dropping one job to get to a higher priority job, not having the right equipment, working in small spaces, and all the time accountable to the organisation which is accountable to the government to fulfil the externally designed terms of their contracts.

In the next chapter, I deliberate the results from the second level of CQI data analysis.

Chapter 6 Work Intensification, Neoliberalism and New Public Management

6.1 Introduction

In this chapter, I investigate in depth one area identified from the data from the Flight Nurses' (FNs') discussion of the work they perform – work intensification. It is an area the majority of informants, whether line FNs, senior FNs, FN educators (FNEs), FN Managers /Directors of Nursing spoke about overwhelmingly, as evidenced in the previous chapter. Green (2002) suggests looking at work intensification in two ways – intensive (an increased pace of work during the working day = working faster with less downtime) and extensive (an increase in the length of time at work = longer working day). Flight Nurses' work involves both the routine and not so routine. Checking and cleaning aircraft and the equipment they carry is an essential routine requirement, no matter how many patients are treated or at what time of the working day (Air Ambulance NSW 2012). However, FNs in 2017 are finding difficulty in attending to even this most basic important task due to intensification of their workday.

I argue here that work intensification is a significant issue, impacting FNs' work life balance and health, maintaining high patient care standards and future FN recruitment. I also argue that the Australian Government's neoliberalist policies have impacted upon FNs' work through the implementation of new public management (NPM) strategies, now core to aeromedical organisations' operations (Cahill 2007, Chester 2012, Edwards Cahill & Stillwell 2012, Fenna & Tapper 2012, Ferlie et al 1996, Germov 2005, Green 2002, Painter 2011, Pollitt 2003, Selberg 2013, Stanton, Young & Willis 2003, White & Bray 2003, Willis 2002, Willis & Weekes 2005). In making these arguments, I draw on the FNs' Enterprise Bargaining Agreements (EBA) and awards, illustrating how these texts shape work intensification. Finally, I support the documents and statistics with data collected from the FNs themselves, wherein they state that their work has intensified in a number of ways across the five year timeframe under examination (2009/10–2014/15).

In making my analysis, I have drawn upon the methods of critical qualitative inquiry (CQI) to situationally plot theeveryday life of the informants (FNs), as viewed from their standpoint (Smith 1999, 2001). This will enable them to see the interconnectedness between society and its ideologies, the organisations within which they work, and how powerfull forces outside what they know and live direct their lives (Campbell 2001, Campbell & McGregor 2004, Denzin 2015, 2017, DeVault & McCoy 2006, Kincheloe & McLaren 2005, Sinding 2010). Having identified work intensification as one of the research questions the FNs want

investigated (Smith 1999, 2001), I now analyse and situationally plot the documents, texts and language of neoliberalism and NPM that drive work intensification and thus direct FNs' work practices.

6.2 Australian Flight Nurses' Enterprise Bargaining Agreements and Awards

Enterprise Bargaining Agreements and awards are publicly available key documents in determining industrial matters, such as hours of work, conditions of work and levels of payment for work performed. Enterprise bargaining is the process of negotiation, generally between the employer, employees and their bargaining representatives, with the goal of making an enterprise agreement. Enterprise agreements are achieved through the process of localised enterprise bargaining and are negotiated by the parties (employer and employees) through collective bargaining in good faith, primarily at the enterprise level (Fair Work Australia Ombudsman 2015a). An award is a ruling handed down by either Fair Work Australia (FWA) or a state industrial relations commission, which grants all wage earners in one industry or occupation the same minimum conditions of employment and wages. In tables 6-1 and 6-2 I outline the EBA and award documents related specifically to FNs' work, and then examine key parts of these in section 6.4.

Table 6-1 Australian Flight Nurses' EBAs

STATE/TERRITORY	EBA TITLE
Northern Territory	CareFlight Nurses' and Midwives' Enterprise Agreement 2013 – 2016 (Fair Work Commission Australia 2013)
Queensland	CareFlight Rotary Wing Flight Nurse Enterprise Agreement 2015 – 2017 (Fair Work Commission Australia 2015e)
Queensland	Royal Flying Doctor Service of Australia (Queensland Section) Limited Nurses' Enterprise Agreement 2014 – 2018 (Fair Work Commission Australia 2015b)
Western Australia	Royal Flying Doctor Service of Australia (Western Operations) Nurses' Agreement 2015-2018 (Fair Work Commission Australia 2015a)
New South Wales	Royal Flying Doctor Service of Australia (South Eastern Section) New South Wales Nurses' Agreement 2015 (Fair Work Commission Australia 2015d)
South Australia	RFDS Central Operations Flight Nurses' (Australian Nursing And Midwifery Federation) Agreement 2015 (Alice Springs, Adelaide & Port Augusta) (Fair Work Commission Australia 2015c)
South Australia	Nursing/Midwifery (South Australian Public Sector) Enterprise Agreement 2013 (Government of SA 2013)

Table 6-2 Awards Covering Australian Flight Nurses' Work

STATE/TERRITORY	AWARD
Australia wide	Nurses' Award 2010 (Fair Work Commission Australia 2010)
New South Wales	Public Health System Nurses' and Midwives' (State) Award 2015 (NSW Nurses and Midwives Association 2015a)
Victoria	Nurses' and Midwives' (Victoria) State Reference Public Sector Award 2015 (Fair Work Commission Australia 2015f)
South Australia	Nurses' (South Australian Public Sector) Award 2002 Transition (Fair Work Commission Australia 2002)

All Australian awards changed to become "modern" awards in 2009 to align with the *Fair Work Australia Act* (2009). A modern award is the Australian Industrial Relations Commission's (AIRC) consolidation and modernisation of an existing award into industry or occupation based categories. It applies to employers and employees who perform work covered by the award (Fair Work Australia Ombudsman 2015b).

A number of aeromedical organisations produce annual reports that are also publicly available. These documents, shown in Table 6-3, list figures for the number of patients transported and number of FNs employed. They are included as an adjunct to my argument about FNs' work intensification.

Table 6-3 Australian Aeromedical Organisations' Annual Reports

Organisation	Document
Royal Flying Doctor Service Australia Council	Annual Report 2009/10
Royal Flying Doctor Service Australia Council	Annual Report 2014/15
CareFlight	Annual Report 2009/10
CareFlight	Annual Report 2014/15

While aeromedicine remains a small part of the Australian healthcare sector, the impact of neoliberalism and NPM has led to these organisations devolving into business units with quasi-independence from government, thus creating a quasi-market (Pollitt & Bouckaert 2011). Thus, while government funds Australian aeromedical organisations, these are divided into health business units and operate like private businesses, often in direct competition with each other for service provision (Pollitt & Bouckaert 2011). Two

"independent charitable" organisations make use of EBAs with their staff – the Royal Flying Doctor Service (RFDS) and CareFlight. One organisation only uses the public sector state based nurses' and midwives' award (Air Ambulance NSW), while the other organisations examined in this thesis use the state based public hospital nurses' and midwives' EBAs (Medstar SA, NETS Vic, NETS NSW). The result is a thought-provoking mix of remuneration levels and working conditions, with very little standardisation across the aeromedical sector. Thus, although FNs essentially fulfil the same role across Australia, they work under a variety of conditions, with different hours for different levels of payment.

Various researchers have established that work intensification typically affects all members of the multi-disciplinary team (Allan 1998, Anderson & Liff 2012, Germov 2005, Weekes Peterson & Staunton 2001, White & Bray 2003, Willis 2002, Willis & Weekes 2005), but this does not occur with the pilots. The Civil Aviation Safety Authority (CASA) closely regulates Australian aeromedical pilots' work hours for safety reasons. While FNs and pilots work together closely, they are not on the same rosters or teamed together; the pilot flying the aircraft can change during a FN's shift, meaning a FN may fly with two different pilots during their rostered shift. The protection against extensive work intensification the CASA regulations afford pilots is not accorded to FNs.

While I have used CQI to explore and illuminate FNs' work, the complex task of discussing Flight Nursing's work intensification must be situated within Australia's current political context. Various Australian governments' enthusiastic adoption of neoliberalist ideology has brought with it a new framework for organising the administration of public bureaucracies – NPM. Aeromedical organisations, while an integral part of public health service provision in Australia, have mainly become individual business units run to mirror private businesses. This is a prominent feature of NPM. In the next section, I introduce and outline neoliberalism's main political and economic ideology, and demonstrate how it affects FNs' work.

6.3 Neoliberalism

Neoliberalism is defined as a conglomerate of three separate concepts: an ideology; a mode of governance; and a policy package (Steger & Roy 2010). Neoliberalism's ideological roots are based in both classical liberalism and modern liberalism. Classical liberalism (19th century) supported an economic laissez-faire approach to the market (i.e. an economic system free from government intervention or moderation, driven only by market forces of supply and demand) and individuals' freedom from excessive government power. Modern liberalism (late 19th and 20th century) comes from the social-liberal tradition, focussing on the

impediments to individual freedoms (poverty, inequality, disease, discrimination, ignorance) that capitalism creates, and which are improved through direct government intervention. By the mid-20th century, direct government intervention included a comprehensive range of social services and benefits representative of the welfare state, for example, workers' compensation schemes, public funding of schools and hospitals, and regulations on working hours and conditions (Business Dictionary 2016, Crouch 2013, Olssen 2010, Smith 2015, Steger & Roy 2010).

Neoliberalist ideology now manifests itself in a set of public policy ideals: deregulation (of the economy); liberalisation (of trade and industry); and privatisation (of government owned enterprises) (Steger & Roy 2010). It is firmly fixed in the entrepreneurial values of competitiveness, decentralisation and self-interest, with ensuing decreases in government regulation of markets and finance, tariff barriers to international trade, and large public spending and the welfare state (Olssen 2010, Smith 2015, Steger & Roy 2010). Neoliberal ideology promulgates the ideal of a "self-regulating free market" as the major power behind an individual's pursuit of wealth (Steger & Roy 2010).

Neoliberalism rose to prominence in the early 1980s with the simultaneous rise to power of Margaret Thatcher in the UK and Ronald Reagan in the US. After the economic stagnation and increasing public debt of the 1970s, Thatcher, Reagan and their conservative political parties enthusiastically adopted the alternative economic doctrines of the Chicago and Austrian schools of economic thought, von Hayek (totalitarianism) and Friedman (monetarism) (Steger & Roy, 2010). Adoption of these alternative economic principles was in direct contrast to the current doctrines of the time; Keynesian economics and modern egalitarian liberalism. Keynes' economic principles included government use of economic intervention policies designed to achieve optimal economic performance and prevent economic slumps. Modern egalitarian liberalism was an overarching social and political philosophy asserting that all men [sic] should have equal access to society's rights and privileges (Bannock Baxter & Davis 1987, Heywood 1998). Adoption of neoliberalism led to a radical change in economic thinking, with many governments moving towards the prime objectives of actively promoting globalisation and the further development of the free market capitalist economy (Cahill 2007, Edwards et al 2012). Various national governments achieved this by adopting a number of neoliberal ideals and practices, including deregulation of financial markets; decreasing taxation on wealthy individuals and profitable corporations; deregulating the labour market; decreasing the size of the welfare state; and promoting innovation and technological growth across the economy (Cahill 2007, Cahill et al 2012, Chester 2102, Crouch 2013, Crouch 2011, Olssen 2010, Smith 2015, Spies-Butcher 2012,

Steger & Roy 2010).

The introduction of the neoliberalist political model into Australia occurred in the early 1980s with the election of the Hawke Labor government. It continued with the Keating Labor government through to 1996, when the Liberal National Coalition (LNC) came into office. A number of authors suggest that Labor's actions were more radical than those of the Australian Coalition government under the then Prime Minister John Howard, due to the amount of labour market deregulation, tariff reductions and government asset sales they organised (Cahill 2007, Chester 2012, Murray 2006, Spies-Butcher 2012, Tonts & Haslam-McKenzie 2005). However, the reform agenda continued strongly under the Howard government, particularly in the areas of labour market reform (e.g. work choices), asset liquidation (sales of national assets such as Australian Airports, Australian National Railways, Qantas, Telstra) and reduction of the welfare state (e.g. reduced increases in pension benefits, and tighter regulation of access to unemployment benefits, aged pension and healthcare benefits) (Australian Government Department of Finance 2016, Cahill 2007, Chester 2012, Murray 2006, Spies-Butcher 2012, Tonts & Haslam-McKenzie 2005).

Neoliberal ideology has become, and remains, the dominant political and economic paradigm globally, despite arguments that we are now in a post NPM era (Halligan 2007, Pollitt & Bouckaert 2011). The ideology has many powerful supporters, including managers and executives of large trans-national corporations, corporate lobbyists, influential journalists, academics and politicians (Cahill 2007, Chester 2012, Ferlie et al 1996, Spies-Butcher 2012, Steger & Roy 2010). Supporters emphasise the value of free market competition and laissez-faire economics globally. They have a strong commitment to the principles of free market capitalism; decreasing the size of the welfare state; increasing the use of innovation and technology; and increasing the freedom of global markets (by promotion of free trade policies and the free movement of international capital, and by decreasing government regulation) (Olssen 2010, Smith 2015, Steger & Roy 2010).

Concurrent with the adoption of neoliberalist ideology in economic and political arenas, NPM, the concrete expression of neoliberalism within the organisation of government (such as the welfare state and the public services that support it) rose to the fore of bureaucratic public administration (Cahill 2007, Chester 2012, Edwards et al 2012, Ferlie et al 1996, Spies-Butcher 2012, Steger & Roy 2010).

6.4 New Public Management

Neoliberal modes of governance encourage as central the entrepreneurial values of competitiveness, self-interest and decentralisation (Steger & Roy 2010). New public

management (NPM) operationalises the neoliberal mode of governance within government bureaucracies, organisations and the welfare state (Chester 2012, Christensen & Laegreid 2011, Ferlie et al 1996, Hood 1995, Pollitt 2003). It is an administrative theory that emphasises the transformation of an employee's bureaucratic thinking and behaviour to that of an entrepreneurial identity whereby they see themselves as self-interested individuals responsible to the market and contributing to the newly revamped organisation's monetary success (Christensen & Laegreid 2011, Halligan 2003, Halligan 2007, Hood 1995, Pollitt 2003, Steger & Roy 2010).

New public management allows employers to utilise administrative means of control to achieve this transformation of employees to meet an organisation's goals (Hood 1975). It has a number of broad objectives that provide a framework for application to both small and large organisations: market orientation; decentralisation and competition; results (outcome) focussed; enterprising; anticipatory and customer driven; empowering citizens rather than serving them; steering the business rather than rowing (making all the effort); and working to transform rule driven organisations to become more flexible and responsive (Christensen & Laegreid 2011, Halligan 2003, Halligan 2007, Hood 1995, Pollitt 2003, Steger & Roy 2010). The concept of steering rather than rowing is often actioned through governments setting the policy agenda but outsourcing the conduct of the service to a private provider through a tendering process. Hence, the service becomes "privatised" although the state still funds and directs it (Christensen & Laegreid 2011, Halligan 2003, Halligan 2007, Hood 1995, Pollitt 2003, Steger & Roy 2010).

New public management looks to individual organisational or business unit empowerment and the devolution of central power to smaller localised units. It has a set of defined goals in order to meet the theory's objectives. These goals include: formulating government policies using the world of privatised business and commerce as the template; shrinking political governance; formulating strategic plans and risk management schemes orientated towards the creation of surplus (or in the case of government, budget cuts); performing cost-benefit analysis and other efficiency calculations prior to any capital outlay; setting quantitative targets and closely monitoring outcomes to allow measurement of success and fast redirection of resources; and the creation of highly individualised performance based work plans. All these goals are designed to internalise and normalise market orientated behaviour within the public service sector (Christensen & Laegreid 2011, Halligan 2003, Halligan 2007, Hood 1995, Pollitt 2003, Steger & Roy 2010).

Public healthcare represents one of the largest areas of government spending in Australia. In the 2015 budget, health consumed 9.4% of Australia's gross domestic product (GPD) –

the broadest quantitative measure of the monetary value of all goods and services produced within a nation's geographical borders over a specified period of time (OECD 2016, World Bank 2016). The ideology of neoliberalism aims to reduce government spending through NPM strategies and practices. Aeromedicine, although a small and integral part of the Australian healthcare system, consumes a significant portion of the healthcare budget. This sector has been removed as a directly funded government service to become a quasi-market enterprise to reduce costs (Ferlie et al 1996). In healthcare, a quasi-market is an internal market formulated to try and acquire the efficiency and productivity gains of the 'free' market, while government funding and regulation are maintained (Christensen & Laegreid 2011). In reality, the government still provides the funding for the service but at "arms' length", and government regulation is maintained (Ferlie et al 1996). At the same time, however, a form of internal competition is operating whereby "duplicate or overlapping activities exist within a firm's boundaries condoned by senior management [government] as a means of addressing market or technological uncertainty" (Birkinshaw & Lingblad 2001, p.6). When discussing the quasi-market enterprise of aeromedicine, this definition can be expanded from the "firm" to the market because the government (main funder) appears to "condone" many duplicate and overlapping activities. The government constructs the contracts (service level agreements/funding and performance agreements) of the services they want provided within the market. The devolved business units (such as the various state ambulance services) bid for the contracts in competition among themselves and the "traditional" private "charitable" operators (RFDS and the CareFlight Group) to provide aeromedical services. Nevertheless, the government mainly funds most of the costs (Ferlie et al 1996). The major differences between competitors are generally the type of transportation vehicle they provide – either fixed or rotary wing aircraft – and the level of financial remuneration their staff receive.

Discussion of the aeromedical organisations within the Australian aeromedical quasi-market follows, but I have restricted it to those who employ FNs.

6.4.1 Quasi-markets/internal competition

The provision of aeromedical services in Australia initially represented a monopoly, with the RFDS as the only provider (not-for-profit charity). The RFDS commenced service provision in 1928 and depended totally on public fund raising as their main financial source. The only government funding was a £1000 subsidy by the Commonwealth Government to the Queensland and Northern Territory Air Services (QANTAS) on mileage up to 20,000 miles for the first year of the service (Bilton 1961, Brooks 1995, Langford 1994, Page 1977, Pearce 1998). At the time, £7000 had to be raised to commence the aerial medical service

(Bilton 1961). During the Depression in the 1930s, all government funding lapsed and the essential service was scheduled to close because it cost £3500 per year. However, further financial donations were raised from the metropolitan community, staff took pay cuts, and so the Australian Inland Mission's (AIM) Aerial Medical Service (AMS) – RFDS as it was first known – managed to continue (Bilton 1961). At the Premiers' conference in February 1934, the Commonwealth Government and states agreed that the AMS was of value, but no funding was given until the end of 1936 when the government granted a subsidy of £5000 per year to the AMS' Federal Council. This funding had to be disbursed across all sections in Australia. The funding increased to £7500 during 1939 (Bilton 1961). State and Commonwealth Government funding was given mostly in small amounts at varying times over the years. No substantial recurrent funding was received until 1958 when the Commonwealth grant to the AMS' Federal Council was increased to £40,000 per year for operational expenses plus a capital expenditure grant of £27,500 on a pound for pound basis (Bilton 1961). These grants have grown over time to the point where RFDS is now mainly government funded (www.flyingdoctor.org.au/annualreports).

The use of helicopters for civilian patient movement became a reality during the Korean (1950–1953) and Vietnam (1962–1975) wars, with the increasing practice of helicopters moving patients quickly from the field of battle to medical care (Martin 2006, Sheehy 1995, Sonneveld 1985). Over this timeframe, it became a public expectation that ill and injured people with no immediate access to healthcare services would be transferred to a facility that could provide the level of service they required.

Aeromedical developments from the wars led to a number of organisations other than the RFDS commencing aeromedical services in Australia, including Surf Life Saving Australia (SLSA) and the CareFlight Group. In 1973, SLSA commenced in Sydney as a basic non-profit beach surveillance rescue service, which operated initially only on weekends and public holidays during the surf season (www.lifesaver.org). CareFlight commenced operations in Sydney in May 1986 as a single doctor, daylight only operation. It registered as a deductible gift recipient in July 2000 and registered as a charity with the Australian Charities and Not-for-profits Commission (ACNC) in December 2012 (www.CareFlight.org).

CareFlight has become RFDS' largest competitor in multiple areas of the patient transport business, and has won a number of government based contracts to provide services to both the metropolitan area and the rural and remote community across Australia. These two organisations have essentially become part of an oligopoly for aeromedical service provision in Australia – a market structure similar to a monopoly whereby a small number of organisations (usually 2-3) dominate the market (Bannock et al 1987). Four main providers

now share the quasi-market of aeromedical service provision in Australia – RFDS, the CareFlight Group, Medstar (SA) and Air Ambulance New South Wales (AANSW) – with small speciality market services for children provided only in NSW (Newborn and Paediatric Emergency Transport Service [NETS NSW]), Victoria (Newborn Emergency Transport Service [NETS Vic]) and South Australia (Medstar Kids). In 2010, the Northern Territory Air Medical Service (NTAMS), the last government based aeromedical service in Australia, was devolved from the NT Government and put out for tender. The contract was awarded to the CareFlight Group.

As part of the NPM aims and objectives, AANSW, Medstar SA, NETS NSW and NETS Vic remain essentially government based services, albeit devolved to the state ambulance services with the exception of Western Australia (WA) and the NT, which are not part of ambulance and remain mostly state government funded. AANSW operates only a fixed wing service, with the others involved in a variety of transport modes; rotary, fixed wing and road transport (Medstar SA, NETS Vic and NSW). These services principally remain under their respective state health department banners, only providing services within state borders and based in metropolitan areas. They form the majority of the quasi-market and must compete for resources and funding, demonstrating innovative, competitive, efficient and effective business practices (Cahill Edwards & Stillwell 2012, Chester 2012, Spies-Butcher 2012). A number of other organisations are attempting to enter the market or increase their market share, but with essentially a quasi-market oligopoly in operation, it is extremely difficult for new organisations to equal or better current service availability and pricing. As one informant remarked:

> *Interestingly enough*
>
> (Informant) #

The same informant gives an interesting insight into how NPM and market forces affect FNs' work, demonstrating the increase in bureaucracy NPM is supposed to dissolve.

> *The interstate movement*

(Informant 60) #

Essentially, the payment process has to be approved prior to the patient being transported, no matter how unwell they are. Thus, the NPM framework pushes those working in public or quasi-public organisations towards a private business way of thinking and working (Hood 1995, Pollitt 2003). Citizens are redefined as "customers", and administrators are encouraged to cultivate an entrepreneurial spirit, nurture innovation and enhance productivity within their departments, as well as using individual performance reviews to decrease areas of waste and aim for increased administrative efficiency, effectiveness and accountability (Christensen & Laegreid 2011, Halligan 2003, Halligan 2007, Hood 1995, Pollitt 2003, Steger & Roy 2010). This allows employers to exert power and control over employees by various administrative means, including ergonomic control, accounting and audit systems, patronage and segregation, deception and persuasion (Hood 1976).

Since 1983, both sides of Australian politics have pushed relentlessly for macro and micro economic reforms, which include the labour market, along with the introduction of multiple technological and organisational changes (including quality and risk management strategies). This has led to a constantly changing and challenging landscape for Australian organisations and their employees (Allan O'Donnell & Peetz 1999, White & Bray 2003, Willis 2002, Willis & Weekes 2005). These reforms, along with the neoliberal mode of governance and NPM, have allowed organisations to gain increased control over employees' pace of work, rate of work and time at work, and to introduce multi-skilling and casualisation of the workforce (Dent 2003, Green 2002, Selberg 2013, White & Bray 2003, Willis 2002, Willis & Weekes 2005). The reforms have affected aeromedical healthcare service provision and FNs' work in a number of areas.

Critics of neoliberalism and NPM argue that using NPM strategies undermines job security. This is particularly so in health with the ratcheting of competition between services and departments to unacceptable levels via increased management surveillance, auditing and assessment, and by undermining self-management and professional autonomy norms (Cahill 2007, Harrison & Pollitt 1994, Martinussen & Magnussen 2011, Olssen 2010). One of the key aims of the labour market reforms has been to increase flexibility, productivity and efficiency because management has historically seen large organisations (and public health professionals) as inefficient and inflexible in their work practices. Globalisation and the

opening up of a free market economy meant these practices had to change (Cahill 2007, Harrison & Pollitt 1994, Martinussen & Magnussen 2011, Olssen 2010).

The quasi-market and internal competition promoted by government in the aeromedical sector functions on successful tendering for government contracts. These service contracts have set budgets and costings, with little provision for budget over runs. Traditionally, the government has funded aeromedical services to a certain level and the organisation has had to find savings to make up the shortfall (RFDS WA Annual Report 2015). Activity based funding and purchasing agreements, service level agreements, and meeting performance criteria and auditing targets also impact on funding levels (NSW Health 2015a, SA Health 2015, WA Health 2015). The introduction, formation and use of the labour market reforms of EBAs and new modern awards are among the mechanisms used to increase employee productivity and efficiency, control costs and make savings.

6.4.2 Enterprise Bargaining Agreements

Organisations and their employees are compelled to become more innovative and productive to survive within the neoliberalist/globalisation framework of modern Australia. They are obligated to be flexible and responsive to the market and the market forces driving the demand and supply for the products and services their businesses provide. The Australian federal government introduced EBAs in 1993 to achieve the flexibility of work practices that an organisation needs to thrive in this type of free market environment (Cahill 2007, Kelty 2012). This major change to industrial relations and the organisation of work was achieved through important labour market reforms supported by the Australian Council of Trade Unions (ACTU) through the *Prices and Incomes Accord* (the accord) at that time (Cahill 2007, Kelty 2012, McLaughlin 2012).

Organisations' move to enterprise bargaining and EBAs represents a shift from central wage determination to the establishment of wages and working conditions at the local or enterprise level. Thus, work terms, conditions and payment levels that were once organised under state award conditions that applied to all workplaces named under the award (e.g. NSW Nurses Association 2015a, 2015b, NSW Health 2015a, 2015b), whereby collective bargaining occurred with union officials doing the bargaining for the entire group, were abolished (Cahill 2007, Kelty 2012). Instead, it became all about what the enterprise (organisation) could afford to pay and increases in employee productivity (Hancock 2012, McLaughlin 2012).

The *Fair Work Act 2009 C2014C00031* s. 2 (12) was passed in 2009 and defines an enterprise as "any kind of business, activity, project or undertaking". The Act establishes a set of clear rules and obligations about bargaining; how bargaining happens, the content of

enterprise agreements, and how agreements are made and approved. Interestingly, this legislation includes clauses that state the pay rate in an enterprise agreement must not be less than the relevant modern award and the working conditions not less than the *National Employment Standards* (NES) (Fair Work Australia Ombudsman 2016b). This provides some level of protection of minimum wages and conditions for employees of individual organisations.

Prior to the *Fair Work Act*, Australia's industrial relations laws consisted of the *Work Choices Act 2005*, in place from 2006–2009; the *Workplace Relations Act 1996*, in place from 1996–2006; and the *Industrial Relations Reform Act 1993*, passed in December 1993, which came into effect on 30 March 1994 (Australian Industrial Relations Commission 2006).

The move to enterprise bargaining allowed employers to bargain with employees regarding minimum wage increases and minimum working conditions by linking these to increased employee productivity, flexibility of work practices and making savings. Employers could now bargain on an individual organisational basis. Simply stated, EBAs allow for flexibility in employment terms and conditions, and in theory allow for bargaining between employers and employees for better conditions of, and payment for, work (Cooper 2009, Cooper 2010, Galetto et al 2014, Hancock 2012, Kelty 2012, McLaughlin 2012). The idea behind enterprise agreements, particularly in the health sector, was to improve employees' productivity and efficiency, and to make savings (Dent 2003, Harrison & Pollitt 1994, Tummers 2013, Willis 2002, Stanton Willis & Young 2005). Making savings, particularly in health, often results in work intensification (Allan et al 1999). Conversely, it has been suggested that EBAs have not led to the intended productivity increases and savings, and growth of real wages (Hancock 2012). Rather, productivity increases can be related to other factors not linked to EBAs and labour market reforms but to technological changes, product design, markets, workers' education and training, and the quality of management (Hancock 2012).

The two main non-profit aeromedical organisations in Australia have EBAs in place with their employees. Each occupational group has bargained individually with the organisation's management team, and these documents form the basis of employees' working conditions and payment. Although promoted through the media (by the organisations) and thought of by the public as two national companies/organisations, this is not the case. These aeromedical organisations are either federated or have developed as different business units under a national umbrella. However, each occupational group that is part of these organisations has negotiated an EBA at a local level. The following two text based examples demonstrate individualised bargaining from the two organisations' processes.

> This agreement will apply to the parties listed at clause 1 of this agreement.
> This agreement will not apply to Flight Nurses and Midwives employed by CareFlight Limited and engaged on CareFlight International Air Ambulance missions.
>
> Fair Work Commission Australia 2013.

> This Agreement shall apply exclusively to Royal Flying Doctor Service of Australia
>
> (Queensland Section) Limited (ABN 80 009 663 478); ('the Company", "Employer', "RFDS" and "RFDS (Qld Section)) and all Nurses employed by the Employer, specifically excluding senior managers as designated by the RFDS as being outside of the scope of this Agreement.
>
> Fair Work Commission Australia 2015b.

When bargaining is organised in this way, the power of the union/s available to assist FNs to bargain with the organisation is split. If FNs could bargain as one collective group from across Australia they would have greater power to achieve better working and payment conditions. This split in power has resulted in a variety of working conditions, as one FN observed:

> *I* *.* (Informant) #

Moreover, in the case of FNs, each localised organisation employs different staff numbers. Some organisations have a small number of FNs while others have larger numbers (see Table 6-4, which is an example of the numbers of FNs employed by those organisations that have EBAs).

Table 6-4 Flight Nurse Staff Numbers

Organisation	FN Staff Number (1.0 FTE) 2014/15
RFDS – CENTRAL	36.6
RFDS – QLD	64.5
RFDS – SE	29.3
RFDS – WA	44.9
CAREFLIGHT NT	23
CAREFLIGHT INTERNATIONAL	Not Available
CAREFLIGHT QLD	Not Available

Source: RFDS Australia Council 2014/15, CareFlight Annual Report 2015

Remarkably, when questioning informants regarding the enterprise bargaining process, some FNs did not appear interested in being involved.

I just go. I love my job,

(Informant) #

This quote demonstrates that this FN was not involved in trying to achieve better wages and conditions of work for herself and her colleagues. She strongly indicated that she would not be involved as a FN representative during the enterprise bargaining process. A second issue is that FNs appear to love their work and are prepared to put up with some level of exploitation, as indicated by the following informant:

I think most people kind of look at it and go, "We've got the bees' knees job".

(Informant) #

It could be posed that where a smaller number of FNs are available to bargain collectively for improvements to their remuneration and working conditions, they will achieve inferior conditions and remuneration compared with FNs who work within organisations that have a greater number of FNs, purely due to having less power because of lower FN numbers. However, when the EBAs are examined, this assumption appears to be incorrect. When examining the various EBAs, I found that organisations with smaller numbers of FNs appear to have much better EBA conditions than larger organisations with higher numbers of FNs. Informants who worked for larger organisations made comments such as:

We're available for a variety of shifts

(Informant) #

We have shifts that

. (Informant) #

We

(Informant) #

6.4.3 State based awards

The FNs who work within the various 'government based' aeromedical services (i.e. AANSW, Medstar, NETS NSW & VIC) as part of the ambulance services under either a state award or a collectively based EBA have a number of work life balance advantages over FNs who work under individual organisation EBAs. Flight Nurses' working conditions are prescribed within the awards, and they do not allow for the same freedom and flexibility of

working conditions as EBAs. This lack of flexibility makes it much more difficult for FNs to achieve recognition for the advanced skills and abilities used in their work; and their wages are significantly lower. The following text based example comes from one of the state based awards, demonstrating that FNs, as a group, cannot negotiate to increase their wages or improve their working conditions to align with their private sector colleagues until the next time the award is reviewed. Moreover, FNs are hard pressed to achieve improvements anyway unless they achieve reclassification of their positions – a difficult process – because this award relates to public sector nursing and midwifery employees.

> Other than as provided for in the *Industrial Relations Act 1996* and the *Industrial Relations (Public Sector Conditions of Employment) Regulation 2014*, there shall be no further claims/demands or proceedings instituted before the Industrial Relations Commission of New South Wales for extra or reduced wages, salaries, rates of pay, allowances or conditions of employment with respect to the employees covered by the Award that take effect prior to 30 June 2017 by a party to this Award.
>
> NSW Nurses and Midwives Association 2015a.

Awards were essentially abandoned with the introduction of EBAs in Australia (as industries (particularly large industries, such as health) moved towards bargaining. Nevertheless, awards remained part of the system, albeit re-written and called “transitional” at that time. Reforms instituted by one government during one timeframe (e.g. *Work Choices* by the Howard coalition) were removed, legislation was changed and enacted, the Fair Work Commission was formed, and a number of awards were revamped (now called “modern” awards) and maintained. It appears that the nursing and midwifery occupations have kept a modern award in most Australian states, which seems to act as the basis or background for the public health EBAs that have been negotiated. Enclosed in the wording of these documents is a timeframe whereby the agreement runs out and must be renegotiated. However, it is worth noting that the Victorian EBA relates to single interest employers, and Victoria has had a recent (2105) state award renegotiated and reregistered with the Fair Work Commission (Nurses and Midwives (Victoria) State Reference Public Sector Award 2015). All states across Australia appear to have individualised variations within their awards.

Flight Nurses in NSW have managed to negotiate with the government to be recognised as an individual group within the award; they are referred to specifically and have had a number of clauses added that apply directly to their work. This includes set definitions of specific duties.

> "Flight Nurse" means a registered nurse employed by the Ambulance Service who is engaged in nursing duties with the Ambulance Service of New South Wales.
>
> "Flight Hours" means all time spent whilst in flight on an aircraft transporting patients or in transit to pick up patients.
>
> "Ground Hours" for Flight Nurses means all time spent at an airport preparing for a flight or a series of flights, and includes generally preparing and restocking aircraft on return to home base; attending to clerical work pertaining to flights and other general duties normally undertaken by a Flight Nurse, including but not limited to the sterilisation of stock, maintenance and care of special nursing equipment, cleaning the nursing sections of the aircraft; caring of patients at terminals until the patient is transferred to hospital or at the commencement of a flight; supervising and assisting in loading and unloading of patients; escorting seriously ill patients to hospital in a road ambulance.
>
> NSW Nurses and Midwives Association 2015a.

Flight Nurses also have a section of the award that refers specifically to those who work as part of AANSW.

> **Air Ambulance Service**
>
> In addition to the weekly rate of pay prescribed by Clause 9, Salaries, Flight Nurses shall receive the sum in Item 19 of Table 2 of Part B as an industry allowance. This allowance shall not form part of the normal wages in respect of overtime, shift penalties or penalties for weekends and public holidays. This allowance shall not be payable on annual leave, long service leave or sick leave.
>
> Reserve Duty Allowance – A Flight Nurse required to stand by at a country centre outside normal rostered hours shall be paid one-third of the normal hourly rate while so doing and while not engaged in actual duties.
>
> Unscheduled Stopovers – A Flight Nurse required to remain away from home overnight shall be provided with accommodation and full board of a reasonable standard which will be paid for by the Ambulance Service.
>
> Each five hours during a tour of duty only, a meal allowance, as set out in subclause (ix) below shall be paid unless a meal is provided
>
> The allowance per meal shall be the average of the allowances for breakfast, lunch and dinner as determined by Item 19 of Table 1 of the Department of Premier and Cabinet Circular C2010-28 Review of Meal, Travelling and Other Allowances (as amended or replaced). P.26
>
> The Ambulance Service shall provide for each employee sufficient suitable and serviceable uniforms, including the following articles of clothing
>
> NSW Nurses and Midwives Association 2015a.

While the award makes a number of allowances for FNs, the level of expertise required to perform FNs' work is very high (Air Ambulance New South Wales 2016). As I have stated previously, FNs are sole practitioners in the back of the aircraft 85-94% of their working hours, which equates to all the triaged category 2-5 patients (Barclay 1998 a,b, Brideson et al 2012, Pugh 2000). The award process does not recognise the levels of expertise required to perform this work, the multiple qualifications that must be held to be employed in the FN role, the ongoing commitment to continuing professional development and the exams that

must be passed in order to keep the FN position. One FN informant stated:

We are employed

(Informant) #

The designations RN8 (registered nurse year 8)/CNS1 (clinical nurse specialist level 1)/CNS2 (clinical nurse specialist level 2)/NUM (nurse unit manager)/NE (nurse educator)/NM (nurse manager) relate to FNs' classifications within the award for levels of payment.[3] However, working conditions and hours of work are the same for FNs regardless of classification. Another informant commented upon the award within which they work:

So it's really operating

(Informant) #

This quote demonstrates that FNs are performing work that should be recognised at the level of an advanced practitioner/nurse practitioner level, which is level 4 within the award system. However, to achieve this level would mean trying to get the employer (the health department) to agree to a reclassification of the work to a higher level, meaning higher wages for those performing the work.

6.5 Work Intensification

The FN informants in this study have identified work intensification as a key concern. It is one of the main problematics to emerge. While state based awards protect FNs from work intensification, as demonstrated in the previous section, they hold other limitations. The use of EBAs by some aeromedical organisations to organise remuneration and working conditions has allowed FNs to negotiate for higher wages. However, this has meant scaling back of their working conditions to achieve the productivity gains the employer expects; gains that have not been demonstrated through EBAs, as stated by Hancock (2012). Instead, EBAs have led to work intensification.

A three-fold classification of the processes leading to work intensification, all linking back to

[3] The quote from Informant #

.

technological and organisational change, has been theorised (Beynon et al 2002). These classifications are led by an intensive focus on customer satisfaction, followed closely by an expansion of employee responsibilities (at work) and growth of managerial control mechanisms (Beynon et al 2002).

6.5.1 Intensive work intensification

Intensive work intensification involves the increased pace of work while at work (Green 2002, Willis 2002). The RFDS is the most transparent of all the aeromedical organisations across Australia that employ FNs because each operational section of the RFDS plus the Australia Council produce freely available annualised reports of their business activity on the internet (www.rfds.org.au/annualreports). While other organisations produce annual reports, also uploaded to the internet, data on their patient numbers was unavailable at the time of this study. The RFDS is always pleased to demonstrate the increase in patients to whom they provide services. Table 6-5 shows the increase in patient numbers transferred by the RFDS nationally between 2009/10 and 2014/15 (RFDS Australia Council 2009/10, RFDS Australia Council 2014/15). There are usually two patients per flight, and as I have stated previously, the FN transfers category 2-5 patients 85-94% of the time as the sole clinician (Anderson 1998, Barclay 1998 a,b, Pugh 2002, Brideson et al 2012).

Table 6-5 National Number of Patients Transferred by Flight Nurse Sole Clinician

Year	Total patients transferred (category 1-5)	Patients Transferred (category 2-5)	Flight number (2 patients/ flight)	FN sole clinician (category 2-5)
2009/10	38,852	33,971	16,985	**33,971**
2014/15	54,705	49,719	24,859	**49,719**
Increase over 5 years	**15,853**	**15,748**	**7,874**	**15,748**

Source: (RFDS Australia Council 2009/10, RFDS Australia Council 2014/15)

The increase in patients transported by FNs as the sole clinician signals intensive work intensification. The annual reports also demonstrate that FN staff numbers have fallen over the same five year timeframe (see Table 6-6), underlining intensive work intensification because the increased numbers of patients could not be transported if work intensification were not happening. The figures in Table 6-5 represent only one service provider (RFDS) but it may be inferred that other service provider patient numbers have also risen. Table 6-6 compares the rise in patient numbers over the five year timeframe to the number of FNs available to perform the work. It shows the number of FNs available to the RFDS has fallen in real terms by 12; a 6.4% fall while patient numbers have increased by 31.7%.

Table 6-6 Flight Nurse Staff Number Compared to Patients Transferred

Organisation/Year	FN Staff Numbers	Number of Patients Transferred
RFDS 2009/10	188	33,971
RFDS 2014/15	176	49,719
Decrease	**12**	
Increase		**15,748**
CareFlight 2009/10	Not recorded	Approx 1800
CareFlight 2014/15	Not recorded	4737
Decrease	Not recorded	
Increase	Not recorded	**2937**

Source: (RFDS Australia Council Annual Report 2009/10, RFDS Australia Council Annual Report 2014/15, CareFlight Annual Report 2010, CareFlight Annual Report 2015)

Talking about FN numbers and increased work, one informant stated:

There's been

(Informant) #

The increase in numbers of patients transferred and the decrease in FN staff numbers have flow on effects to FNs' basic allowances at work. Flight Nurses are entitled to employer meal and comfort breaks during work, the same as any other employee, as part of the award and EBA. Understandably, much of the time meal breaks occur while the FN is away from base in the air providing patient care. Thus, FNs work through meal breaks and rest periods performing either patient care or associated duties. Intensive work intensification means there is less downtime available, with patients requiring care on every leg of a flight. Previously, the opportunity presented whereby FNs could take a break when no patients were on the aircraft. However, this opportunity no longer presents. Intensive work intensification also means less time on the ground and/or between flights where patient care or associated work is not required. The FN informants made the following comments.

... the sheer volume of work is just increasing –

(Informant) #

It's a lot busier.

(Informant) #

Moreover, as discussed in section 5.4, there are organisational directives regarding the clinical care provided to patients. In relation to these organisational directives, one informant stated:

For clinical governance,

(Informant) #

6.5.2 Extensive work intensification

Extensive work intensification involves the extension of the working day (Green 2002, Willis 2002). In the FNs' case, shifts have been extended by the use of an on call period in an attempt to "decrease'' actual rostered working hours so the EBA stipulated number of hours per roster cycle is not broken.

The problem with

(Informant) #

Organisations achieve a further extension of the hours at work by utilising FNs' on call period. The organisation pages the FN to come to work as soon as they commence the on call period or in the hour prior to commencing their on call period for priority 1 tasks. A number of organisations have gained agreement through the EBA process that FNs can be called into work before they officially commence their on call period. FN informants stated:

We are pretty much called
(Informant) #

The hours of work

(Informant) #

It appears that FNs often work through until the end of their rostered shift plus overtime. They commence work (flying) at the beginning of their shift and work until their completion time or over. The minimum break between shifts for fatigue management is usually 10 hours, and after 13 hours at work it is hour for hour (Fair Work Australia 2015a). The following FNs' comments about hours at work directly contravene this agreement. The organisation gains a number of extra FN work hours that are unpaid and unrecognised as part of their work by having FNs present for work with a minimal break.

You can get called

(Informant) #

The MOU

(Informant) #

Flight Nurses are

(Informant) #

On the roster

(Informant) #

6.5.3 Situational Plot of the social relations of work intensification

Many FNs are unaware of the interplay between all of the factors that influence their work. I have constructed the map of social relations regarding work intensification for FNs (see Figure 6-1) as part of this examination of their work to bring these to light.

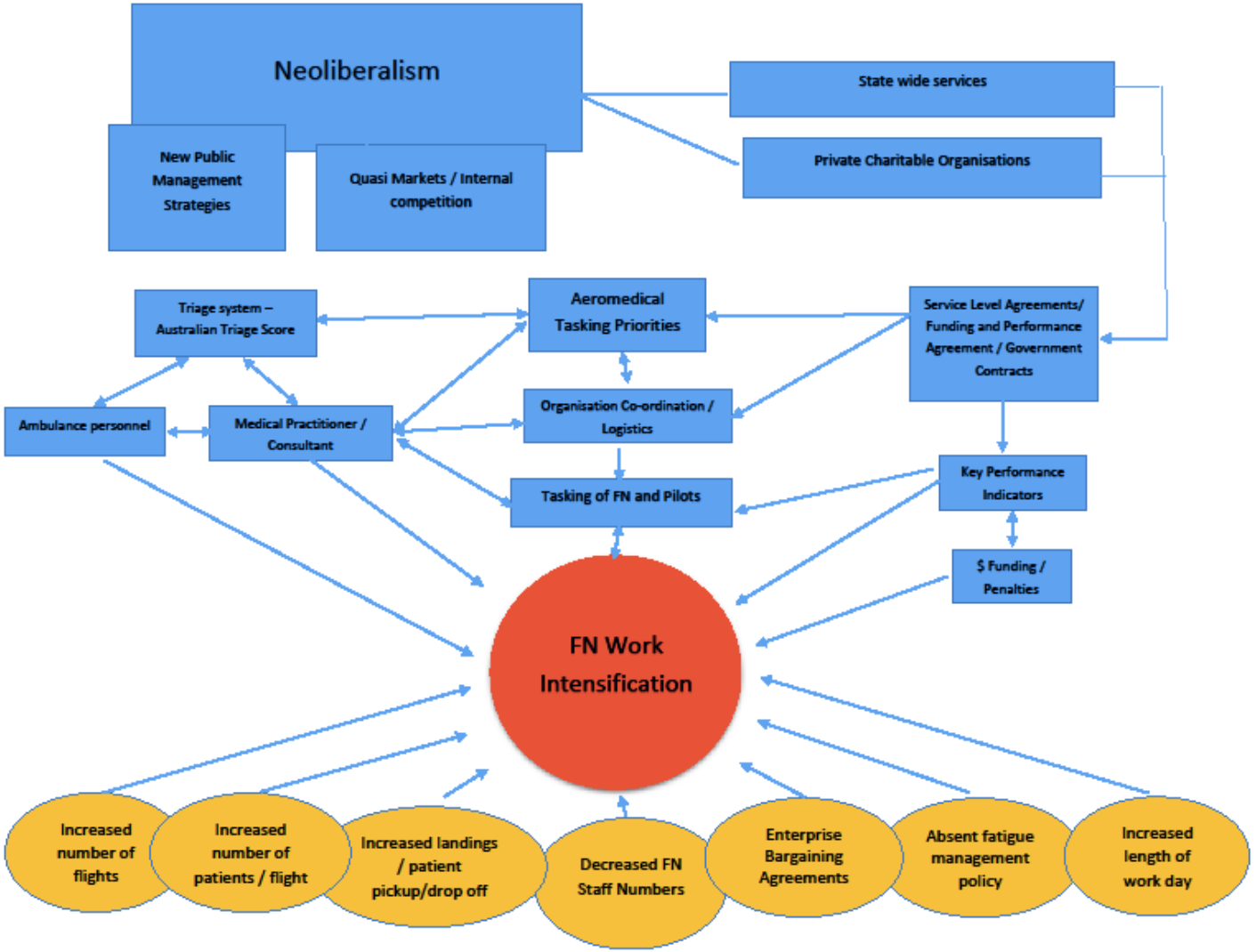

Figure 6-1 Situational plot of Social Relations of Flight Nurses' Work Intensification

6.6 Comparison between EBA and Award Working Conditions

In the previous discussion, I have demonstrated both intensive and extensive work intensification for FNs. However, there is one group of Australian FNs whose award conditions protect them from both types of work intensification, as demonstrated by the following two excerpts from award documents. This is the only group in Australia afforded these protections because the other state awards and negotiated EBAs do not include such specific clauses. The first exemplar relates to intensive work intensification while the second relates to extensive work intensification.

> - The employer has a responsibility to provide reasonable workloads for nurses.
> - The work performed by the employee will be able to be satisfactorily completed within the ordinary hours of work assigned to the employee in their roster cycle.
> - The work will be consistent with the duties within the employee's classification description and at a professional standard so that the care provided or about to be provided to a patient or client shall be adequate, appropriate and not adversely affect the rights, health or safety of the patient, client or nurse.
> - The workload expected of an employee will not be unfair or unreasonable having regard to the skills, experience and classification of the employee for the period in which the workload is allocated.
> - An employee will not be allocated an unreasonable or excessive nursing workload or other responsibilities except in emergency or extraordinary circumstances of an urgent nature.
> - An employee shall not be required to work an unreasonable amount of overtime.
> - An employee's workload will not prevent reasonable and practicable access to Learning and Development Leave, together with 'in-house' courses or activities, and mandatory training and education.
> - Existing minimum staffing levels to ensure safe systems of work and patient safety shall continue to apply.
>
> NSW Nurses and Midwives Association 2015a.

> Flight Nurses shall not exceed 30 hours flying time in each period of seven days.
>
> NSW Nurses and Midwives Association 2015a.

These FNs also have prescribed duty hours of not more than 38 hours per week per roster cycle, as demonstrated in the next example of text taken from their award. This is very different from the negotiated EBAs utilised by other organisations, as discussed previously.

> The ordinary hours of work for shift workers, other than Directors of Nursing and Area Managers, Nurse Education, exclusive of meal times, shall not exceed an average of 38 hours per week in each roster cycle.
>
> The hours of work prescribed in subclauses (i) and (ii) of this clause shall, where possible, be arranged in such a manner that in each roster cycle of 28 calendar days each employee shall not work his/her ordinary hours of work on more than nineteen days in the cycle. Provided that employees who work 8 hour shifts are entitled to 12 additional days off duty per annum (per NSW Health Policy Directive PD2014_029 Leave Matters for the NSW Health Service); employees working 10 hour shifts are entitled to one additional day off duty each five weeks; and employees working other combinations of shifts are entitled to such number of additional days off duty per annum as will ensure that their ordinary hours of work do not exceed an average of 38 hours per week.
>
> NSW Nurses and Midwives Association 2015a.

Furthermore, there are a number of conditions of rostered hours of work prescribed by the award that assist these FNs in resisting work intensification.

> Except as hereafter provided, no employee shall be required to remain on call whilst on a rostered day off or from the completion of the employees' shift on the day preceding a rostered day off.
>
> Each shift shall consist of no more than 10 hours on a day shift or 11 hours on a night shift with not less than 10 hours break between each rostered shift, unless agreed otherwise between an employee and local nursing management. An employee shall not work more than 7 consecutive shifts unless the employee so requests and local nursing management agrees but in no case shall an employee be permitted to work more than 10 consecutive shifts. In any fortnightly pay period an employee shall not be rostered for more than three quick shifts, ie. an evening shift followed by a morning shift, unless agreed otherwise between an employee and local nursing management.
>
> The minimum break between shifts shall be 11.5 hours.
>
> NSW Nurses and Midwives Association 2015a.

6.7 Flight Nurse Only – Where is the Doctor?

Since Chapter 1, I have described how FNs are the sole clinician in the aircraft for category 2-5 patients; the type of patients transferred 85-94% of the time. Informants support this fact, for example, *Probably 80% of our flights are nurse only* (Informant) *#,* as do the statistics taken from the aeromedical organisations' annual reports, showing many less priority/category 1 flights than category 2-5 flights. For example, in 2014/15 in Queensland (QLD), the RFDS attended 1,033 priority 1 flights as opposed to 10,408 category 2-5 flights (RFDS QLD annual report 2014/15). Flight Nurses are the sole clinician on category 2-5 flights, supported by the data. Doctors are mainly present for priority 1 flights, although they may accompany a FN on other priority flights to assist if they are available. Over the last five years, work has intensified. There is now an expectation that FNs will transfer, as the sole clinician, all patients other than those classified as category 1 using the Australasian Triage Scale (Australasian College of Emergency Medicine 2013 a,b). As stated by one informant:

The FN responsibilities

… . (Informant) #

Moreover, a different informant stated:

[Company] are more

(Informant) #

6.8 Summary

In examining in depth the research question of work intensification – a question that arose from the FN informants' data – I have demonstrated that many of Australia's FNs are affected by intensive (an increased pace of work during the working day; working faster with less downtime) and extensive (an increase in the length of time at work; longer working day) work intensification; even those who are reasonably protected by their state based award. Informant data reveals that even the most basic essential tasks (checking and cleaning aircraft and the equipment carried) are difficult to achieve due to intensification of the FN's workday.

I have argued that work intensification is a significant issue affecting FNs' work life balance and health, maintaining high standards of patient care and future FN recruitment. I have also argued that the Australian Government's neoliberalist policies have impacted upon FNs' work through implementation of NPM strategies, now core to aeromedical organisations (Cahill 2007, Chester 2012, Edwards Cahill & Stillwell 2012, Fenna & Tapper 2012, Ferlie et al 1996, Germov 2005, Green 2002, Painter 2011, Pollitt 2003, Selberg 2013, Stanton Young & Willis 2003, White & Bray 2003, Willis 2002, Willis & Weekes 2005). In making these arguments, I have drawn on the FNs' EBAs and awards, illustrating how these texts shape work intensification. Finally, I have supported the documents and statistics by data collected from the FNs themselves, in which they state that their work has intensified in a

number of ways across the documented five year timeframe (2009/10 – 2014/15).

In the next chapter, I analyse the data related to the third research question in this study; increased regulation of FNs' work.

Chapter 7 Regulatory Capitalism and Regulation

We have been ISO accredited for quite a number of years, but we're now being judged against the national quality and healthcare standards. (Informant) #

7.1 Introduction

Building on my in-depth critical qualitative inquiry (CQI) investigation of the second research question identified in this study (intensive and extensive work intensification) in Chapter 6, including an examination of Australian Government neoliberalist policies and new public management (NPM), I now explore the thirdresearch question ; the increasing regulation of Flight Nurses' (FNs') work. According to May (2007, p.464), "regulations are aimed at preventing harms or providing potential benefits to segments of society". Regulations that perform this role are labelled "protective regulations" (May 2007, p.464). Nursing and midwifery regulation fits mainly within this definition. I argue that although FNs are registered nurse midwives (RN RM) and thus subject to the same regulation as all other nurse midwives in the health workforce, they experience an increased level of surveillance and regulation. I argue that FNs are some of the most highly regulated RN RM in Australia. Firstly, as both RNs and RMs, they are mandated by the Nursing and Midwifery Board of Australia (NMBA) to complete 40 hours of continuing professional development (CPD) per year. Secondly, in performing work across such a large scope of practice, FNs have a greater number of mandated organisational competencies that accompany their work processes; many more than other organisations normally require, as I will discuss. Moreover, while performing in the role of aircrew, FNs work under regulations and requirements from additional regulatory bodies; the Civil Aviation Safety Authority (CASA) and the federal legislation that is part of the Air Safety Transport Board (ATSB) (CASA 2016).

This regulation of FNs' work from an CQI standpoint indicates external and powerfilled control of their labour processes (Kinchloe & McLaren 2005, Orlikowski & Baroudi 1991, Smith 1987, 1990). The national regulatory bodies (NMBA and CASA) formulate the regulations and standards that come from an act of parliament/legal directive. The professional nursing and midwifery bodies transfer the directive to the organisation through their professional standards. The organisation adds its ideas to the way FNs should work, and these layers of regulations, policy, procedure and guidelines are then transferred to the resident area of FNs' work. FNs accept these different layers and change their work processes to ensure compliance, thus avoiding non-compliance penalties of various types and levels of seriousness. Modification of work processes to comply with the powerful

directives that come from “above” is also seen as a way of ensuring quality, evidence based patient care. However, I argue that regulation (and its accompanying processes) is a unique way of achieving control over FNs’ labour (Marx & Engels 1872/1968).

A further demonstration of the ruling apparatus applied to FNs, but this time to the organisation, occurs as part of the risk management, quality obsession currently sweeping the Australian Government. Aeromedical organisations in Australia have previously achieved accreditation as part of the International Organisation for Standardisation (ISO) 9000 standards (American Society for Quality 2016 a,b). This set of international standards is based on quality management principles that lead to organisational improvements. These standards include such things as evidence based decision-making, leadership, engagement of people and customer focus (American Society for Quality 2016 a,b). However, the Australian Government, via the Australian Commission on Safety and Quality in Healthcare (ACSQH), has decreed that all healthcare organisations will now implement the 10 *National Safety and Quality Health Service [NSQHS] Standards* (ACSQHC 2011a, 2011b, Australian Government 2015) as part of increasing powerful regulation, brought about by NPM strategies leading to regulatory capitalism. This directive includes aeromedical organisations, which now need to change what they have been doing as part of their quality and risk management strategies (ISO 9000) to implement the external directions from the ACSQH regulatory authority (ACSQHC 2015, 2015b). This is a difficult task to achieve given the number of environmental, logistical and practical differences in aeromedicine compared to the acute healthcare arena. For example, standard 2 refers to links with consumers (ACSQHC 2011), but many within Australia’s remote and rural population, who are the main aeromedical consumers/clients, have no easy access to the internet and thus do not have easy access to surveys. Engagement of this far-flung population takes time and creativity. However, only a short timeframe (three months) was given for implementation of the NSQHS standards prior to auditing. The short timeframe did not allow for solutions to these types of issues, making non-compliance with the standard to the auditor’s expected level likely. One informant responded in the following way in relation to trying to meet the criteria to fulfil standard 2:

> *Partnering with consumers,*

(Informant) #

Flight Nurse informants explained that they face challenges with implementation of the NSQHS standards, from the organisation's management level right through to the regulatory agency. I argue that the direction for implementation of these standards in all areas of healthcare in Australia has come about externally and been translated by powerfilled texts to the resident area (i.e. to the organisation). The organisation has accepted the texts – the direction to implement the NSQHS standards – and translated them further into its culture. Flight Nurses have no choice but to accept the texts and implement them in their daily work. The extra work imposed by the implementation of these regulations is absorbed into the FNs' daily workload, causing further work intensification, as demonstrated in the FN informants' data presented in their comments throughout this chapter.

The fact that FNs work as sole clinicians in the aircraft prevents aeromedical organisations' management from using informal practices to ensure they work according to policy and procedure, and maintain the mandated NSQHS standards. Thus, the organisation directs that both colleagues and management audit individual FNs' work on a daily/monthly/yearly basis. This auditing takes the form of visual checking of FNs' written documentation, senior colleagues accompanying the individual FN on check flights (where they sit and observe the FN at work caring for patients in-flight), and written and oral examinations. These practices demonstrate a greater level of surveillance and regulation of FNs' work than that experienced by other Australian RN RMs who work within non-aeromedical organisations (Allsop & Saks 2002).

In making the above arguments, I have drawn on textual data collected from a variety of regulatory authorities', government and aeromedical organisations' documents within Australia (see Table 7-1), which is supported by data I collected from the FN informants to demonstrate the increased regulatory processes involved in FNs' work.

Table 7-1 Documents Examined Regarding Regulatory Processes and Flight Nurses' Work

AUTHOR	DOCUMENT
ACSQHC Australian Commission on Safety and Quality in Health Care (2011a)	National Safety and Quality Health Service Standards
ACSQHC (2011b)	Australian Safety and Quality Framework for Health Care Putting the Framework into Action: Getting started
Australian Government (2015)	Accreditation and the NSQHS Standards (2015)
ACHS (2015a)	Background on Accreditation

ACHS (2015 b)	Mission, Vision, Values
AIHW (2009)	Towards National Indicators of Safety and Quality in Healthcare
AIHW (2016a)	Safety and Quality of Healthcare
AIHW (2016 b)	Other Australian Information on the Safety and Quality of Healthcare
AIHW (2016 c)	Metadata Online Registry National Health Performance Framework
AIHW (2016 d)	National Healthcare Agreement (2016) Performance Framework Metadata Online Registry
QLD Health 2016	Clinical Services Capability Framework Fact Sheet

Most aeromedical organisations produce publicly available annual reports containing written reports to their members from the president of the board, the chief executive officer (CEO) and the chief financial officer (CFO) regarding how the organisation has performed over the last year. They also include any changes to the business strategy and general information regarding the way the business is operating. This information is included to demonstrate how the power and control that arises externally and is applied at the local level affects the organisation, which, like the FNs, is expected to comply with external directives. A positive outlook is always projected to organisation members and the public regarding these directives. Table 7-1 outlines further documents used to demonstrate the increased regulatory process involved in FNs' work. Again, these documents show that the Australian Government's political stance and policies impact FNs' work through regulatory capitalism.

Table 7-2 Further Documents Examined Regarding Regulatory Processes and Flight Nurses' Work

ORGANISATION	DOCUMENT
Air Ambulance Service NSW (2012b)	Flight Nurse Operational Manual
Flight Nurses Australia (2009)	Flight Nurse Competency Standards
Nursing & Midwifery Board of Australia (2016)	Continuing Professional Development Guidelines
Nursing & Midwifery Board of Australia (2016)	Registered Nurse & Registered Midwife Standards
Royal Flying Doctor Service QLD Operations (2015)	Year in Review - Annual Report 2014/15

7.2 Regulatory Capitalism

Privatisation of government owned enterprises, accompanied by an increase in regulation, has been one of the manifestations of neoliberalist ideology over the last 30 years

(Cogianese & Kagan 2007, Levi-Faur 2009). “Regulatory capitalism” is the term coined by a number of scholars to explain this change in governments’ NPM, neoliberalist strategies whereby devolved and privatised utilities, previously held by government, are brought back under government control through regulation, albeit not by reintegration of the business unit into government but by the government’s utilisation of regulatory mechanisms (Braithwaite 2008, Cogianese & Kagan 2007, Gilardi 2005, Levi-Faur 2005, 2006, Levi-Faur & Jordana 2005, 2005b). Levi-Faur (2005, p.200) described regulation as “both a constitutive element of capitalism and the tool that moderates and socialises it”. Regulatory capitalism is a process that substitutes for NPM within the public sector, allowing privatisation of government services that become part of the capitalist system while ensuring control remains with the state.

Thus, as service units are moved out of the government sector through privatisation and contracting out, regulation of these sectors increases so that government can ensure the goods and services they provided previously are still available to consumers (Cogianese & Kagan 2007). There are many examples of this process, including health, utilities (power, water, telecommunications) and employment services (Ayres & Braithwaite 1992). Regulatory capitalism is where the state retains responsibility for how the service is used and who has access to it, but business provides the services and technological innovations (Levi-Faur 2009). In effect, government steers (i.e. directing service use and access) and business rows.

The main institutional feature of regulatory capitalism is the formation of independent regulatory agencies/authorities (Gilardi 2005). Governments have created these regulatory agencies/authorities as “independent” through acts of parliament to increase their credibility among the public. Thus, the regulatory agencies/authorities are autonomous in their regulatory functions and have become the “appropriate” model of governance of public enterprises in capitalist economies (Jordana & Levi-Faur 2005, Jordana, Levi-Faur & Marlin 2011). Jordana and Levi-Faur (2005, p.210) argued that “the global diffusion of autonomous regulatory authorities is the hallmark of the rise of regulatory capitalism”.

Research strongly supports the claim that regulatory capitalism has diffused across the globe through three dominant mechanisms; top-down, bottom-up and horizontal (Braithwaite 2005, Gilardi 2005, Levi-Faur 2005, Levi-Faur & Jordana 2005, Post 2005). Examples from the review of many countries include telecommunications, water and electricity utilities. Levi-Faur (2005, p.19) collected a data set from 171 countries that graphically represents the close proximity of privatisation and the formation of regulatory authorities. However, the fact that in many other areas (environment, food safety and pharmaceuticals) the regulatory

authority is formed prior to any privatisation is more interesting. It appears that in these areas, regulation is seen as the antidote to privatisation of a public resource because it provides a higher level of governance and increased organisational compliance.

A thought-provoking point noted by a number of scholars in this area is that changes to government policy occur in waves (Braithwaite 2008, Gilardi 2005, Levi-Faur & Jordana 2005). The rise of neoliberalism led to the introduction and usage of NPM strategies (wave 1) to improve the government's financial state by downsizing government, decreasing the welfare state and devolving government core business functions to the private sector. This led to the nationalisation (wave 2) and privatisation (wave 3) of a number of government sectors (Gilardi 2005). Wave 4 has seen the rise of regulation for these earlier privatised business sectors through the creation of a number of regulatory agencies/authorities. The growth in the number of regulatory agencies/authorities in recent years signals the government's desire to maintain control of these privatised business sectors to ensure they maintain their public function (Braithwaite 2005, 2008, Gilardi 2005, Levi-Faur & Jordana 2005).

Being an independent regulator supposedly separates the regulatory agency from the political process whereby changes in government do not negatively impact the service (Gilardi 2005, Levi-Faur & Jordana 2005). However, in the case of one well-known regulatory agency/authority in Australia (Health Work Force Australia), a negative impact occurred when a change of government withdrew the agency's funding in 2014, forcing it to close (Australian Government 2016, 2016a). This example demonstrates that government control of even supposedly independent regulatory bodies remains strong because the government controls the organisations' funding.

Examples of independent regulatory agencies/authorities that regulate FNs' work in Australia are the Australian Health Practitioner Regulatory Authority (AHPRA), the NMBA, the CASA and the ATSB. The AHPRA and the NMBA are prime examples of regulatory agencies/authorities that have been set up since the growth of regulatory capitalism. Moreover, while the CASA has been in operation since 1988 under various guises, significant governance and enforcement related changes occurred in 2009 with the establishment of the ATSB as an independent agency (Civil Aviation Safety Authority 2016). These authorities regulate FNs' work through the application of mandatory standards that must be upheld or penalties are applied, often to both the FN and the organisation (Civil Aviation Safety Authority 2016, 2016 b,c).

Regulatory capitalism is the natural flow on from neoliberalism and NPM strategies.

Governments put regulatory agencies/authorities in place to ensure compliance as business units are devolved from government; thus, as one hand lets go, the other tightens its grip. A new market is encouraged but a regulator must be put in place to ensure everything the government wishes to achieve happens within the new market. According to Levi-Faur (2005), the social dimensions of regulatory capitalism are reflected in the rise of a quality and risk management society, and corporate social responsibility through increased regulation and auditing. In terms of ruling apparatus, this is a classic example of the state apparatus- but operating at one step removed through the regulatory agency (Wolff 2004).

These changes to governance structures in aeromedicine impact Flight Nursing and FNs, as demonstrated in Chapter 6. The government's devolving of the business units linked to aeromedicine and the creation of quasi-markets has led to a powerful increase in the regulatory side of the business and a squeeze on the available government funding. This is demonstrated by the implementation of service level agreements and the application of key performance indicators (KPIs) that are linked to funding at the organisational level and by the requirement to comply with increasing regulatory standards (Gilardi 2005, Levi-Faur & Jordana 2005). The changing landscape of the economy, business and society across Australia has also led to a decrease in the available corporate, individual and other monetary donations, which are spread more thinly as more organisations enter the quasi-market, thus encouraging aggressive competition among all the organisations to secure the available funding (McLeod 2015, Teece 2010). However, this level of heightened competition can lead to a decrease in the amount, type and quality of services delivered (Kaplan & Porter 2011, Porter & Lee 2013). This eventuality leads the government to think that greater regulation is required to ensure standards do not fall, even though the issue can be traced back to decreased funding for service provision (Nichols et al 2004).

7.3 Regulation in Healthcare

The term "regulation" encompasses a number and range of different areas of work. Toombs (2002, p.113) stated that "regulation invokes an inherently political set of considerations", which are at the heart of many debates involving contemporary economics, distribution of the means of production at all levels of society and the role of the law. A regulation is defined as a "rule or law that controls, directs or manages an activity, system or organisation" (Web Finance Inc. 2016). Regulations ensure uniform application of the rule or law across society. However, in this thesis, I have constrained discussion of regulation to healthcare.

Over the last thirty years, globally there has been a proliferation of regulatory agencies/authorities and strategies in the healthcare sector (Braithwaite, Healy & Dwan

2005). This appears to have occurred with the main intent of improving the safety and quality of healthcare because it has been shown that medical errors are a common occurrence; the preventable deaths of patients have at times exceeded the yearly road toll (Braithwaite, Healy & Dwan 2005). Therefore, the key purpose of regulation in the healthcare sector is to abate or control the risks to the public that healthcare brings (Braithwaite, Healy & Dwan 2005, International Council of Nurses [ICN] 2015). Health professional services are high on the list of risks to the public that require control and management (Harrison & Pollitt 1994, Martinussen & Magnussen 2011, Tummers 2013). This partly explains the intense focus over recent years on continuing professional development and maintenance of competence, along with the proliferation of professional standards and clinical guidelines (Australasian College for Emergency Medicine 2003, 2013 a,b, Flight Nurses Australia 2009, Gray, Rowe & Barnes 2014, Katsikitis et al 2013, NMBA 2016c, Pearson et al 2002, Summers 2015).

Professional regulation in healthcare is defined as “the means by which order, consistency, and control are brought to professions’ practice” (International Council of Nurses [ICN] 1986, p.7). Regulation is pervasive – sometimes subtle, sometimes bold, direct and indirect – and occurs on many levels and in many arenas (Affara & Styles 1992). It takes many forms, serves multiple purposes, and has a number of intended and unintended effects (Affara & Styles 1992). The purposes can be divided into two areas; protection of the public and protection of the professional. Thus, the purposes include, in the first instance, things such as protection of the public from unsafe practices, ensuring quality of provided services, informing the public regarding availability of services; and in the second instance, fostering development of the profession, conferring accountability, identity and status, and promoting the professional’s socioeconomic welfare (Affara & Styles, 1992 p. 8).

The mechanism by which professional regulation is applied is referred to by multiple titles such as registration, qualification, certification or accreditation. This means that a standard has been applied, that the professional is deemed to have met it, the regulatory agency/authority has awarded the designated title to the professional, and thereby allows that person to provide the service to the public (Affara & Styles 1992). There are various other authorities that also award titles, dependent upon the level of criteria that the professional is meeting. If the criterion being met has been set by the profession, it is viewed as internal and is in the main met voluntarily by the professional (Affara & Styles 1992). An example of this is credentialling of the professional by the professional group, that is, a credentialled mental health nurse has achieved a higher level of education, and met the standards and criteria set to achieve this level of practice awarded by the College of Mental Health Nurses. The nurse can then use the title of ‘credentialled mental health nurse’.

There is likewise recognition that other external regulatory levers can improve organisational performance rather than just focussing upon individual professions and professionals (Braithwaite, Healy & Dwan 2005). These include meta-regulation (whereby a third party external to the organisation monitors the conduct of self-regulation), competition, quality performance indicators and benchmarking, and responsive regulation (Braithwaite, Healy & Dwan 2005). Australian aeromedical organisations make use of these external regulatory levers to improve their performance, as demonstrated within their annual reports. Many organisations now practise responsive regulation, which is gaining strong support within the literature.

7.3.1 Responsive regulation

The basic idea behind responsive regulation is that the regulator is responsive to the conduct, culture and context of those they seek to regulate when deciding whether a more or less bureaucratic response is required if standards are not complied with. This includes escalating punishments that commence with oral persuasion and warning letters, for example, moving to the extremes of license suspension, or civil and criminal penalties (Ayres & Braithwaite 1992, Braithwaite 2002, Braithwaite, Healy & Dwan 2005). Responsive regulation means finding strategies that redress corrupt organisational behaviours, reduce defiance, avoid penalties when compliance does not occur and allow the best intentions of all organisations to shape virtuous corporate behaviour (Haines 2005, Healy & Braithwaite 2006). Solutions need to redress the power imbalances between organisations and those affected. However, regulatory processes must be seen as just by commencing with the least punitive and only escalating as required (Haines 2005, Healy & Braithwaite 2006). The best responsive regulation strategy depends on context, regulatory culture and history because different structures lead to different degrees and forms of regulation (Braithwaite 2002).

All the regulatory bodies directing FNs' work make use of responsive regulation in that the penalties applied for various breaches move along a scale. Flight Nurses Australia (FNA, the professional body representing FNs) has documented what constitutes acceptable minimum standards for Flight Nursing best practice (Flight Nurses Australia 2009). Meeting safety and quality challenges, and continual improvement, remain important to Australian FNs. As time goes by, error and near miss incident reporting systems at each aeromedical organisation are improving. However, it is up to each organisation to decide whether any breaches identified in an individual's practice are reported to the regulatory agency/authority. Reporting to the regulatory agency/authority could lead to professional sanctions and de-registration if viewed as serious enough. Ayres and Braithwaite (1992, p.7) commented that, "Regulatory agencies can speak more softly when they carry a very large stick!" The

regulatory agencies/ authorities covering FNs' work fit this category.

7.3.2 Aviation regulation

The Civil Aviation Safety Authority (CASA) is the overarching regulator for the aviation side of all aviation related business. This authority, as well as the NMBA, impacts and regulates FNs because a large part of their work is in the aviation arena. Flight Nurses must meet the CASA requirements to be granted an Australian Security Identification Clearance (ASIC) pass allowing them to perform various tasks "airside" (on the tarmac at airports and airstrips Australia wide) (Civil Aviation Safety Authority 2016 b,c). Inherent in the CASA regulations are competencies involving the carriage of dangerous goods, and requirements for the 1-2 yearly performance of aircraft safety procedures and drills, such as Helicopter Underwater Escape Training, fire and emergency drills, and removing the window and escaping the fixed wing aircraft. If FNs do not meet these requirements or are found to be negligent in one of them, their ASIC pass is rescinded and they cannot perform airside tasks, thus greatly impacting performance of their job.

7.3.3 Nursing regulation

The governmental regulation of nursing is multi-tiered. The law is at the pinnacle; then there is the regulatory agency/authority (in Australia's case, the NMBA, which represents government and is external and mandatory). The NMBA is authorised within the law to develop regulations or procedures to operationalise its regulatory program (Affara & Styles 1992). The standards for professional practice cover areas such as minimum education standards reflecting the scope and demands of nursing work (practice); evidence of the professional's actual knowledge and performance, and the services provided. Various instruments, such as exams, records and letters of recommendation validate standards. If standards are formulated based on a legal standpoint, they are very explicit and must be met at all times (Affara & Styles 1992, Johnstone 1994, Lam 2008).

Nursing regulation has filled a number of tasks apart from the risk management "protection of the public" argument to which current nurses and midwives are continually exposed. In Australia, Nurses Registration Acts and Ordinances that have made provision to control and regulate the nursing profession occurred historically at different times in different states and territories; but all transpired after women achieved suffrage (Johnstone 1994, Jordan 1999, O'Sullivan & Bates 1983, Owsley 2013). South Australia (SA) led the way, regulating nursing in 1920, followed by the Australian Capital Territory (ACT) in 1933, Tasmania in 1952, New South Wales (NSW) in 1953 and Victoria (Vic) in 1958. Each state convened a nurses' registration board post implementation of the Act. Each board was given the overall

responsibility for supervising the nursing profession. The boards were made up of a number of professionals. Although nurses were included, medical practitioners, hospital administrators and lawyers featured heavily. Thus, theoretically, when nurses' own profession should judge them, they did not (Johnstone 1994, O'Sullivan & Bates 1983). What the early nurses had attempted to achieve from the regulation of nursing (for nurses [women] to direct their own profession) did not happen (Johnstone 1994, Owsley 2013). Remarkably, all nurses' registration Acts in Australia stated that the nurse applying for registration must hold the perquisite of being "of good character", a reference left from the mid-1860s when Florence Nightingale and others were trying to improve nursing's profile (Godden 2001, O'Sullivan & Bates 1983). This reference was not removed from the wording of Australia's nurse registration Acts until 2010 with the implementation of national nursing legislation and registration (AHPRA 2016).

As I have stated previously, nurses' registration came about at differing points in time for different states in Australia. However, in 1993, the federal parliament finally passed the *Mutual Recognition Act*, which allowed for the mutual recognition of Australian nurses' basic qualifications across all Australian states and territories, meaning nurses could register and work anywhere in Australia as long as they had applied and paid the appropriate registration fee (Stanton & Whyburn 1997). This was significant for FNs because in many instances patients needed to be transferred from one state to another to receive the care they needed. This legislation meant that FNs would be legally covered while working across state borders. In 2010, after many years of lobbying the federal and state governments to allow nurses single registration across Australia, the legislation was passed for this to occur (AHPRA 2016).

Although nursing regulation has been present since the early 1920s, it has grown in stature, particularly since 2010, through the strengthening of regulatory capitalism as the overarching ideology behind the formation and implementation of a number of parliamentary Acts that regulate health professionals' work. Post (2005, p.168) made an interesting point when stating:

> Public health regulations have long represented one of the most intrusive areas of government regulation ... the rise of the regulatory state is closely tied to the spread and increase in public health standards.

Protecting public health standards is closely tied to regulators endeavouring to ensure ongoing competence of the regulated professions by mandating continuing professional development (CPD).

7.4 Flight Nurses and Continuing Professional Development

The NMBA, professional organisations (Colleges of Nursing and Midwifery and the Union) and aeromedical organisations hold expectations of the standards of evidence based practice required to work as a FN. Flight Nurses must meet these standards at all times to ensure patient safety and evidence based best practice (Flight Nurses Australia 2009, NMBA 2016 a,b). The NMBA's professional codes of practice, conduct and ethics, intertwined with the standards for professional practice, stipulate the powerful importance of standards to the profession. The following text is a short example of the preamble written in the standards of practice for registered nurses and midwives, and demonstrates the National Board's expectations (NMBA 2016 a,b).

Registered nurse standards for practice

As regulated health professionals, RNs are responsible and accountable to the Nursing and Midwifery Board of Australia (NMBA). Together with NMBA standards, codes and guidelines, the Registered nurse standards for practice should be evident in current practice, and inform the development of the scopes of practice and aspirations of RNs.

RN practice, as a professional endeavour, requires continuous thinking and analysis in the context of thoughtful development and maintenance of constructive relationships. To engage in this work, RNs need to continue to develop professionally and maintain their capability for professional practice. RNs determine, coordinate and provide safe, quality nursing. This practice includes comprehensive assessment, development of a plan, implementation and evaluation of outcomes.

NMBA 2016a.

Midwifery standards for practice

The midwife is recognised as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the newborn and the infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures. A midwife may practise in any setting including the home, community, hospitals, clinics or health units (ICM 2005). The midwife will be able to demonstrate competence in the provision of midwifery care as specified in the National Board National competency standards for the midwife.

NMBA 2016b.

The importance of regular practice and CDP to maintain skill levels is well recognised (Casey et al 2016, Cleary et al 2011, Coventry Maslin-Prothero & Smith 2015, Gray Rowe & Barnes 2014, Katsikitis et al 2013, NMBA 2016c, Pierce 2016, RFDS 2011, Ross et al 2013, Summers 2015). The NMBA mandates that professional nurse midwives maintain their skills with 20 hours each of midwifery and nursing CPD per year, as demonstrated below.

> Learning and development occurs throughout a nurse's and/or midwife's career. CPD is an important foundation of lifelong learning and helps nurses and midwives maintain their competence to practise.
>
> RNs are responsible for their professional development and contribute to the development of others. They are also responsible for providing information and education to enable people to make decisions and take action in relation to their health.
>
> CPD aims to enable nurses and midwives to maintain, improve, and broaden their professional knowledge, expertise and competence to meet their obligation to provide ethical, effective, safe and competent practice. Research on CPD shows that by engaging others in CPD planning, this results in positive learning outcomes and evidence based changes to practice.
>
> NMBA 2016c.

The aeromedical organisation and the regulator (NMBA 2016 c,d) direct CPD for FNs. An example of one organisation's expectations is highlighted in the following excerpt from their documentation.

> **Professional Development**
>
> 5.1 Complete an orientation program and to be successfully appraised by the Senior Flight Nurse.
>
> 5.2 Complete annual check flights performed with the Senior Flight Nurse.
>
> 5.3 Attend educational sessions provided by the and complete the Flight and assessments.
>
> 5.3 Demonstrate proficiency in emergency procedures, safety and ditching .
>
> 5.4 Demonstrate proficiency Dangerous Goods Courses in accordance with Civil Aviation Safety Authority biannually.
>
> 5.5 Demonstrate a commitment to maintaining nursing standards and professional development by regular attendance at seminars, conferences and courses utilising study leave and off duty time.
>
> 5.6 Attend clinical placements, in-service programs, with specialist hospital units to maintain professional and nursing competencies and skills to a tertiary health service level.
>
> 5.7 Attend at case reviews and training days with other retrieval services when facilitated.
>
> 5.8 Participate in the orientation and training of new staff and the education/briefing of accompanying medical/nursing staff re aviation and aircraft considerations.
>
> 5.9 Represent the Service, as required, at lectures, seminars, conferences, to educate community groups, nursing and medical personal regarding the role of the and Flight Nurses.
>
> 5.10 Demonstrate annual Nurses Registration.
>
> 5.11 Complete other currencies as required including advanced life support.
>
> 5.12 Participate in nursing research.
>
> . #

Although CPD is written into the FNs' duty statement, often there is no allocated work time within which to complete it. Alternatively, CPD occurs frequently if time has been allocated, but this time is often revoked to fill a roster gap.

It's very difficult

(Informant) #

Due to these types of difficulties, FNs often use their own time working outside the organisation to meet their CPD goals and ensure maintaining high standards of work; a strategy that avoids the barriers to maintaining skills at the level FNs consider essential for their own personal level of professional practice. Flight Nurses view practical hands on provision of care in an acute care setting as one of the ways to achieve this.

I do a bit of

(Informant) #

Flight Nurses Australia (FNA) led the development of competency based standards (see next excerpt) relating to FNs' unique field of work. These competency based standards are published on the FNA website (Flight Nurses Australia 2017). All nurses involved in transferring patients by air are expected to follow and adhere to these standards of care. This textual excerpt demonstrates the standard of work performance expected of FNs by their professional group

> Although these competency standards have a stand-alone function, they should be read in conjunction with the National Competency Standards for the Registered Nurse (NMBA).
>
> The implications for the Flight Nurse in complying with the following competency standards are that they will be able to:
>
> Demonstrate the core competencies that are required for all Registered Nurses.
>
> Practice at an advanced level in the unique context of Flight Nurse practice.
>
> Frequently work in professional isolation
>
> Work as a sole practitioner or as a member of a team
>
> Provide care across the lifespan of diverse groups
>
> Provide health care across a diverse range of health specialities
>
> Work in consultation with a variety of health professionals
>
> As the situation arises work in cross cultural environments and constantly adapt skills knowledge and attitudes to local customs and traditions
>
> Where appropriate adhere to the competencies for relevant nursing specialities.
>
> FLIGHT NURSES AUSTRALIA 2009.

All FNs must perform and pass yearly organisational competency based clinical skills assessments, but, as discussed previously, allocated rostered days on the ground to do these are rare. These skills assessments include, but are not limited to, manual handling; basic life support (BLS); advanced life support (ALS) of adults, paediatrics and neonates;

application of both pelvic and vacuum splints; checking and use of the oxylog [ventilator], pumps and monitoring equipment; and 12 lead ECG and pacing. Other competencies include history taking and examination of both adults and children; remote practice endorsement (RIPEN); recognition and treatment of acute coronary syndrome; pharmacology of a number of commonly used medications in practice; child safety; midwifery learning package; immunisation exam; annual flight and clinic assessments.

So we have a

(Informant) #

An education day may be organised when the aeromedical company's FN educator (FNE) is available, so that staff not involved in emergencies can attend (this usually means those not rostered at that time because those FNs' rostered will be flying). This day typically involves simulation and a number of scenarios, including rapid sequence intubation (RSI) and "can't intubate, can't ventilate" (unable to place an endotracheal tube due to various reasons and therefore unable to ventilate the patient), so that the FN is prepared if these types of situations arise in reality. Rapid sequence intubation involves critically unwell patients who cannot protect their own airway; they require airway support via intubation and ventilation to remain breathing. When working as a FN, you can be presented with a patient who has been assessed inaccurately or who becomes very unwell during the flight. At times, the patient may require immediate intubation and when working as a sole clinician, the FN must do this alone. Regular practice is essential to maintain the skill level required to perform intubation successfully. Therefore, RSI practice happens as often as possible; at least once per week for most FNs' (some organisations include this in the daily duty schedule). For example:

We have two

(Informant) #

Mandatory skill competencies are the means by which aeromedical organisations try to ensure FNs comply with their clinical governance directives and maintain a level of technical expertise in the provision of patient care. Flight Nurses have a number of competencies that must be completed on a yearly basis; many more than a registered nurse midwife employed by an acute healthcare service (e.g. a large acute care hospital). Flight Nurses at all levels within all aeromedical organisations were asked about the competencies they needed to complete as part of their compliance with regulatory direction and how this was tracked by the organisation. Some of their responses follow.

Database

(Informant) #

Yes

(Informant) #

Flight Nurses

(Informant) #

We've got a list

(Informant #

Considering FNs must complete many of these education updates in their own time due to rostering and work intensification issues, it is a significant drain on their personal time outside work, and highlights how the ruling apparatus is applied through regulation and regulatory capitalism from an externalsetting to the resident setting of FNs' work.

7.5 Application of the Ruling Apparatus: An Example

Quality and safety in healthcare have become progressively popular topics over the last 40 years in Australia, increasingly so with the advent of governments' neoliberalist policies and the introduction of NPM strategies. The growth in the area of risk management through the increased quality and safety focus is a prime example of regulatory capitalism at work. The example I use in this section, while providing an active demonstration of the ruling apparatus and how FNs' work has become increasingly regulated over time, also demonstrates the growth of regulation and the impact of regulatory capitalism through the evolution of regulatory agencies/authorities and the power they have been granted (Gilardi 2005, Levi-Faur & Jordana 2005 b).

Government regulation has been on the increase at the same time as governments have been busy devolving and privatising business units (Braithwaite Healy & Dwan 2005, National Health Performance Committee [NHPC] 2001). The Australian Government has organised national priorities for healthcare (ACSQHC 2011) through legislation applied by various regulatory agencies/authorities. This has meant that FNs have become more highly regulated over time through these state apparatuses. However, FNs' major focus has always been quality in healthcare service provision and providing patient care to the highest levels of evidence base, as demonstrated by Australian aeromedical services' international reputation for excellence (Barclay 1998 a,b, Brideson et al 2012, Newlands 2003).

There have been times in Australian healthcare where the best outcomes for patients have not occurred. In an effort to try and guarantee best patient outcomes and ensure organisations are not exposed to litigation risks from unsafe practices, risk management, which looks to manage and mitigate risk to the organisation and its users, has become a

powerful focus of all organisations and the government (Australasian College of Emergency Medicine 2003, 2013 a,b, AIHW 2016 a,b, Avery & Lockey 2013, Braithwaite Healey & Dwan 2005, Jarden & Quirke 2010). The healthcare sector actions risk management through quality and safety systems, which has led to regulation, standards, auditing and accreditation of healthcare as current routine practice (Australian Commission on Safety and Quality in Health Care (ACSQHC) 2011, Australian Government 2015, AIHW 2016 a,b,c,d, Braithwaite Healey & Dwan 2005).

The Australian Hospital Standards Committee was the first appointed management committee in Australia to recognise that accreditation would allow a focus on the achievement of desirable standards for Australian hospital based healthcare (McIntosh McManus & Party 2014). The first provisional standards, formulated and audited by a committee external to the organisation being accredited, were released in October 1974 (McIntosh et al 2014).

In July 1988, the Australian Hospital Standards Committee changed their name to the current Australian Council on Healthcare Standards (ACHS) (McIntosh et al 2014), which remains a quasi-independent (dependent upon the government for funding), not-for-profit organisation dedicated to improving the quality of healthcare in Australia through continual review of performance, assessment and accreditation of healthcare organisations (ACHS 2015a, AIHW 2016b). Organisations seek ACHS accreditation mainly because: 1) accreditation signifies to consumers and the public that an organisation maintains a set standard of healthcare; and 2) government funding is available by meeting this key performance indicator. However, most organisations endeavour to display the altruistic motive that the organisation is always looking to improve their performance against the standards, and that they are trustworthy and committed to quality care and outcomes for their clientele (ACHS 2015b).

The following exemplar demonstrates the application of the ruling apparatus on multiple levels within the Australian healthcare arena. The ACHS has played an important part in the debate about the safety and quality of healthcare in Australia, which has gained greater focus since 1993. This is the same time period when the Australian Government introduced their macro and micro economic changes, with NPM strategies starting to make way for the beginnings of regulatory capitalism. All healthcare organisations, including aeromedical organisations, were undergoing evaluation as per the following review excerpts. A number of actions followed this and other reviews, including the government's formation of regulatory agencies/authorities to set the standards for, and monitor, the performance of the quality of healthcare provision in Australia. The growth in the number of regulatory agencies/

authorities is one of the key features of regulatory capitalism (Braithwaite 2005, Gilardi 2005, Levi-Faur 2005, 2006, Levi-Faur & Jordana 2005, Levi-Faur 2009, Post 2005).

> The Review of Government Service Provision was initiated by the Prime Minister, Premiers and Chief Ministers at the Premiers' Conference in July 1993. The Steering Committee for the Review, established in 1994, comprises senior representatives from Australian, State and Territory governments. The report:
>
> - publishes a set of performance indicators agreed by the Steering Committee
> - publishes data for these indicators, for each jurisdiction (where possible)
> - includes several chapters on the characteristics and performance of Australia's healthcare services.
>
> AIHW 2016b.

Even though the professions (medicine, nursing and allied health) had professional bodies available that monitored the performance of their members (state based registration councils/boards and now AHPRA), the government was not satisfied with the statistics for patient care outcomes, as demonstrated by the above review (AIHW 2016b). However, it appears that nothing further occurred from the review undertaken in 1994 until 1999 when the Australian Health Ministers' Conference established a National Health Performance Committee (NHPC 2001). The health ministers instructed this committee to develop and maintain a national health system performance measurement framework, thus signalling the government's preference for further regulation of healthcare (AIHW 2016b). The national health performance framework comprised three spheres: health system performance; health status of consumers; and the social determinants of health (NHPC 2001). Equity was considered integral to all spheres. Data was collected to allow for the use of benchmarking between health services nationally and to demonstrate areas where health services required improvement. This action also allowed for appraisal of overall health system performance, including community health, general practice and public health (AIHW 2016c, NHPC 2001).

Data coming out of the metadata online registry – the national performance framework was reported to government – was deemed not to provide enough information, so the indicators would be altered and the number increased, as per the following document excerpt.

> Between 2000 and 2004, the Committee reported on the performance of the Australian health care system through a range of indicators for which data were nationally available.
>
> In 2008, the Australian Health Ministers' Conference decided on the development of a different set of performance indicators covering the entire health and aged care system. The AIHW was commissioned to produce the indicator set, which is available through the Indicators subject area page on the AIHW website
>
> AIHW 2016b.

The committee, now called the National Health Information Standards and Statistics Committee (NHISSC), passed this new set of indicators and revised framework, to which the national health ministers agreed in September 2009 (AIHW 2016 b,c). At the same time, a further focus on safety and quality in healthcare was happening in Australia with the formation of the Australian Council for Safety and Quality in Health Care (yet another independent regulatory agency/authority), which functioned from 2000 to 2005. This council published a number of reports detailing statistical information about the safety and quality of healthcare in Australia, including *Charting the Safety and Quality of Healthcare in Australia* (2004) and *Safety through Action: Improving Patient Safety in Australia* (2002) (AIHW 2016b). In January 2006, the Australian Council for Safety and Quality in Health Care was replaced by the Australian Commission on Safety and Quality in Health Care

> One main outcome of the agreement is the development of a set of **55 national indicators** of the safety and quality of clinical care provided to patients across the Australian health care system. These 55 indicators, along with the framework used to inform their selection, and data on the indicators where available, can be found in the AIHW's report *'Towards National Indicators of Safety and Quality in Healthcare'.*
>
> AIHW 2009.

[ACSQHC] (AIHW 2016b). Funded by both the Commonwealth Government and the state/territory governments, its stated mission was to develop a national strategic framework and associated program of work to guide improvements in safety and quality of healthcare systems in Australia. Later in 2006, a partnership between the ACSQHC and the Australian Institute of Health and Welfare (AIHW) (both regulatory agencies/authorities) was formed that (supposedly) aimed to collect more useable data relating to the safety and quality of healthcare in Australia. Interestingly, both regulatory agencies/authorities are subject to the whims of the government in power at the time, as demonstrated by their continual amalgamation or partnership and change of name/s. After this latest partnership was formulated, the AIHW website stated the following:

The justification for the increased surveillance of healthcare organisations at government level is displayed in the following text, again located on the AIHW website.

> The AIHW suggests that, broadly, public reporting on these indicators could serve two main purposes: to provide transparency and to inform decision-making about overall priorities and system-level strategies for safety and quality improvement; and to inform quality improvement activities of service providers. Reporting to serve these purposes may not only be national but also at the level of states, territories and individual facilities and organisations. All of the recommended indicators are suitable for national public reporting, and most are also suitable for use at other levels. The ability to act directly to improve health care safety and quality arguably lies primarily at the facility and organisation level.
>
> AIHW 2009

The layering of the regulatory agencies/authorities and government reporting frameworks is very complicated but discussion and non-compliance by an organisation is not an option because these regulatory agencies/authorities represent government expectations of healthcare service provision, and government funding ultimately hinges upon compliance.

The 55 national indicators led to the formulation of the 10 *NSQHS Standards* that were set to **"drive the implementation of safety and quality systems and improve the quality of health care in Australia"** (ACSQHC 2011b). Essentially, the standards were designed to ensure nationally consistent standards of healthcare, improve the quality of health service provision and protect the public from harm throughout Australia (ACSQHC 2011 a,b). All Australian health ministers endorsed the standards and a national accreditation structure in

> The National Safety and Quality Health Service (NSQHS) Standards were developed by the Commission to drive the implementation of safety and quality systems and improve the quality of health care in Australia. The 10 NSQHS Standards provide a nationally consistent statement about the level of care consumers can expect from health service organisations.
>
> In **September 2011**, Health Ministers endorsed the NSQHS Standards and a national accreditation scheme. This has created a national safety and quality accreditation scheme for health service organisations.
>
> ACSQHC 2011a.

September 2011. This created the national safety and quality accreditation scheme for health service organisations, which commenced in the acute care sector from January 2013 and which now requires implementation across all areas of healthcare in Australia (ACSQHC 2011a).

A framework for implementation of the *NSQHS Standards* (termed the *Australian Safety and Quality Framework for Health Care* [ASQFHC]) was also provided for Australian healthcare organisations to follow (ACSQHC 2011b).

> Health Ministers endorsed the Australian Safety and Quality Framework for Health Care in 2010. The Framework provides 21 areas for action that all people in the health system can take to improve the safety and quality of care provided in all healthcare settings over the next decade.
>
> **Everyone who works in health has a part to play in creating a safe and high-quality healthcare system.** This document has been prepared specially for people who directly provide healthcare services to consumers, patients and clients
>
> ACSQHC 2011b.

This document provides a mandatory framework for implementation of the standards that are mandated to be put in place by organisations to meet the government's quality, safety and

risk management agenda. As stated in the preamble to the framework, it is expected that those working at the clinical level with patients will make use of the framework for implementing safe, quality practice. However, this does not take into consideration that the professionals are already working under the direction of their organisation's policy and procedure, their relevant profession's codes of practice and ethics, and their relevant profession's professional associations and registration boards.

Whilst the Commonwealth Government and a number of regulatory agencies/authorities provide policy, procedure and documents to guide quality and safety in healthcare practice, individual state health departments have different areas of governance and policy frameworks that they also expect organisations within their state to follow. So, mandated

> [This document] is intended to work along with and inform other frameworks, systems or mechanisms supporting the provision of safe and high quality health services. Service networking by health facilities is fundamental in providing essential service links across a range of sites and settings, ensuring continuity of care and integrated levels of care for safe and sustainable services to meet community need
>
> QLD Health 2016.

directives are coming to the organisation from two levels of government – federal and state. For example, Queensland (QLD) Health has a clinical services capability framework (CSCF) that all public and private providers of health services in QLD are expected to implement.

The CSCF represents yet another level of regulation and risk management at the second level of government. Thus, organisations are controlled by two levels of government through regulations, standards and clinical governance guidelines, policy and procedure. The ruling state apparatus formulated at the external level (government) are directed to be applied at the level of the organisation. The organisation then changes whatever it is doing to fit within the external direction, and the flow on effect moves down the chain of command and directs the FNs to comply and change their work processes to fulfil the direction at the resident level. The next textual exemplar was taken from the RFDS QLD Operations Board Chairman's report for 2014/15. It demonstrates how the external ruling apparatus has been applied at the level of the local /resident organisation. How the organisation has responded to these regulatory changes signalled by the regulatory agencies/authorities demonstrates the organisation's uptake and application of these directions. Furthermore, as the chairman mentioned briefly, these changes have been **signalled** to "the staff" (including FNs), who must make alterations to their work practices to ensure the directives are implemented and measurable through accreditation. Accreditation signals the process of auditing against the **"now well-defined and measured standards of patient care"**, which ensures the

organisation's compliance with the directions given externally by the regulatory agencies/authorities and various levels of government.

As part of this exemplar, I have tracked the texts that have come from the direction given externally from the government, via the regulator, to the organisation. I now demonstrate the application of this ruling relation at the resident level of the FNs through the implementation of the *National Safety and Quality Health Service (NSQHS) Standards* (2011a) into FNs' work.

> The past twelve months has been a period of significant change within RFDS (Queensland Section), as our two important operational pillars – aviation and health services, each focus on the continually evolving air safety regulatory reforms and health service accreditation standards.
>
> Earlier this year, the organisation embarked on an aviation program designed to prepare our aeromedical operations for the impending changes to aviation regulations proposed by the Civil Aviation Safety Authority (CASA). While regulatory reform will be progressive, we are now well advanced in anticipation of these changes across our maintenance, flight standards and flight safety training areas, ahead of the expected mandated timeframe
>
> Throughout the year, our Health Services team has also taken giant strides in the preparatory journey towards full health service accreditation, with the organisation on track to have its first accreditation assessment in early to mid-2016.
>
> In seeking to now measure ourselves against the National Quality Health Service & Safety Standards, our staff have embraced the opportunity to translate our unique clinical settings into now well-defined and measured standards of patient care.
>
> RFDS QLD 2015).

7.5.1 Application of the ruling state apparatus exemplar to Flight Nurses' work

As I stated at the beginning of this chapter, aeromedical organisations across Australia have achieved ISO 9000 accreditation. All of the processes currently in place to achieve this accreditation will require change to fit with the direction of the *National Safety and Quality Health Service Standards* (ACSQHC 2011a). The informants made comment upon the implementation of these standards as follows.

> *[Are you introducing the national safety quality standards?]*
>
> (Informant) #
> *[pseudonym]*

(Informant) #

There's a lot of

(Informant) #

The FN informants commented consistently regarding the amount of extra work involved with the implementation of these standards in their workplaces. The next informant's comments regarding how adaption and implementation of these standards have been ***added*** to the FNs' workload highlight that they are primarily providing care to patients and any other work performed is in addition to their key responsibility, whereas in other healthcare systems there are extra people employed to perform this work. This is another demonstration of work intensification for FNs.

Yeah … we are unique …

. (Informant) #

The regulator's auditing of the aeromedical organisation's compliance with the 10 standards has also begun. Passing the audit = compliance. However, aeromedicine is different from all other areas of healthcare. The basics of patient care always remain the same but there are a number of significant differences between ground and air based work, including the environment and lack of easily available resources.

We're now

(Informant) #

We have to be ready
(Informant) #

At the moment we're

(Informant) #

Flight Nurses work under multiple levels of auditing and processes that ensure compliance with the myriad of standards, regulations and clinical governance expectations from within and outside the organisation. Auditing is a direct result of the implementation and demonstration of the power of the ruling state apparatus organising and directing FNs' work. As discussed earlier in this chapter, the regulatory agency/authority can speak very softly if

they wield a “big stick” (Ayres & Braithwaite 1992).

Informants made comments along the spectrum of auditing, with Informant 34 speaking of her concerns regarding auditing by the NMBA:

I think it will

(Informant) #

Organisational auditing is undertaken to ensure FNs comply with the organisation’s policy and procedure at a local level. This demonstrates a further form of powerful ruling by the organisation and represents very close scrutiny of FNs’ work. Standards are audited against and FNs’ work is checked daily. Flight Nurses’ work cannot be checked or viewed by a fellow FN as it is being performed, therefore flight records and other documentation are checked to ensure policy and procedure are complied with, and standards maintained. Informants’ comments about auditing at the organisational level, examining FNs’ work through their documentation, echoes the legal adage of “not written, not done”:

I’m responsible

(Informant) #

At night …
(Informant) #

We do documentation

(Informant) #

The other thing we do is

(Informant) #

Interestingly, audits are also conducted on the equipment, FNs’ occupational health and safety performance, and FNs’ stock checking performance.

All our records are

(Informant) #

They [the organisation] also

(Informant) #

The aim of this exemplar regarding regulation is to demonstrate how the ruling apparatus is applied externally , from a distance, to FNs and Flight Nursing, and are translated by texts through a number of various regulatory agencies/authorities and other distant organisations to the resident area of aeromedical service provision. On the next page, I present the situational plot of the social relations for increased regulation of FNs' work (Figure 7-1).

7.5.2 Flight Nurses and key performance indicators

Key performance indicators (KPIs) are identified for FNs and their work as part of the service level agreements and other contractual arrangements aeromedical organisations have with their funders. These KPIs have been formulated and usually benchmarked against other organisations, thus allowing for the measurement and comparison of certain performance criteria. They are linked with the quality and risk management frameworks developed at the highest level externallyand are mandated to be implemented at the resident level. Implementation of these frameworks and achievement of accreditation are tightly linked to the organisation's government funding. Thus, KPIs have been developed as a powerful ruling apparatus and FNs must work within these to ensure continued funding of the organisation. Flight Nurses must complete the associated paperwork that tracks and links with the KPIs. This presents yet another incidence of work intensification and regulation, as it involves yet another area of work to be completed:

We do have key performance indicators

(Informant) #

It is interesting how the application of external expectations at the resident level affects FNs' work. Paying special attention to these KPIs has nothing to do with care of the patient, which is what the FNs are essentially employed to do. Another informant commented on how the change in business practices and the way the organisation is funded directly impact on FNs' occupational health and safety, and upon patient care, for example broken air-conditioning in the aircraft.

We've got

(Informant) #

At times, the temperatures in the back of the aircraft reach 60 degrees Celsius and above

when the aircraft is sitting on the tarmac with the doors closed. Safety comes first, and all passengers and crew must be loaded and strapped in before the pilot starts the engines.

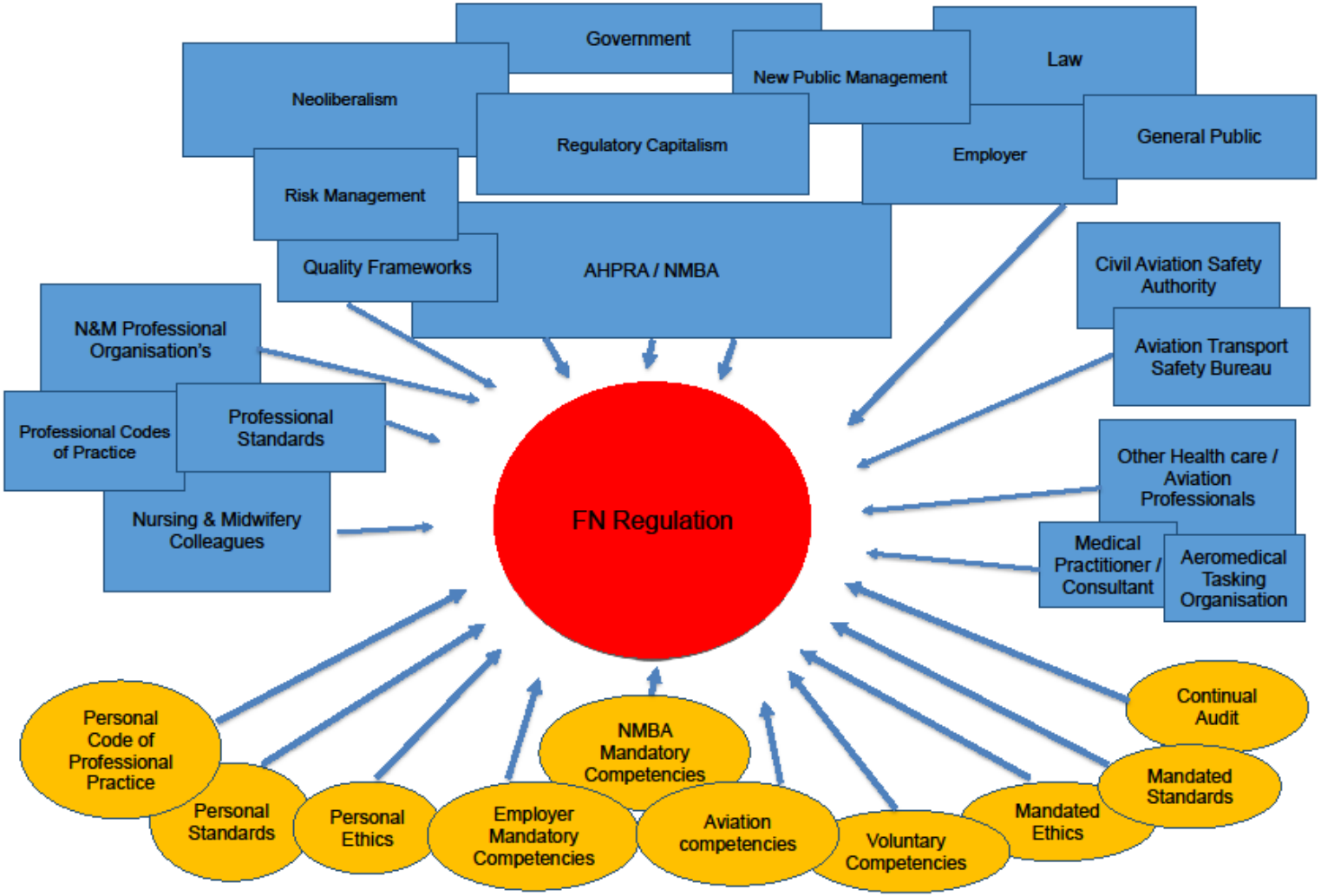

Figure 7-1 Situational plot of Social Relations of Flight Nurses' Work Regulation

Usually, When the

rapidly. #

At times, staff do not appear to know the rationale behind the KPIs, even though completing them requires added work and they are unsure of the flow on effects for themselves and the organisation.

I think they're just

(Informant) #

The documents required to trace the rationale for KPIs were not available to me because they are commercial in confidence. Thus, all I can report is the fact that they exist and that some FN informants said more than others about them. According to the few informants who were aware the organisation had KPIs to meet, these powerful KPIs appear to be linked to efficiencies regarding various departure times and times on the ground while working with a patient.

[We-FN] have to

(Informant) #

We have to

(Informant) #

Well mine

(Informant) #

7.6 Summary

In this chapter, I have demonstrated the ruling state apparatus at work over a number of levels and the multiplicity and complexity of those levels, including the key debate regarding

the regulation of nursing by the NMBA (as the independent regulatory agency/authority representing government) through to the regulation of FNs' work at numerous levels by professional organisations, the aeromedical organisations and their colleagues.

Flight Nurses are under pressure from all these groups to change their work practices to ensure they meet the myriad of regulatory requirements, clinical governance and organisational requirements, and more senior colleagues' expectations of their work from within the organisation and the profession. I have demonstrated the ruling apparatus of regulation applied to FNs' work in the situational plot of social relations of FNs' work regulation in Figure 7-1. The example of the application of the ruling apparatus (section 7.5) that I explored in depth is but one of many actual implementations of the ruling apparatus controlling the work of the health professions and in particular the work of FNs.

Governance and regulation have a powerful invading presence throughout all levels of society and societal relations. Regulatory capitalism appears to have taken over as the major societal driver and has strengthened the neoliberalist ideological approach by increasing the regulatory control of health professionals' work, and, as applied to this thesis, FNs' work.

A number of independent regulatory agencies/authorities have been commissioned in Australia in the last 20 years. The Australian Commission on Safety and Quality in Healthcare (ACSQH) is one of the most powerful of these agencies/authorities. Organisations are compelled to implement the ACSQH dictates. Thus, implementation of the *National Safety and Quality Health Service (NSQHS) Standards* (2011a), a key driver in securing government funding, is a necessity, particularly when organisations depend upon the government for a large amount of their funding. The other side of this argument revolves around public expectation. The public expects to see the organisation achieving NSQHS accreditation; they see an organisation's reputation for providing excellence in safe healthcare as linked to this accreditation.

In the next chapter, I discuss in greater depth the implications that have arisen from discovering and exploring the answers to the research questions posed for this study, and how gender and class issues impact upon FNs' work.

Chapter 8 Discussion

8.1 Introduction

I commence this chapter with a critical analysis of the previous seven chapters, throughout which I have argued that underlying the issues of Flight Nurses' (FNs) invisibility, work intensification and work regulation are the covert topics of gender and class, power and control. Lamentably, we still live in a society based on patriarchy, which remains in force in numerous areas (Allen 2017, Aranda 2015, Wade 2016, Witz 1992). Moreover, the socialisation of men and women into defined gender roles continues. Women continue to carry the weight of domestic duties, child and elder care, and part time work (Wade 2016). Remarkably, domestic and caring work remains invisible and unpaid, so is not counted towards any measure of work (Allen 2017, Aranda 2015, Chen & Binfield 2017, DeVault 1991, Wade 2016). In addressing the dual working role of women as workers in the labour market and in the domestic arena I have drawn on the work of Barbara Pocock to illustrate the way the discourse differs from the reality. Working hours take no account of women's domestic responsibility unless the woman worker goes part time- as most FNs do (Pocock 2005).

I highlight the important points from each chapter and continue with the thesis narrative; that of gender, class, power and control. Flight Nurses are subject to the control of their labour by both resident (organisational) and external (government) forces, as revealed during my critical qualitative inquiry (CQI) analysis. Work intensification and increasingly tight regulation by both these powerful forces have occurred due to the impact of political ideologies and economic change in Australia. These issues directly affect FNs and Flight Nursing work.

Following the critical analysis of chapters, I discuss a number of emerging issues that are highlighted by the results – work life balance, fatigue management policies, remuneration, educational and other entitlements, workplace insurance and mandatory competencies – which are of key importance to FNs' work. These issues were initially revealed by analysis of informants' data, then revealed further by a number of the key textual documents I examined during the second level of CQI analysis. Scrutiny of these emerging issues is important because they provide additional support and validation to the results in chapters 6 and 7.

8.2 Critical Analysis of Chapters

Chapter 2 serves a dual purpose. In exploring the historical background of FNs' work through the literature, I identified the dearth of peer reviewed literature debating this work

and its impact on patient care. Of particular note throughout the literature review (both historic and contemporary) is the fact that globally, women have pioneered and championed Flight Nursing and air ambulance work. This literature review also enabled me to establish the thesis narrative of class and gender, power and control. While the origins of Flight Nursing were in war, the Australian context of this nursing specialisation arose in response to the difficulties of providing medical care to people living in remote Australia (Bilton 1961, Page 1977, Rudolph 2002). While there is little written evidence in the literature regarding the importance of Flight Nursing, historical papers document visual images of nurses providing care, along with lists of nursing duties cited in organisational meeting minutes (Bolton 1961, Page 1977). Nineteenth century society's patriarchal stance, political and legal climate, and staunchly enforced class values ensured that nurses (women, secondary to men) remained invisible, subordinate and dominated. Florence Nightingale improved the image of nursing and made it respectable, but did little to help women's cause with her ideology and actions. She brought about the ideal of the "Nightingale nurse" as one belonging to a distinctly feminine discipline, whereby the young women involved were of "good character" and were "good women" (Gooden 2001, Jordan 1999). These nurses were also required to unquestioningly obey authoritarian instructions from medical practitioners, hospital administrators and those above them within their own hierarchy, and to utilise a systematic approach towards strict hygiene and order (Gooden 2001, Jordan 1999). In the 1890s, the "nurse" question identified as the "woman" question, with both tightly intertwined (Johnstone 1994). This thinking appears to remain today in contemporary Australia, with class and gender remaining tightly intertwined with nurses' work and their image (Nelson & Gordon 2006. Women's work is invisible, therefore nursing is invisible because it is deemed women's work, ensuring that Flight Nursing remains invisible (DeVault 1991, 2014, Dracup & Bryan-Brown 1998, Kalisch & Kalisch 1982, 1985, Kreitzer 2005).

Flight Nurses hold the key to Australian aeromedicine's international reputation for excellence in patient care (Barclay 1998 a,b, Newlands 2003) because they care for patients alone in the back of the aircraft 85-94% of the time (Anderson 1998, Barclay 1998 a,b, Brideson et al 2012, Jarvis 1995, Pugh 2000). While the number of papers regarding aeromedicine has steadily increased across the decades, the number of quality research studies of international FNs' work is small (12 studies), with studies of Australian FNs' work less again (2 studies) (Brewer & Ryan Wenger 2009, Gunnarsson & Stromberg 2008, Gustafsson Wennerholm & Fridlund 2010, Holmberg & Fagerberg 2010, Keifer Schwartz & Jacobs 1993, Larsson & Engstrom 2013, Ravella 1995, Reimer Clochesy & Moore 2013, Seften & Engstrom 2015, Stohler 1998, Topley et al 2003, Wihlborg et al 2013), (Brideson et al 2012, Pugh 2002). These studies of FNs' work are mainly qualitative, so their evidence

cannot be generalized. Much of the knowledge of FNs' work has come from evidence located within popular culture, such as stories, newspaper commentary or opinion pieces. While such publications are considered the lowest level of evidence in the research chain (JBI 2014 a,b), I argue that these sources of evidence of FNs' work have credibility (JBI 2014 a,b). The dearth of "quality" evidence affirms the position of Flight Nursing work as invisible and gendered.

In Chapter 3, I outlined the methodological and theoretical approach of critical qualitative inquiry (CQI) used for the study. Critical qualitative inquiry (CQI) is a title given to a group of eclectic methodologies that recognise power and that seek to analyse how unjust, oppressive social conditions and taken for granted perspectives, have become historical givens in our everyday world (Pasque & Perez 2015). Denzin & Lincoln (2005) posit that CQI is about critical topics and methodologies, rather than just one or the other. Complexities of the past as well as current contemporary issues are researched together to investigate the ways organisations exercise power and control, via texts and language, to coordinate and regulate people's lives (Adams Carryer & Wilkinson 2015, Bailey & Fonow 2015, Bartlett 1991, Cannella 2015, Denzin 2015, 2017, Denzin & Lincoln 2005, Grbich 1999, Holstein & Gubrium 2015, Kincheloe & McLaren 2005, Orlikowski & Baroudi 1991, Pasque & Perez 2015, , Smith 1987, 1990, 1990b, 1992). It allows the researcher to investigate what study informants want explored, plotted and illuminated from their own standpoint (Adams Carryer & Wilkinson 2015, Bailey & Fonow 2015, Bartlett 1991, Cannella 2015, Denzin 2015, 2017, Denzin & Lincoln 2005, Grbich 1999, Holstein & Gubrium 2015, Kincheloe & McLaren 2005, Orlikowski & Baroudi 1991, Pasque & Perez 2015). I have argued that CQI is particularly relevant to this study because of its ability to expose both the state and its ruling apparatus that control FNs'work by institutional processes of power. My use of CQI has illuminated the social construction of FNs' work; it allowed me to plot the social relations, demonstrating the way FNs' everyday work is controlled and coordinated textually and discursively by the ruling apparatus, and the application of the ruling apparatus using the coordinating function of language through institutional texts. Situational plots of the social relations have been formulated for the research questions of work intensification (in Chapter 6) and regulation (in Chapter 7).

Using CQI research methods in Chapter 4, I dispelled the myths (glamour, romance, excitement and heroism) that popular media reinforces and highlighted the invisibility that surround FNs and their work. I strengthened the findings from Chapter 2 that explored the absence of public knowledge of FNs, and the way stereotypical images of nursing and midwifery impact upon FNs' work. These images are of an ideal nurse, far from the actuality

of the experience. They contain hidden patriarchal, gendered values that strengthen stereotypical societal views of both women and nursing. I argue that due to the continual, unchallenged presence of these images, FNs suffer inequality within their work because FNs' work is hidden, and remains invisible, within aviation healthcare provision.

In Chapter 5, I investigated the work of the contemporary, professional FN in Australia today, replacing the myths with visible facts regarding the FNs' real work. As opposed to other countries with aeromedical healthcare services, in Australia FNs are highly autonomous and work as the sole healthcare provider in the aircraft 85-94% of the time (Anderson 1998, Barclay 1998 a,b, Brideson et al 2012, Jarvis 1995, Pugh 2000, 2002). Data provided by FN informants reveals the span and impact of their work, and their real work environment. Using this data, I have established that FNs' scope of practice is extensive and variable, providing care to all age groups across the population and multiple specialties, encompassing pre-hospital, trauma, emergency and intensive care; mental health; neonatal and paediatric care; midwifery; and primary healthcare. I argue that FNs are specialist generalists due to the vast array of skills they hold and maintain across all nursing specialities; they are not the invisible, stereotypical nurse midwife that media images and a dearth of public knowledge purvey. I have used Chapter 5 to provide evidence of the breadth and depth of FNs' skill base, strengthening the importance of FNs' work, dispelling the issue of invisibility and negating societal stereotypical images.

Chapters 6 and 7 reveal two other major impacts upon FNs' work; work intensification and increasing regulation and the role of the state apparatus. While highlighting that these impacts are closely intertwined, I demonstrate that the issues of class and gender remain concealed major influences over FNs' work today. Using CQI enabled me to identify these powerfilled influences during the investigation, analysis and plotting process.

In Chapter 6, I focussed on the intensive and extensive work intensification that affects FNs as a by-product of Australian political parties' relentless pursuit of neoliberal ideology and the use of new practice management (NPM) strategies (Green 2002, Selberg 2013, Stanton, Willis & Young 2005, Willis 2002, Willis & King 2011, White & Bray 2003). As demonstrated in the data, 70% of FNs in Australia are women, with 30% male. This figure represents a larger number of males within Flight Nursing than the nursing/midwifery workforce across Australia, where males represent only 9% (NMBA 2016d). Interestingly, this number of men does not appear to test either class or gender distinctions for FNs. Men who choose nursing and midwifery as their profession stereotypically have their masculinity challenged by society (Dahle 2005), thus not changing the gender balance per se. While intensification of FNs' work does not specifically highlight gender differences, it does signal strong class

differences. Flight Nurses represent one level of the proletariat, with the organisation, representing the managers responsible to the ruling class, holding overall power and control. As part of the proletariat, FNs sell their labour to the organisation but have no control over the way it is divided and used (Marx 1872/1968). The division of labour into smaller tasks or areas of work can increase the overall speed and efficiency of business operations, as per the theorists/economists Adam Smith and Charles Babbage (Fox 1991). Organisational efforts to increase the pace and length of work, made possible by current industrial relations policies and Enterprise Bargaining Agreements (EBAs), has seen FNs' work increasingly divided and intensified, with as many tasks as possible split into smaller work units.

I have demonstrated the close link between work intensification and increasing regulation with the revelation in Chapter 7 of the global rise of regulation and growth of regulatory capitalism as a consequence of the government-led NPM strategy of privatisation (Braithwaite 2005, 2008, Gilardi 2005, Levi-Faur 2005, 2006, Levi-Faur & Jordana 2005). This privatisation has resulted in the unrelenting pursuit of increased regulation across Australia as the preferred mode of governance for healthcare service provision, given many core services are outsourced or privatised but most continue to be monitored by government (ACSQHC 2011a, Australian Government 2016b, AIHW 2009, 2016 a,b, Braithwaite Healy & Dwan 2005, QLD Health 2016).

All nurses and midwives in Australia are regulated but the evidence demonstrates that FNs are the most regulated, with severe consequences for non-compliance. Again, gender is not highlighted as an issue but class is, and on multiple levels. Using CQI to plot the regulatory forces, I have revealed a complex web of overlapping, independent regulatory agencies/authorities with overarching managerial power and control (bourgeoisie), which impact FNs' (proletariat) work from a distance. Combined with this, the current managerialism ideology adopted by the aeromedical organisations as mainly government funded, quasi-private organisations (second level bourgeois; further power and control) has meant a high level of organisational surveillance of FNs' work to the point of daily auditing. Thus, the impact of increased regulation is present through all levels of the organisation (resident) and above (external). Flight Nurses, as part of the proletariat, have no control over their labour once it is sold to the organisation, yet they are expected to supply labour of sufficient quality to meet all imposed and other regulations. Flight Nurses have had their labour dismissed – they have lost their job (local consequences) and come under further regulatory scrutiny (external consequences) – as part of the threat of not meeting quality control regulations.

My use of CQI to explicate and plot the ruling apparatus demonstrates to FNs how

institutional power shapes their world. This knowledge provides an opportunity for FNs to interact and engage differently with the institutional processes (Denzin 2015, 2017 Smith 2005). I now further discuss what the CQI analysis results have plotted and illuminated about FNs' work, and demonstrated to be emerging issues.

8.3 Discussion

What has the analysis of FN informants' data revealed and what does it mean for FNs' work? New public management strategies, have led to the devolvement of aeromedical organisations from government to quasi-independent business units. This means that Australian aeromedical organisations and health business units are run under the auspices of a private business as "not-for-profit" charities, in direct competition with each other for the provision of services. Although government mainly funds them, fund raising is required to cover a certain percentage of the business costs.

One of the strategies of NPM (which I have discussed previously) works to change the way employees think about their workplace, encouraging them to take an active part in improving the organisation's profitability, or, in the case of quasi-government instrumentalities, to reduce budgets (Cairney 2002, Hood 1995, Martinussen & Magnussen 2011, Minogue Polidano & Hulme 2000). Aeromedical organisations directly implement this strategy through EBAs agreed with FNs and other staff. Contained within EBAs is the understanding that workers are expected to increase productivity and cut costs as outcomes linked to their agreement. These outcomes directly link with making the organisation more cost effective. Thus, FNs are expected to assist in making the organisation for which they work cost effective and to assist in keeping costs down. They are expected to meet the key performance indicators (KPIs) outlined in service level agreements, linked to funding, to help keep the contracts the organisations have secured from the government (NSW Health 2015a, SA Health 2015, WA Health 2007, 2015).

Indirectly, FNs are in competition with each other through their employing organisations. As each aeromedical organisation seeks to increase its market share and expand its business in the quasi-market, they compete directly with other organisations to fulfil the available contracts. Competition increases as one organisation increases its market share over the others. According to the normal principles of competitive tendering, organisations providing the required service must meet the contract conditions at a lower cost than all other organisations. Economically, the government aims to provide a service to the community at the lowest cost to itself, and this flows to the contract requirements. This competition between organisations affects FNs due to the work intensification that necessarily occurs (as

demonstrated in Chapter 6) to meet contractual requirements in the most cost efficient manner. Moreover, the organisation uses EBAs to access greater productivity from the workers to ensure operating costs are contained (including staff [FN] costs) (Fair Work Commission Australia 2014a, Fair Work Australia Ombudsman 2015 a,b, 2016 a,b).

Organisations' use of NPM strategies and the impact of quasi-market conditions upon aeromedical organisations also mean changes to industrial relations and FNs' working conditions (Fair Work Commission Australia 2014b). Some organisations have kept their FNs working under the public health nursing and midwifery awards, while others have made use of EBAs designed to make the organisation more profitable, and which endeavour to increase workers' flexibility while at work, with inducements such as more flexible hours and greater base payment for work. Those working under awards have much more strictly structured conditions and hours of work but achieve much lower levels of payment for the same type of work. This makes for a thought-provoking mix of remuneration levels and working conditions for FNs, with very little standardisation across the aeromedical sector in Australia for similar work, qualifications and outcomes.

As part of the Fair Work Australia (FWA) 2015a rules around the formation and use of EBAs, "pattern bargaining" is not allowed (Fair Work Commission Australia 2014a, Fair Work Australia Ombudsman 2016b). This ruling prevents FNs from standardising their awards and agreements. In undertaking this study, I examined and compared FNs' working conditions and remuneration across Australia under both EBAs and awards. I examined four areas in particular: FNs' hours of work; fatigue management policies; salary; and overtime payments (see appendices 8 and 9). I also noted FN numbers where available. While FNs and the unions cannot comment regarding these points, there are vast, conspicuous differences between aeromedical organisations, remembering that the Royal Flying Doctor Service (RFDS) is a federated company with individual operating sections coming together under a national umbrella (RFDS 2016). Thus, each operating section has its own individual chief executive officer, nursing director, medical director and so forth. Interestingly, all the latest EBAs registered with FWA for FNs contain a set basis of very similar items (complying with national employment standards and leave entitlements), but then have a number of different foci, for example work life balance, fatigue management policies, remuneration, educational and other entitlements, workplace insurance and mandatory competencies. I now discuss these areas in greater depth.

8.3.1 Flight Nurses' work intensification

Research shows that NPM has had a stronger impact on women than men (Burchell &Fagan 2004, Cope & Hendricks 2015, Sommerlad 2016, Thornton 2016). Seventy percent of

Australia's FNs are women, therefore it could be stated that NPM has had a strong impact upon their work. By virtue of the fact that men in nursing are viewed as demasculinised (Dahle 2005), the other 30% of Australia's FNs are equally impacted. Work intensification is an outcome of changes to industrial relations in Australia, arising from the implementation of NPM strategies. Evidence that FNs' work intensification is both extensive and intensive (Green 2002) has come from FN informants' data and aeromedical organisations' annual reports. The work intensification experienced by FNs is not new – it commenced with the introduction of EBAs back in 1994 – but has reached the point of non-sustainability. Selberg (2013) and Rasmussen (2004) both note that within a caring profession, work intensification takes on a double burden. The professional /nurse is more compelled to complete the work in full, because it is directed towards the care of another human. As Selberg and Rasmussan argue, organisations capitalise on women's caring socialisation making it difficult for the nurse to resist intensive and extensive working hours. Selberg (2013) refers to this as gendered work identity.

8.3.1.1 Work life balance

Flight Nurses are looking to adapt their working lives to manage work intensification, and to achieve some type of "work life balance"; an often repeated term today. Work life balance refers to the hard won 1850s' union campaign for an eight hourworking day, whereby the 24 hourday was divided into three segments; eight hours' work, eight hours' leisure and eight hours' sleep (Fox 1991, Thornton 2016). However, since the rise of NPM, this has become an intangible ideal that is missing from the lives of many workers, particularly women (Burchell &Fagan 2004, Sommerlad 2016, Thornton 2016). In order for women to compete in the male workplace, they must ignore (or pay someone else for) their caring responsibilities to the family; ditto with domestic duties and other areas of life that society deems to be the realm of women alone (DeVault 1991, 2014, Thornton 1984, 2016). Remarkably, today, this work (caring and domestic) remains invisible and unpaid, so is not counted towards any measure of work (Aranda 2015, Australian Government WGEA 2016, Bowden 2016, Chamberlain 2015, Chen & Binfield 2017, Conifer 2016, McMahon 2016, Sedghi & Ong 2016, Wade 2016, World Economic Forum 2016).

The data I collected from FNs in this study provides further evidence that full time hours and work life balance no longer fit together. Flight Nurses stated that when they are rostered for work, they do not organise social engagements because they never know if they will be able to keep the commitment (Informants 23, 43 and 45). The time of expected shift completion is not written on many FN rosters because FNs work until they no longer have a pilot available or another FN who can take over the work (informants 8, 9, 45). Interestingly, yet another FN

said that she did not consider that children and Flight Nursing mixed well, so she chose not to have children (Informant 29). The issue of work life balance is so important to one aeromedical organisation's FNs that they have it listed as an item in their EBA (Fair Work Commission Australia 2015b). Charlesworth (2012) and Kaine (2015) both provided an overview of women's issues for the *Australian Journal of Industrial Relations* Annual Review for 2011 and 2014. The issues contained within these papers most relevant to flight nurses are the gender pay gap and paid parental leave. However, they also discuss developments within various awards and EB agreements around sexual harassment and domestic violence leave. I have not addressed these as they did not arise in the informant interviews.

It appears that in the aeromedical industry, the only way for FNs to have some control over the amount of hours worked in a week is to work less than full time hours. This means that the days at work are limited, and only the days at work on the roster can build up to the many, many hours usually covered. Evidence of this point appeared when one FN stated they were the "only full time" FN on the roster at this particular location:

> *I'm the only*
> (Informant) #

The gender issue of work life balance again becomes obvious at this point; this particular FN is male, whereas all the others on the roster are female. Williams (2000), cited in Thornton (2016), states:

> The ideal worker is constructed in the image of the unencumbered monad of liberalism who is able to pursue an unbroken career path and work excessively long hours. ...
>
> This is still assumed to be a man with an "economically inactive wife" who will take responsibility for running the household, and caring for children and those unable to care for themselves. (Thornton 2016, p.15)

In the main, men are partnered and have a "woman" at home to fulfil the domestic role and responsibilities. In Australia in 2014/15, participation in the workforce for women aged 20–74 years was 65.1% as opposed to 78.3% for men. This equates to 34.9% of women in the 20–74 age range not present in the wage-earning workforce (Australian Bureau of Statistics [ABS] 2016). This means that while extra hours at work impact on their lives, realistically many men do not need to worry about completing domestic tasks once they leave work and arrive home. However, despite his fulltime status compared with the women on his roster, Informant 19 commented upon the lost family time accrued from working full time hours, demonstrating that work life balance is actually also an issue for male FNs. Remarkably, in Australia in 2014/15, one in 10 men with a dependent child did not have access to any paid leave entitlements (ABS 2016).

This discussion is extended by reference to the work of Todd and Binns (2013) who argue that the industrial literature has shifted the discussion to work/life balance away from family friendly policy- thus making it gender neutral. Importantly, they note, caring for a family is radically different from wanting a work/life balance in order to play sport.

8.3.1.2 Rostering practices

Three of the EBAs examined in this thesis have clauses that list hours of work and the roster. The rostered hours favour the organisation. In one organisation's EBA, FNs, including the senior FN, are rostered on a 7-day rotating roster, including night shift. In this same EBA is the following statement:

> While it is acknowledged by all parties that actual working hours will vary depending upon the operational needs of the RFDS, it is anticipated that a Flight Nurse's actual working hours will not exceed an average of 38 hours per week over a 52-week cycle.
>
> Fair Work Commission Australia 2015c

This is an interesting clause in that the actual hours at work of these FNs could, in all probability, be much longer than just the average 38 hourweek over the 52-week cycle. There is the possibility that a particular FN may attract a higher percentage of complex and difficult cases while on duty, which would mean their hours would be much longer than what has been stated. Allocated leave hours are included in this calculation, which would reduce the average weekly amount of hours worked across the other 46 weeks of the year, making it **appear** more even. Overtime payments are made if the FN has agreed to work additional shifts to cover the roster, but **not** if the hours that they are normally rostered to work extend past the supposed completion time of that shift (Fair Work Commission Australia 2015c). Flight Nurses from this particular organisation can also be rostered to work from another base if the organisation requires it. However, there is no mention of changes (either increase or decrease) to the rate of remuneration, even though this differs among the three bases (Fair Work Commission Australia 2015c).

The next relevant finding relates to a number of clauses in the RFDS QLD EBA (Fair Work Commission Australia 2015b), such as the following:

> In Aeromedical and PHC [primary health care] Clinic environments, it is agreed a 12 hour duty shift is equivalent to an average of 9.5 hours worked. An Employee may be contacted for duty up to one (1) hour before the nominated start time for priority one (critical/immediate patients) as identified in the relevant Aeromedical Services Manual.
>
> Fair Work Commission Australia 2015b.

This is a very curious clause. How does a rostered duty period, where you are available for work the entire 12 hours, usually at the workplace, reduce to only 9.5 hours – 2.5 hours less for every shift worked? These FNs are providing 2.5 hours of unpaid work time per shift. This is added to the fact that when a FN works past 12 hours, they are repaid as time off in lieu (TOIL) and not by monetary remuneration. Along with not having 2.5 hours of duty time per shift recognised as work time, the next clause, whereby FNs can be contacted for duty up to one hour prior to their nominated rostered shift commencement time for critically unwell patients is also remarkable. The organisation has managed to save money by introducing these clauses; clear validation of NPM strategies at work. The fact that this agreement has been negotiated with these terms demonstrates the employees (FNs) are ensuring the organisation meets its KPIs at their expense.

The next thought-provoking clauses come from the RFDS WO EBA (Fair Work Commission Australia 2015a). Here, FNs have negotiated an EBA that could result in one or two FNs working with all the very complex and time consuming cases while others do not. All FNs are paid the same annualised salary, however, the EBA contains no stated hours of work, which could result in a high number of hours at work and very little off-duty time. Two other clauses have been added to the EBA to try to abate this eventuality, as follows:

> A FN will have the right to refuse unreasonable additional hours as per the Fair Work Act.
>
> Rosters shall display rostered duty periods of eight (8), ten (10) or twelve (12) hours duration.
>
> A FN shall be rostered for no more than seven (7) consecutive rostered duty periods, except agreed to by both the FN and RFDSWO.
>
> A FN shall be rostered for a maximum of four (4) consecutive rostered night duty periods of twelve (12) hours duration, except where agreed to by both the FN and RFDSWO.
>
> Fair Work Commission Australia 2015a.

The hours at work underlie a major issue that accompanies FNs' work intensification; that of fatigue.

8.3.1.3 Fatigue management

When at work in the air at altitude, FNs typically register saturated oxygen levels between 92–94%. When at work at ground level, with no altitude effects, FNs typically have saturated oxygen levels of 97–98% (the normal range for the population) (Porth 2013). The decreased amount of oxygen available to the tissues on a regular basis compounds the level of fatigue suffered by FNs during the normal work required during the day. This fatigue affects FNs' work life balance at the same time as work intensification. The following comment from an

informant provides further evidence that FNs are working part time to manage both fatigue and work intensification by decreasing the hours they are at work:

I work

(Informant) #

Fatigue is defined as that state, following a period of mental or bodily activity, characterised by lessened capacity for work and reduced efficiency of accomplishment…usually accompanied by a feeling of weariness, sleepiness or irritability, fatigue can be triggered by stress, medication, overwork, mental and physical illness, and disease (Farlex 2012).

Comparing the available EBAs for FNs in Australia, I found that fatigue management and the workplace policies governing it have been an issue amongst aeromedical organisations Australia wide. Fatigue management policies were evident in some of the FNs' EBAs, but not all. There was a large variation across the available EBAs, from a very strict organisation wide policy dictating the maximum number of hours to be worked in one shift through to the self-recognition of fatigue, whereby the employee notifies management when they are fatigued and require time off duty. For example, one EBA notes that when fatigue arises, which causes the FN to need time off to recover, another FN must be organised to cover either the remainder of the shift or the whole shift for the fatigued FN. This causes an issue of its own because it is usual for the organisation to have a very lean roster (not many staff available) of FNs. Typically, it falls to the senior FN to fill this shift.

As backup,

(Informant) #

In most areas of Australia and for most aeromedical organisations, "extra" FNs are in short supply. In the main, there are no casual FNs available to fill any roster gaps.

We do

(Informant) #

Pilots, and thus aeromedical organisations, must adhere strictly to the Civil Aviation Safety Authority (CASA) regulations as far as fatigue management of the pilot is concerned. A number of organisations do not team the FN with a set pilot, as I discussed in Chapter 6, therefore FNs lack the protection provided by CASA regulations for pilots against fatigue despite forming part of the aircrew in many organisations. If there is nothing stated regarding

fatigue management in the EBA, FNs are unprotected from continuing work until all the work is completed.

In comparison, FNs working under one particular public health award are protected from the problem of fatigue to a much greater extent than those who work under EBAs and fatigue management policies. For example, the *NSW Nurses and Midwives Public Health Award 2015* states very clearly that FNs will not be on duty in the air for more than 30 hours per 7-day timeframe (NSW Nurses and Midwives Public Health Award 2015). These duty hours are clearly prescribed for all parties to see and must be adhered to. The other eight hours in the working week are covered by ground based duties; checking, cleaning, restocking, on-ground patient care and transport, and administration duties.

The FNs who work under the New South Wales (NSW) award do not have the same restrictions on their life outside of work as their colleagues in other services because it is very unusual for them to work overtime (i.e. past their rostered shift of e.g. 0800-1700). However, FNs who work under other state awards appear not to be protected to the same extent. Nowhere in the other state awards was Flight Nursing noted as a different entity to acute care hospital based work, for example. The restrictions applied to acute care hospital work also apply to Flight Nursing in this instance (Fair Work Commission Australia 2002, 2010, 2015). Nowhere in the other awards was it noted that FNs should only have 30 hours of duty time in the air.

Thus, FNs who work under other state based awards (not NSW) face a potential problem. Fatigue management is not discussed and no fatigue management policies are included. Overtime is paid for increased shift lengths and an 8-10 hour break is specified for employees between shifts. But, if the person is rostered for a 7-day shift cycle and the increased shift hours happen at the beginning of that cycle, FNs will most likely be significantly fatigued by the end of the cycle.

Significant fatigue has a number of ongoing effects for patients, employees and employers before, during and after work, including tripling the risk of an employee making an error at work and struggling to stay awake, let alone alert, not only at work but also during the drive home (American Nurses Assoc 2016, Barnes & Miller 1985, Cipriano 2016, Rogers 2008, Scott et al 2006).

8.3.1.4 Remuneration

While FNs covered by awards enjoy better working conditions, they perform the same work as FNs working under EBAs but are paid significantly less. The greatest differential between

one EBA and the award system is $57,000 per year for the same work, but significantly different hours of work; 30 flying hours per week as opposed to **no** stated hours of work. This difference is despite the fact that FNs across Australia mainly perform the same types of work. There are a few variations (primary healthcare role, on-ground clinic work and immunisations, winching duties) but essentially all FNs nurse patients across the life span and cover multiple specialties. All FNs across Australia must hold a set number of skills and competencies, as deemed by the organisation. The remuneration differential appears to occur due to the differences in working conditions. Moreover, those FNs who undertake part time work due to family caring responsibilities and the need to control work intensification, receive less access to paid leave and other entitlements, while exacerbating the gender pay gap and lifetime income gap (Kaine 2015).

The best remunerated FNs in Australia are paid a set salary but have ***no*** stated hours of work (Fair Work Commission Australia 2015a). What is stated in their EBA is an understanding between the employer and employee regarding what this means (no stated hours of work), and the expectations to be met by both parties. These FNs are not paid overtime or provided with time off in lieu (TOIL).

> Where full-time employees work more than 152 hours in the 28 day roster cycle, they will be able to access the additional hours as time off in lieu.
>
> TOIL can only accumulate to a maximum of 5 days.
>
> Where a nurse requests in special circumstances to exceed the 5-day accumulation, this must be approved by the relevant Regional Manager.
>
> TOIL should only be taken in the circumstance where backfill will not be required.
>
> Accumulated TOIL can be cashed-in at any time at the request of the Employee. Cashed-in TOIL attracts superannuation, but leave does not accumulate on the payment.
>
> Fair Work Commission Australia 2015b.

All other FNs working under EBAs across Australia have set hours of work ranging from 152 hours across 28 days to an “average” 38 hourweek or 19 days in 28 (no mention of hours of work). Some FNs are paid overtime at various rates if they work over and above these hours, or are given TOIL, yet others have all their hours of work, including overtime, included in their annualised salary. However, accessing TOIL usually involves taking an entire shift and this is very roster dependant; often it is not possible. It has been agreed by the organisation in this textual example, that time off in lieu can be negotiated to be taken as overtime remuneration. However, this must be at the convenience of the organisation. The problem with TOIL comes about when the issue of work intensification is brought into the debate. There are not enough work hours available for FNs to complete all their duties, let alone take TOIL where backfill is not required. Therefore, most FNs cash in their TOIL,

which is only remunerated at their ordinary rate of pay, not as overtime hours, and attracts no leave (Fair Work Commission Australia 2015b).

8.3.1.5 Flight Nurses' educational entitlements

There are ranges of educational entitlements discussed within most of the different EBAs. In this regard, some FNs are better off than others because their employer will cover the costs of attending a number of courses (course registration, accommodation and travel costs) as well as provide paid study leave. However, such generous educational provisions are only provided to one group of FN employees; all others have much smaller provision or none at all (Fair Work Commission Australia 2015d).

8.3.2 Flight Nurses' regulation

The impact of regulatory capitalism on the economy is demonstrated by the steady increase in the number of independent regulatory agencies/authorities, along with the growth of managerialism (Lynch 2014, Rudge 2015, Traynor 1999). This increase in the number of independent regulatory agencies/authorities, along with organisations' managerialist practices, has changed organisations' governance structures, meaning FNs are affected by both resident and external textual directions (Lynch 2014, Rudge 2015, Traynor 1999). Freedom in choosing the ways FNs go about their work has disappeared. They are now subject to many powerful layers of regulation, guidelines, policy and procedure, and auditing that all extend the control of the state apparatus. Complying with clinical governance and managerial direction takes precedence over all else if one wants to remain registered and employed.

The formation of quasi-markets and the privatisation of government owned enterprises come as manifestations of neoliberalist ideology, as I have mentioned previously. Increased privatisation is accompanied by an increase in regulation (Braithwaite 2008, Levi-Faur 2009), which is part of a global economic wave termed "regulatory capitalism". Regulatory capitalism is where the state retains responsibility for the means of production, but business provides the services and technological innovations (Levi-Faur 2009). However, in reality, this means the government puts in place regulations to ensure its wishes are met. The main institutional feature of regulatory capitalism is the formation of independent regulatory agencies/authorities (Braithwaite 2005, Gilardi 2005, Levi-Faur 2005, 2009, Levi-Faur & Jordana 2005, Post 2005), which are autonomous in their regulatory functions and looked upon as the "appropriate" model of governance in capitalist economies (Jordana & Levi-Faur 2005). Self-regulation of the professions is viewed as no longer relevant (Lynch 2014, Rudge 2015, Traynor 1999). Thus, the independent regulatory agencies/authorities have taken over

the professions' regulatory functions.

In the case of nursing and midwifery, the NMBA performs these functions, while within the aviation industry, the CASA is the independent regulatory agency/authority. Australian law has changed to accommodate these independent regulatory agencies/authorities. Interestingly, this change of law is viewed as posing serious challenges to the nursing profession's mandate of advocacy for social justice – public empowerment and participation in decisions about their own health and the social determinants of health (Bryant 2001, 2004, Duncan et al 2015). Governments are making use of individual cases of nurse incompetence as the impetus for increasing regulation of the profession rather than focussing upon the system level changes that are more than likely the cause of the compliance problems (Bryant 2001, 2004, Duncan et al 2015). In the meantime, safety and quality of care are being eroded for a multitude of reasons, the social determinants of health are being ignored and nursing leadership is struggling to influence managerialised structures (Duncan et al 2015, Lynch 2014, Rudge 2015, Traynor 1999).

The increase in managerialism has led to an increase in power of the managerial class, consisting of nurses, other health professions and non-nurse business administrators (Rudge 2015, Traynor 1999) whose primary goals are efficiency and productivity rather than accountability and responsibility (Andersson & Liff 2012). There is widespread failure by those currently in senior nursing leadership positions (e.g. Directors of Nursing) to take account of the system wide failures of staffing levels and the complexity, scope of practice, skill mix and staffing decisions that impact upon nurses' safe work practices. Managerial efficiency overrides safety and quality concerns (Duncan et al 2015, Rudge 2015, Traynor 1999). This is also occurring within Flight Nursing as many nurses in senior positions experience serious tension between government and organisational dictates, and their nursing standards and ethics (Duncan, Thorne & Rodney 2015, Rudge 2015, Traynor 1999).

Rather than a joint role of regulating the profession and advancing it, the current government policy direction is one of devolution to the sole function of regulation. As I discussed in Chapter 7, lobbying for nurse regulation/registration began from the early 1900s and performs a number of functions, including: fostering development of the profession; conferring accountability, identity and status; and promoting the socioeconomic welfare of professional nurses (Affara & Styles 1992, Bryant 2001, Godden 2001, Johnstone 1994, Stanton & Whyburn 1997). The devolution of the NMBA functions to regulation alone, rather than including the nursing profession's development, is problematic. The power and resources associated with a unified body of professional nurses is necessary for the promotion and growth of the profession, *and* for protection of the public (Affara & Styles

1992). Therefore, NPM strategies and regulatory capitalism challenge the nursing profession and nurses' voices in many areas, but most importantly in the equity of health for all and the safety and quality of healthcare (Duncan et al 2015, Rudge 2015, Traynor 1999).

8.3.2.1 Mandatory competencies

Employment as a FN involves a high degree of responsibility and accountability, as I have discussed previously. This is an expectation of the patient, the employer, the profession, the NMBA and the FNs themselves. Given FNs work across a diverse environment, they have a high degree of autonomy. Therefore, they must hold and maintain a high level, diverse skill base (Bader et al 1995, Brewer & Ryan-Wenger 2009, Brideson et al 2012, Flight Nurses Australia 2009, Topley et al 2003, Wisborg & Bjerkan 2014). Maintenance of this skill base requires time, planning, energy and effort on the part of the FN (Brideson et al 2012, Pearson et al 2002). In a number of cases, the organisation assists the FN to keep track of their mandatory competencies, ensuring they are up-to-date. This is also important for the organisation because they need to meet accreditation and insurance requirements relating to the level of education (and competence) of their staff (Australian Commission on Safety and Quality in Healthcare 2011). The public's expectations of the level of service they will receive is also of great importance as aeromedical organisations strive to maintain their reputation of excellence. Therefore, it is vital to all that FNs meet mandatory and other competencies.

Again, as previously stated, the work intensification that FNs currently experience does not allow individuals to easily update or meet these competencies. Given these competencies are mandatory, it is not unusual for the employer to provide rostered duty time for staff to meet them. However, with work intensification, the rostered time is often subsumed by other duties that must be performed to keep the organisation functioning. While the organisations acknowledge the importance of meeting the mandatory and other competencies, provision of the required time for staff to meet them presents difficulties. Flight Nurses must be proactive in managing their competencies, but, as with any other obligation, some are more proactive than others. This has led to some staff completing competencies during their own (leisure) time. Again, this causes a problem with work life balance. Essentially, it is another instance of work intensification. Again, goodwill becomes a feature as FNs maintain their competencies during planned leisure time.

> *I've chosen*
>
> (Informant) #

There are harsh consequences if the FN does not meet their competency requirements. In other areas of nursing and midwifery, if your work is demonstrated as lacking one of the

mandatory requirements, some form of remedial action is usually taken and you are given a chance to improve your standard, as per the Fair Work Australia Ombudsman (2016a). However,

work. #

It's a

(Informant) #

8.3.2.2 Recruitment and retention

Recruitment to aeromedical organisations in order to work as a FN has been an ongoing issue since the 1940s when Flight Nursing commenced (England 1986, Frederick & Burney 1991, NSW Health Ambulance Service of NSW n.d.). Many people apply but they do not necessarily hold the high level of qualifications required (ENA 1987, Flight Nurses Australia 2017, Pugh 2002, Topley et al 2003). In Australia, this also includes a qualification in midwifery, thus the available pool of staff from which to recruit is small. The change to recognition of midwifery as a separate degree completed at university with unpaid placements, rather than as paid student work, has increased the difficulty level and made the recruitment pool even smaller. Staff retention and turnover issues occur due to the current problem of work intensification (Whitley et al 1990), which further increases this problem for those left on the roster who need to cover the vacant shifts.

8.3.2.3 Crew composition/inter-professional rivalry

The discussion regarding the composition of the aeromedical crew on the aircraft has been the subject of much debate and research over many years, and continues to be topical (Ahl et al 2005, Baxt & Moody 1987, Belway et al 2006, Beninati et al 2008, Bjoernsen 2009, Burney et al 1992, 1995, Cook 1979, Hamilton 1990, Hamilton 1994, Lees & Elcock 2008, McDonald 2006, Rashford & Myers 2004, Suserud & Haljamae 1999, Venkatesh & Freebairn 2013,Wiegersma et al 2011, Wihlborg et al 2013, Wirtz et al 2002). Currently, in Australia, there is ongoing discussion regarding the best aeromedical crewing model. Aeromedical crew composition varies across the globe, with a mix of FNs, nurse anaesthetists, nurse midwives, aeromedical nurse practitioners, paramedics, special operations paramedics, intensive care paramedics, respiratory therapists, medical practitioners of various levels (including GPs with obstetrics and anaesthetics), emergency

physicians, retrieval physicians and intensive care physicians. Interestingly, a number of the papers I reviewed state there is no difference in patient outcomes across the different professional groups (Baxt & Moody 1987, Belway et al 2006, Botker et al 2009, Bjoersen 2009, Burney et al 1992, 1995, Garner 2004, Lees & Elcock 2008, McDonald 2006, Scott 1987, Suserud & Haljamae 1997, Wirtz et al 2002). However, there are large differences between wages paid to the various professional groups.

Many countries employ registered nurses in both the aircraft and pre-hospital ambulance care (Senften & Engstrom 2015, Suserud & Haljamae 1997, Suserud & Haljamae 1999, Wihlborg et al 2013, Yeung et al 2008). In Sweden, the government has decreed that registered nurses must be part of the ambulance service (usually as the lead clinician) because they provide quality ongoing care at a reasonable cost (Suserud 2005, Suserud & Haljamae 1997, Suserud & Haljamae 1999, Wisborg & Bjerkan 2014).

Throughout this thesis, I have argued and continue to argue strongly to keep FNs as part of the aeromedical crew. Flight Nurses work across multiple areas of healthcare, filling various roles in primary and public healthcare, advanced practice nursing, midwifery, and search and rescue (winching). They are cost effective team members due to this flexibility; they can be utilised in many contexts. Research has provided evidence that FNs ensure the same patient outcomes as medical personnel, are useful for providing outreach specialist services to rural and remote communities, represent a cost effective model of care and are more multi-skilled than other non-medical health professionals (Baxt & Moody 1987, Belway et al 2006, Botker et al 2009, Bjoersen 2009, Burney et al 1992, 1995, Garner 2004, Lees & Elcock 2008, McDonald 2006, Scott 1987, Suserud & Haljamae 1997, Wirtz et al 2002, Wisborg et al 2014).

8.3.2.4 Aeromedical Nurse Practitioner

In Australia, there is currently one NMBA registered and endorsed Aeromedical Nurse Practitioner (ANP) ready to perform in the role, supported by the aeromedical organisation. However, the ANP role and the model of care the ANP can provide for the organisation is not currently supported by the department of health in the state where the ANP works. Therefore, the ANP does not provide the expanded level of service for the organisation that would otherwise be possible. A number of other ANP trainees are currently studying and will become qualified shortly. Although not investigated in the literature, one could consider that a model using the ANP would be more cost effective than staffing aircraft with physicians because available literature has demonstrated that patient outcomes are not adversely affected by the use of the FN only model of care. The ANP has acquired the extended skills required to manage sicker patients who need more in-depth interventions to manage their

condition. Currently in Australia, a medical practitioner must perform this level of patient care.

> *In the aeromedical environment, I see [patient's with] chest pain, shortness of breath, pneumonia [and I use] extended skills like intubation and insertion of arterial lines.* (Informant) #

Based on the results of my study, I argue that aeromedical nurse practitioners are the way of the future. The regulators have demonstrated their agreement by endorsing the current ANP (Carryer 2002, Carryer & Adams 2016, Carryer Gardner Gardner & Dunn 2007, Donnelly 2003, Gardner Gardner Dunn & Carryer 2006).

8.4 Conclusion

The use of CQI has enabled me to expose the ruling apparatus and institutional processes of power that control FNs' work. This explication of the ruling apparatus enables FNs to see how their world is shaped, providing an opportunity for them to interact and engage differently with institutional processes.

The informants' data has revealed the pressures upon current FNs and the intensification of their work, which is directed by powerful language and texts via the ruling apparatus both at an organisation level and externally from the highest levels of government in Australia.

Extensive and intensive work intensification leads to a number of problems for both the organisation and the employee. A few of those highlighted in Flight Nursing include fatigue management, lean staffing, tight rostering, work life balance and completing mandatory competencies. While an organisation may have a fatigue management policy in place, FNs must willingly access and use it. Currently, this does not occur in a number of organisations because FNs are concerned about the flow on effects for colleagues. The issue of lean staffing and tight rostering practices means there are minimal or no casual staff available, with the only "extra" staff being those who are already employed. Also, rostered time off to complete mandatory competencies is not currently quarantined. I argue that it should be quarantined to enable FNs to complete their mandatory competencies. Currently, they are often taken off ground duty days to fill flying roster gaps.

The organisation also has a number of responsibilities that need to be fulfilled, including adherence to their stated fatigue management policy and hours of work, and meeting other conditions of work as negotiated within the EBA. The organisation must no longer rely upon the FNs' "goodwill" and their overarching ethical responsibility and accountability as health professionals in areas such as working past the end of their rostered duty time, filling in shifts on days off, or using their leisure time to complete their mandatory and other required

competencies.

In the next chapter, I conclude the thesis, acknowledging the study's limitations, and outlining recommendations to improve FNs' visibility and work conditions, and ideas for further research into FNs' work.

Chapter 9 Recommendations, Future Research and Conclusions

9.1 Introduction

This is the final chapter of this thesis, in which I restate the study aims and research questions, describe how I have fulfilled these, discuss the overall findings, make recommendations for improving Flight Nurses' (FNs) image, visibility and working conditions, acknowledge the study's limitations and draw the study to a conclusion.

9.2 Aims of this Thesis

The work in this thesis demonstrates that I have fulfilled my study's aims and objectives as set out below and as listed in chapters 1 and 3.

The aims of this research were three fold:

i) To investigate the possible rationale behind the invisibility of Flight Nurses' work in Australia.

ii) To investigate the organisation of aeromedical health services in Australia in order to understand the work of Flight Nursing.

iii) To explore whether gender and class explain the invisibility of Flight Nurses and impact on the contemporary work of Australia's Flight Nurses.

9.3 Research Questions

I have answered the research questions (listed below and appearing in chapters 1 and 3) in chapters 4, 5, 6 and 7, with further discussion in Chapter 8. The questions were:

i) What are the historical images of Flight Nursing in Australia, and to what extent do these images influence current popular understandings?

ii) What types of work do contemporary Flight Nurses perform in their workday?

iii) What are the forces that affect Flight Nurses' work, from their perspective?

iv) Does the way aviation health services operate in Australia impact upon the way Flight Nurses work?

In Chapter 4, I investigated and dispelled the unrealistic historical myths of glamour, romance, heroism and adventure that have been created from the very beginning of Flight Nursing. Remarkably, these images have been maintained to a great extent to date because

FNs have never challenged them until this work. With the work in this chapter, I have illuminated the question of FNs' continuing invisibility.

In Chapter 5, I discussed contemporary FNs' work, which I illustrated with vignettes containing quotes from the FN informants. My analysis of this entry level data revealed the breadth and depth of the real work contemporary Australian FNs perform, as told by the FNs themselves. I collected and discussed further textual evidence regarding FNs' work from the organisational and other documents that direct it.

In chapters 6 and 7, I investigated work intensification and increased regulation based on informants' identification of these as forces that affect their work. Both of these forces impact highly on FNs' work, equally at work and outside of work time. The situational plots of the social relations of these forces upon FNs' work are located in Chapter 6, section 6.5.3 and Chapter 7, section 7.5 respectively. Chapter 6 is the first chapter of results from the second level of critical analysis of all the data collected. My analysis has illuminated the impact of successive Australian governments' neoliberalist ideology and new public management (NPM) strategies, resulting in both intensive and extensive work intensification for FNs. In Chapter 7, I continued to discuss the results from the second level critical analysis, identifying the impact of global regulatory capitalism and the growth of independent regulatory agencies/authorities on FNs' work.

In Chapter 8, I discussed the forces of work intensification and regulation in greater depth through comparison of the different Enterprise Bargaining Agreements (EBAs) and awards under which FNs across Australia work. These documents demonstrate the impact on FNs' work of the way aviation health services operate within Australia. In addition, I used this chapter to critically analyse all previous chapters with regard to the thesis narrative of gender and class, power and control, identifying how these issues impact FNs and their work.

9.4 Discussion

Flight Nursing is an area of nursing that is fast paced and subject to constant, rapid change, as illustrated in the informants' comments. Their data enabled identification of what was occurring within Flight Nursing in Australia at the point in time when I collected it. The data captured FNs' work from a number of the aeromedical organisations operating within Australia. While this data cannot be generalized due to its qualitative nature, this critical qualitative inquiry (CQI) of FNs and Flight Nursing illuminates the particular case of their work. Australian FNs' predicament may enlighten workers in other organisations as to how their organisations may be subject to NPM and regulatory capitalism. However, there would need to be an exploration of how the ruling apparatus operates within those organisations.

Having examined, investigated, illuminated and plotted the work of the contemporary FN in Australia in 2014/15, I discovered a dearth of literature (Chapter 2) regarding FNs' work, both historically and currently, but also the important fact that women have been the champions and pioneers of Flight Nursing and air ambulance services. I used CQI as the methodology and methods (Chapter 3) for this study because one focus of CQI is to ensure that informants are made knowledgeable regarding how their everyday world is structured. Critical qualitative inquiry enables them to see the organisation's power and control at work through the application of the ruling apparatus, including the state apparatus (Bailey & Fonow 2015, Bartlett 1991, Cannella 2015, Denzin 2015, 2017, Denzin & Lincoln 2005, Grbich 1999, Holstein & Gubrium 2015, Kincheloe & McLaren 2005, Orlikowski & Baroudi 1991, Pasque & Perez 2015) Smith 1987, 1990, 1990b, 1992, 1999, 2005). This awareness assists FNs to better understand how and why processes operate within the organisation, and how both resident and external forces mould their work to fit with the organisation's discursive and textual direction. Resident forces, as I have explained earlier in the thesis, are generated by the organisation at the resident level, and applied at this level from a local perspective. External forces come from outside the resident area and organisation, for example the *National Safety and Quality Health Service (NSQHS) Standards* (2011a) have been formulated at government level and are applied to the organisation through the independent regulatory agencies/authorities at the external level. Regulations are incorporated into the organisation at the corporate, organisation wide level, then transferred to the resident level where they are implemented and applied to FNs' work.

The covert issues of gender and class, power and control feature throughout this study and impact FNs' work across all areas. I have illuminated for Australian FNs what is happening within their workplace and why, explaining the impact of successive Australian governments' use of NPM strategies externally and at the level of their work , and how increased global regulation and the growth of independent regulatory agencies/authorities as the preferred mode of governance at all organisational levels has impacted significantly on the FNs' work. Flight Nurses have been forced to change the way they work to adapt to these ongoing processes. Armed with this enlarged understanding, knowledge and awareness, FNs may be able to increase their ability to better manage these forces and improve their working conditions through the available EBA process.

I have also illuminated how vital FNs' work is to the continued presence of aeromedical healthcare service provision in Australia. Flight Nurses hold a comprehensive breadth and depth of scope of practice that includes areas such as midwifery; pre-hospital, emergency and trauma; neonatal and paediatric; primary healthcare; and health promotion. In this

thesis, I have argued that FNs' expertise is irreplaceable. A number of recommendations require implementation to maintain Australian FNs' rightful place within aeromedical healthcare service provision.

9.5 Recommendations

The profile of FNs' work must be enhanced and become more easily identifiable by the public and other healthcare colleagues. The results of this study must be presented and promoted at international forums and conferences, throughout social media and published in the peer reviewed literature. Knowledge regarding Australian FNs' work and patient outcomes must be disseminated using these methods.

Realistic images and portrayals of FNs' work should be promoted at every opportunity in all forums, particularly within the mass media, to challenge the incorrect cultural myths regarding the real work of Australian FNs. It is essential to recognise FNs as part of the multi-disciplinary team (MDT) and dismiss the myth that they are merely the doctor's handmaiden.

Aeromedical organisations must give a name and title to the people seen in their marketing campaigns, images and all publications any time they promote their organisation. The organisation is made up of many more people than just a doctor, which is how the marketing campaigns are currently structured (CareFlight 2015, RFDS 2016).

Knowledge is power. Therefore, ensuring the public and other health professionals have an accurate understanding of FNs' work is part of challenging the myths. Recruitment of FNs has been an ongoing issue. The level of qualifications, experience, education, and breadth and depth of scope of practice are difficult for the ordinary clinician to achieve. Current FNs must engage prospective FNs by providing mentoring, promoting realistic career paths and giving direction towards the education required. Active promotion of this profession to prospective FNs is very important to ensure the speciality remains.

Aeromedical healthcare service provision in Australia is about more than a flight in a plane or helicopter. Australian FNs work across multiple areas of nursing specialisation, including primary healthcare, health promotion and health education. On the basis of this study's findings, I recommend that FNs become more politically active by directing their union and professional organisation to enthusiastically support Australian aeromedical organisations in lobbying government for recurrent funding for patient care programs. While FNs are unable to achieve this recommendation personally due to work intensification, the power of the union may garner more attention and action from government. This recommendation would

ensure FNs showcase their commitment to aeromedicine as dedicated, serious professionals who are willing to support the organisation in achieving its aims, thereby marketing Flight Nursing in multiple arenas, but in particular in the political arena.

9.6 Future Research

The research opportunities available in this area of study are large; multiple areas of FNs' work are available to be researched, for example historical, clinical, managerial and leadership. This study represents the largest, most comprehensive study undertaken in Australia to date exploring the social and political aspects of FNs' work. The other two studies I found were a masters' level project and my own honours project, neither of which examined FNs' work.

In Australia, there is a gap in Flight Nursing history between 1954 and 1988. This knowledge is missing due to the dearth of literature regarding FNs' work. Those who hold this knowledge are vanishing and thus their knowledge is lost. The recording of this history is of some urgency to ensure a record is kept of the early FNs' work and the contribution these professionals made to society and healthcare in Australia. Knowledge of the history of Flight Nursing is important so that connections can be made between the past, present and future.

Clinical outcomes and evidence based care are key concerns within the modern healthcare arena. The maintenance of health professionals' skill bases and the continuity of care provided in the transport environment as a continuum of the patients' journey could be further investigated. The question regarding the most cost effective crew option for patient care in the aircraft might also be investigated further because, according to the literature, this has been an area of contention between the professions. Investigation of the way patient triage is performed in aeromedicine, looking at best practice models from both Australia and internationally, is another area for research. Although the Australasian Triage Scale is essentially followed, a guideline for aeromedical cases could be formulated because the time differences relate to "wheels off the ground" in aeromedicine rather than the timing of seeing and assessing the patient.

Models of management and health service provision in aeromedicine are ripe for further investigation. Comparisons could be made between the "Australian way" and international service provision models. In order to build an evidence base of FNs' work and contribution to society, FNs themselves must be questioned regarding the areas of practice they want researched.

While I have focussed on the work of Australian FNs, Flight Nursing is not restricted to

Australia. Research examining the work of international FNs is also required. Comparisons between FNs who work internationally and those within Australia would be useful to generate global recognition of FNs' work, and to make FNs aware of, and have access to, the best evidence and models of healthcare provision available.

There is an opportunity for cost effectiveness and outcomes evaluation research across the spectrum of aeromedical healthcare services provision. Aeromedical organisations provide essential healthcare services on multiple levels to the Australian rural and remote community, which has not been adequately researched or published. Currently, aeromedical organisations conduct primary healthcare and other programs that are funded only by fund raising activities and the generosity of large organisations. Research could be undertaken on an international scale to explore what can be learnt from other countries regarding how they fund their healthcare provision to rural and remote areas, and the models of healthcare service provision they use. Working with the aeromedical organisations to assist them to provide evidence to government to secure recurrent funding is another area of possible future research.

9.7 Limitations

One of the main limitations of this study was the absence of ease of access to textual data for the second level data analysis. Concerns about commercial in confidence documentation and work processes limited my access to the textual data required. The individual areas examined were chosen for two reasons: the informants wanted them investigated; and I could access the required data for analysis.

I considered many options, but direct observation of FNs' work within the aviation environment did not occur due to a number of insurmountable issues. However, I visited a number of FNs' workplaces to observe their preparation for transferring and caring for patients so I could note the equipment they used within the aircraft, and to garner any changes to the work practices I had previously performed as a FN. Having been a FN for a number of years, I was aware of the unique environment in which FNs work. I was viewed as an "insider" for this research due to my prior knowledge and work in this specialty area of practice; a position allowable for the researcher in CQI because the research questions are explored from the stance of the informants and the researcher is viewed as a knowing informant.

Again, this study cannot be generalized to the wider context of nursing or other countries' FNs because it is located in the qualitative paradigm. However, the informants represented FNs from many different organisations that are involved in aeromedical health service

provision across Australia. Many unique views were represented, and all states and territories where FNs are employed were involved.

Healthcare in Australia is experiencing rapid change, which presents many challenges to all involved. Flight Nurses are part of a fast paced, constantly changing, challenging environment. I collected data from informants in late 2014 and early 2015. As far as I am aware, the work environment and forces I identified have not taken a different course since then; if anything, they have intensified further.

9.8 Conclusions

Contemporary research provides little insight into the work of Flight Nursing both within Australia and internationally. The continuing omission of Australian FNs' work from the literature demonstrates a lack of evidence for FNs' effectiveness and their contribution to society through improved patient outcomes, even though the international reputation of excellence held by Australian aeromedicine rests upon FNs' work (Barclay 1998 a,b, Brideson et al 2012). As Bishop (2009, p.28) states: "The power of a profession lies in the evidence of the effectiveness of their work". This evidence has been missing because FNs' work has been neither researched nor well documented within the peer reviewed literature. Australian FNs' work has remained hidden since its inception in the late 1930s; unrecognised, unappreciated and "invisible" because it is caught up in the gender debate. In 2017, both class and gender are hidden but relevant issues, causing a substantial impact upon FNs' work. However, the issue of absence of FNs and their work within the peer reviewed literature will change with the completion of this thesis.

The reality of Flight Nursing in Australia is one of very hard working, autonomous nurse midwives who are highly qualified and skilled across multiple specialities. Flight Nurses work long hours in a constantly changing, challenging environment, within a very small space. They provide care to patients across the age span. Flight Nurses are the health professionals who perform patient care in the air. Flight Nursing is not, as the image portrays, glamorous, romantic and heroic, but is challenging and very rewarding for those involved.

The political climate of the last 30 years and continuing challenges in healthcare in Australia today have deeply impacted FNs' work, as evidenced in this study. My CQI analysis of the data has led to results that demonstrate FNs are impacted by issues of work intensification and increasing regulation. A number of further issues have emerged, including problems with work life balance; fatigue management; maintenance of professional, mandatory and organisational competencies; and inequitable remuneration and working conditions.

Seventy percent of FNs are women, with 30% men. Although this represents a much greater preponderance of men involved in Flight Nursing work than in other nursing and midwifery specialities, it has not changed the overarching invisibility of FNs' work. This may be explained by the continuing cultural norm that nursing and midwifery are women's work and men involved in these areas are demasculinised. Performing caring work, these men no longer fit the male stereotypical, patriarchal role and have become effeminate, no longer meeting society's requirements for recognition as a male (Dahle 2005).

Knowledge translation is a vital aspect of research. There are a number of areas where knowledge translation must occur from this study. The public should be better informed regarding FNs' work. They must be made aware that 85–94% of the time, it is a FN providing their care in the back of the aircraft. Moreover, FNs take a leading role in providing healthcare to multiple areas and numbers of people in society; they are highly qualified, autonomous, highly professional nurse midwives. Flight Nurses' scope of practice has a breadth and depth unrecognisable in other areas of the health professions, thus benefitting the model of care provision in the aircraft delivered by most of the aeromedical organisations across Australia.

This study represents the third ever Australian study in over 105 years to examine Australian FNs' work. It not only reveals many facets of the specialisation that require further in-depth examination, but also demonstrates the requirement for uniform regulation across the nursing and midwifery professions. At the same time, it has exposed the high level of professionalism and high standards within which Australian FNs work. It has exposed the high level work undertaken and the fact that many Australian FNs dedicate a large part of their lives to their work to support and care for people, irrespective of their salary and working conditions.

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Appendix 1: Pre-flight Nursing Assessment

PREFLIGHT NURSING ASSESSMENT

Assessor.....todays date:..... Time.....Date required.....

Referral MO + Nurse..... Pt Aware of Flight: Yes No Any Concerns.....

Name.....**DOB**.....**Weight**.....Escort.....Weight.....

Diagnosis.....Admitted.....

History /Examination/ Management (*think primary/secondary assessment*).....

.....

.....

.....

.....

.....

.....

Psychiatric: **Form 1** Yes No **Form 15** Yes No **Weapons Check:** Person Luggage **Police Escort:** Yes No

Significant PMH.....

Regular Medications:.....

.....

Allergies: Yes No If Yes Specify.....

Airway / Breathing: Adequate Poor Ventilation Required **O2 Required** Yes No Type.....

T	P	R	BP	BSL	Sa02	Conscious Level	GCS			Pupils				Comments
							E	M	V	React R	React L	Size R	Size L	

Neurovascular Obs (for # or limb injuries).....**Pulse:** Yes No

OBSTETRIC

G.....P.....**EDD**.....Labour Established Y / N Time.....

Contractions (Frequency /Strength /Duration).....

Medications Given.....Regime Used.....

VE Time:.....Cervix / Os Dilated Y / N .....Membranes Intact Y / N

PV Loss Y / N Type.....Fetal Heart .....

Obstetric History / Complications.....

.....

IV Cannula: Requested Insitu **Anti-emetic:**..... **Analgesia:**.....

Drug Infusion / IV Fluid	Dose / Route	Rate

NGT
Fasting: Y / N.....
Chest Drain Y / N.....
Cervical Collar Y / N
Continent Y / N
IDC Y / N

Orders for Flight: .....

Priority 1 2 3 **Severity 4 3 2 1** **Dr Required: Y / N** **Pressurisation: Y / N** If Yes.....

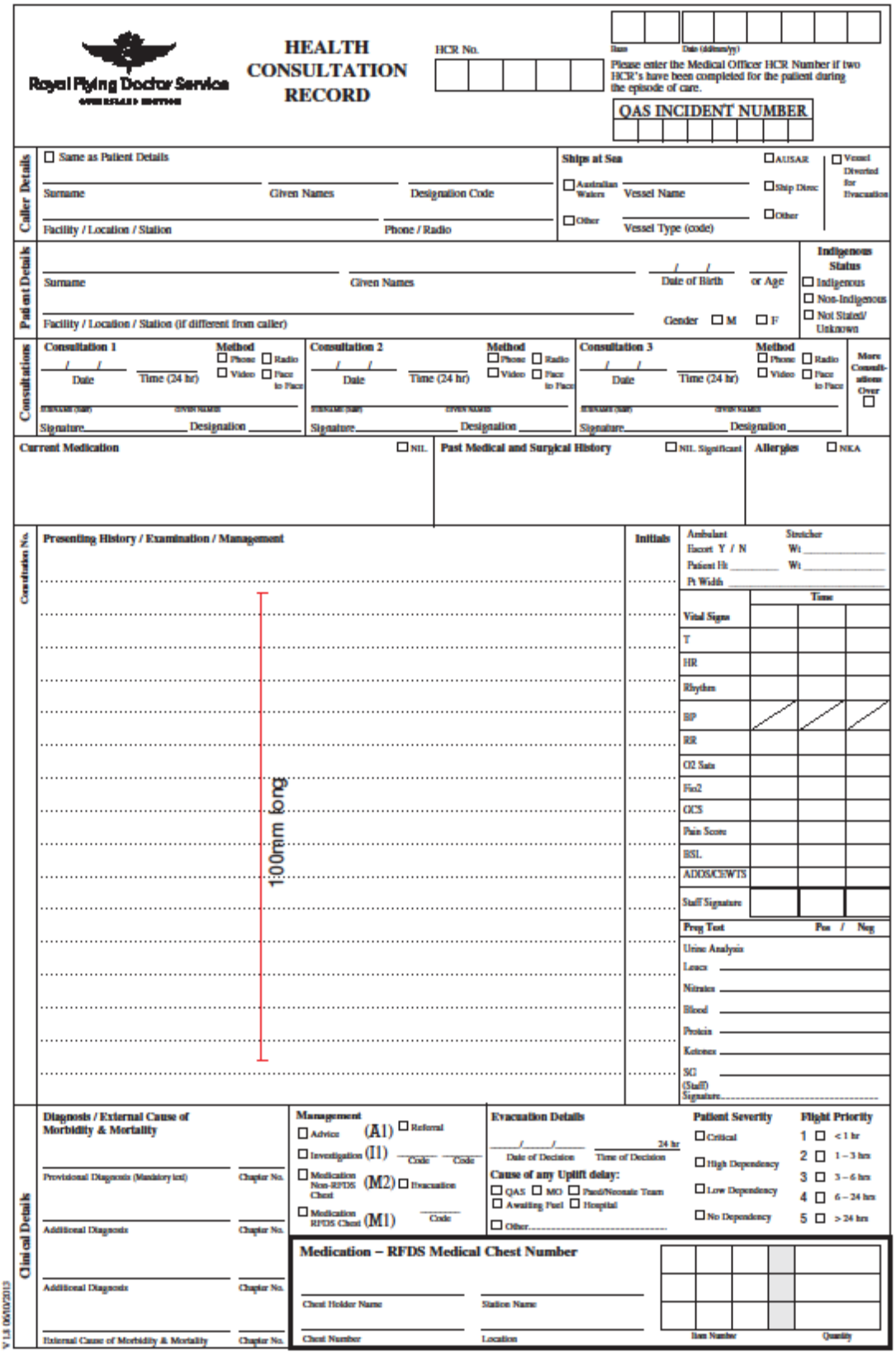
Stretcher **Sitter** **Mobility?** (Able to walk up stairs).....

Child: Nursed Thermocot Capsule Neotran

LUGGAGE: Small soft sided bag **No Walking Frame**

"Safety in the air begins on the ground" RFDS Central Operations Form No: A068 /04 Photocopy

Appendix 2: RFDS Health Consultant Record v1.8



Royal Flying Doctor Service

HEALTH CONSULTATION RECORD

HCR No.

Item | Date (dd/mm/yy)

Please enter the Medical Officer HCR Number if two HCR's have been completed for the patient during the episode of care.

QAS INCIDENT NUMBER

Caller Details

☐ Same as Patient Details

Surname | Given Names | Designation Code

Facility / Location / Station | Phone / Radio

Ships at Sea

☐ Australian Waters ☐ AUSAR ☐ Ship Diverted ☐ Other

Vessel Name | Vessel Type (code)

☐ Vessel Diverted for Evacuation

Patient Details

Surname | Given Names | Date of Birth | or Age

Facility / Location / Station (if different from caller)

Gender ☐ M ☐ F

Indigenous Status

☐ Indigenous ☐ Non-Indigenous ☐ Not Stated/ Unknown

Consultations

Consultation 1 — Date | Time (24 hr) | Method ☐ Phone ☐ Radio ☐ Video ☐ Face to Face

Surname (Staff) | Given Names | Signature | Designation

Consultation 2 — Date | Time (24 hr) | Method ☐ Phone ☐ Radio ☐ Video ☐ Face to Face

Surname (Staff) | Given Names | Signature | Designation

Consultation 3 — Date | Time (24 hr) | Method ☐ Phone ☐ Radio ☐ Video ☐ Face to Face

Surname (Staff) | Given Names | Signature | Designation

More Consultations Over ☐

Current Medication ☐ NIL

Past Medical and Surgical History ☐ NIL Significant

Allergies ☐ NKA

Condition No.

Presenting History / Examination / Management

100mm long

Initials

Ambulant | Stretcher

Escort Y / N | Wt

Patient Ht | Wt

Pt Width

Vital Signs	Time		
T			
HR			
Rhythm			
BP			
RR			
O2 Sats			
Fio2			
GCS			
Pain Score			
BSL			
ADDS/CEWTS			
Staff Signature			

Preg Test — Pos / Neg

Urine Analysis

Leucs

Nitrates

Blood

Protein

Ketones

SG

(Staff) Signature

Clinical Details

Diagnosis / External Cause of Morbidity & Mortality

Provisional Diagnosis (Mandatory text) | Chapter No.

Additional Diagnosis | Chapter No.

Additional Diagnosis | Chapter No.

External Cause of Morbidity & Mortality | Chapter No.

Management

☐ Advice (A1) ☐ Referral

☐ Investigation (I1) Code | Code

☐ Medication Non-RFDS Chest (M2) ☐ Evacuation

☐ Medication RFDS Chest (M1) Code

Evacuation Details

Date of Decision | Time of Decision (24 hr)

Cause of any Uplift delay:

☐ QAS ☐ MO ☐ Paed/Neonate Team ☐ Awaiting Fuel ☐ Hospital

☐ Other

Patient Severity

☐ Critical

☐ High Dependency

☐ Low Dependency

☐ No Dependency

Flight Priority

1 ☐ < 1 hr

2 ☐ 1 – 3 hrs

3 ☐ 3 – 6 hrs

4 ☐ 6 – 24 hrs

5 ☐ > 24 hrs

Medication – RFDS Medical Chest Number

Chest Holder Name | Station Name

Chest Number | Location

Item Number | Quantity

V 1.8 06/03/2013

Appendix 3: Final Ethics Approval

Genevieve Brideson

From: Human Research Ethics
Sent: Monday, 4 August 2014 2:23 PM
To: Genevieve Brideson; Lidia Mayner; Eileen Willis
Subject: 6568 Final approval granted (4 August 2014)

Importance: High

Dear Genevieve,

The Chair of the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University considered your response to conditional approval out of session and your project has now been granted final ethics approval. This means that you now have approval to commence your research. Your ethics final approval notice can be found below.

FINAL APPROVAL NOTICE

Project No.:	6568
Project Title:	An exploration of flight nurses work in Australia
Principal Researcher:	Ms Genevieve Brideson
Email:	brid0086@flinders.edu.au
Approval Date:	1 August 2014
Ethics Approval Expiry Date:	30 June 2021

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided.

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. **Participant Documentation**
   Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:
   - all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
   - the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialling codes for all telephone and fax numbers listed for all research to be conducted overseas.
   - the SBREC contact details, listed below, are included in the footer of all letters of introduction and information sheets.

Appendix 4: Study Flyer

Flinders UNIVERSITY

Invitation

This is your opportunity to participate in an Australian Flight Nursing Research Project. Excited? Read On!

FLINDERS UNIVERSITY

School of Nursing and Midwifery

Faculty of Medicine, Nursing and Health Sciences
GPO Box 2100
Adelaide SA 5001

Are you willing to be a significant influence in increasing the knowledge about, and promoting the image of Flight Nurses from Australia across the globe?

I would like to have a 30–40 minute conversation with you about your work.

The interview will be conducted at your convenience, where you choose and be anonymous

Interested? Please contact: Genevieve Brideson 08 8201 5992

genevieve.brideson@flinders.edu.au

or my supervisors Associate Prof Lidia Mayner 08 8201 3377

Lidia.mayner@flinders.edu.au

Professor Eileen Willis 08 8201 3110

Eileen.willis@flinders.edu.au

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number 6568). For more information regarding ethical approval of the project the Executive Officer 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 5: Informant Information Sheet

Mrs Genevieve Brideson
School of Nursing and Midwifery
Faculty of Medicine, Nursing and Health Sciences
GPO Box 2100
Adelaide SA 5001
Tel: +61 8201 5992
Fax: +61 8276 1602
Genevieve.brideson@flinders.edu.au
www.flinders.edu.au
CRICOS Provider No. 00114A

INFORMANT INFORMATION SHEET

Title: *'An exploration of Flight Nurses work in Australia'*

Investigators:
Mrs Genevieve Brideson
School of Nursing and Midwifery
Flinders University
Ph: 08 8201 5992

Supervisor(s):
Associate Professor Lidia Mayner
School of Nursing and Midwifery
Flinders University
Ph: 8201 3377

Professor Eileen Willis
Deputy Executive Dean
Faculty of Medicine, Nursing and Health Sc
Flinders University
Ph: 8201 3110

Description of the study:

This study is part of a larger project entitled '*An exploration of Flight Nurses work in Australia'*. This phase of the project consists of interviews with individual flight nurses and will investigate the work that flight nurses perform during their work day. This project is supported by the Flinders University School of Nursing and Midwifery.

Purpose of the study:

This project aims to:

- Explore the work that flight nurses perform during their work day.
- Investigate the policies and procedures that guide flight nurse's work

What will I be asked to do?

Genevieve Brideson would like to interview you face to face, one-on-one to discuss the work you perform on a daily basis, by asking you a few questions that have arisen from the study aims. The interview will take between 30 - 40 minutes and will be conducted at your convenience, at a place of your choosing. The interview will be recorded using a digital voice recorder to help with analysing the results. Once recorded, the interview will be transcribed (typed-up) and stored as a computer file on a password protected computer. Once the results have been finalised, the audio file will be destroyed. Involvement in the interview is entirely voluntary and you may withdraw or chose not to answer a particular question at any time.

What benefit will I gain from being involved in this study?

As an informant you will not directly benefit from participation in this study. The major benefit of the study will be an increased body of knowledge about the work Flight nurses perform on a daily basis in Australia. This unfunded research forms part of Genevieve Brideson's PhD Research project and she is not receiving any sponsorship or in-kind arrangements with any company.

Appendix 6: Letter of Introduction

Dr Lidia Mayner
Associate Professor
School of Nursing & Midwifery
GPO Box 2100
Adelaide SA 5001
Tel: 08 8201 3377
Fax: 08 82761602
lidia.mayner@flinders.edu.au
www.flinders.edu.au
CRICOS Provider No. 00114A

LETTER OF INTRODUCTION FOR PHD STUDENT

Dear Informant

This letter is to introduce Genevieve Brideson who is my PhD student in the School of Nursing and Midwifery at Flinders University. She will produce her student card, which carries a photograph, as proof of identity.

She is undertaking research leading to the production of a thesis or other publications on:

'An exploration of Flight Nurses work in Australia'

She would be most grateful if you would volunteer to assist in this project, by

1. Participating in a face to face interview about your work.

Be assured that 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, entirely free to discontinue your participation at any time or to decline to answer particular questions.

As Genevieve intends to interview you, she will seek your consent on the attached form to use parts of your transcript in preparation of a thesis, report or other publications, on condition that your name and identity are not revealed, and that the interview transcripts will not be made available to other persons except her supervisors and the transcription service, who will respect the confidentiality of the material.

Any enquiries or concerns you may have regarding this project should be directed to me at the address given above or by telephone on (8201 3377), fax (82761602) or e-mail (lidia.mayner@flinders.edu.au) or Genevieve's other supervisor Professor Eileen Willis by telephone on (8201 3110), fax (82013646) or e-mail (eileen.willis@flinders.edu.au).

Thank you for your attention and assistance

Yours sincerely

Associate Professor Lidia Mayner

School of Nursing and Midwifery

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee- No 6568. 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.

inspiring achievement

Appendix 7: Informant Consent Form

Flinders
UNIVERSITY

CONSENT FORM FOR PARTICIPATION IN RESEARCH

By interview

An exploration of Flight Nurses work in Australia

I .....

being over the age of 18 years hereby consent to participate as requested in the letter of introduction and information sheet for the research project titled 'An exploration of Flight Nurses work in Australia'

I have read the information provided.

1. Details of procedures and any risks have been explained to my satisfaction.
2. I agree to audio recording of my information and participation.
3. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
4. I understand that:
   - I will 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, I will not be identified, and individual information will remain confidential.
   - I may ask that the recording be stopped at any time, and that I may withdraw at any time from the session or the research without disadvantage.
5. I agree/do not agree* to the tape/transcript* being made available to other researchers who are not members of this research team, but who are judged by the research team to be doing related research, on condition that my identity is not revealed.
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...Genevieve Brideson

Researcher's signature.....Date.....

F:\To Editor\Appendices\Appendix 7 Informant Consent Form.doc
Updated 28 June 2006

Appendix 8: Comparison of FN EBA Working Conditions and Salary

NB: All salary amounts are gross (before tax) and approximate.

EBA salary amounts are for the lowest level of FN

Award salary amounts are for the classification of Nurse stated

EBA	FN staff number	Hours of work	Fatigue management policy	Salary –FN level 1	Paid overtime
CAREFLIGHT NURSES AND MIDWIVES ENTERPRISE AGREEMENT 2013 - 2016. (NT)	**24**	**152 hours in a 28 day period** **When more than 12 hours is worked during a shift, such additional hours worked will accumulate toward the maximum 152 hours payable every 28 days.**	**A minimum break of 10 hours between the end of one shift and the beginning of the next shift** **If less than a 10 hour break either of the following may occur:** **(a) the Employee will be permitted to commence the rostered shift late and finish at the normal time without loss of pay; or,** **(b) the Employee and CareFlight may agree to a roster variation to perform the rostered shift at a later date in that roster or a subsequent roster.**	**$110,480** **Retention and all other allowances included** **Salary packaging arrangements are not mentioned** **Superannuation paid at nominal rate** **Annual leave equalling 6 weeks/year.** **The Employer will meet the costs of approved training courses and professional development (including travel and accommodation where applicable) which are required** **to maintain registration with the AHPRA, up to a maximum annual amount of $2,000.00 incl GST per eligible Rotary Wing Flight Nurse** **Clause 15 only applies to Professional Development required to maintain Employees registration as a Registered Nurse**	**When more than 152 hours is worked in a 28 day period, the Employee concerned will be paid for such additional hours**

CAREFLIGHT ROTARY WING FLIGHT NURSE ENTERPRISE AGREEMENT 2015 – 2017 (QLD)	**Unknown**	**Full time Employees are engaged to work 192 ordinary hours in a 32 day cycle, averaged over a period of 12 months, equating to an average of 182.5 shifts per year.** **For the purposes of calculating overtime in accordance with clause 9.1(g), each 32 day cycle stands alone.** **At the time of engagement, the Employer and Employee will agree on the minimum number of hours the Employee will be guaranteed to be paid in each 32 day cycle** **Employees engaged as Rotary Wing Flight Nurses may be rostered on an 8 day cycle consisting of 2 day shifts followed by 2 night shift's, followed by 4 rostered days off, as per the following Shift Designations 0600-1800, 1800-0600**	**Employees must not undertake other work without the Employer's prior permission.** **Employees who are authorised by the Employer to undertake other work, must provide the Employer with those hours of work on request for the purposes of complying with the FRMS.** **Employees will not be required to be on call.**	**$85,000** **Salary packaging arrangements are not mentioned** **Superannuation paid at nominal rate** **Annual Leave 42 days inclusive of weekends and public holidays to be taken in a minimum of 8 day blocks** **The Employer will meet the costs of approved training courses and professional development (including travel and accommodation where applicable) which are required to maintain registration with the AHPRA, up to a maximum annual amount of $2,000.00 incl GST per eligible Rotary Wing Flight Nurse** **Clause 15 only applies to Professional Development required to maintain Employees registration as a Registered Nurse**	**Hours worked in excess of ordinary hours will be paid at 125% of ordinary hourly rate** **Hours worked on a part-day public holiday declared or prescribed between 7.00 pm and midnight on Christmas Eve or New Year's Eve will be paid at 200% of ordinary hourly rate**

RFDS, CENTRAL OPERATIONS FLIGHT NURSES (AUSTRALIAN NURSING AND MIDWIFERY FEDERATION) AGREEMENT 2015 (ALICE SPRINGS, ADELAIDE & PORT AUGUSTA).	**37**	**While it is acknowledged by all parties that actual working hours will vary depending upon the operational needs of the RFDS, it is anticipated that a Flight Nurse's actual working hours will not exceed an average of 38 hours per week over a 52-week cycle.** **All Flight Nurses shall work to a seven-day roster.** **A full-time Flight Nurse and SFN will be rostered for 1,976 hours of work per annum: 38 hours x 52 weeks= 1,976 hours (inclusive of 228 hours for annual leave)** **Flight Nurses shall work shifts, as determined by the roster, varying from eight to 12 hours.** **Flight Nurses and SFNs, who are rostered on standby are not required to attend their normal place of work, other than as required to attend to:** **• Day-to-day administrative and house-keeping requirements** **• Quality/clinical review and organisational staff development activities;** **• Contactable and available for duty at all times during their standby period;** **Flight Nurses and SFNs not specifically engaged as relieving staff may be required to provide roster relief at another base for a period not exceeding four weeks on a voluntary basis, or for a longer period, as negotiated by the individual Flight Nurse or SFN and the RFDS.** **In an Emergency Situation, as**	**During the life of this Agreement, the parties are committed to reviewing existing work practices with the aim of improving flexibility and productivity whilst maintaining Flight Nurse and SFN lifestyles.** **In the event that average actual working hours significantly exceed this level, the RFDS, via the ACC, will review rostering arrangements either on an individual or a collective basis depending on the circumstances** **All Flight Nurses shall have a break between shifts of at least 10 hours for availability and are responsible to discuss with the SFN/ Flight Nurse Manager appropriate coverage of 1heir roster if the break impacts on their next rostered period.** **The break shall be increased by one hour for every hour, or part thereof, where the preceding actual duty period exceeds 10 hours. For the purposes of this Clause, duty time means the commencement of the tasks associated with first assignment of the shift to the completion of the last task associated with that shift's flight (e.g. clean up of the aircraft, paperwork or other associated tasks).** **The RFDS agrees to consult with the SFNs and their**	**ADL - $105,294** **Pt AUG – $107,869** **ASP – $110,043** **Retention and all other allowances included** **Flight Nurses and SFNs will be entitled to salary packaging benefits in accordance with the RFDS Salary Packaging Policy** **Flight Nurses and SFN's are entitled to 30 rostered working days of Annual Leave in each 52 week period.** **Applications for periods of leave will be approved following appropriate negotiation and reference to roster requirements at the time of the request for leave** **Remote Area Housing Allowance will be paid in accordance with RFDS Remote Area Housing Assistance Policy.** **Flight Nurses and SFNs agree to participate in annual performance, training and development reviews, which will assess the Flight Nurse's and SFN's overall performance, core and role specific competencies and professional development for the review period. In addition to assessing performance and competency, these reviews will assist to identify any personal training and professional development requirements needed to achieve the RFDS' role specific competencies whilst also considering the individual Flight Nurse's or SFN's aspirations in line with the RFDS' organisational requirements.**	**Full-time Flight Nurses and SFNs, who work additional shifts during their days off outside their agreed, negotiated or published roster, to facilitate roster/task coverage, will be entitled to an overtime payment as detailed in Clause 14.4** **For full-time and part-time Flight Nurses and SFNs, overtime rates will be paid for all hours worked (relating to agreed additional shifts), in excess of 76 hours in each fortnight** **Any overtime worked on Monday to Saturday (inclusive) will attract a rate of time and a half for the first two hours, and then double time thereafter.** **Any overtime worked on Sunday will attract a rate of double time.** **Any overtime worked on a public holiday will attract a rate of double time and a half.** **A Flight Nurse or SFN who works agreed additional shifts as defined in this Clause will be required to be at the Base for the entire shift unless otherwise agreed with the Flight Nurse Manager** **The parties acknowledge that, on occasion and due to operational reasons, a Flight Nurse may be required to perform duties beyond the**

		defined, a Flight Nurse or SFN may be rostered to another base. In such **circumstances, and when selecting staff, consideration will be given to a Flight Nurse's or SFN's personal and/or domestic circumstances.** **Where the RFDS, Flight Nurses and SFNs seek to alter the master roster, the RFDS will undertake consultation with the Flight Nurses and SFNs (where appropriate) in accordance with Clause 8. The RFDS also agrees to undertake a vote of the affected nurses to seek a response in relation to the master roster change**	**representatives about potential solutions to work/life balance issues.** **SFNs will continue to access a minimum of 12 weekends, per calendar year, free from duty in accordance with Clause 13.7.** **Where a SFN is unable to identify an alternative Flight Nurse to provide** **emergency shift coverage and the SFN is unable to provide coverage, the SFN must contact the Flight Nurse Manager to discuss alternatives.** **Any increased requirement for Flight Nurses to attend work at the hangar when rostered will be the subject of discussion and consultation via the ACC constituted pursuant to Clause 9.1.**		**rostered standby period. However, the RFDS will take steps during the life of the Agreement to minimise this occurrence, where possible. Should an overrun occur, the payments prescribed in this Clause will apply:** • **Priority 1 and 2 Tasks** **If a Flight Nurse, in the performance of duty, overruns the end of the** **rostered standby period by more than two hours, but less than four** **hours, the Flight Nurse will be paid an overrun duty payment of $165.** **If a Flight Nurse, in the performance of duty, overruns the end of the** **rostered standby period by four hours or more, the Flight Nurse will be paid an overrun duty payment of $360.** • **Priority 3-5 Tasks** **If a Flight Nurse, in the performance of duty, overruns the end of the** **rostered standby period by more than 30 minutes, but less than four hours, the Flight Nurse will be paid an overrun duty payment of $165.** **If a Flight Nurse, in the performance of duty, overruns the end of the** **rostered standby period by four hours or more, the Flight Nurse will be paid an overrun duty payment *of* $360.** **The payments provided in this**

					Clause do not operate cumulatively. In calculating the duration of the overrun and the allocation of the payment (if any) In this Clause, the parties agree that a Flight Nurse will have a maximum of 30 minutes to finalise all work-related tasks after patient handover

ROYAL FLYING DOCTOR SERVICE OF AUSTRALIA (SOUTH EASTERN SECTION) NEW SOUTH WALES NURSES AGREEMENT 2015.	**10**	**The ordinary hours of work for full-time Flight Nurses shall be 180 hours per 42 day cycle, as rostered by the RFDS.** **Flight Nurses shall be rostered free from duty for 14 days in each 42 day cycle.** **Rostered shifts shall be from 6 am -6 pm and 6 pm - 6 am. Flight nurses shall only be regularly required to attend the base during rostered periods between 0900 and 1400 Monday to Friday** **All other rostered hours shall be done on a call-in basis. Rostered "on call" hours will not contribute to the accrual of overtime.** **The Flight Nurse shall continue to be contactable and available for duty at all times during their rostered on call period.** **The RFDS SE Section may alter the roster in consultation with the Flight Nurse to ensure the operational requirements are satisfied. If this requires the employee working a day, which would have otherwise been a rostered day off, the employee will be entitled to a** **day off in lieu (which may be taken a mutually agreed time) or overtime payment**	**At the commencement of a Rostered Duty Period an employee shall be free of any fatigue, illness, injury, medication or drug which would impair the safe delivery of nursing care in an aeromedical environment** **The minimum break between attendance at work on any two consecutive shifts shall be ten hours.** **A flight Nurse who works up to 12 hours of continuous nursing duty shall be entitled to a 10 hour continuous duty free period prior to commencing the next Rostered Duty Period.** **Flight Nurse who works more than 12 hours but less than 14 hours of continuous nursing duty shall be entitled to a 12 hour continuous duty free period prior to commencing the next Rostered Duty Period.** **A Flight Nurse who works more than 14 and up to and including 16 hours duty shall be entitled to the next twenty four (24) hours continuous duty free period prior to commencing the next duty period.** **A Flight Nurse who works more than sixteen (16) continuous hours of duty shall be entitled to the next**	**$115,699** **Retention and all other allowances included** **After 5 years continuous service a nurse will be entitled to a yearly $2,000 allowance** **Salary packaging arrangements are available** **Superannuation paid at nominal rate on the Employee's Total Salary** **Additional Superannuation Benefits will be provided in accordance with the RFDS SE Superannuation policy as amended from time to time on the intranet** **Annual leave equalling 6 weeks/year** **An employee who is called upon to relieve another employee in a higher classification or act in a vacant position for a period of seven consecutive days or more in a higher classification shall have his or her Base Rate of salary as set out in Annexure A increased by 1 0% for the period of relief.** **Study leave will be granted at the rate of 10 days paid in each period of 12 months' continuous service with the RFDS.** **The AREC, ACLS and MIDUS, courses will be given priority for**	**0vertime shall be calculated on hours worked in excess of 180 hours in any one roster cycle of 42 days.** **All overtime in excess of 180 hours in a roster cycle of 42 days shall be paid at time and a half of hourly rate of pay.** **Where an employee is requested to work on a rostered day off they will be entitled to a Rostered** **Day Off payment equivalent to their Daily Rate of Pay at the overtime rate specified** **The employee shall accrue a maximum of 7 shifts of time off in lieu of working on a rostered day off for which they may apply for time off in lieu of payment. Extensions beyond this limit are to be agreed upon an individual basis with the Employer. Where the extension is not agreed, all time off in lieu of working on a rostered day off in excess of 7 shifts will be paid to the individual at the** **end of the pay period during which the rostered day off is worked at the relevant rates specified**

			thirty six (36) hours continuous duty free period prior to commencing the next Duty Period. **If the next Duty Period is a rostered day off, the next duty period will be considered a fatigue day off in lieu.** **Flight Nurses must inform the Senior Flight Nurse / DON when it becomes apparent fatigue management needs to be considered and implemented.** **A Flight Nurse who deems herself/himself unable to safely execute nursing care in the aeromedical environment due to fatigue arising from duty with RFDS SE Section or other contingent circumstances, shall not be required to perform nursing duties for a period of time agreed with the Director of Nursing or her/his delegate .Any resulting absence from work will be on full pay.** **Employee shall be provided with an opportunity for adequate rest and the employee shall take adequate rest during the rest period prior**	**approval with the full cost to be met by the RFDS, subject to receipt by the RFDS of any subsidy payable, up to the total attendance at the course. Funding for attendance at other courses will be at the discretion of the RFDS and subject to budgetary constraints.**	
		An employee engaged on 12 hour shifts shall be rostered for a maximum of 16 duty periods in any 28 day roster period.	**At the commencement of a Rostered Duty Period, an Employee shall be free of any fatigue, illness, injury,**	**$103,122** **Retention and all other allowances included**	**No overtime payment – Time off in Lieu (TOIL) only**

ROYAL FLYING DOCTOR SERVICE OF AUSTRALIA (QUEENSLAND SECTION) LIMITED NURSES ENTERPRISE AGREEMENT 2014 - 2018.	**64**	**In Aeromedical and PHC Clinic environments, it is agreed a 12 hour duty shift is equivalent to an average of 9.5 hours worked.** **An Employee may be contacted for duty up to one (1) hour before the nominated start time for priority one (critical/immediate patients) as identified in the relevant Aeromedical Services Manual.** **The Day Duty Period will commence at paging for a task OR one (1) hour after the roster shift start time OR on attendance at the workplace, whichever is earliest.** **The Duty Period for Night Duty will commence at the time of the nominated roster start OR at the time of paging if that time is before the nominated shift start time.** **An Employee who is on a Rostered Duty Period is required to be able to attend the workplace within thirty (30) minutes of being contacted or forty-five (45) minutes if based in Brisbane.** **An Employee, who is on a Rostered Duty Period, shall be required to attend the workplace for operational, non-clinical duties, administrative and associated duties, professional development and scheduled meetings. During this period, the Employee is required to**	**medication or drug which would impair the safe delivery of nursing care** **If the hours look to exceed 152 before the end of the 28 day roster period, the Nurse Manager may, when feasible and operationally possible, remove the requirement for the employee to attend the work place on a rostered shift to minimise fatigue and TOIL accumulation. Where neither feasible nor operationally possible, TOIL will accumulate** **Where an Employee is suffering from work related fatigue that may affect their capacity to safely deliver nursing care or feels affected by other extreme work related circumstances, the Employee shall bring these issues to the attention of the Nurse Manager or their delegate** **The Employee shall be provided with an opportunity for adequate rest and the Employee shall take adequate rest during the rest period prior to commencing**	**Salary packaging arrangements are available** **Superannuation paid at nominal rate initially. If employees contribute 5%, after 6 months RFDS will increase to 10% and after 3 years' service to 12.5%** **Annual leave equalling 6 weeks/year**	**Where full-time employees work more than 152 hours in the 28 day roster cycle, they will be able to access the additional hours as time off in ieu.** **TOIL can only accumulate to a maximum of 5 days** **Where a nurse requests in special circumstances to exceed the 5 day accumulation, this must be approved by the relevant Regional Manager.** **TOIL should only be taken in the circumstance where backfill will not be required.** **Accumulated TOIL can be cashed-in at any time at the request of the Employee. Cashed-in TOIL attracts superannuation, but leave does not accumulate on the payment.**

		complete all duties that are necessary for that duty period and to complete any outstanding work. Once this work has been completed, the Employee shall continue to be contactable and available for duty at all times during their rostered on call period			
ROYAL FLYING DOCTOR SERVICE OF AUSTRALIA (WESTERN OPERATIONS) NURSES AGREEMENT 2015 - 2018.	**45**	**There are no stated hours of work for this EBA** **A FN will have the right to refuse unreasonable additional hours as per the Fair Work Act.** **Rosters shall display rostered duty periods of eight (8), ten (10) or twelve (12) hours duration.** **A FN shall be rostered for no more than seven (7) consecutive rostered duty periods, except agreed to by both the FN and RFDSWO** **A FN shall be rostered for a maximum of four (4) consecutive rostered night duty periods of twelve (12) hours duration, except where agreed to by both the FN and** **RFDSWO** **Due to the [annualised salary] provision commencement and completion times of rostered days off (RDO) are strictly prescribed in the EBA – for example where a FN is rostered to work a day shift (06, 08, 010, and 014) prior to a RDO, the**	**At the commencement of a Rostered Duty Period, an Employee shall be free of any fatigue, illness, injury, medication or drug which would impair the safe delivery of nursing care** **The parties acknowledge the unique demands of providing nursing care in an aeromedical environment and the importance of maintaining appropriate fatigue management strategies.** **RFDSWO is committed to ensuring such strategies including those prescribed by this clause, are available to assist FN's avoiding working while fatigued.** **A FN who deems them-self unable to safely execute nursing care due to fatigue arising from duty with RFDSWO, shall not be required to perform nursing duties for a period of time agreed with the GM or Operational Senior Nurse. Any resulting absence from**	**$134,140** **RFDSWO shall maintain insurance cover for each FN covered by this Agreement in respect of personal injury or death arising out of aircraft accidents and arising from FN duties.** **Salary packaging arrangements are available** **Superannuation paid at nominal rate on the Employee's Total Salary** **Annual leave equalling 7 weeks/year plus one day of leave (up to a maximum of five (5) in total) for every two months of paid service worked north of the 26th parallel or in Meekatharra.** **A FN who has completed a Post Graduate Certificate in midwifery and who maintains registration as a midwife shall to entitled to a qualification allowance of $2200 per annum.** **After each twelve (12) months of continuous service, a FN shall be**	**Except where expressly stated in this agreement, the annualised Salaries prescribed in** **Schedule A of this agreement are in lieu of the provision of an average 38 hour week, overtime, penalties, on call and any other entitlement that would otherwise exist under the** **Award.**

		RDO shall commence and finish at 2400 local time. **Where a FN is rostered to work a night 1 (N1) shift prior to a RDO the RDO shall commence and finish at 0600 local time. For a night 2 (N2) the RDO shall commence and finish at 0800 local time.** **A FN, who ceases a period of continuous nursing duty on what would otherwise be an RDO at a location other than their home base, shall be entitled to a continuous duty free period in accordance with Clause 12.2.7 and 12.2.8. At the end of the continuous duty free period, a FN required to commence work on what would otherwise be a RDO shall be paid double time for the number of hours worked. On cessation of such duty the FN shall be entitled to a RDO to be taken at the conclusion of the current duty free period.** **At bases other than Jandakot (city), a FN who is on a rostered duty period is required be contactable and available for duty at all times and shall be able to attend the work place within thirty (30) minutes of being contacted. At Jandakot, a FN who is on a rostered duty period shall be able to attend the work place within forty** **five (45) minutes of being contacted.** **Hours of attendance at the work place for purposes other than actual operational flying and**	**work will be on full pay.** **RFDSWO shall provide the FN with an opportunity for adequate rest** **It is recognised that a FN may not always be able to take a timely meal break. In such circumstances the FN will access a reasonable meal break at the first opportunity. For the purposes of this clause, the duration of a reasonable meal break is 30 minutes. This period** **may be reduced by the FN if operational requirements arise and the FN is agreeable** **On the completion of a duty period, A FN shall be entitled to the following duty free period prior to commencing their next rostered duty period. This continuous duty free period shall be increased by one hour for every hour or part of an hour that the FN's hours of work exceed ten (10) hours.** **b) If worked eleven (11) hours, then have eleven (11) hours break** **c) If worked twelve (12) hours, then have twelve (12) hours break** **d) If worked thirteen (13) hours, then have fourteen (14) hours break**	**entitled to six (6) days of** **professional development leave (PDL). By prior arrangement, PDL** **may be utilised as an up to ten day block of in a two year period.** **PDL assistance, non cumulative, will be available to FN's and will be paid on the presentation of receipts for travel and expenses and certificates of completions once the course has been completed.** **A gratuity payment recognising continuous service for all bases - an initial payment after 2 years continuous service between $3-8,000 and then subsequent payments on an annual basis between $1500-4000** **At locations other than Jandakot Base RFDSWO shall provide suitable furnished accommodation** **for any FN, her/his children and her/his spouse/ defacto spouse or partner living with the FN when appointed to work at a base outside of the metropolitan area** **Rental charges for accommodation shall be calculated at 5% of the base salary component of a FN's annualised salary as prescribed at Clause Schedule A.** **Utility charges (i.e. water, electricity and gas) shall be calculated at 3% of the base salary component of a FN's annualised salary as prescribed at Schedule** **At locations other than Jandakot Base, where a FN chooses not to utilise RFDSWO accommodation, the FN will be paid a fortnightly**	

		associated duties, shall be determined by RFDS WO. **Rosters to reflect that mandatory attendance at a base for non-flying duties only, will be for a maximum of up to 7.6 hours per day plus thirty (30) mins for lunch**	**e) If worked fourteen (14) hours, then have sixteen (16) hours break;** **f) If a FN works 15+ hours they will not be required to work the next rostered shift. If the 15+ hours shift precedes a day off they will be entitled to 7.6 hours TOIL which will be banked to be paid back on approval. TOIL only applies if the FN was not able to recoup the extended hours by not working the next rostered shift.** **Where a FN rostered to work a night shift is required to commence duty before the commencement of that night shift, for operational reasons, they shall not be required to work the night shift they were rostered to work at the conclusion of the duty period worked.** **A FN who has overnighted or over-dayed at a location other than their home base shall be entitled to an extra hour added to their continuous duty free period prior to commencing their next rostered duty period.**	**accommodation and utilities allowance, $8,978.21 per annum. The subsidy will be adjusted in March each year of this Agreement as per the Perth, Western Australia CPI rate**	
		Ordinary hours of duty are defined as 152 within a cycle not exceeding 28 days.	**No fatigue management policy listed**	**$100,245** **Salary packaging arrangements are**	**Where an employee is recalled to work and the actual time worked is less than the**

NURSING/MIDWIFERY (SOUTH AUSTRALIAN PUBLIC SECTOR) ENTERPRISEAGREEMENT 2013. **This Agreement is to be read and interpreted wholly in conjunction with the *Nurses (South Australian Public Sector) Award 2002* (the Award) or any successor thereto; provided that where there is inconsistency between this Agreement and the Award this Agreement takes precedence to the extent of that inconsistency.** **MEDSTAR SA**	**unknown**	**Rostering is by a 7 day roster** **No rostered times of work listed for FN** **No area within the agreement that specifically lists FN** **The parties agree that an agency (for the purposes of this clause 'agency' is DHA and/or DCSI) may negotiate and reach agreement at a workplace level with employees within that workplace (including an individual employee), on more flexible employment arrangements that will better meet the operational needs of the workplace having regard to the needs of employees (including taking into account employees' family and other non-work responsibilities).** **The parties bound by the Agreement acknowledge that the provision of health services in this State is subject to ongoing development and restructuring in order that the best possible health outcomes are achieved for the people of South Australia. To this end it is acknowledged that the *South Australian Health Care Plan 2007-2016* released on 6 June 2007 by the Minister for Health provides the platform for health service reform**		**available** **Annual leave as per the Award** **Nurses and midwives will have access to an average of 3 days professional development leave per annum** **Skills maintenance/training will be provided by the employer in addition to the 3 days and will include the following training: Fire safety; Manual handling ; Hand hygiene ; Basic Life Support (CPR); Aggression Management (where relevant and required in specific health settings) ; Drug calculations; Child protection ; Implementation or maintenance of clinical systems ; Administration and/or record keeping; Advanced Life Support (where relevant and required in specific health settings)** **Performance review and development of employees will be developed/maintained for all nursing/midwifery staff during the life of this Agreement** **Nursing/midwifery employees will be entitled to progress to the next increment higher than their previous increment on their next annual anniversary date (or after completion of 1610 hours for casual/part time employees but no earlier than 12 months) in accordance with existing incremental progression dates.**	**minimum of 3 hours on such recall(s), the time worked is considered as interrupting the 8 consecutive hours off duty. That is, clauses 5.4.10 and 5.4.11 of the Award apply.** **At the request of an employee and where agreed to by management, where an employee is recalled to duty the payment of recalls to work may be deferred and accumulated to be taken as time off in lieu (TOIL) with a period of annual leave. Employees may accumulate up to 2 weeks time off in lieu of payment for such recalls.** **Employees will be paid at ordinary time rates (i.e. base rate and Sunday penalty rate) for the extra hour worked in the month that Daylight Saving ceases and have the option to either work an extra hour or to take one hour leave without pay in the month that Daylight Saving commences, such that it will be of no additional cost to DHA.**

Appendix 9: Comparison of FN Award Working Conditions and Salary

Award	FN Staff Number	Hours of work	Fatigue management policy	Salary –FN level 1	Paid overtime
Nurses (South Australian Public sector) award 2002 transition. **MedStar – in conjunction with EBA**	**Unknown**	**Ordinary hours of duty are defined as 152 within a cycle not exceeding 28 days. There should be a reasonable balance of hours worked in each fortnight of any 28 day period.** Rostering is by a 7 day roster **Registered nurse level 3** (RN3) means an employee who is registered by the Nurses Board of South Australia as a registered nurse, who holds a current practicing certificate and any other qualification required for working in the employee's particular practice setting. The RN3 is appointed by a selection process or by reclassification from a lower level in the circumstances that the employee is required to perform the duties detailed in this subclause on a continuing basis. **1.6.14(b)** An employee appointed at this level is required in addition to the duties of an RN2 to undertake a number of other functions such as provision of clinical leadership and role modelling; deliver comprehensive nursing care to a specific group of patients with complex needs; co- ordinate and manage MDT that provide acute or community nursing care; be accountable for human and material resources; manage budgets, financial matters and cost control in conjunction with the nursing budget; relieve level 4&5 RN as required	**No fatigue management policy listed** An employee must wherever practicable have at least eight hours free from duty between the completion of one rostered shift and the commencement of the next rostered shift. Where the ordinary hours of work on a rostered shift have exceeded eight hours, the period free from duty must be at least equal to the number of ordinary hours of the shift being worked concurrently with the period free from duty. Every employee is wherever practicable entitled to consecutive days off duty, provided the provisions of this subclause may be varied by mutual agreement.	"We're all level three nurses" Clinical Services Co-Coordinator or Clinical Practice Consultant	Should an employee, other than a registered nurse level 4 or 5, rostered to be on call be recalled to duty they will in addition to the rates prescribed in 4.4.1, be entitled to receive normal overtime provisions in accordance with the provisions of clause 5.4 - Overtime. An employee rostered to be on-call for a period spanning two days over which two different on call allowances apply, will receive payment which is equal to the allowance payable for the day attracting the higher allowance. Penalty rates are prescribed and shall be paid for every shift worked, with the exception of RN4&5 Reasonable overtime hours will be paid at the set rates An employee may refuse to work overtime in circumstances that would lead to the employee working unreasonable hours

Public Health System Nurses' and Midwives' (State) Award 2015. NSW. **AANSW** **NETS NSW**		**The ordinary hours of work for shift workers, shall not exceed an average of 38 hours per week in each roster cycle.** **Flight Nurses shall not exceed 30 hours flying time in each period of seven days** **In each roster cycle of 28 calendar days each employee shall not work his/her ordinary hours of work on more than nineteen days in the cycle.** **Employees working 10 hour shifts are entitled to one additional day off duty each five weeks;** **The minimum break between shifts shall be 11.5 hours.** **Each shift shall consist of no more than 10 hours on a day shift or 11 hours on a night shift with not less than 10 hours break between each rostered shift.** **An employee shall not work more than 7 consecutive shifts** **The employer has a responsibility to provide reasonable workloads for nurses** **The work will be consistent with the duties within the employee's classification description and at a professional standard so that the care provided or about to be provided to a patient or client shall be adequate, appropriate and not adversely affect the rights, health or safety of the patient, client or nurse.** **The workload expected of an employee will not be unfair or unreasonable having regard to the skills, experience and classification of the employee for the period in which the workload is allocated.** **An employee will not be allocated an unreasonable or excessive nursing workload or other responsibilities except in emergency or extraordinary circumstances of an urgent nature.**	**No official fatigue management policy but not allowed to fly over 30 hrs/ 7 day duty period** **Have a number of other conditions of work that must be complied with that protect against fatigue**	**RN8/CNS1/CNS2/NUM/NE/NM – all achieve different pay rates. Lowest is RN8 - $83,403 /yr; highest is NM $104,328 /yr** **In addition to the weekly rate of pay prescribed by Clause 9, Salaries, Flight Nurses shall receive the sum in Item 19 of Table 2 of Part B as an industry allowance. This allowance shall not form part of the normal wages in respect of overtime, shift penalties or penalties for weekends and public holidays. This allowance shall not be payable on annual leave, long service leave or sick leave.** **Reserve Duty Allowance – A Flight Nurse required to stand by at a country center outside normal rostered hours shall be paid one-third of the normal hourly rate while so doing and while not engaged in actual duties.** **Unscheduled Stopovers - A Flight Nurse required to remain away from home overnight shall be provided with accommodation and full board of a reasonable standard which will be paid for by the Ambulance Service.** **Each five hours during a tour of duty only, a meal allowance, as set out in subclause (ix) below shall be paid unless a meal is provided** **The allowance per meal shall be the average of the allowances for breakfast, lunch and dinner as determined by Item 19 of Table 1 of the Department of Premier and Cabinet Circular C2010-28**	**An employee shall not be required to work an unreasonable amount of overtime** **An employee's workload will not prevent reasonable and practicable access to Learning and Development Leave, together with** **'in-house' courses or activities, and mandatory training and education.** **In lieu of the conditions specified in subclauses (ii) and (iii) of this clause, a nurse who works overtime may be compensated by way of time off in lieu of overtime, subject to the following requirements:** **Time off in lieu must be taken within three months of it being accrued at ordinary rates** **Where it is not possible for a nurse to take the time off in lieu within the three month period, it is to be paid out at the appropriate overtime rate based on the rates of pay applying at the time payment is made.** **Nurses cannot be compelled to take time off in lieu instead of overtime.** **Time off in lieu of overtime should only be considered as an option in those circumstances where the employer is able to provide adequate replacement staff to ensure that the level of quality of service that would otherwise have been provided had overtime been worked, is in fact provided.** **Records of all time off in lieu owing to nurses and taken by nurses must be maintained.**

Nurses and Midwives (Victoria) State Reference Public Sector Award 2015. **NETS VIC**		**The ordinary hours of work for a full-time employee will be 38 hours per week, 76 hours per fortnight or 152 hours over 28 days** **The shift length or ordinary hours of work per day will be a maximum of 10 hours exclusive of meal breaks.** **Each employee must be free from duty for not less than two full days in each week or four full days in each fortnight or eight full days in each 28-day cycle. Where practicable, such days off in a week must be consecutive.** **At the time of engagement an employer will inform each employee whether they are employed on a full-time, part-time or casual basis.** **A full-time employee is one who is engaged to work 38 hours per week or an average of 38 hours per week**	**An employee will be allowed a rest break of eight hours between the completion of one ordinary work period or shift and the commencement of another ordinary work period or shift.**	**Yr11/12 RN/RM** **Salary approx. $ 77,928 /yr** **Superannuation paid at nominal rate on the Employee's Total Salary** **The maximum period or aggregate of periods of accident make-up pay to be made by an employer will be a total of 39 weeks for any one injury.** **Accident make-up pay means a weekly payment of an amount representing the difference between the total amount of compensation paid in accordance with the WIRC Act as amended for the week in question and the total 38 hour weekly rate** **A Registered Nurse engaged in duties carrying a higher rate than the employee's ordinary classification on any shift for more than two hours shall be paid at the minimum rate for that higher classification for the full shift or, if for two hours or less, only the time worked shall be paid for at that higher rate.** **With the consent of the employer, ADOs may be accumulated up to a maximum of five in any one year.**	**The entitlement to be free from duty as described at clause 19.4 (two full days per week, four per fortnight etc.) includes on-call/recall work. Therefore additional days leave will be paid dependant on how many on-call periods were worked (refer to award p.13) up to a maximum of 5 days additional leave**

Nurses Award 2010 **Not applicable to FN**		**This award does not cover employees who are covered by a modern enterprise award, or an enterprise instrument (within the meaning of the Fair Work (Transitional Provisions and Consequential Amendments) Act 2009 (Cth)), or employers in relation to those employees.** **The award does not cover employees who are covered by a State reference public sector modern award, or a State reference public sector transitional award**		