

**An integrated literature review
of the role of the
Nurse Practitioner in the
Emergency Department**

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ABSTRACT

The nurse practitioner is one of the newest nursing health care professionals to be introduced to the New Zealand health system for many years. Eighty-six nurse practitioners are credentialed in New Zealand, with three working in urban Emergency Department settings. Nurse Practitioners are common internationally especially in the United States, Canada, United Kingdom and Australia. The purpose of this integrated literature review is to explore current research and literature in regards to the Emergency Department Nurse Practitioner, and their role within emergency settings. This review presents the growth and development of the nurse practitioner as an advanced practice nursing position.

Four key themes emerge from the literature review; education of the Emergency Nurse Practitioner, how and who defined the Emergency Nurse Practitioner role, practice setting of the Emergency Nurse Practitioner, and what the barriers are to independent practice. The economic, legal and governance aspects of the Nurse Practitioner role are also portrayed.

This integrated review documents the potential for further development and expansion of the Emergency Nurse Practitioner scope of practice to provide a broad range of patient care services within Emergency Departments, and emergency care settings. Future research is essential for the promotion of autonomous practice of the Emergency Nurse Practitioner within the international and New Zealand health care system.

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CHAPTER ONE:

BACKGROUND

1.1 Introduction

This dissertation describes an integrated review of the literature in regards to the Emergency Nurse Practitioner (ENP) role. This review is important as Nurse Practitioners (NPs) within New Zealand are new (the first one became registered in 2001), and it is also a new role within Emergency Departments (EDs). I chose to investigate the literature, as I had personal observation for a short time of the role of urban ENPs, and rural NP within New Zealand. From this brief observation I concluded that the scope of ENPs could be much broader. This is of particular significance to myself, as I work within a semi-rural ED.

I have worked as an emergency nurse for fourteen years, and have a special interest in emergency and pre-hospital care, the rural environment, and road/air transfers of patients. Growing up in a rural area and completing some volunteer ambulance work has had a large influence on my interest in emergency care. I am currently employed as a clinical nurse educator and clinical nurse co-ordinator in a level four ED which has 20 beds, in a small city of just over 50,000 people in New Zealand. A level four ED within New Zealand is expected to be able to provide certain service components, as per Ministry of Health guidelines (Ministry of Health, 2003). Level four EDs are termed a major secondary hospital ED by the Ministry of Health (2003), and though not specifically stated within this document, similar size EDs within New Zealand include Taranaki, Whangarei, Palmerston North and Hawkes Bay (Hastings). Southland hospital has approximately 198 beds, and during the period of July 2009 – June 2010, there were over 31,000 ED presentations. By New Zealand standards, more than half of the community served by this hospital is based in rural areas (Southland & Otago District Health Boards, 2009). These two previously neighbouring District Health Boards (Southland & Otago), have worked together to streamline services and resources for the wider community (Gauld, 2009; Morgan & Simmons, 2009), and are now amalgamated as the Southern District Health Board.

Activities within the Southland ED for nursing staff include initiating triage, and completing initial assessment of stable and more unwell patients. Treatment of patients within guidelines already occurs within our small department including the prescription of medications for specific conditions, under standing orders. Prioritising and sound assessment skills are developed by most emergency nurses over time. Benner (1984) discusses how not all nurses will become experts; for those that are competent or proficient, they need to have a vision of “what is possible” (p.35). Many of my colleagues have many years of experience and demonstrate forward thinking; others are newer to the ED role and pace and as they adjust to this, are being exposed to a wide range of patient age groups and presentations. Age ranges seen by the Southland hospital ED include newborns to those over 100 years; patient presentations include minor injuries and illness to major traumas and cardiac arrest patients.

Southland hospital currently covers a broad geographic area, including two major tourist destinations, and two other community hospitals transfer patients to this base hospital regularly. The area also includes Stewart Island, and a major part of the southern ocean off the south coast of New Zealand. The nearest tertiary centre is 2.5 hours by road; some patients are retrieved by air transfer to various centers throughout New Zealand including Dunedin, Christchurch and Auckland. Types of patient conditions sometimes retrieved by air include paediatric clients, those with spinal injuries/major burns, and patients requiring neurosurgery or cardiothoracic intervention. At times ED nurses are asked to complete mostly road transfers, with no prior knowledge of transport risks or training (Worley, 2009; Semonin-Holleran, 2008; Gentil, Ramos & Whitaker, 2008; Gunnarsson & Warren Stomberg, 2009). Emergency nurses who are asked to undertake transfers must have a broad range of knowledge and skills, and also be able to implement lateral thinking quickly when required. In contrast to larger centers, these areas often have dedicated transfer nurses who are recognised and form part of a transfer team. Thus although not undertaken regularly, transfers form part of an ever-broadening role and scope for the registered nurse in the local ED, potentially demanding more advanced skills.

All ages of patient presentations are cared for by the ED nurse, and remain their core focus. Providing support and education for patients, liaising with medical staff regarding plans for patient care, and discharge planning form the main parts of the role. The small ED assesses and treats to the best of its ability and resources any person or condition that may present. In many rural areas of Australasia, registered nurses and NPs are currently assessing and treating for this range of patient presentations and are doing so competently (Timmings, 2006;

Paterson, 2007). This is in response to meeting patient need within their communities (Mills, 2009; Provost, 2010).

Historically, different health professions have differing roles in the provision of care for patients. Medical practitioners within New Zealand need to be registered with the Medical Council of New Zealand, must hold an annual practicing certificate, meet a required standard of competence, and work within a particular scope of practice (Pharmaceutical Management Agency of New Zealand [PHARMAC], 2010). Generally, medical practitioners assess a patient condition by history taking and physical examination, request diagnostics as appropriate, order and complete treatments, and prescribe medications for patients. A registered nurse within New Zealand, while still having to meet regulatory expectations similar to medical practitioners (as above), often complete treatments and care ordered by a medical practitioner, though nursing has a different philosophical background to medicine. Included in the nurses role is the utilisation of knowledge and complex nursing judgement to assess health needs and care, including the provision of advice and support for patients to manage their own health, if able (New Zealand National Nursing Organisations, no date).

It is envisaged that the role of the NP is in addition to the registered nurse, and will allow for an alternative regulated healthcare provider within EDs, who could assess, treat, refer, prescribe and discharge, as appropriate, patients with a range of presentations (New Zealand Nurses Organisation [NZNO], 2009b; Safih, 2009; Safih, 2010; Yarwood, 2010). The ENP in the future may not be confined only to the ED, but may respond to rural or semi rural emergencies as part of a team, depending on local community need, resources, and demand (Williams, 2006; Ministry of Health, 2009, cited in Nursing Council of New Zealand, 2009d; Provost, 2010). This emergency team response occurs in some other countries presently (Kedgley, 2008; Hoyt et al., 2010). Ongoing consultation and collaboration with emergency consultants is an important factor in the provision of the ENP role. However, like any evolution the barriers and facilitators to practice need to be considered and applied to local health needs and demands now, and into the future.

As this chapter proceeds, several factors are examined to provide the reader with background information in regards to the role of ENP, and how this has developed. My bias and interest in this subject matter is declared. Summarised are differences between urban and rural healthcare and health systems, the role of EDs and issues within New Zealand, and the concept of new health practitioners. Following this is an explanation as to what a NP is in the

United States (US), Canada, United Kingdom (UK) and Australia, and how New Zealand has defined the NP role. These explanations are provided as each country was found to have a unique perception of the NP role, how NPs were educated, and also regulation of NP. Within countries and regions, preparation and regulation of the NP also varied.

1.2 Urban/rural healthcare, and health systems

Generally, people in more rural and isolated areas have less access to healthcare than their urban counterparts (Ministry of Health, 2000; Gauld, 2001; Brabyn & Barnett, 2004; Robson, 2008; Crampton & Foley, 2008; Brown, Hart & Burman, 2009). Often, travel distances and economic status of patients affect their ability to have treatment within the healthcare environment. A distinction between urban and rural populations, as defined by the World Health Organisation (WHO) is:

Urban – those working in urban areas or in planned metropolitan communities in developed areas designed to be self-sufficient, with their own housing, education, commerce and recreation.

Rural – those working in rural areas or in areas outside cities and metropolitan areas, generally regarded as underdeveloped in terms of infrastructure and specialised services.

(World Health Organisation, 2008).

Infrastructure from rural areas in New Zealand has become centralised in an effort to be cost effective. Access to services such as banks, fuel, chemists, and health care services has become increasingly difficult. Many patients in the regional areas need to travel for one - two hours to see a health professional, depending on location and time of day (Gauld, 2001; Rural Expert Advisory Group, 2002; Brabyn & Barnett, 2004; Howie, 2008; Dillon, 2008; Provost, 2010). This has had a significant impact on the local health system, and on patients as they struggle to access healthcare for themselves or their family. Often patients have no means of communication such as telephone, have no transport, have poor housing, are from low socioeconomic groups, and from varied ethnicities including Maori and Pacific Island descent (Ministry of Health 2001; Rural Expert Advisory Group, 2002; Robson, 2008; Easton, 2008; Howden-Chapman & Bierre, 2008; Manchester, 2010). From 2006 data, the Southern District Health Board regions have the second highest number of people in the South Island,

identifying as Maori (Ministry of Health, 2006). People who identify as Maori in the southern region number 22,000, or four per cent of the New Zealand Maori population (Statistics New Zealand, 2006). Maori are well known to have poorer health outcomes than other patient groups within New Zealand, which in some areas appears to be slow to improve over time (Pomare & de Boer, 1988; Durie, 1998; Gauld, 2001; Robson, 2008; Gauld, 2009; Morgan & Simmons, 2009).

Access to healthcare has become a concern worldwide, as is escalating cost. The cost burden may stem from advancing technology, patient demand, and increasing age of the population (Gauld, 2009; Morgan & Simmons, 2009). However there are also large variances for healthcare system funding, and degree of success or performance of the various systems (Moran, 1999; Gauld, 2001; Tuohy, Flood & Stabile, 2004; Belgrave, 2008; Gauld, 2009).

The New Zealand health system has evolved since the signing of the Treaty of Waitangi in 1840. In 1846 the first four district hospitals were provided by the state, but were only free of charge to the Maori population and indigents at this time (Gauld, 2001). The department of public health was formed in 1900, with the threat of bubonic plague, tuberculosis and small pox becoming evident from the European immigrants to New Zealand (Dow, 1995). Over the next century, the New Zealand health system continued to evolve (Dow, 1995), with many ongoing structural reforms apparent from the 1980's onwards (Gauld, 2001). Though our present day health system it may be argued provides adequate healthcare to the broad population, historical themes and problems within it continue. Gauld (2001) identifies five main issues, which include tensions between central and local delivery of resources, the mix of private and public funding of healthcare, and the lack of access to healthcare due to financial or geographical reason. The integration between primary and secondary care remains weak, and the power of the medical profession, other interest groups and the general public demand which has led to the shaping of the system, have all contributed to our present day structure (Gauld, 2001).

In Australia, healthcare is generally funded through taxation, and is referred to as Medicare. This system operates within all seven states and generally covers patients for primary health visits, pharmaceuticals and hospital care (Health Insurance Consultants Australia, no date). There is still some charges for primary care, often termed co-payments (Swerissen, 2004). The level of taxation and contribution to the healthcare fund is dependent on an individual's income; private insurance is available to those who desire it (Australian Government, 2010).

In contrast each state within the US has its own rules and regulations in regards to the provision of healthcare and there is no national health fund; healthcare is generally 'market' driven, and is complicated and expensive (University of Maine, 2001; Spithoven, 2009). Both Medicare (more focused on the elderly) and Medicaid (focused on lower income earners and the disabled) is available to help pay for patient's healthcare. Employers offer health benefits as part of employment, though generally these benefits are not transferable between roles (University of Maine, 2001; Spithoven 2009). Private insurance is available, however over 38 million Americans did not have any type of health insurance in 2000, so were expected to pay for their own health needs (Irvine, 2002). Spithoven (2009) examines that the highest growth of the uninsured in the US between the years 2000-2001 were family units, who earned more than \$75,000 US per annum; this may or may not have been by choice.

The universal National Health System (NHS) exists within the UK, and has since 1948. Differences between UK countries and their health systems are becoming more prevalent, meaning that variances between UK countries sometimes occurs (Rivett, no date). The NHS generally provides free primary and hospital care (Health Policy Consensus Group, no date), and is funded through general taxation. Private insurance for healthcare is available, again to those who can afford it. The NHS is currently working through a major revolution in healthcare, with primary care practitioners (general practitioners, or GPs) being required to take over the NHS budget from managers, as directed by the UK government. Various agendas and potential issues with this system will become evident in the next 3-4 years, and as these changes progress (Rivett, no date; Martin, 2010).

Canada has a national health system called Medicare, which is funded by general taxation. Within the thirteen Canadian provinces and territories, this funding is distributed in different ways (Health Canada, 2010). Private insurance is available (Irvine, Ferguson, & Cackett, 2005). The Canadian system does set out to provide guaranteed healthcare to all its citizens, but appears more efficient and cost effective generally when compared to the US system (Spithoven, 2009). Greater provision of the primary care service, productivity of the healthcare system, and the general health of Canadians also appears to exceed the US (Spithoven, 2009).

As well as recognising diverse funding structures currently applied to healthcare throughout the world, new ways of providing healthcare are being considered with some urgency in most countries, including New Zealand (Rural Expert Advisory Group, 2002; Ryall, 2007). NPs

are considered one of the potential healthcare providers who will make a contribution to improving access and affordability for people in New Zealand (Ministry of Health, 2001; Rural Expert Advisory Group, 2002; Ryall, 2007; Maw, 2008; NZNO 2009b). The importance of accessibility for all people to healthcare is recognised by other westernised countries, and may have stemmed from the nature and structure of their individual health systems, societies and cultures (Lancaster, Lancaster & Onega, 2000; Canadian Nurses Association (no date); Williams, 2006; Hayley & Kellermann, 2009; Menchine, Wiechmann & Rudkin, 2009; Hoyt & Proehl, 2010).

1.3 Emergency Departments and the local situation

Publicly funded healthcare within New Zealand includes the provision of emergency care. Thus EDs are present within many public hospitals to provide assessment and treatment to those patients with emergencies. However, health professionals and patients have different concepts of what necessitates a visit to ED. Acute care or emergency care generally refers to health care for a condition that has sudden onset, and is typically of a short duration (Working Group for Achieving Quality in Emergency Departments, 2008). Additionally, some clinicians distinguish acute care from emergency care, whereas emergency care could be described as the provision of care to a patient experiencing a major health crisis (Working Group for Achieving Quality in Emergency Departments, 2008).

A unique part of the New Zealand health system is the Accident Compensation Corporation (ACC), which has existed since 1974. Any person that has an accident within New Zealand is entitled to be cared for and provided with rehabilitation by this service, including tourists (ACC, 2010). It is funded by New Zealand taxation, via levies on groups such as employers and motorists. For some high risk occupations, employer levies paid to ACC are higher, compared to low risk occupations (ACC, 2008). Current debate is occurring about ACC provision and its structure, due to continually rising costs (Smith, 2009).

For many people, EDs are their first choice of access to healthcare, often due to financial constraints (Ministry of Health, 2001; Ryall, 2007; Morgan & Simmons, 2009; Provost, 2010). This use of ED occurs despite provision of primary health organisations (PHOs) within New Zealand, where much of the population is enrolled for their primary care needs (Gauld, 2009). Patients who do not have a GP for various reasons, including not being able to become enrolled due to practices being overwhelmed with patients, will come to the hospital for their

general and primary health needs (Bezzina, Smith, Cromwell & Eagar, 2005; Working Group for Achieving Quality in Emergency Departments, 2008; Ryall, 2007; Ministry of Health, no date [a]; Provost, 2010; NZNO, 2010). Patients will also present with what the patient or whanau (a Maori word meaning family) consider an emergency, whether or not it matches the definition provided above. Variation in interpretation of what constitutes an emergency is not particular to any cultural group, or age group within society, and is deemed to be common in EDs throughout the world (Tachakra & Stinson, 2000; Maurice & Byrnes, 2001; Mills & McSweeney, 2005; Thrasher and Purc-Stephenson, 2007).

Primary care presentations to EDs may include preventative health, a repeat prescription for medication, or presentation of a patient with a non life-threatening condition. This can affect patient flow through the department, and often extends waiting times for other patients. EDs are designed for acute care, such as the assessment and stabilisation of chest pain patients, victims of road traffic crashes, and treatment for lacerations. There is much debate worldwide and within New Zealand about the ‘inappropriate attender’ (Trzeciak & Rivers, 2003; Bezzina et al., 2005; Richardson, Ardagh & Hider, 2006; Sandoval et al., 2010). This problem is exacerbated as for each person their perception of ‘emergency’ varies widely. Currently, professional nursing colleges do not recommend ‘turning away’ of any patients (College of Emergency Nurses New Zealand – NZNO, 2009).

Within the New Zealand health system, there will often be a fee attached to a PHO visit. This fee is in addition to the funding that the PHO receives from the Government for their enrolled population and is set according to their priorities for their community (approved by the District Health Board), and also the degree of deprivation in the area covered (Robson, 2008; Easton, 2008; Crampton & Foley, 2008; Gauld, 2009). Whilst some general practices choose to make children’s visits free, most adult patients pay for primary care visits, unlike hospital visits to EDs which are free to everyone. To manage this disparity it has been suggested that GPs treat people presenting to EDs with primary health care concerns (Ryall, 2007). These clinics would be within or close to the ED; there would be a fee charged for this service, but these services are not available or functioning yet in most areas within New Zealand. Internationally and within New Zealand there are conflicting viewpoints around the location of GPs or primary care clinics within EDs (Krakau & Hassler, 1999; Boushy & Dubinsky, 1999; Richardson, 1999; Elley, Randall, Bratt & Freeman, 2007; Lega & Mengoni, 2008).

'Fast track' services within EDs often assess minor injury or illness, sometimes complete basic diagnostics, and aim to have the patient assessed, treated and discharged within 1-2 hours. Fast track may be seen to be different to primary care such as that provided by a family healthcare provider, though similarities exist. Different terms and criteria for this kind of service within individual EDs exist (as analysed further in the discussion chapter). Both primary care and EDs assess a wide range of patients with conditions of a more minor nature. This is despite primary care settings at times struggling to refer patients to specialist teams within hospitals, having reduced access to diagnostics and resources, and GPs offices not being the most appropriate place to assess some patient presentations within a 15-20 minute time slot. It may not be easy to draw a distinction between fast track systems and primary care; this topic remains controversial including within the New Zealand health system (Richardson, 1999; Richardson, Ardagh & Hider, 2006).

The Working Group for Achieving Quality in Emergency Departments (2008), examined recommendations from many District Health Boards throughout New Zealand in regards to improving quality within EDs. This call for recommendations evolved due to the increasing pressure on EDs, from various factors. The pressures included an increasing number of presentations (especially those deemed primary health care, as noted above), department overcrowding, a lack of ability to move patients out to wards when appropriate, and a lack of adequately trained staff. This working group found that often the aforementioned issues have led to increased morbidity and mortality of patients within the ED setting (Ministry of Health, 2009h). This problem is not unique to New Zealand (Trzeciak & Rivers, 2003; Sprivulis, da Silva, Jacobs, Frazer & Jelinek, 2006).

Recommendation twelve from the working groups document, examines the best workforce models, and mentions advanced nursing roles and the success of the NP role in a main urban centre. It also examines the link between primary care and emergency work; hence the suggestion that the range and roles of practitioners working in the primary care sector requires "fresh thinking" (Working Group for Achieving Quality in Emergency Departments, 2008, p. 56). Furthermore another New Zealand document (New Zealand Quality Improvement Committee, 2009) discusses workforce models, and roles for advanced emergency nursing. This document emphasises that the work and skills of staff needs to be understood and defined, including the role of the ENP.

At a similar time to the above discussions, and leading on from them, the Ministry of Health developed a standard for all New Zealand EDs in regards to patient flow, similar to what the UK and Canada have initiated (Hartley Jones, 2004; Priest, 2008). A six hour target was planned, where patients should be triaged and assessed, diagnostics and referrals completed, and a decision made as to whether a patient needs admission or not (Ministry of Health, 2009g; Tenbenschel, 2009). The measure of this target is that 95% of patients will meet this time criteria, within the next two years. According to Ryall (2007), just over 50% of the triage two and three patients were being assessed within their ideal triage time at my place of employment, in the quarter to June 2007. Triage two and three patients in Australasia are described as being safe to wait 10 minutes, and as being safe to wait 30 minutes respectively (Australasian College for Emergency Medicine, 2006).

Hence the implementation of ENPs would contribute to meeting New Zealand and ministerial goals (Ryall, 2007), as it is difficult to recruit and retain emergency staff, especially rural medical staff (Provost, 2010). Medical staff employed on a locum basis, are frequently used in situations where there are 'gaps' in provision of healthcare. Locums are more costly than permanent staff, are often unfamiliar with the local healthcare system, and patients do not receive continuity of care (Ryall, 2007; Morgan & Simmons, 2009). NPs usually live within the community they work including rural zones, and often stay longer within a community than medical staff (Canadian Nurses Association, no date). This can be due to family ties, partner employment, or a 'bonding' or familiarity with the area (Howie, 2008). Brown (2008) focuses on hospital based emergency nursing in rural settings, and cites research from the Upper Midwest Rural Health Research Centre (2007). This study found that rural EDs are commonly staffed with ENPs within the US, amongst other health professional staff (Upper Midwest Rural Health Research Centre, 2007). Approximately thirteen per cent of the 408 rural hospitals (with less than 100 hospital beds) surveyed by this group found that ENPs or physician assistants staffed the ED solely 24 hours per day, with a physician on call if needed (Upper Midwest Rural Health Research Centre, 2007). Research completed by these authors suggests staff within rural EDs need to have good expertise and technical skills to provide optimal care. Also stated is the need for specific paediatric, trauma and team training (Upper Midwest Rural Health Research Centre, 2007).

Primary care within EDs will always exist, though building of strong relationships with primary care services is recommended, to enable the management of these issues outside of hospital where possible (Gauld, 2001; Ryall, 2007; Working Group for Achieving Quality in

Emergency Departments, 2008; James, 2008; Bennett et al., 2008; Gauld 2009). Even with the best provision of primary care such as Ryall (2007) suggests, the delivery of some primary care within EDs will always occur, as a patient will choose where they access health care because of factors such as convenience, timing and cost (Bezzina et al., 2005).

1.4 Health professional scope of practice

For many health practitioners, and other professions, what they can or cannot do within their employment setting can be broadly termed as their ‘scope of practice’. This can be restricted by state or local law, professional governing bodies, or the professional or individual themselves. In the health sense it can be defined as “scope of care, professionalism, the range of responsibility. For example, types of patients or caseload and practice guidelines that determine the boundaries within which a physician, or other professional, practices” (The McGraw-Hill Companies Inc, 2002). Health workers can also be employed by a business, or be independent practitioners. As new health professionals emerge such as NPs, their scope is sometimes defined or restricted by employers, medical staff or people who are unclear about the role and educational requirements (Drummond, 2003; Bragg, 2009). However, the role of the NP is continually evolving in all countries, often to meet needs of the healthcare population. For some current examples of definitions of NPs within the countries reviewed, please refer to appendix A.

Scope can also be defined as opportunity, and comes from the Greek work *skopus*, meaning “a target” (Orsman, 1979, p. 971). There is an opportunity for professional growth within the NP role, and this also concurrently enables patients to have improved access to an alternative health provider. This is relevant to the New Zealand situation, whilst the rural and urban health workforce struggles with retention and recruitment issues (Gauld, 2009; Provost, 2010). Alternative health workers, such as NPs, have been discussed in ministerial documents since 1998. (Ministerial Taskforce on Nursing, 1998). Since then, nurses are being increasingly recognised for their skills, and potential ability to fill some of these health provision gaps (Ministry of Health, 2001; Rural Expert Advisory Group, 2002; Ryall, 2007; Morgan & Simmons, 2009; NZNO 2009b).

1.5 The regulation of Nurse Practitioners

Advanced nursing practice is evolving in many countries in the world, and roles such as the ‘clinical nurse specialist’ and ‘advanced care nurse’ have existed for many years, with varying degrees of educational standards, regulation, and use of titles. Clinical nurse specialists (CNS) are different to NPs (Ministry of Health, 2002). CNS have a more focused, narrow definition of practice, such as assessing and caring for patients with liver disease or failure, or a nurse specialising in wound care.

The NP has a broad focus, with the NP title now regulated in most countries, along with specified standards of educational preparation (Ministry of Health, 2002). The New Zealand requirements for NPs have recently been updated and further competencies added (Ministry of Health, 2009b). Nursing practice has evolved to the NP standard in response to changing health care needs and at times because patients have difficulty accessing healthcare. The NP role is the most advanced current clinical nursing position being utilised in some countries (Royal College of Nursing Australia, 2010).

The International Council of Nurses first officially released the following statement in 2002, in regards to the NP role definition:

A nurse practitioner/advanced practice nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A Masters degree is recommended for entry level.

(International Council of Nurses, 2002).

NPs in countries such as the US, Canada, and the UK have been apparent since the late 1960’s. The US has the earliest history of regulated NPs. Some registered nurses working in more advanced roles were seen as ‘NPs’ in the UK and other countries. However, standardisation of the NP title or education had not occurred. Many positions and roles were ‘ad hoc’, and perhaps driven by rurality, lack of resources, and the wish of nursing staff to provide more efficient and holistic healthcare for patients (Read, Jones & Williams, 1992; Strange, 1994; Tye, Ross & Kerry, 1998; Bagg, 2004). This situation has continued to evolve; most countries or states have now defined and protected the title, so it cannot be misconstrued.

Variations still currently exist, as to who sets the standard of education and regulation of the role. For some countries it is their professional bodies, for others, their regulatory groups. On the job training especially for the ENP, as discussed later, is an undeniable component of their education in all countries (Tachakra & Stinson, 2000; Cole & Ramirez, 2000; Campo, McNulty, Sabatini, & Fitzpatrick, 2008). Many hours of clinical time immersed in the role, is required for clinical Masters or higher degree training.

The NP role had not been fully defined by the Nursing and Midwifery Council in the UK, but the Royal College of Nursing delineate the role with their 2008 document entitled 'Advanced Nurse Practitioners' (Royal College of Nursing, 2008). In the UK, the title and role of the NP has been somewhat 'ad hoc', but is moving towards standardisation of the role. The use of the title 'NP' and the progression of advanced practice has blended together somewhat in the UK. Registered nurses calling themselves 'NPs' now require an 'honours' degree level training, and must meet seven groups of competencies (Royal College of Nursing, 2008). Please refer to appendix A for a definition of the NP in the UK.

In the US, and within states, the role and definition of the NP varies; the US has the advantage worldwide of having had the role for many years, and according to the American Academy of Nurse Practitioners website, four percent of their members work in an emergency or urgent care setting. The US started training NPs specifically for emergency practice again in 1994 (Cole & Ramirez, 2005); this area specific training had occurred in the past for a short time. The American Academy of Nurse Practitioners has a scope of practice for NPs (American Academy of Nurse Practitioners, 2007). The two most common types of NP that are employed in EDs in the US are those of the family nurse practitioner (FNP), and the acute care nurse practitioner (ACNP), both educated at clinical Masters level. FNPs are able to assess and treat any age group; ACNP are confined to adults only, and are more apparent in the intensive care setting (Cole & Ramirez, 2005; Cole & Kleinpell, 2006; Norris & Melby, 2006; McLaughlan, 2007). This formal education for NPs is one of the few places in the world that specific 'patient group' education occurs. The scope of their role may depend on state legislation, their employer, clinical experience, or even the collaborating physician if this is required within the ENPs employment. Please refer to appendix A for a US definition of NP.

Tapper (2008) discusses how new NPs in the US by 2015 will need a Doctorate of nursing practice for entry to practice; this is also mentioned by other authors (Klein, 2008; Steiner,

McLaughlin, Hyde, Brown & Burman, 2008). The Doctorate is not a PhD or research degree, and generally has the same time requirement as a clinical Masters. The move to a Doctorate is an interesting precedence for the NP role that if applied in the Australasian and remaining worldwide scene, may be a barrier to practice, or could be viewed as positive growth for NP practice and role evolution. Many countries however have only just cemented Masters programmes for NPs, and if this changed, the lead in time for tertiary institutes forming educational standards for this qualification may be considerable.

The term 'trauma NP' (Galicyznski, 2006; Lowe, 2005) is used in parts of the US and UK literature. These NPs practice in acute areas, which include EDs and also intensive care units and high dependency areas. The Emergency Nurses Association (ENA) of the US, have defined standards of practice and scope for the NP working in emergency care (ENA, 2001; ENA 2009). The standard of practice and scope was developed by ENPs, for ENPs. The scope includes discussion of the patient population, professional role, educational preparation and philosophy of care of ENPs. Also examined is how ENPs provide consistency of care for patients and provision of care in an uncontrolled and unpredictable environment, including the patient transport area (ENA, 2009).

Whilst historically there was no national defined role in Canada for the NP, the term is frequently used to describe or identify an advanced practice nurse. Differences in titles and role may include the acute care NP, clinical nurse specialist, or primary health care NP (Worster, Sardo, Thrasher, Fernandes & Chemeris, 2005). The role in EDs is only beginning, as NPs try to become established in an area to meet patient need and improve access. The Canadian Nurse Practitioner Initiative has developed a statement analysing the NP role in the ED (Canadian Nurse Practitioner Initiative, no date). There are ten provinces and three territories within Canada, therefore legislation and restrictions around scope and role of the NP may depend on the local area, as does education and licensure. Later documents appear to provide a more definitive description of the NP in Canada (refer to appendix A). The NP title does not appear to be protected in Canada, and is frequently used to identify advanced practice nurses who have undergone extensive extra training in assessment, diagnosis and prescribing (Worster et al., 2005; Canadian Institute for Health Information, 2006). NPs specialising in emergency care (ENPs) number 41, below the numbers of community health and ambulatory care NPs present in Canada, according to the Canadian Institute for Health Information (2006).

Australia is still developing the NP role within EDs; the NP role in Australia had until the late 1990's been confined to mostly rural and isolated areas. 'Clinical initiative nurse' (Cashin et al., 2007; Hudson & Marshall, 2008) was a term used in some Australian literature in reference to EDs; this was at registered nurse level, but did enable the patient to be assessed and certain diagnostics requested early. However, registered nurses relied on another healthcare team member for planning of patient care, prescribing, and discharge arrangements (a doctor), before the start of the NP role. In 1998, the government of New South Wales (NSW) enacted the Nurses Amendment (Nurse Practitioner) Act, which provided for recognition and accreditation of NPs within NSW. Within Australia, most states have developed and piloted the NP role in various sites (Canadian Nurses Association, 2002). The Australian Nursing and Midwifery Council published in 2004 National Competency Standards for the NP, and provided an initial definition for the role (Australian Nursing and Midwifery Council, 2004). Refer to appendix A for a 2009 definition of the Australian NP from the Australian Nursing Federation. Interestingly the majority of NPs in Australia practice in the ED environment (Gardner, Gardner, Middleton & Della, 2009).

In Australia, each state historically regulated their own nurses; this system has been updated, to have a national accreditation body for all health professionals (Council of Australian Governments, 2008). This body is termed the Australian Health Practitioners Regulation Agency (AHPRA), and includes a range of health professionals including nursing and NPs. NPs are expected to have a Masters degree; no formal training programmes exist for area specific NPs (similar to New Zealand). Many states such as Victoria have legislated NPs must practice under guidelines (Considine, Martin, Smit, Jenkins and Winter, 2006).

1.6 The regulation of NP in New Zealand

The definition of NP scope of practice in New Zealand is:

Nurse practitioners are expert nurses who work within a specific area of practice incorporating advanced knowledge and skills. They practice both independently and in collaboration with other health care professionals to promote health, prevent disease and to diagnose, assess and manage peoples' health needs. They provide a wide range of assessment and treatment interventions, including differential diagnoses, ordering, conducting and interpreting diagnostic and laboratory tests and

administering therapies for the management of potential and actual health needs. They work in partnership with individuals, families, whanau and communities across a wide range of settings. Nurse practitioners may choose to prescribe medicines within their scope of practice. Nurse practitioners also demonstrate leadership as consultants, educators, managers and researchers and actively participate in professional activities, and in local and national policy development.

(Nursing Council of New Zealand, 2004).

The NP role within New Zealand has evolved from advanced practice nursing, in various forms. The Nursing Council of New Zealand has defined and trademarked the NP title, and has prescriptive expectations of NP candidates. The title is applied for, via the Nursing Council. Currently, professional groups such as NZNO and the College of Nurses Aotearoa, support and mentor applicants through portfolio development and the application process as required. A particular scope of practice or role has to be defined, in the area in which the candidate wants recognition, for example, rural health care (Ross, 1999) or emergency care. The applicant must have had at least four years clinical work experience in the particular area they are requesting NP status, such as four years as an emergency nurse (Nursing Council of New Zealand, 2009c).

An application form and submission of a portfolio of evidence is required, demonstrating the candidate meets eleven main competencies, in three domains. The ability to prescribe (another domain), if desired, requires evidence of meeting another nine competencies. The applicant must also have completed a Nursing Council approved clinical Masters programme, or be near completion. A fee is charged for the assessment process by the Nursing Council (Nursing Council of New Zealand, 2009c).

Once the portfolio is reviewed by a desk audit, and confirmation is obtained regarding completion of clinical Masters, an assessment panel meets to consider the portfolio, complete reference checks, and a discussion is held around whether the evidence in the portfolio is adequate or whether a site visit may be required (Nursing Council of New Zealand, 2009c). An interview is then arranged with the applicant and the panel, to ask questions of the applicant in regards to their portfolio of evidence, and to assess candidate suitability for the role. Panel members may include a mix of Nursing Council representatives, medical staff,

NPs, health consumers, nurse educators and a Maori or iwi (meaning local tribe) representative.

After this interview, a decision is made by the panel as to the suitability of the applicant, or to whether further evidence is required, such as a worksite visit. If the applicant meets the criteria, the panel recommends the person to be made a NP; the Nursing Council itself makes this final decision. This process takes several months and up to a year, and applicants are made aware of this (Nursing Council of New Zealand, 2009c).

Hence, when comparing the New Zealand definition of NP to the International Council of Nurses (ICN) statement, they are very similar. The ICN has included an 'advanced practice nurse' alongside the NP title, perhaps because of the range of titles being used throughout the world for these roles. Interesting to note is that this statement was published in 2002, long after some official and unofficial NP roles had been apparent for some time. When the concept of having NPs in New Zealand was developed, the Nursing Council had the advantage of being able to assess other countries systems and role definitions, to be able to form an appropriately high standard and regulation for the New Zealand NP (Gardner, Dunn, Carryer & Gardner, 2006; Gardner, Carryer, Gardner & Dunn, 2006).

The first NP was recognised in 2001; at the time of writing 86 nurses are now registered as NPs in New Zealand, 61 of those possessing prescribing rights. Currently there are three NPs in EDs within New Zealand (District Health Boards of New Zealand, 2010). They are based mainly in more urban areas, and have been in the role for between approximately 0 - 7 years.

While it may be considered that there is a gradual acceptance of NP within EDs in New Zealand, the impetus for change in the delivery of care within this setting makes it timely for consideration of role expansion. A review of international literature to inform this discussion was appropriate. Hence, I was led to my research question about the role of ENP, and ENP scope of practice in their everyday employment situations.

My research question is: **'What is the current role or scope for ENPs working in EDs, and how have these developed over the past 20 years?'**

1.7 Chapter summary

The scope and role of the ENP is different between countries, and even within countries or areas. More patients are using EDs as their primary care setting (Ryall, 2007; Working Group for Achieving Quality in Emergency Departments, 2008). The primary care group seeking healthcare could be filled by an ED based NP (as Thrasher & Purc-Stephenson, 2007, suggest), but the NP role can also be viewed as potentially much wider, encompassing a broad range of patient presentations. The NP has a strong focus on health promotion and education which is needed for all patients that present to EDs or for emergency care, and research in regards to satisfaction with ENP provision of care is plentiful (Cooper, Lindsay, Kinn & Swann, 2002; Carter & Chochinov, 2007; Wilson & Shifaza, 2008; Hart & Mirabella, 2009). Ongoing collaboration with emergency consultants is essential to promote and nurture the role, as well as education for the public, other health workers and health administration about NPs. Professional nursing organisations such as NZNO, College of Nurses Aotearoa and the College of Emergency Nurses New Zealand (CENNZ) play a part in promotion of the ENP role, and currently offer mentor support to applicants (O'Connor, 2010).

This section has acknowledged some of the issues around rural and urban healthcare, and the types of patient presentations that EDs usually assess. The concept of health professional scope of practice is introduced, along with regulation, education, and the role of the NP throughout the countries reviewed. The New Zealand system of NP appraisal has been examined, and the research question presented.

1.8 Outline of following chapters

In the following chapter the research question for this review will be re-presented, search strategies discussed, methods and tools used for the literature review stated, and an explanation of how the literature was critiqued for content and rigor examined. Joanna Briggs Institute tools for critical appraisal and data extraction are implemented, to classify the literature available into common themes.

An integrated review of the literature itself follows in chapter three. From this, four themes emerged. These included, in no particular order

- education of the ENP,
- by whom and how ENP scope was defined,

- ENP practice setting, and
- what were the restraints or barriers to autonomous practice.

Chapter four is a thematic discussion of the potential scope of ENPs. Facilitators, implications and recommendations for practice to further develop the ENP role, are examined. Further research is recommended on the role, the international NP role and in New Zealand generally. A conclusion at the end of the document summarises the major recommendations from this integrated review of the literature, and the international and New Zealand background information.

CHAPTER TWO:

METHOD

2.1 Introduction

In this chapter the method chosen for this literature review is explained. Rationale for the method used, identification of the research question, and explanation of the search strategy are discussed. Pertinent literature is examined, and after an inductive analysis, a brief outline of the four main themes that became apparent from the literature are stated.

A literature review can be considered a critical summary of research on a topic of interest. Whilst there may be various reasons for completing a literature review (Polit & Hungler, 1997), for the current study the intent was to explore literature identifying the development of the ENP role and current scope of practice. An integrated literature review was chosen as it permitted the inclusion of a wide range of sources, including qualitative and quantitative data, methodologies and theories which were perceived to be appropriate to answer my research question (Whittemore & Knafl, 2005). Stated by these authors is that integrative review is one of the broadest types of research review methods, and with the inclusion of experimental and non-experimental data, it allows the reader to more fully understand a phenomenon of concern (Whittemore and Knafl, 2005). Content analysis was used to examine the information within articles, after initial data extraction, coding, and grouping into dominant themes (Schneider, Whitehead, Elliott, Lobiondo-Wood & Haber, 2007; Whittemore & Knafl, 2005).

2.2 Research question

My initial research question was ‘What is the current scope of practice for ENP roles in semi rural EDs in the UK, North America and Australasia, and how have these developed over the past 30 years?’ Due to little research being found specific to rural EDs in my initial search, mixed and urban ED information was subsequently included. Thus the question ultimately addressed was **‘What is the current role or scope for ENPs working in EDs, and how have these developed over the past 20 years?’**

2.3 Search strategy

The importance of a thorough search strategy cannot be underestimated. A comprehensive search strategy ensures all relevant information and data is reviewed, which enables the author to extract applicable content to inform the research question. The theories and tools that follow were implemented for studies to be included in the search and literature review, and to enable a means of assessing and managing the amount of literature available. My search strategy is discussed by use of the PICO theory (Miller, 2001). That is, discussion of the population/problem of interest, the phenomena of interest/interventions, and the context/comparison in which these ideas were apparent. Given the broad research question, the outcomes part as such, is not relevant in this discussion of search strategy. PICO theory allows a clinical question to be formed that is searchable and answerable, and is usually the first part of the evidence based practice process (Fineout-Overholt, Melnyk & Schultz, 2005; da Costa Santos, de Mattos Pimenta & Nobre, 2007).

Population of interest

The population of interest was ENPs that practise within EDs or the emergency environment. Advanced practice nurses or senior registered nurses within EDs were also of note, as the ENP role has partly evolved from these positions. The ENP role has been becoming apparent within New Zealand over recent years.

The population of interest was used as it answers the specific research question; it would not have been answered by the inclusion of other registered nurses or NPs not providing emergency care.

Phenomena of interest

The phenomena's of interest were the scope of practice and role of ENPs within the emergency setting, and how this has evolved over the past 20 years. As discussed in the previous chapter, registered nurses are expanding their scope through education and practice, and many healthcare procedures which were once undertaken by medical staff, are now incorporated into advanced nursing roles including ENP positions. Role is not solely limited to specific tasks or procedures. Literature had to meet the inclusion criteria, which is discussed shortly. Therefore these factors became the phenomena's of interest, and evidence was sought on topics including ENP scope, and role enlargement.

Context of information

Areas of practice included EDs or accident and emergency (A&E) clinics, but also 24 hour services and rural clinics where an ENP was employed, as these facilities often provide emergency care. The intent of this review was to examine the ENP role within rural or semi rural EDs; however a widened search was needed as discussed to capture relevant literature. New Zealand, Australia, Canada, the US and UK all have differing local contexts; this also had to be considered during the search process. Rationale for the countries chosen included those possessing similarities to New Zealand. For example, the ‘westernised’ countries chosen have similar economic systems, nursing education, and use of English language. Part of the search process included considering the context of the literature as it was reviewed, as to whether it was helpful to answer the research question.

Having established the population, phenomena of interest and context, key search words included ‘emergency nursing’, ‘emergency medicine’, ‘emergency services’, ‘emergency care’, ‘nurse practitioner’, ‘emergency nurse practitioner’, ‘role’, ‘scope’, ‘A & E’, ‘A & E NP’, ‘NP scope’, ‘NP role’, ‘rural NP’, ‘ENP’ and ‘rural ENP’. The term ‘A & E’ was used to capture UK based information, as this term is sometimes used for their emergency care units. The full term ‘accident and emergency’ was not used routinely, as often abbreviations are used within research article titles. ‘ED management’, ‘trends’ and ‘role utilisation’ were also specifically searched for, to check for relevant literature. These terms were used due to the ENP role in some countries being relatively new. MESH headings for use within Medline searching included ‘trends’, ‘utilisation’, ‘supply and distribution’, ‘rural hospitals’, and ‘rural health services’. Again these broader terms were used because of the ‘tree’ system within the Medline search system, to try and capture information on the ENP topic. Most of the literature was found by the main search term ‘emergency nurse practitioner’, with little new information being sourced from the use of other key words. Boolean logic such as ‘and/or’ was not applied.

The initial search of databases took over six weeks to complete, and included some initial narrowing down of the information available. A broad range of international sources was searched. These included evidence based websites such as the Cochrane Collaboration and the Joanna Briggs Institute. Core bibliographic databases were searched thoroughly, which included the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline and Pubmed. New Zealand sources of information included Index New Zealand (INNZ), Ministry of Health, and the University of Otago library catalogue. As progress was made

with these searches, many articles and pieces of research began to repeat themselves. New information on the topic became more difficult to find, but was certainly included if considered relevant to the research question.

English language literature only was searched, and sources of literature were limited to the UK, North America, and Australasian regions. Where information relating to other aspects of ENP function became apparent, such as satisfaction with ENPs, this was excluded as it did not focus on what the role of the ENP was or could be. Three New Zealand based theses were reviewed as to their relevance to the topic, and excluded. Overseas theses abstracts were also reviewed if thought to be relevant, but excluded. Theses titles included advanced nursing practice, or ENPs and their introduction into EDs; however, none specifically focused on role of the ENP. In summary of the exclusion criteria implemented for the main literature review, those excluded were:

- Articles or information that were titled around the role of ENP, but that focused on other topics
- Research or information that did not originate from the UK, US, Canada or Australasia
- Literature greater than 20 years old
- Non English language
- 'Grey' literature such as government or professional association documents.

All selected articles were read and reviewed for relevancy. Article reference lists were checked for other possible sources or links to information with additional relevant articles found. Subsequent to the initial search, further searches using the term 'emergency nurse practitioner' were completed before finalising the analysis. These final searches were to ensure findings were as up to date as possible before final submission. This new information provided useful background and discussion literature, but were not used specifically in the literature review.

The focus of this integrated literature review is the current role and evolution of ENP scope of practice over the past 20 years. Much of the literature originally sourced related to various NP roles such as trauma, acute care, and rural health. This may have occurred due to myself as author not utilising Boolean operators during the search process. The lack of Boolean search terms led to a plethora of articles on topics not related to ENP role or scope of practice

such as NP cost effectiveness, or patient satisfaction with NP care. These articles were considered if the information reflected the ED environment or role, but many did not.

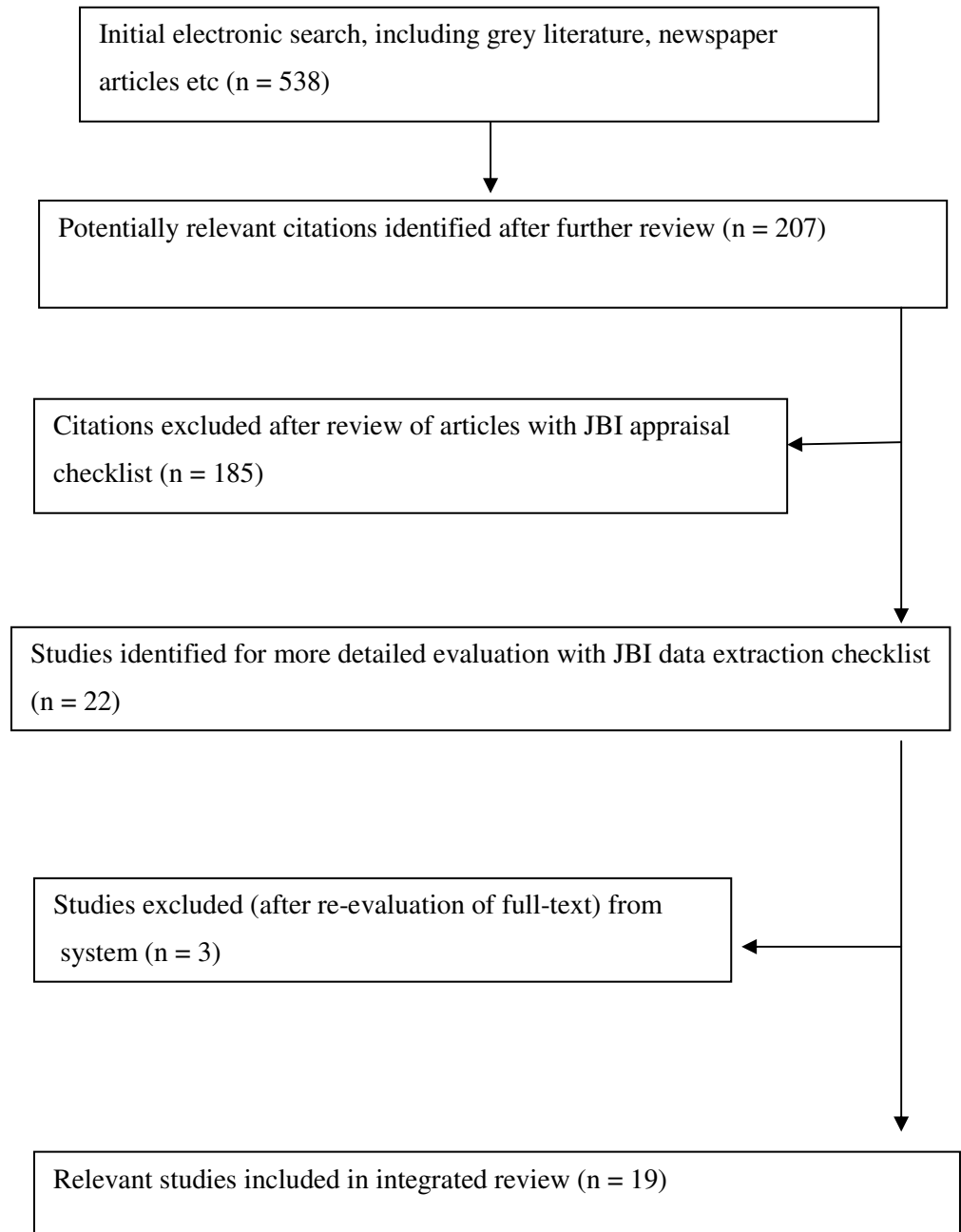
Over 538 pieces of information, New Zealand and overseas grey literature, research articles and newspaper articles were retrieved and abstracts reviewed. The main group of articles deemed relevant for the literature review chapter numbered 207 initially. Many once reviewed and read for content, were not within the inclusion criteria or were insufficiently focused. The judging of article content at this time in the process was implemented by the potential of the literature to help answer or contribute to my research question. Other articles reviewed concentrated on unrelated topics to this dissertation, once they were read. Multiple articles did not analyse or state clearly what the ENP role was or could be, within their research or narrative.

Three culls of the information occurred, removing respectively 83, 83 and then nineteen articles, by use of the Joanna Briggs appraisal checklists as suitable to the individual research methodology (refer appendix B). Many articles were deemed to be of poor quality, once re-reviewed with these tools. Schneider et al. (2007) identify that the Joanna Briggs Institute (JBI) pioneers recognised the need for health professionals to make decisions based on evidence from a range of sources, which could include experience, expertise, and all forms of rigorous research. Tools have been developed for the critique of both qualitative and quantitative types of evidence, since 1996 when the institute in South Australia began. The two tools used for critique in this dissertation were the QARI and NOTARI tools. These tools were used, as most of the literature provided qualitative information. QARI focuses on the evaluation of interpretive and critical research, whereas NOTARI focuses on narrative, expert opinion or text (Joanna Briggs Institute, 2008). Both tools include two parts, an appraisal checklist and a data extraction form (discussed shortly).

After the assessment of quality of literature via the QARI and NOTARI appraisal checklist tool, the remaining articles I believe provided sufficient and robust information to enable my research question to be answered. Thus 22 pertinent articles were left, focusing on ENP role and scope. My primary supervisor also reviewed and critiqued the 22 pieces of literature for quality, as an independent reviewer with perhaps differing biases to myself. This enabled a high level of honesty to be applied to the review process. Hamilton and Clare (2004) discuss that even publication within peer reviewed journals is not a guarantee of quality; the

researcher needs to exercise a degree of judgment as to whether a study is credible. The following flow chart clarifies the literature reduction process.

2.4 Reduction of literature flow chart



2.5 Analysis of selected articles

At completion of the literature search, 22 articles were deemed to meet the inclusion and exclusion criteria and were deemed to be of good quality. All 22 pieces of literature were then reviewed again and evaluated by the use of the second part of the Joanna Briggs tools, that being data extraction (refer appendix B). Data extraction provides a mechanism where data can be organised to assist with following processes of comparison and contrasting of information. Seventeen pieces of literature were appropriate for the QARI tools, and five to the NOTARI tools. Statistical analysis was present in parts of the literature, but generally the use of statistics was for the purpose of frequency of procedures performed by ENPs, and demographical reporting.

From the point of data extraction it is important that rigor is considered (Whittmore & Knafl, 2005). The data extraction tools supplied by Joanna Briggs Institute ensure a process that assists the reviewer to combine diverse data sources, which can be complex and challenging. For each of the 22 articles initially meeting the inclusion criteria, the articles were re-read and portions highlighted with pen and coloured 'post it' notes, as to varying subthemes. The appropriate data extraction tool was completed depending on the research report methodology. Coding provided a thorough and robust path to the identification of the dominant ideas and themes to help answer the research question. Three articles were excluded at this point, as after further review they did not provide adequate information as to ENP role and scope (see section 3.2 for details). This left a total of nineteen articles.

Of these nineteen articles, fourteen were research based, using qualitative, quantitative and mixed methodology. Five articles were opinion; as such these articles are a type of 'grey' literature, which it can be claimed do not provide an acceptably high level of evidence (Melnyk & Fineout-Overholt, 2005). They are included however, as after critique and data extraction via the NOTARI tools, I believe the articles provide useful insight to help inform the research question in regards to the ENP role within EDs (Oermann et al., 2008).

Polit and Hungler (1997) discuss types of analysis styles; in conducting the coding and content analysis for this review the editing style was used to enable a focused approach to the coded information. When conducting an editing style analysis the researcher acts as an interpreter and reads through the literature in search of meaningful segments and units, as guided by the research question. Once these segments are identified and reviewed, the

information is categorised so data can be sorted (for example, into colour coded information). The researcher then looks for the patterns and structures that connect the thematic categories, by reviewing the amount or frequency of the phenomena (such as colours). From this coding, themes from the literature become evident. In my review, relevant pieces were underscored and marked with pen and also marked via coloured 'post it' notes; this enabled coding to occur and these subthemes contributed to the dominant themes.

Content analysis involves sorting information found into common ideas, and is an important part in the integrative process. Polit and Tatano Beck (2008) describe content analysis as the process of organising and integrating narrative, qualitative information according to emerging themes and concepts. In the case of an integrative literature review, all data and information found on the topic, including quantitative results, are assessed; this was completed within this review. Critical assessment of all the literature available occurred to establish whether it was worthy of inclusion within the integrated review.

My content analysis approach for this literature review fits into the qualitative paradigm (Joniak, no date; Polit & Tatano Beck, 2008; Thorne 2009; Polit & Tatano Beck, 2010). The completion of qualitative research and ultimate aim is to develop understanding, or to bring meaning to phenomena within the context that it has occurred. Data that is subjective, is described as real, rich, thick or deep. Polit and Tatano Beck (2008) discuss difficulty with rigor in qualitative analysis. They suggest that concepts such as reliability and validity don't necessarily fit into an interpretive approach, which values insight and creativity. Instead some qualitative researchers simply dismiss these concepts, reflecting different paradigms, and their varied philosophical underpinnings and goals.

With qualitative methods, rather than reliability and validity, it may be more useful to examine trustworthiness (Burns & Grove, 2005; Holloway & Wheeler, 2010; Polit & Tatano Beck, 2008). In my review I took the following steps to ensure trustworthiness. These included honest presentation of the themes evident from the literature, vivid description of what was reported within the articles, and ensuring my primary supervisor reviewed the articles. Qualitative research produces data that is context specific, and evaluators of studies must understand the context of the particular study reviewed. Context of the literature was always considered during the critique and coding stage of this dissertation; contextual elements are discussed as appropriate within the main literature review. In regards to myself

as author I had my own context as to critiquing the literature from an emergency nurse's viewpoint, with an interest in the ENP role, as acknowledged in the background chapter.

Information from documents was read more than once, common ideas were identified, and also similarities and differences within the literature noted, to enable my research question to be answered. The theories of honest presentation and trustworthiness (as discussed) were applied to the information reviewed by myself, as it was analysed. What the literature provided or stated is presented clearly and within context, and critique of the information has been included in the literature review chapter as the reader progresses through the topic.

A brief summary of the articles included is present in section 3.2, as mentioned earlier. These articles are in chronological order, and provide an overview of the studies analysed methodology, sample numbers, country of origin, and comment from myself as reviewer.

2.6 Results of the analysis

After using Joanna Brigg tools for critique and data extraction, and analysing the coded information from the literature in regards to the ENP role, the following four dominant themes of interest were revealed:

1. ENP education,
2. Role definition, who and how this was decided,
3. ENP practice setting, and
4. Potential barriers to practice, and practising autonomously.

Within these four themes in the following chapter, ENP role is discussed throughout. Role itself is not limited to clinical expertise but includes research, education, consultation, collaboration and professional leadership. These themes were induced from the literature reviewed, but are also of interest to myself as author due to the current NP situation in New Zealand.

2.7 Chapter summary

Within this methods chapter, the process of an integrated review of literature has been discussed, including potential limitations. Limitations of my research approach and the resulting information are analysed again later in the discussion chapter. Inclusion and exclusion criteria were examined, as well as how data was analysed, and what common themes of interest emerged from the literature.

The following chapter of the main literature review, includes a summary table of the literature, and the review itself is presented. ENP education, role definition, practice setting, and potential barriers and restraints to practice are examined and discussed. Limitations and critique of the literature occurs throughout the chapter.

CHAPTER THREE:

LITERATURE REVIEW

3.1 Introduction

In this chapter a table of the literature is presented, and the four themes that were drawn from the review are discussed. At the end of the search process there were no New Zealand articles available for inclusion, however there were articles from the UK, US, Canada and Australia. The aim of this dissertation was to explore the role and scope for the NP within EDs, and how these have developed over the past 20 years.

Synthesis of findings from nineteen articles resulted in four themes. Whilst every attempt was made to ensure a rigorous process it is acknowledged that the focus of the research question and my own beliefs, background and experience, may have influenced identification of the following four themes:

1. Preparation and education of the ENP,
2. By whom and how the ENP role was decided,
3. ENP practice setting, and
4. Barriers and restraints to practising autonomously.

These four themes did hold after repeated analysis of the literature, by both my primary supervisor and myself.

Role competencies of the ENP were of interest to myself as author, and are discussed throughout the themes. These competencies were noted as the literature was reviewed, and came about due to my own background and experience in emergency care, as analysed in the background chapter. It is my belief that these competencies form a major component of the ENP scope of practice.

Discussion of literature within themes occurs approximately in chronological order, to demonstrate common elements and evolution of the ENP role throughout the countries

reviewed. A summary table of the nineteen pieces of literature reviewed follow shortly, and appear in chronological order. This table includes information such as author and credentials of those authors, what journal and year the literature was published, title of the article and country of origin. Type of research methodology is identified, along with sample numbers, and whether ENPs themselves were used as subjects. Finally, general comments in regards to the literature reviewed are included, covering points such as the presence of statistics, whether the literature focused on the ENP assessing minor or major ED patients, and whether the study was credible or robust to myself as reviewer of the research.

3.2 Summary table of articles reviewed

Author(s)	Year	Title	Journal/source	Country	Type of research	Sample numbers	Comment
Wright, S & Erwin, T & Blanton, D & Covington, C (2 NPs, 2 doctors)	1992	Fast track in the Emergency Department: a one year experience with Nurse Practitioners	<i>The Journal of Emergency Medicine</i> , 10, p 367-373	US	Narrative and statistical account of 1 years work NPs in fast track	2 ENPs	Fast track focus. Good statistics of numbers and cases seen; nil p values stated.
Read, S & Jones, N & Williams, B (1 nurse, 1 statistician, 1 director research unit, 3x university based)	1992	Nurse Practitioners in Accident and Emergency Departments: what do they do?	<i>British Medical Journal</i> , 305(1), p 1466-1470	England/Wales	Postal survey – content analysis. Quantitative and qualitative analysis	513 replies from nurse in charge of ED	Minor injury/illness focus, p intervals not specifically stated. Robust evidence.
Strange, P (nurse consultant)	1994	The Nurse Practitioner in A&E	<i>Australian Nursing Journal</i> , 1(9), p 20-23	Australia	Narrative or survey of trial NP role	1 'ENP' (Nine RN's 'acting up' to ENP role)	Minor injury/illness focus, concentrated on reducing waiting times and senior nurse job satisfaction
Zimmermann, P & Pierce, B (registered nurse and Master nursing respectively)	1998	Managers forum	<i>Journal of Emergency Nursing</i> , 24(5), p 439-440	US	Editorial/opinion sought from readers regarding NP use outside of fast track	2 ENPs, 3 manager observations	Personal accounts of role and limitations; evidence of mixed role
Tye, C & Ross, F & Kerry, S (2 x medical school, 1 x primary care; all university based)	1998	Emergency Nurse Practitioner services in major Accident and Emergency Departments: a United Kingdom postal survey	<i>Journal of Accident and Emergency Medicine</i> , 15, p 31-34	UK	Postal survey; to establish current and predicted formal ENP services, and organizational variants of same - quantitative	274 'senior nurses'	Minor injury/illness focus, but dedicated minor injuries units excluded. P values discussed. Credible and robust evidence

Author(s)	Year	Title	Journal/source	Country	Type of research	Sample numbers	Comment
Blunt, E (NP, university based)	1998	Role and productivity of Nurse Practitioners in one urban Emergency Department	<i>Journal of Emergency Nursing</i> , 24(3), p 234-239	US	Reviewing ED patient statistics as to patient acuity, and numbers	2 ENPs	Only 1 site, demonstrates mixed role, major patients with collaboration
Chang, E & Daly, J & Hawkins, A & McGirr, J & Fielding, K & Hemmings, L & O Donoghue, A & Dennis, M (6 doctors, 2 nurses, 3 university based)	1999	An evaluation of the Nurse Practitioner role in a major rural Emergency Department	<i>Journal of Advanced Nursing</i> , 30(1), p 260-268	Australia	Randomized trial, quantitative and qualitative methods	78 R/N's who could have worked as ENPs	Minor injuries and other restrictions, more focused comparing quality of care to medical officers and patient satisfaction. Limitations discussed
Tachakra, S and Stinson, A (1 clinical director ED, 1 director of nursing)	2000	Emergency Nurse Practitioners should manage major cases	<i>Emergency Nurse</i> , 8(5), p 12-15	England	Narrative, proposal. Opinion based	N/A	Recognising senior nurses skill, acknowledges lack formalized training in UK. Protocols to be followed by all health practitioners in the ED
Cole, F and Ramirez, E (2 nurses, both university based)	2000	Activities and procedures performed by Nurse Practitioners in emergency care settings	<i>Journal of Emergency Nursing</i> , 26(5), p 455-463	US	Questionnaire via email. Instrument developed to look at 71 procedures: frequency, degree of supervision, education, importance of knowing how to complete procedures	72 ENPs	Good overview of procedures and 4 factors of on the job role. Robust and credible evidence
Cooper, M & Hair, S & Ibbotson, T & Lindsay, G & Kinn, S (5 nurses, 3 university based)	2001	The extent and nature of Emergency Nurse Practitioner services in Scotland	<i>Accident and Emergency Nursing</i> , 9, p 123-129	Scotland	Postal survey	91 replies from nurse in charge ED	Validity examined by 2 independent researchers, piloted in 6 EDs. Minor injury focus. Robust evidence

Author(s)	Year	Title	Journal/source	Country	Type of research	Sample numbers	Comment
Loveridge, B (nurse educator)	2001	The Boston experience	<i>Accident and Emergency Nursing</i> , 9, p 86-91	UK	Narrative and observation, comparing Boston/UK practice. Opinion based	3 nurses observing multiple US ENPs; specific numbers not stated	6 main comparisons; student training, ENP education and training, role, physicians assistants, primary care interface, and department culture. Useful contrasts
Maurice, H and Byrnes, M (2 nurses, 1 clinical nurse Specialist, 1 university based)	2001	Is there a role for Nurse Practitioners in Australian metropolitan Emergency Departments?	<i>Australian Emergency Nursing Journal</i> , 4(2), p 9-11	Australia	Narrative; the ability of NPs to provide care equal to and more holistic than medical officers. Opinion based	N/A	Discusses need for clear role definition, and the need for conclusive research. Focus on ENP seeing minor injuries
Mills, A and McSweeney, M (1 nurse, 1 PhD, both university based)	2005	Primary reasons for ED visits and procedures performed for patients who saw Nurse Practitioners	<i>Journal of Emergency Nursing</i> , 31(2), p 145-149	US	Exploratory, descriptive study using national stats over 4 year period	1545 participating EDs where ENPs were the provider of care	Established national statistics used, ENP numbers not stated clearly. Good evidence
Cole, F and Ramirez, E (2 nurses, both university based)	2005	Nurse Practitioners in emergency care	<i>Topics in Emergency Medicine</i> , 27(2), p 95-100	US	Expert opinion – overview of training and role	N/A	More recent literature regarding role; difficulties with practice also presented
Fisher, J & Steggall, M & Cox, C (3 nurses, 2 university based)	2006	Developing the A&E Nurse Practitioner role	<i>Emergency Nurse</i> , 13(10), p 26-31	UK	Grounded theory, staff interviews	3 ENPs and 2 consultant doctors	Authors state data saturation with 5 participants, data validated by participants, minor injury focus. ? First ethically approved study reviewed

Author(s)	Year	Title	Journal/source	Country	Type of research	Sample numbers	Comment
Considine, J & Martin, R & Smit, D, & Jenkins, J & Winter, C (2 nurses, 1 nurse unit manager, 1 doctor, 1 clinical director ED)	2006	Defining the scope of practice of the Emergency Nurse Practitioner role in a metropolitan Emergency Department	<i>International Journal of Nursing Practice</i> , 12, p 205-213	Australia	Prospective exploratory design; cohort study	1 ENP candidate	Minor illness and injury focus, with guidelines. Validity and reliability discussed, also limitations.
Thrasher, C and Purc-Stephenson, R (1 nurse, both PhD)	2007	Integrating Nurse Practitioners into Canadian Emergency Departments: a qualitative study of barriers and recommendations	<i>Canadian Journal of Emergency Medicine</i> , 9(4), p 275-281	Canada	Semi-structured interviews – grounded theory approach. Some face to face, some phone	24 interviews; 6 each of ENPs, emergency physicians, nurse unit managers and ED staff nurses	\$100 incentive paid to participants. Validity discussed, and limitations. Key themes - organizational context, role clarity, and recruitment of ENPs
Steiner, I & Blitz, S & Nichols, D & Harley, D & Sharma, L & Stagg, A (4 doctors, 2 other authors unsure of their position, all university based)	2008	Introducing a Nurse Practitioner into an urban Canadian Emergency Department	<i>Canadian Journal of Emergency Medicine</i> , 10(4), p 355-363	Canada	Prospective clinical assessment comparing NP care to emergency physician care – looking at complete autonomy or not for NP	1 ENP, 6 month comparison evaluation	Physician leaders chose ENP. Questionable comparison study as two different healthcare providers from different philosophical backgrounds. Limitations acknowledged
Campo, T & McNulty, R & Sabatini, M & Fitzpatrick, J (4 nurses, 2 NPs, 2 university based)	2008	Nurse Practitioners performing procedures with confidence and independence in the emergency care setting	<i>Advanced Emergency Nursing Journal</i> , 30 (2), p 153-70	US	Cross sectional descriptive design – internet survey format	423 ENPs	71 procedures – participants asked specific frequency, independence, confidence and education in performing tasks. Discusses limitations to study, credible and robust

Excluded studies:

- 1) Dealey, C. (2001). Emergency Nurse Practitioners: should the role be developed? *British Journal of Nursing*. 10(22), p 1459-1468.
Excluded because literature review and critique of evidence at that time of poor quality, and limited conclusions could be drawn according to author. No discussion of how ENP role could be developed or how practice boundaries could be extended.
- 2) Jennings, N., & O Reilly, G., & Lee, G., & Cameron, P., & Free, B., & Bailey, M. (2008). Evaluating outcomes of the Emergency Nurse Practitioner role in a major Urban Emergency Department, Melbourne, Australia. *Journal of Clinical Nursing*. 17(8), p 1044-1050.
Excluded because article focused more on length of stay/waiting times; little discussion present around role and future scope.
- 3) Ramirez, E., & Tart, K., & Malecha, A. (2006). Developing Nurse Practitioner Treatment Competencies in Emergency Care Settings. *Advanced Emergency Nursing Journal*. 28 (4), p 346-359.
Excluded because article focused on developing a tool/instrument to assess ENP competency, not role of the ENP.

Please refer back to this table as required. The information examined within the following literature review may be perceived as important elemental information to the history, and potential scope in the future, of the ENP role. Each of the four themes listed earlier, are now examined further.

3.3 Education of the ENP

Education and preparation of ENPs has been progressive over time; in the past 20 years registered nurses advanced into the ENP role with little or no educational preparation (Strange, 1994). The ENP is relatively new in some countries, but for those areas that have had the role for many years, formal education usually at clinical Masters level is now expected. The need for further higher education has also perhaps been driven by the types of patient presentations that an ENP is expected to assess. Formalisation of educational standards has been slow to occur, in some countries (Tye et al., 1998; Fisher, Steggall & Cox, 2006). The evolvement of educational standards evidenced from the literature is examined in this section.

The diversity of education standards across different countries was already evident in the early nineties. Read, Jones and Williams (1992) stated that there is no education specifically for NPs working in the ED in the UK; types of patient conditions the ENPs were assessing included minor trauma to eyes, toothache, and wound checks. From their research, six per cent were found to be 'designated' NPs, but with 34% of EDs having 'unofficial' nurse practitioners. These definitions were not clarified further, though a brief mention was made of a combined role of the ENP and triage nurse. The authors discuss that some EDs had their own training schemes for NPs, as no nationally recognised education programme existed. The education schemes and content were not discussed further by Read et al., (1992), who surveyed 513 nurses in charge of EDs. The reasonable sample size and quantitative element of this literature lends itself to being robust evidence of the ENP role at this time in England and Wales.

In contrast Wright, Erwin, Blanton and Covington (1992) from the US, found that two NPs used for a fast track role within ED in their research were both family NPs or FNPs (as explained in the background chapter). More unwell types of patient presentations were assessed, including potential concussion, cardiorespiratory problems, altered levels of consciousness and noxious ingestions (Wright et al., 1992). Some patients were specifically excluded from the 'fast track' system, such as back pain presentations that had a history of

direct trauma, chronic back problems, and those with fever or showing symptoms of neurological deficit at triage. Patients with these conditions were seen by emergency physicians with no rationale provided as to why ENPs could not assess them. The participants had a Master of Science degree in nursing, with specialisation in the 'family' or primary care role, and were also certified through the American Nurses Credential Centre examination. At a similar time in Australia, Strange (1994) describe the ENP as extending the role of the emergency nurse, and mention a state-wide document recommending appropriate accreditation of ENPs. No further description or specification of educational requirements is acknowledged by Strange, who studied nine registered nurses 'acting up' to the NP role; they were not permitted to treat patients less than fourteen years of age.

In the three studies discussed (Read et al., 1992; Wright et al., 1992; Strange, 1994), at this time the ENP role mostly included minor injury or illness assessment and treatment. ENP were only expected to assess more minor presentations, therefore the need for higher educational standards may not have been considered essential to their role at this time. 'Fast track' within EDs refers generally to those patients with more minor injuries and ailments, which can be assessed and discharged within one–two hours as discussed in the background chapter. This time includes any diagnostics needed and patient discharge education. Depending on the local hospitals need and patient demands, the criterion and educational preparation for a fast track service within the literature was not consistent (Wright et al., 1992; Strange, 1994). The provision of fast track services and other similar terminology of these systems is examined further in the discussion chapter.

By the late nineties, the UK continued to struggle with wide variations in length, content, and academic level of education, therefore leaving the title of the ENP ambiguously defined. Tye et al. (1998) in their research found that 60% of ENP preparation for the role was from in-house training, and 33% from a small number of external establishments from the ED. Specific short courses in regards to the ENP role, of perhaps one or two week duration, also occurred frequently (80%). Thirty-three per cent of their respondents acknowledged that the current provision of education at that time was inadequate with a lack of standardisation in the UK. The participants in Tye et al. (1998) research were 274 'senior nurses', of which 54% of senior nurses 'rotated' through the ENP role. The definition of 'senior nurse' was not clarified further. Registered nurses were deemed NPs for the purpose of this study, but may not have had specific qualifications or education. Australian researchers also used registered nurses to demonstrate an ENP role (numbering 78), with no specific mention of length of

experience or training (Chang et al., 1999). Both of these articles (Tye et al., 1998; Chang et al., 1999) concentrate on the assessment of minor patient presentations.

In summary the level of education for ENPs in the nineties appears to be reasonably 'ad hoc', with often 'senior' nurses completing the ENP role. No formal educational programmes or qualifications are discussed, apart from one study based in the US (Wright et al, 1992). ENPs appeared to be mostly focusing on the assessment and management of more minor presentations or 'fast track' clients, during this time.

By the early two thousands, the literature began to evidence varying options for ENP educational preparation. The ongoing inability to define what the education could or should be in the UK continued, with Tachakra and Stinson (2000) suggesting a three week training course for ENPs (who already assessed and managed minor cases in their hospital) to assess and manage 'major' cases. This literature was an opinion piece, by a director of nursing and a physician. The training suggested appears to be 'in-house' by the emergency consultants, but did acknowledge the acute need for ongoing evaluation of performance of ENPs, via audit and monitoring of patient outcomes. Some of the conditions assessed included more unwell patients, such as those needing a chest tube, severe headache presentations, vaginal bleeding and cardiovascular patients. The need for further education of ENPs was becoming evident, due to the increasing complexity of patients ENP were being asked or expected to assess. The hospital where this literature originated from already had in place protocols for both medical and nursing staff for management of patients with a wide range of conditions. Cooper, Hair, Ibbotson, Lindsay and Kinn (2001) from Scotland acknowledge that 70% of their ENP sample had been educated for the role "...on a 'recognised' ENP course, a local in-house course, a University minor injuries course, or the Royal College of Nursing's Nurse Practitioner Diploma" (Cooper et al., 2001, p. 125). This research was conducted via a postal survey of 91 nurses in charge of EDs. Acknowledged are inconsistencies in the formal preparation of ENPs, and Cooper et al. (2001) state that the use of a title does not necessarily imply appropriate training. Their study sample again focused primarily on the treatment of patients with minor injuries or illness. A first mention from the UK literature is made in this study in regards to clinical Masters degree level training for ENPs in the future, which indicates potential growth in the role at that time and the need for further educational preparation (Cooper et al., 2001).

When Loveridge (2001) observed the US system of ENPs within healthcare, one of the main observations from a UK perspective and personal viewpoint was the formal training of ENPs, being predominantly at clinical Masters level. By the end of the two year Masters programme, the ENP student was expected to be working two to three days per week as a practising ENP. It is discussed that employers and the UKCC (United Kingdom Central Council), must work together to enable a Masters degree to become the standard in the UK for ENP preparation and training. Meanwhile in Australia, the registered nurse was still being used as an example of NP within the ED setting, especially in rural areas. No official ENP position within an ED existed at this time, according to this literature which was opinion based (Maurice & Byrnes, 2001). US literature from a similar time frame, highlights a relevant point on the education and preparation of ENPs. Cole and Ramirez (2000) acknowledge that ENPs had been practicing in the emergency care setting for over 25 years, and that 64% of their research sample (72 NPs) had obtained their education at clinical Masters level. When the authors examined where some of the ENPs received the majority of their education in regards to specific procedures in the ED, it was revealed that this mostly was from on the job training or continuing education courses. A wide range of common ED procedures and treatments was examined by these authors, and this literature provides robust and credible evidence of ENP education and role.

In 2005, Cole and Ramirez (2005) again discuss NPs in emergency care, partly based on their prior research, but also to share their personal views. By this time a formal training programme had restarted in Texas, US, after several specific courses for ENP training were stopped in the 1980's. Post Masters certificates were also offered that focused on emergent and urgent care, with ENPs prior to this managing the role by drawing from their often substantial ED experience. Certification at this time for the ENP still did not exist, and NPs involved in emergency work completed either the FNP or Acute Care NP certification exams (as discussed in the background chapter). The authors assert this needed to change, to validate the knowledge of the NP working in emergency care (Cole & Ramirez, 2005).

The UK continued to have difficulty with defining educational standards (Fisher et al., 2006), while within the Australian literature there was a brief mention of ENPs being Masters prepared with the completion of a medication management unit (Considine et al., 2006). Canadian literature from this period describes NPs being prepared at baccalaureate or Masters degree level (Thrasher & Purc-Stephenson, 2007; Steiner et al., 2008), with Steiner et al. (2008) stating there is no nationally accredited NP programs for those working in emergency

care. The authors of this study assert after their research of one ENP, that lack of consistency compared with emergency physician practice of ENP was due to systemic educational problems, and not personal shortcomings. Again they discuss the lack of emergency specific training for NPs within Canada, similar to the US (despite the US having post Masters certificates as discussed above).

Campo et al. (2008) conducted research of 423 NPs practising in emergency care in the US, and participants were questioned partly in regards to where they received the majority of their education for emergency care and procedures. Seventy-two per cent had a highest qualification of a clinical Masters degree, with 86% of those also being certified as FNPs. Similar to Cole and Ramirez (2000) findings, Campo et al. (2008) found that the majority of those questioned were educated in a list of five common procedures predominantly by on the job training, after their foundation Masters education. Their NP training programme (or Masters training) for source of specific procedure training, was listed second for skill acquisition, with continuing education courses appearing third overall for the five most common procedures completed by ENPs. This study demonstrates important implications for future curriculum of NP programs in the US and worldwide, as the increasing role and scope of ENPs continues to develop. Also from this credible study, 87% of participants were interested in clinical residency programs, which are discussed later in this document.

3.4 Summary

The education and preparation of ENP continues to evolve, from early beginnings of registered nurses completing the role with no formal preparation, to present day with some countries having specific education programmes for NPs based in emergency care. The majority of countries considered within the literature now have a minimum of clinical Masters degree training for ENPs. Education will continue to evolve into the future, as the demands on ED services increase, and to allow appropriate and safe access to healthcare for consumers seeking treatment.

In the following section, how and who defined the role of the ENP will be examined. Often what motivated the beginning of the role depended on various local factors. From the literature retrieved, some did not state or discuss this, or it was at times not clear for the reviewer to be able to gain a good understanding.

3.5 By whom and how was the role defined?

There are significant differences within the literature in terms of exactly what tasks or groups of patients ENP can attend. This is further confused by who makes the decision about scope of ENP practice. As with educational preparation, there is a historical thread over the past 20 years to how both of these factors have influenced the practice that has evolved. These two aspects are addressed within this theme.

Definition of the role of ENPs varies between countries as previously discussed in the background section and appendix A, but also varies between individual departments. Currently, country, state or professional associations often define the role. However this was not always the case, possibly reflecting the lack of regulation or guidelines in regards to the role in earlier times. The topic of role definition evolved from the literature, and it allows the reader to relate this information to their local place of work, or local circumstances. It is also useful to reflect on how the role has become more formalised and regulated, over time.

During the nineties, Strange (1994) and Blunt (1998) summarised who could be seen by ENPs. This was generally decided in discussion with senior medical and nursing staff including the nurse consultant. The definition of 'nurse consultant' was not clarified further. The use of research and professional experience also contributed to how the role was defined (Strange, 1994). US research with two ENP participants, discussed that role guidelines were based on departmental NP job description and role responsibilities (Blunt, 1998). However, it was not stated who authored these documents, or what resources were utilised to define the role. Acknowledged by this author was that ENPs were examining patients with minor conditions, but were also assessing more sick and unstable patients, including conditions such as severe heart failure and chest pain. Blunt (1998) analysed assessment and treatment of more unwell patients occurred when patient acuity was high within the ED. ENPs were cautious assessing these patients, as they had to be aware of unit and state scope of practice as defined by Nurse Practice Acts (as discussed in the background section). High acuity and resuscitation cases had to be cared for in collaboration with an emergency physician (Blunt, 1998), perhaps indicating that sometimes ENP defined their own role, depending on patient need at the time. Zimmermann and Pierce (1998) acknowledge that in some departments in the US, ENP completed much of the 'traditional' nursing care for the patient also. This 'traditional' nursing care would usually be the role of a registered nurse, within an ED. It may include emptying bed pans, starting intravenous fluids and completing observations such as heart rate

and blood pressure (Zimmermann & Pierce, 1998). This piece of literature, though based on personal opinion to a range of specific questions asked of readers, does originate from a reputable international nursing journal. The completion of traditional nursing care within the ENP role and the topic of collaboration, are revisited again later in this document.

Cole and Ramirez (2000) summarise that the largest group of respondents to their survey of 72 ENPs were from Texas in the US (over 15%), where few restrictions are placed on their practice. They state that it is a myth that ENPs work predominately in fast track areas; their research found 46% of ENP respondents practised at least some of their time in the main ED. Cole and Ramirez (2000) do state most of their respondents from EDs were FNPs (over 65%), allowing ENP to assess and treat a broad range of age groups. No further examination on how and who defined the ENP within EDs is apparent from this literature, though it needs to be kept in mind that it was based in the US where a clinical Masters degree is required (as examined earlier) for ENPs. From their professional body, the ENA has developed standards of care and a broad scope of ENP practice, as discussed in the background chapter.

Loveridge (2001) describe ENPs observed in their study in the US as practicing by their own competence, evidence based literature and research, and maintaining a broad role. Interesting to note that in some departments Loveridge (2001) observed that ENPs were “medicalised” (p.88). Loveridge quantifies this by explaining that some ENPs functioned like doctors, and there were few differences in their approach to patient care. Where the role within departments remained with a nursing focus, these roles could only be replaced by another ENP, if they were short staffed. When Loveridge (2001) reflects this back to the UK situation, it is reinforced that the ENP role must remain within nursing, and that nursing needs to be proactive instead of reactive to changes in service requirements. Examined is that advanced practitioners must be self critical, and recognise the shortfalls in current training and legalities of the ENP role in the UK. Loveridge (2001) analyses that advanced assessment and differential diagnostic skills, and broader prescribing skills must be the way forward for ENPs.

Thus the developing ENP scope at similar times on both sides of the Atlantic appears in part to be driven by NPs themselves, possibly in response to local patient need as well as their own professional growth. With the established formal training of ENPs in the US as examined by both Cole & Ramirez (2000) and Loveridge (2001), control of who defines scope changes, and it is the ENPs responsibility to work within their scope. However, the

differing focus of their individual health systems needs to be considered in context also, with the US having a more market driven or productivity focus when compared to the UK.

As to who and how ENP scope was defined in Australia, Maurice and Byrnes (2001), in contrast to prior authors, viewed the role as enabling medical staff to see more high acuity patients. This may have been because the numbers of low acuity patients presenting to their New South Wales ED in August 1999, formed over half of their total patient numbers for a 24 hour period. Maurice and Byrnes (2001) discuss the ENP covering ED when it is busy, and where there is reduced medical coverage, such as at nights. Cooper et al. (2001) also reinforced this theory, with ENPs used to treat minor injuries in response to a number of factors. Within Scotland EDs, these factors included making more appropriate use of medical staff time, using nurses time and skills more effectively, reducing patient waiting time within the departments and lastly, to improve patient satisfaction and quality of care. Cooper et al. (2001) piece of literature has a reasonable sample size (91 nurses in charge of EDs), and provides robust evidence as to the ENP role at that time in Scotland.

Literature from 2005 onwards from the US, partly integrates the issue of role definition. At a national level, professional bodies may identify scope, though this is not bound to law. State laws vary; often what is in the law is the 'maximum' that ENP can complete (Cole & Ramirez, 2005). Other limitations to the role may include employers, or the NP themselves. Hence if an ENP is directly employed by an emergency physician, the physician may or may not allow them to complete certain procedures. Conversely, if an ENP feels that a patient or presenting complaint is beyond their ability or knowledge, they may elect to refer the patient (Cole & Ramirez, 2005). Mills and McSweeney (2005) provide examples from this time period in the US, as to the type of patients being assessed by ENPs. The management of conditions included the use of intravenous fluids, treatment of eye, ear, nose and throat (ENT) patients, conducting mental status exams, and assessing abdominal pain presentations (Mills & McSweeney, 2005). This was a large study of 1545 EDs in the US over a time period of four years (1997-2000); this literature demonstrates firm evidence that the ENP role in the US during this time was broadening.

Fisher et al. (2006) deduced from their UK research, that blurring of traditional boundaries between medicine and nursing are significant, though it is not stated clearly how or who decided what the ENP role should be. This later piece of UK literature clearly states that ENPs were still focusing on minor injury, though some participants in this study could see

potential for ENP to assess high acuity patients. Participants included NPs and physician consultants; all of the NPs (three) and one of the two physicians agreed with ENPs assessing higher acuity patients, such as patients with chest pain, respiratory difficulties or gynaecological conditions. This was despite the participants expressing a lack of research to substantiate the increasing scope, at that time (Fisher et al., 2006).

In Australia during the same period, Considine et al. (2006) discuss the state of Victoria made it a requirement that ENP practice was underpinned by evidence based clinical guidelines. They go on to argue that because of the low numbers of patients in their study needing emergency physician consultation, the scope of ENP practice was appropriate (their study focused on one ENP candidate seeing mostly minor or fast track patients). Considine et al. (2006) state that due to an increase in presentations at their ED and the increasing number of low acuity patients (over 70%), this may have been why an ENP was trialed as a health provider. By whom and how the ENP role was defined is not clarified further by these authors; in this instance the role appears to be partly driven by managements need to provide a more efficient service to low acuity patients.

The Canadians identify that how and who defines the role of the ENP is restricted by state legislation and by the physicians working alongside ENPs. Within Canada the NP role in EDs has been apparent since at least 2003 (Thrasher & Purc-Stephenson, 2007). It is not stated in this study whether ENPs were employed by the hospital, or the emergency physicians. ENPs were limited to what kind of patient presentations they could assess (non-urgent patients mostly), could prescribe, and what diagnostics could be requested. No patients could be discharged without being seen by a physician first; this was due to state legislation. With many patients presenting to EDs with primary care needs such as those usually provided by a family GP, ENP may also partially fill a primary care role, according to Thrasher and Purc-Stephenson (2007). One of the NPs (from their sample of six NPs) had to create their own clinical directives for everything within the NP scope, so that they could meet hospital bylaws. Participant sample for this research included six respectively each of emergency physicians, nurse unit managers and registered nurses. Despite being evident from a reasonable sample size, this research may have limitations as participants were paid an incentive to participate (Thrasher & Purc-Stephenson, 2007). Interestingly, Steiner et al. (2008) did not recommend a common, nationwide role for ENPs, because EDs were so variable. Stated is that NPs should not be autonomous, but that a model of collaborative practice is the most appropriate method to have an ENP service. Within their department,

they report this fact was not contentious. Whilst this study was physician led, potential bias could be inferred from some of the conclusions that Steiner et al. (2008) make. A potential weakness of this study is that it compares two different health care providers from different philosophical backgrounds, to the care that each other provides. However one of the main aims of this study was to see if ENPs were an appropriate provider of care to all clinical presentations, and if the scope of ENP practice could be broadened, beyond the boundaries that had been set elsewhere.

3.6 Summary

Who and how the ENP role is defined varies between countries, and within countries themselves. Different stakeholders appear to have a range of views on 'by whom and how' the role is defined. Stakeholders include ENP themselves, administration or management teams, and medical staff. There was adequate information from the literature in regards to who determined ENP practice, and the driving forces beyond ENP scope. In addition some provinces or countries, especially in later years, have a defined scope of practice as set by their nursing governing bodies or professional organisations (as discussed in the background section and appendix A). Role may also be affected by liability issues within some countries such as the US. For the role to progress and meet the health needs of populations, a broad outlook needs to be maintained by all stakeholders as to the value and potential scope of ENPs.

In the following section, practice location of ENPs is evaluated. Where they were employed, size of their workplace, and whether there was any relationship between ENP skill level and their degree of competency is evaluated. This is an interesting theme that emerged from the literature, as the reader can compare or benchmark this information to their individual workplace or health facility, and the wider New Zealand and global situation of healthcare workers.

3.7 ENP practice setting

The clarity with which the reviewed literature identified the type of working environment for ENPs in the studies varied. Given that the research question was partly stimulated by an interest to develop an ENP role in a level four ED within New Zealand, particular attention

was paid to the description of the settings of participants within the literature reviewed of the past 20 years. A blend of worksites became apparent; initially my aim was to focus on rural or semi rural EDs only, which was broadened to include urban areas due to the paucity of articles specific to these areas. Some studies also included those NPs working in ‘emergency care’.

Generally, little mention was made of actual bed numbers in EDs, or the wider geographical areas from which EDs may have received patients. Patient numbers attending EDs have increased world wide, and depending on the age of the literature, this needs to be kept in mind by the reader (Maurice & Byrnes, 2001; Fisher et al., 2006; Considine et al., 2006; Thrasher & Purc-Stephenson, 2007; Campo et al., 2008). In other words, patient numbers seen annually by an ED may have limited relevance when comparing one ED to another.

Some EDs have physically separate areas for assessment and treatment of minor injuries (Zimmermann & Pierce, 1998), or resuscitation bays, for example. Other departments do not, and patients are assessed and treated depending on need for a physical bed, and the acuity level of the patient (Blunt, 1998). This point was often not clarified well, within the literature examined. The assumption could be made that where physically separate areas existed for the assessment and treatment of minor or fast track clients, that these were generally larger hospitals.

Some researchers’ (Cole & Ramirez, 2000; Cole & Ramirez, 2005; Campo et al., 2008) sample included NPs working in ‘emergency care settings’, or providing ‘emergency care’. Though not clearly defined, these areas and settings could have included primary care offices, after hours emergency clinics and rural areas. The sole piece of literature, from what was stated as being based in a rural area, was Chang et al., (1999). Their research was described as being based in a “regional/rural/remote setting”, with a geographical population of approximately 150,000 people (p. 261). No other detail is provided of the setting. In comparison to some New Zealand rural areas, this information may or may not be applicable. However, the literature is based on 78 registered nurses who were “...working in a role considered to be a nurse practitioner role...”, so provides some evidence for the ENP role at that time in Australia (Chang et al., 1999, p. 265). Participants were limited to assessing minor trauma only.

Predominately urban setting information was abundant (Wright et al., 1992; Blunt, 1998; Cole & Ramirez, 2000; Loveridge, 2001; Maurice & Byrnes, 2001; Cole & Ramirez, 2005; Considine et al., 2006; Thrasher & Purc-Stephenson, 2007). All of these studies were either based in large metropolitan or urban cities, and most EDs in these settings were seeing between 40 - 60,000 patients per annum and based in large tertiary hospitals.

Despite the majority of studies being based in urban settings, some authors recorded that ENP could still only assess minor patients. Australians Maurice and Byrnes (2001), state ENP would not see patients who required resuscitation or needed emergency medical intervention. This was perhaps because of local guidelines, or because numbers of low acuity patient presentations made up the bulk of their ED workload; the rationale behind seeing only patients with minor disorders was not clarified further. Maurice and Byrnes (2001) do suggest that the role of the ENP includes a patient centered, holistic approach to care, that includes health promotion, patient education and referral to appropriate resources. Cole and Ramirez (2005) acknowledge that ENPs are located predominately in urban areas (over 71%). Their study also found ENPs practised 50% of their time in a blend of fast track and main ED work. This information was drawn from the authors own previous research efforts, and demonstrates that ENPs were assessing both low and high acuity patients, at this time in the US.

What could be described as 'mixed' literature included sources from urban, rural and suburban settings, or where ENP practice site was not specifically defined within the literature. Read, Jones and Williams (1992) included a selection of departments from England and Wales to give a balanced range of results (including both smaller and larger departments). Such purposive sampling was also used by Fisher et al. (2006), whose research sample mostly believed that ENP should be able to manage major cases in the UK. Their research included both ENPs and emergency physicians, who were interviewed partly as to ascertain their beliefs about developing ENP scope of practice. Literature from Strange (1994) was based in a suburban area of Australia where the ED assessed over 40,000 patients per year; participants were again limited to mostly the assessment of minor injury clients. Cooper et al. (2001) included GP run units in their sample of UK EDs, where ENPs often worked alongside GPs in the assessment of mostly minor injuries.

Tye et al. (1998) demonstrate that EDs with less than 40,000 new attendances per year were less likely to have a formal ENP service, within the UK. This study helps to demonstrate

ENP competency, with the participants role including the ability to order x-rays (84% of participants) though not interpret them (36%). The supply of medications to patients was mentioned, including over the counter drugs (68% of participants), and prescription only type medications to 54% of patients; these were from an agreed formulary (Tye et al., 1998). This piece of research was generated from a reasonable sample size of 274 'senior' nurses surveyed, and provides credible evidence of ENP scope at this time in the UK. Zimmermann and Pierce (1998), through their reader responses, discuss that ENP work in a range of urban, regional and community hospitals within the US. The range of activities undertaken as part of ENP scope included advanced skills such as intubation, to completing quality assurance activities.

In Australia, Considine et al. (2006) demonstrate the sole ENP candidate they researched was located in an acute hospital based 30 kilometres north of Melbourne, with the ED seeing greater than 60,000 patient presentations per year. The ENP candidate assessed patient illnesses including vomiting and diarrhoea, and upper respiratory tract infections. Mentioned is that scope of practice for NPs was yet to be defined in the state of Victoria, where the research occurred (Considine et al., 2006). "Extensions to practice" (p.208) were described as prescription of medications, ordering of diagnostics, completing absence from work certificates, and referral to specialists. This term may well have been used in this manner due to the ENP being a candidate, and also due to local or state legislation; it may not necessarily reflect ENP competence.

Over 75% of ENPs were based in urban areas from Mills and McSweeney (2005) research of 1545 EDs throughout the US, though they do acknowledge ENP also work in rural communities where there is generally less clinical support. Steiner et al. (2008) research of a sole ENP was based in an urban ED, though the ED did not accept ambulance patients, had no inpatient beds, had one emergency physician with no other inpatient consultant teams. A primary care unit was also present within their ED. A US piece of literature found rural, suburban and urban ENPs (equally a third each), completing a broad range of roles (Campo et al., 2008). Interestingly, this was evidenced from the results themselves of ENPs workplaces, and was not purposeful sampling of the 423 participants. The top five procedures that ENP performed were of a minor nature, and included skills such as fluorescein staining and incision and drainage of abscess. More advanced procedures, admittedly performed less frequently by ENPs, included inserting of arterial lines, completing venous cutdowns and performing cricothyroidotomy. It can be argued that these are skills that require a high degree

of competence. Thirty nine per cent of Campo et al. (2008) sample performed their role in a mixed main ED and fast track.

3.8 Summary

Practice setting of ENPs was sometimes difficult to identify from the literature. Some ENP were not based within hospitals, and also identifying for the reader exactly what was meant by an 'ED' was at times not clear. Some ENP practice in rural and suburban settings, but mostly they are located within more urban areas.

There was no pattern within the literature in regards to ENP practice site, or what skills and tasks they completed within their role. Little examination within the literature was apparent, as to the wider geographical area that EDs and ENP could have accepted patient referrals.

In regards to ENP competence, those based in rural or suburban settings probably had to deal with more unwell or unstable patients, as they may have been the only healthcare provider in the emergency care setting. This factor was not clarified from the literature reviewed. It should be noted that where ENPs exist with medical staff and emergency consultants, that the potential opportunity to increase ENP competence and education in regards to the assessment, treatment and referral of emergency clients should not be overlooked.

The final section within this integrated review of the literature discusses potential barriers and restraints to the NP role. Whilst these findings specifically focus on ENP, they may have relevance to all NP roles. Considering the NP role within New Zealand is only ten years old, similarities in regards to barriers for NPs are evident within the literature and the New Zealand situation.

3.9 Barriers to autonomous practice

In this section, I examine findings related to the limiting factors of ENP role development over the past 20 years, and barriers to ENPs being autonomous. Several of the studies examined had different motivations for initiating the role; in others it was not stated at all. From the literature, various studies illustrated all kinds of constraints, though this was not the prime focus of my literature search. Barrier can be defined as "anything which obstructs or

restrains” (Orsman, 1979, p. 81). Autonomy may be defined as meaning “any independence or freedom” (Orsman, 1979, p. 66).

Much of the literature analysed clinical protocols or guidelines, outlining what conditions or population groups ENP could assess and treat (Read et al., 1992; Tye et al., 1998; Zimmermann & Pierce, 1998; Chang et al., 1999; Tachakra & Stinson, 2000; Cooper et al., 2001; Cole & Ramirez, 2005; Considine et al., 2006; Thrasher & Purc-Stephenson, 2007). There was no indication of who developed or lobbied for clinical guidelines stated in most of the literature, or what particular guidelines were used. As a rule, it was also not clear whether guidelines were used at the initiation of an ENP role, or whether they remained unchanged over several years. Depending on your perspective, clinical protocols may be a useful safety guideline, or a restriction on practice. Due to no specific mention within the literature as to which guidelines were used amongst various settings, a New Zealand reference is provided to assist the reader of the dissertation understand this part of the theme.

Didsbury (2003) discusses the benefits of best practice guidelines, and how to evaluate and apply this evidence to the clinical situation. Clinical guidelines usually give an outline of a specific presenting problem, what assessments and diagnostics should be requested for that patient and their age group, and may also guide the clinician as to treatment or prescription of medication and follow up care for a patient. They are based on evidence or research based practice. Referral onto other services may be outlined, or a collaborative discussion recommended of the patients situation with a more senior colleague (Didsbury, 2003). Clinical protocols vary between institutions, and may not be utilised or followed. Considine et al. (2006) acknowledged that 25% of their sole ENP candidates time was devoted to guideline formation, to meet state requirements (Victoria, Australia). This was not specifically mentioned by any other studies.

Guidelines were evident from a mix of the literature including minor or fast track patients, as well as higher acuity patients. From the earlier literature (Read et al., 1992; Wright et al., 1992; Strange et al., 1994; Tye et al., 1998; Zimmermann & Pierce, 1998), guidelines were often applied to minor or fast track patients. Tye et al. (1998) make a first mention of expanding ENP service, by expanding local protocols. As ENPs started to see more high acuity patients, these guidelines partially shifted towards more unwell patients (Zimmermann & Pierce, 1998; Tachakra & Stinson, 2000; Cole & Ramirez, 2005). Zimmermann and Pierce (1998) acknowledge in some areas in the US, ED physicians have to assess all patients; this

was dependent on state restrictions or local law. If ENP assessed and treated a patient outside of protocol, the ED physician had to co-sign the chart after consultation. No rationale is provided for this process. Tachakra and Stinson (2000) state that working with protocols for major or resuscitation cases may be one way of reducing waiting times in a busy ED, with their protocols for both medical and nursing staff. Cooper et al. (2001) mention that 7% of the 91 ED charge nurses from their study believed clinical guidelines were a barrier to practice, and potentially reduce access to care for patients. This point, in regards to reduced access to care, was not clarified further. In contrast, when Loveridge visited Boston, US from the UK "...protocols dictated by the medical profession were not apparent..." (Loveridge, 2001, p.87).

Other barriers to autonomous practice for ENPs from the literature included resistance from medical staff (Maurice & Byrnes, 2001) and other healthcare workers such as inpatient teams, outpatient services (Zimmermann & Pierce, 1998), registered nurses (Thrasher & Purc-Stephenson, 2007) and radiology staff (Read et al., 1992; Strange et al., 1994; Tye et al., 1998). This resistance was more prominent in the earlier literature. Zimmermann and Pierce (1998) note that resistance to the role from some colleagues lessened over time, as health providers and professionals came to understand advanced nursing practice.

Fisher et al. (2006) from the UK specifically acknowledges potential barriers to the ENP role, which included attitudes of ENPs (only having to deal with one patient at a time, moving away from night shift and weekend work), the repetitive nature of the work (perhaps because ENPs were confined to minor injury) and perceived threats to medical colleagues. No further explanation was provided as to the reduction in night shift and weekend work by Fisher et al. (2006); for some these factors may be seen as an advantage to the role. A lack of clarity about titles and educational standards, and a reduction in the ability to train junior medical staff by senior colleagues, were also acknowledged by Fisher et al. (2006) to be barriers.

Prescribing of medications and treatments by ENPs has been controversial, initially in earlier times (Read et al., 1992; Tye et al., 1998). This is an important component of the NP role, as it enables clients to have comprehensive care provided by one health provider. The prescribing of medications historically has been the domain of medical practice, though in the past ten years this concept is continually evolving and changing worldwide, to allow other health providers the ability to prescribe. In Australia, Considine et al. (2006) acknowledge there had been significant debate in regards to prescription of medications, and the medical

fraternities resistance to NP prescribing. Perhaps this was due to some Australian states changing laws to allow NPs to prescribe certain medications, and also that patients would have some of this cost subsidised under the countries Medicare health scheme. This debate continues currently (Royal College of Nursing Australia, 2009; Nursing Review, 2010).

Some confusion was apparent from the literature, in regards to whether ENPs complete registered nursing duties, as well as the ENP role. This may depend on the ED workload (Zimmermann & Pierce, 1998; Blunt 1998; Thrasher & Purc-Stephenson, 2007) and is also cause for debate. Practice setting and resourcing may also have an effect. For example, if an ENP is working with minor or fast track patients, they may complete all cares for the patient, especially if nursing staff are busy with higher acuity patients (Blunt, 1998). In other cases, if the ENP is working with higher acuity patients, registered nurses may complete much of the usual nursing duties. From the literature, ENPs appear to be flexible to this need, depending on the EDs demand at the time (Zimmermann & Pierce, 1998; Thrasher & Purc-Stephenson, 2007). It is important to have role clarification for patients, staff, and ENPs.

Collaboration, perhaps broadly termed ‘working together’, was commonly discussed in the literature, and for various reasons (Wright et al., 1992; Zimmermann & Pierce, 1998; Blunt, 1998; Mills & McSweeney, 2005; Cole & Ramirez, 2005; Considine et al., 2006; Steiner et al., 2008). Blunt (1998) acknowledged that ENPs assessed major cases including resuscitations; these patients were treated in collaboration with the physician. The consultation process included discussing with the emergency physician physical findings, indications for diagnostics, and the plan of treatment for the patient. ‘Co providers’ is one term in the literature that Mills and McSweeney (2005) refer too. More than half of the ED patients in their study initially seen by an ENP were then assessed by some form of medical personnel. The reasons for another examination were not clarified. Cole and Ramirez (2005) discuss collaboration in terms of ENP supervision. An ENP may be employed by a physician. If this was the case, the physician may limit the role or scope of practice of the ENP. Health care institutions may also have restrictions which the ENP, if employed by them, needs to follow.

Whilst in Australia and Canada respectively, Considine et al. (2006) and Steiner et al. (2008) both required ENP collaboration with a physician. Considine et al. (2006) research was based solely on one ENP candidate, so collaboration in this context would be entirely appropriate. Steiner et al. (2008) concluded from the results of their study that ENPs should not be

permitted to practice autonomously, and that a model of collaborative practice for the ENP was more appropriate within the ED setting.

3.10 Summary

This section has discussed the potential restrictions and barriers to ENPs practising autonomously. Discussion points examined in regards to barriers to autonomous practice are not necessarily specific to ENP, but may be related to any NP role especially in countries where the role is not well established. The barriers appear at times to depend on local resourcing and practice setting of ENP, local legislation, and possibly in part an ignorance to ENP role and scope of practice.

3.11 Chapter summary

This chapter focusing on the literature reviewed, has acknowledged four main themes of information evidenced as to ENPs role within emergency care, in the past 20 years. These themes included preparation and education of the ENP, how and who decided what the ENP role was, practice setting of the ENP, and what were the common barriers or restraints to practising autonomously.

Within these four main themes, the role and scope of the ENP has been acknowledged as mostly dealing with minor injuries or ‘fast track’ assessment and treatment (as described by many of the UK, Australian and Canadian authors). Multiple studies though also confirm the role includes assessing and treating more sick and unstable patients, depending on local setting and resources. As evidenced by the literature, this broad scope has evolved over time, and will continue to progress in the states and countries discussed.

The following chapter moves on to a discussion of the importance of this topic, and how the literature findings may be related to achieving or maintaining a broad scope of practice for ENPs. Information provided from the background section is reviewed, and related to the local New Zealand health situation and needs. Implications for practice and future recommendations are documented, including the need and potential for further research in this area of practice.

CHAPTER FOUR:

DISCUSSION & CONCLUSION

4.1 Introduction

This chapter explains why the author believes this topic to be important, especially when applied to local needs, and examines the common themes that emerged from the literature reviewed. A summary and relevance to the New Zealand situation are provided, along with suggested implications for practice and future recommendations that could be viewed as unique to the New Zealand situation.

As discussed in the background chapter, the role of ENPs is relatively new to New Zealand, however is established in the US and to some extent the UK, Canada, and Australia. The scope and role of the NP has had a haphazard development and regulation in some areas when compared to New Zealand. New Zealand had the benefit of international colleagues establishing the role, and in some cases forging ahead with broadening the role. As mentioned elsewhere, there are three ENP currently in New Zealand (District Health Boards of New Zealand, 2010). These New Zealand pioneers have observed and contributed to evolution of the role, and have been able to define their scope within New Zealand, according to the Nursing Council of New Zealand standards.

An integrated literature review of the role of the ENP in the ED has been revealing of international information in regards to this topic, but also highlighted barriers to the role broadening into the future, to meet healthcare consumer and system need. I wanted to complete a literature review, due to my background in emergency care, and my interest in rural, pre-hospital healthcare and transport of patients. After I observed ENPs and a primary rural NP in their own environment, I had some understanding of what their role entailed, and what it may include in the future.

I have vision for broad potential with both of these roles, especially when trying to access and provide more efficient and complete healthcare for patients. Hence similarities between the two roles, was duly noted. Currently, primary NPs number 26 within New Zealand (District

Health Boards of New Zealand, 2010). The primary NP role was often the first to become established in many countries, to try and address equity of access to health services. My aim for this literature review was to provide evidence of the past ENP role, what it is currently within the countries reviewed, and from this evidence suggest what it could be in future years as applied to the unique New Zealand situation.

4.2 Limitations of the literature and search method

Many research studies critiqued did not actually use ENPs as their sample; other health professionals were used. Polit and Hungler (1997), Schneider et al. (2007) and Polit and Tatano Beck (2008) all discuss purposeful or judgement sampling. Sampling bias is referred to as systematic over or under representation of part of the population or characteristic relevant to the research question. It can be a conscious decision by the researcher to exclude or include certain groups, but often occurs unconsciously (Polit & Tatano Beck, 2008). When applying this knowledge to the studies represented by the literature review, perhaps ENP themselves were not formally recognised or accessible. It could also have been entirely appropriate of researchers to use these people, depending on the research question they were trying to answer. Other stakeholders in regards to the ENP role, especially within the earlier literature reviewed included supervisors, nurse unit managers or administrators, academic nurses based at universities, medical staff and clinical nurse specialists. Therefore, some of the literature assessed has limitations to answering my research question, as ENP at times were not utilised. It can be argued that they are the people that know their role the best. Limited conclusions may be drawn from the earlier literature reviewed, due to ENP themselves often not being used as the sample. Later literature (from early to the mid 2000's) was more representative of ENP and their views, or NPs themselves as authors (refer to section 3.2).

Over time as I reviewed the literature, it became clearer in terms of who was included as a 'NP' in research, and arguably the significance of the authors own work role and potential bias. As the role of ENP has been established and is progressing, perhaps this is duly reflected in the literature. The US featured strongly in the later literature, and as appropriate studies were often conducted by ENP about ENPs. The UK, because of their 'ad hoc' NP system up until 2008 (Royal College of Nursing, 2008), does not appear prominently in the later literature. The NP role is relatively new in Canada, Australia and New Zealand, with the latter two having their first formal NPs by 2000 and 2001 respectively (National Nursing and

Education Taskforce, 2006; Nursing Council of New Zealand, 2009b). All countries studied now have some formal system of NP recognition or educational standards, though it may still vary between states or provinces (see appendix A for definitions). The context of the countries reviewed health system (as discussed in the background chapter), also needs to be considered. No New Zealand research is included in the literature review, as there was little published information found on the role of ENPs.

Another potential limitation of the literature reviewed is through my search strategy and exclusion criteria, discussed earlier in the methods chapter. These included factors such as excluding non English language articles, the limited time frame for the literature search, and exclusion of 'grey' literature from overseas countries reviewed. These limitations needed to be implemented for the review itself to keep the amount of literature to a manageable level, and to enable reviewing of the information found within a limited time frame. Some of the overseas 'grey' literature has been utilised in other parts of this dissertation, such as the background and discussion chapters.

4.3 Discussion of common themes

From the four main themes evidenced by this literature review, the ENP role varies throughout the world. Countries and states have differing health systems, as acknowledged earlier. Apparent was mixed guidelines, standards, education and scope for ENPs. This made comparison between countries difficult, and was a limitation of the literature as arguably there was inadequate amounts of information in which to make comparisons. It also made comparison to the New Zealand situation difficult, as specific high prescriptive standards are expected to attain NP status within New Zealand (Nursing Council of New Zealand, 2009c).

4.3.1 Education of the ENP

Preparation of ENPs has evolved in some countries over the past 20 years, from being an emergency registered nurse with no other qualifications, to now most requiring a clinical Masters degree and some countries encouraging post Masters certificates and other higher qualifications (Pulcini & Wagner, no date; Australian College of Nurse Practitioners, 2009). Some reasonable amount of experience in the emergency care area appears from the literature to be required, which I believe is essential to any clinical role. A 'reasonable' amount of practice time could be a questionable factor for some, as time in a position does not always

reflect skill level (Benner, 1984). The expectation of tertiary education perhaps sits alongside a westernised move over the past 10-20 years, from on the job training in many occupations to base education received in a tertiary institute. However, as some authors alluded to (Cole & Ramirez, 2000; Campo et al., 2008), a substantial amount of ENP education was still received via on the job training. Even those countries having formal training for NPs in the ED (the US) are not perhaps fulfilling some of the ENPs educational requirements for everyday practice. By having family NPs (or FNPs, as explained in the background chapter) fulfill these roles in some EDs in the US, this enabled ENP to be able to assess a full age range of patients that may present to the ED (Wright et al. 1992; Cole & Ramirez, 2000, Campo et al., 2008).

As standardisation of education and preparation of ENPs is slowly moving towards some degree of consistency in the countries reviewed, this can only be a good thing for the profession, employers, and for the public and patients. Transferability of skills and qualifications has become an issue in the global competition for health workers; various countries need to have similar training to enable this transferability (Pulcini & Wagner, no date; Currie, Edwards, Colligan & Crouch, 2007).

In relating this to the New Zealand situation, a clinical Masters is the base preparation for an NP, with the applicant having at least four years clinical experience in the scope of practice being applied for. During the applicants clinical Masters education, substantial hours need to have been completed in the area of choice (for example, emergency) to become a NP (Nursing Council of New Zealand, 2009c).

From an observational point of view, preparation of ENPs may have been increased in rural areas, or where there was an acute need to provide some kind of health service to a population. This was not discussed in the literature reviewed. Other health workers sometimes have no desire to work in these more isolated and remote areas (Maw, 2008; Pedersen, 2008). Therefore over time, educational preparation may depend on management drive to provide a particular service, cover a particular practice area (such as urban/remote or after hours cover), or type of patient condition to be assessed (such as fast track/major patients). For example, an ENP assessing and treating minor injuries or fast track patients in an urban area with close nearby support it can be argued, may not need the same education as an isolated ENP in a more rural area. This idea is closely related to one of the other major themes evidenced from the literature, practice setting of ENP, which is discussed shortly.

4.3.2 By whom and how was the role defined?

How and who defined the scope of ENP within ED is an interesting theme. This may be paralleled to evolution of the role in the past 20 years, but also to the nursing professions desire to drive practice development and become more autonomous. Keenan (1999) examines autonomy around advanced nursing roles, such as the NP. From this concept analysis, antecedents to the exercise of autonomy include experience, education, ability to prioritise and discriminate, self discipline, and the acceptance of responsibility.

From the literature reviewed, difficulties appeared sometimes where there was no national or regulated version of the NP (Loveridge, 2001; Fisher et al., 2006). Even in areas where there was some regulation and a national definition of NP, the ENP in these situations often did not or could not specify their scope of practice for themselves (Steiner et al., 2008; Considine et al., 2008; Cole & Ramirez, 2005). Sometimes this was due to barriers and constraints on the role, or the role was defined by ED management needing to treat high numbers of lower acuity patients (Chang et al., 1999; Cooper et al., 2001; Maurice & Byrnes, 2001; Considine et al., 2006). For these administrators or managers, ENPs may have been seen as a cost effective alternative to a lack of medical staff. In other cases, medical staff, registered nurses, educators or managers contributed to what the role should or could be (Tachakra & Stinson, 2000; Fisher et al., 2006; Thrasher & Purc-Stephenson, 2007). Varying motivations may be the rationale behind this, such as protecting what they perceive as the patient's interests, or 'patch protection' (American College of Emergency Physicians Board of Directors, 2007). Few examples were apparent of ENP practising by their own competence, evidence based guidelines and research (Loveridge, 2001); this was noted more from literature outside of the US.

Tapper (2008) is critical of the research literature of Steiner et al. (2008), stating that comparing ENP and emergency physician care for a range of patients is inappropriate, as ENPs can work both autonomously and collaboratively. Tapper (2008) believes Steiner et al. (2008) study method is in stark contrast to nursing theories, and nursing group mandates for implementing the NP role within Canada. He goes on to discuss that NPs should not be considered role replacements for any other health care providers, as most health providers have different professional paradigms.

Ongoing discussion around nursing as a profession, may be an underlying reason for the difficulty around who and how the role of ENP is defined. Professionalism is described by

some authors as a group of attitudes, behaviours and values that result in serving the patient and society's interest, before the professions own (Finkel & Adam, 1999). Others describe professionalism as having certain characteristics, such as altruism, respect for others, honour, integrity, ethical and moral standards, accountability, advocacy, autonomy, self regulation, the use of professional organisations as major referent groups, and a sense of calling (Wynd, 2003; van Mook et al., 2009). Some may view advanced nursing practice evolution to being more task based, with the partial loss of other nursing values, such as caring (Scott, 2008; Law & Aranda, 2010). The view of major stakeholders of ENP positions may have been confused as to what ENPs were able and capable to complete within their scope, depending on their bias in establishing the role and position.

Resistance to the NP role being autonomous may be for various reasons as discussed, but often include hospital or employer liability, other health workers feeling threatened, and regulatory bodies or laws that control NP scope. Loveridge (2001), Fisher et al. (2006), and Campo et al. (2008) acknowledge role expansion, with Campo et al. (2008) discussing that the more a procedure or patient presentation is encountered, the more an ENP would complete this patient care confidently and independently. Autonomy and the NP is analysed by Keenan (1999) and Cullen (2000). Examination of this concept reveals with autonomy, comes accountability. Keenan (1999) discusses defining attributes of autonomy as independence, capacity for decision making, judgement, knowledge, and self determination. A legal term, sometimes used when discussion around responsibility for patient care occurs, is vicarious liability (Tachakra & Stinson, 2000; Tye et al., 1998). This can be defined as:

When one person is liable for the negligent actions of another person, even though the first person was not directly responsible for the injury. For instance, a parent can sometimes be vicariously liable for the harmful acts of a child, and an employer sometimes can be vicariously liable for the actions of a worker

(Lectric Law Library's Lexicon on..., no date).

Vicarious liability does not only include NPs; it covers any health professional directly involved in patient assessment and care (Keenan, 2010). Within New Zealand the Health Practitioners Competency Assurance Act (HPCAA) 2003 provides a framework for the regulation of registered health practitioners, in order to protect the public. This includes mechanisms to ensure practitioners are competent and fit to practise their professions

(Ministry of Health, 2009a). In the case of NPs, the responsible authority for monitoring their practice is the Nursing Council of New Zealand (Ministry of Health, 2008), as discussed in the background chapter. NPs are responsible for their actions and treatments, similar to other health care professionals. Depending on geographical site and local laws, in some cases NPs are autonomous practitioners, have a substantial awareness of their scope of practice, and will consult and refer patients when and where appropriate. Miller (2007) acknowledges that NPs must be aware of their qualifications, and never be afraid to seek consultation. He states “We cannot be expected to know everything, but we can be expected to know where and when to seek consultation” (Miller, 2007, p. 26).

By whom and how the NP role is described has been set by the Nursing Council of New Zealand, and strict criteria and attributes of applicants are expected. NP applicants within New Zealand are encouraged to look for ‘gaps’ in service provision, to help support their ability to find a position once NP status is obtained. Resources are available to assist NPs to form business plans, so as to meet DHBs and Ministry of Health outcomes (NPAC – NZ, 2005). The health system within New Zealand over many years has gone through much change and restructure, not always focused on the need to provide pertinent patient care (Gauld, 2001; Belgrave, 2008; Gauld 2009). Some authors (Robson, 2008; Easton, 2008; Carr & Tan, 2008; Morgan and Simmons, 2009) discuss how health workers in the future within New Zealand will need to be more generalist and holistic, and need to be able to work as part of a team. They will need to deal with the increasing burgeon of chronic disease in future years. Managing these conditions will help improve patients ‘QALY’, or quality adjusted life years; a term commonly used by governmental departments when costs and maintenance of healthcare or services are critiqued (Morgan & Simmons, 2009). There are already adequate standards within New Zealand for NP registration (as discussed in the background chapter), therefore there is a case in allowing some autonomy in order for the ENP role to develop to meet the healthcare needs of the population. The presence of patients with chronic disease within EDs, either as an exacerbation of these conditions or as a comorbidity, are relatively common presentations. ENPs, often with years of varied experience, could also effectively assess and care for these emergency patients.

Much of the scope of the early ENP focused on the assessment and treatment of minor injuries and illness. As the role has developed, especially in the US, ENP scope of practice has expanded to care for acutely ill or unstable patients. It could be assumed development of the ENP role within Canada, UK and Australia is slowly progressing. How the role and scope

is defined depends partly on geographical location and patient need, but as Partin (2006) states, ENPs themselves must take the initiative and define their own scope of practice.

Where the NP role has a defined and regulated scope of practice, such as in New Zealand (Nursing Council of New Zealand, 2009c), taking initiative in regards to role scope and definition is crucial. A 2008 document from the ENA of the US defines entry-level competencies for ENPs working in emergency care; these are related to ENP skills, behaviour and knowledge, despite what practice setting they are based in (ENA, 2008). This document includes the provision of advanced skills, and should provide a guide for those considering ENP roles within the emergency care area in New Zealand.

4.3.3 ENP practice setting

As noted earlier, my initial interest was in the ENP role for semi-rural and rural settings. However, among the literature sourced from the past 20 years it was common for practice locations of ENPs to be a mix of mostly suburban and urban locations, including NPs who provided 'emergency care' as part of their role. Examples of variations of practice setting that included emergency care were after hours clinics and rural NPs. Only one piece of literature was described as rural (Chang et al., 1999). In later literature (2005 onwards) most of it was based within metropolitan or urban areas (Mills & McSweeney, 2005; Fisher et al., 2006; Considine et al., 2006; Thrasher & Purc-Stephenson, 2007; Steiner et al., 2008). Interestingly, in a recent census of NPs within Australia (85% response rate), most worked in metropolitan areas and a number of them were based within EDs (26.9%) (Gardner, Gardner, Middleton & Della, 2009).

As noted in the background chapter, one possible reason for developing ENPs would be to address the problem of primary care or 'fast track' kind of presentations, within EDs. Definition of various terms for practice setting for the treatment of minor injury or illness, was not consistent within the literature. Wright et al. (1992) provide an expansive list of patient conditions that were seen in their fast track, whereas no other authors described their 'minor injury/illness' criteria. Problems with patient musculoskeletal systems, wounds and injuries, and the assessment of ENT complaints are described by other authors as 'fast track' appropriate (Hart & Mirabella, 2009). 'Minor injuries unit' was another term often not qualified within the literature, though other references can be sourced (NHS, 2008). This NHS description includes the assessment and treatment of fractures, eye problems, and minor head injuries. 'See and treat' is an alternative term used to describe the assessment and

treatment of minor injury and illness; Lamont (2005) describes principles to this concept, though does not clarify patient presenting complaints. 'Nurse-initiated discharge' is another term used that advanced practice nurses are completing; this is not the sole proviso of emergency care but is applied to ward patients with potentially predictable outcomes or uneventful recoveries (Kai Tiaki Nursing New Zealand, 2006). Therefore, from the literature where these terms were used, it often remained unclear as to where (such as major or minor treatment areas, if available) in the ED the ENP was based, and what sort of patient conditions ENPs were assessing.

Whilst it is reassuring that ENPs are employed in a range of settings, and complete their role competently, the lack of clarity in some of the reports makes it difficult to relate these findings to the local or national setting. Most ENP appear to be based in predominantly urban settings, though ENPs also practice in rural areas (Upper Midwest Rural Health Research Centre, 2007; Keating, Thompson & Lee, 2009), often where resources are more scarce (as discussed in the background chapter). Few of the critiqued studies discuss the local population demographics (Strange, 1994; Chang et al., 1999; Tachakra & Stinson, 2000; Mills & McSweeney, 2005; Considine et al., 2006; Campo et al., 2008). Greater detail within the studies as to population groups cared for by ENPs, including whether or not their practice tended to be within certain cultural or socioeconomic groups, would have been helpful in determining the potential further scope of the role within New Zealand. From other recent research practice setting of ENPs is examined, and includes evidence of ENP being present in the pre-hospital setting (Hoyt et al., 2010).

Little information was apparent from the literature, in regards to the patient journey to the hospital, especially from semi-rural and rural areas. This may be a role for an ENP, though within the literature reviewed there was little precedence for this. Within New Zealand, rural areas generally rely on volunteer ambulance staff, and for people providing this invaluable service, the demands of education, complex cases and the threat of 'something going wrong', are seriously reducing their numbers in both Australia and New Zealand (University Department of Rural Health, Tasmania, 2002). Within New Zealand, a service jointly funded by the Ministry of Health and ACC called PRIME (Primary Response In Medical Emergency) exists currently, where local GPs or rural nurses provide advanced healthcare in the field, if an ambulance is greater than thirty minutes travel away. This system has been functioning for several years in the rural areas. Some difficulties have been encountered though such as staff

availability, the healthcare practitioner confidence with dealing with an emergency that they have never encountered, or have not dealt with for many years (Horner, 2008).

A new role of the 'paramedic practitioner' has been mooted and implemented overseas as a possible option for future healthcare in the emergency environment. The paramedic practitioner may have a background of being an emergency nurse or paramedic, and would assess and treat patients in their homes as appropriate, to reduce the chance of a trip to hospital. A form of this role has been trialed in the urban Wellington region of New Zealand (Wellington Free Ambulance, 2009; Ministry of Health, no date[b]; Swain, Hoyle & Long, 2010; Long, 2010). Literature from Australia and the UK included this role; they commonly used the term 'emergency care practitioner' (Cooke, 2006; Cooper et al., 2004; Stirling, O'Meara, Pedlar, Tourle & Walker, 2007). Currently ambulance staff and paramedics, whether voluntary or in paid positions, remain unregulated under the HPCAA 2003 within New Zealand, whereas ENPs are regulated. Consultation in regards to paramedic registration is currently occurring within New Zealand; the outcome of these discussions remains unclear currently (Ambulance New Zealand, no date). ENPs often have extensive nursing and emergency experience, and with a broad scope of practice, could incorporate this role to meet a range of semi-rural or rural needs in smaller and more isolated communities to ensure timely access (Williams, 2006). Early and later New Zealand government documents have alluded to this need (Ministry of Health, 1999; Working Group for Achieving Quality in Emergency Departments, 2008; New Zealand Quality Improvement Committee 2009; Ministry of Health 2009f; Provost, 2010). In the South Island of New Zealand, other pre-hospital care options by nurses are being considered and piloted (St John Ambulance, 2009); consideration of expansion to these broader roles for ENP should continue into the future.

The 'Roadside to Bedside' document (Ministry of Health, 1999), states that "it is essential that people get the right care, at the right time, in the right place, from the right person" (p.4). Although this document is over ten years old, I believe this statement is still relevant. An appropriately prepared ENP can complete a role within an ED assessing low and high acuity patients, and the role needs to cement itself within EDs initially. Depending on community resource and need, the ability to practise in the pre-hospital area must be considered in the healthcare environment of today, as is occurring in other countries presently (Hoyt et al., 2010).

4.3.4 Barriers to autonomous practice

Independent practice, whilst still collaborating and referring as appropriate to colleagues, is one of the fundamental cornerstones for NP practice in New Zealand. It also enables patient access to a potential 'one-stop shop' for their healthcare needs. Barriers to autonomous practice from within the literature of the past 20 years was numerous, and included national and state regulations, laws and clinical protocols. The use of clinical protocols was common within the UK, Canada and Australian information. From the US literature, little mention, if at all, is made of protocols (Blunt, 1998; Cole & Ramirez, 2005; Campo et al., 2008). As discussed earlier, due to stringent NP registration protocols within New Zealand, and most practitioners at this level having an astute awareness of their own limitations, the use of clinical guidelines needs to be reconsidered. Guidelines can be useful and act as a guide for some practice, especially if the ENP is a new practitioner. However, over time and as the ENP becomes more skilled, they need to be able to follow best evidence available and current practice regimes to provide appropriate care for patients. Tingle (1996) from the UK provides a review in regards to clinical guidelines, as to risk and legal issues. He discusses that the use of them may depend on the purpose of having guidelines, and what level of evidence they are based upon. Care quality improvement and not cost containment need to be the focus, and Tingle (1996) acknowledges if guidelines are properly developed and implemented, they can facilitate the development of evidence based care both in medicine and nursing. Didsbury (2003) appears an active supporter of best practice guidelines (as discussed in the literature review chapter); he acknowledges guidelines are aids to decision making, but other factors such as skill and patient empathy must also be used in clinical practice situations, because any of these single factors are insufficient on their own. Keating et al., (2009) focuses on perceived barriers and sustainability of the ENP role; they found that clinical practice guidelines were a barrier to role progression.

At times a lack of collaboration or resistance from other health professionals of all descriptions (such as medical staff, radiographers, inpatient medical teams and registered nurses) was evident from the literature. Historically, the perceived and often actual dominant feature of health systems has been medical staff over nursing staff; this has sometimes been a two-way process, where some nurses saw this as "...the natural order of things" (Walsh & Ford, 1989, p. 137). Medicine has often traditionally dominated the health system, despite business and management models of care being implemented over many years (Gauld, 2001; Belgrave, 2008). The lack of collaboration may also be partially related to traditional gender roles; nurses are traditionally female, doctors are traditionally male (Greer, 1970; Walsh &

Ford, 1989). Over time this situation and viewpoint are slowly changing, though not in all places and not in all practitioners.

Perhaps in countries where the NP role is new, and especially new to the ED environment, the challenges of nurses having more advanced roles will have to be worked through (Balogh & Berry, 1998; Brown & Draye, 2003; Keating et al., 2009). Health service providers may have to persevere through early role difficulties, and ENPs need to continue to educate others in regards to the value and potential of their role.

Other barriers found from the literature were the ordering of diagnostics or x-ray imaging, the ability to prescribe where appropriate, and the ENP completing the role of the registered nurse. The ENP completing both registered nurse and ENP role some or all of the time, may lead to role confusion by all parties or, because of their extensive experience and advanced nursing knowledge, ENPs may be able to be flexible enough to provide what is appropriate as the circumstances dictate (Klein, 2008). The combining of the two roles of registered nurse and NP, can be viewed in multiple ways, but may not be appropriate use of a highly skilled cost effective practitioner. Role definition may have to be clarified within individual departments, depending on the motivation for initiating the ENP service. It needs to be remembered when an ENP first starts to practice, they are a novice within the NP role (Shea & Selfridge-Thomas, 1997; Cusson & Strange, 2008; Hurlock-Chorostecki & Loft, 2008). Suitable mentoring, role transition or internship programmes should be in place to support the new NP (Steiner, McLaughlin, Hyde, Brown & Burman, 2008; Bahouth & Esposito-Herr, 2009; Lee & Fitzgerald, 2008; NPAC – NZ, 2010).

As the ENP role has evolved and countries have defined NP qualifications, these issues are perhaps specifically mentioned within role definitions, or have been partly resolved with ‘on the job’ experience and time within the position. For example, the New Zealand definition of NP includes the ordering of diagnostics and x-ray imaging, and the authority to prescribe if the NP defines this within their scope. In the New Zealand situation, as discussed in the background chapter, the ability to prescribe for NPs is currently optional. Debate and resistance from certain groups in the past few years has occurred within New Zealand, as to NP prescribing (Carryer, no date; New Zealand Society of Anaesthetists, no date).

Another barrier to practice depending on your viewpoint, may be the changing of basic educational preparation of NPs, as mentioned in the background section by Tapper (2008).

This includes change from a clinical Masters education to that of a Doctorate of nursing practice; this is planned for the US by 2015 and is clarified further by other sources (ENA, no date). The Doctorate would take the same time as clinical Masters, but the lead in time for tertiary education providers to prepare for this may be considerable. If other countries, such as New Zealand or Australia were to change their current entry criteria, it may be a further barrier to NP practice. Requiring a clinical Masters for NP within New Zealand has some critics, due to the perceived lack of clinical focus (O'Connor, 2008). This potential change from clinical Masters to a Doctorate of nursing practice for NPs, can also be seen as evolution and growth of NP scope, which requires extensive formal education and clinical expertise.

4.4 Facilitators to practice

Although there were a number of barriers apparent, it was clear from the literature that there was also support for ENP role development. The term facilitate may be described as “to make easier or assist” (Orsman, 1979, p. 386). In addition to Zimmermann and Pierce (1998) other positives to enable the ENP to practice to their wide scope, include the broad range of conditions and treatments that some ENPs are able to complete (Blunt, 1998; Cole & Ramirez, 2000; Campo et al., 2008). The support of some senior medical staff and colleagues for the role was apparent (Blunt, 1998; Tachakra & Stinson, 2000; Fisher et al., 2006). These role facilitators need to be encouraged and nurtured, as ENPs become established within EDs. Australian research demonstrates ENPs make up the greatest number of their registered NPs (Gardner et al., 2009).

Appropriate and timely consultation and communication between all stakeholders, and ongoing publicity and education of the role to the general public cannot be underestimated, to help alleviate some barriers (Canadian Nurse Practitioner Initiative, 2006; Keating et al., 2009). Support for ENPs within New Zealand is becoming more obvious, as discussed in the background chapter (NZNO, 2009b; Safih, 2009; Safih, 2010; Yarwood, 2010). Publicity within New Zealand in regards to NPs and their role is also starting to become more apparent (Hawkes Bay Today, 2009; Ministry of Health, 2009e; Ministry of Health, 2009d).

4.5 Direction for ENP within New Zealand

The value of the literature reviewed was adequate to informing the topic of the ENP role in EDs. However, applying this to the New Zealand situation needs consideration of local issues and health demands within New Zealand. With the NP role being a newer concept in New Zealand, many of the difficulties faced by overseas colleagues have also perhaps been experienced here. It may be argued that ENPs are practising in a more high risk area (emergency clients) than other NPs. ENPs often have several years of emergency nursing experience, and are well aware of the potential risks and problems that can occur with any patient presenting to ED, including the primary care group (as discussed in the background chapter). Acknowledged is that primary care NPs in rural areas often work independently with emergency clients. Clinical guidelines or restrictions for NPs within EDs may have to be reduced, especially if applied in more regional areas and considering the ongoing problems with both medical and nursing staff retention (Gauld, 2009; Provost 2010).

Smarter ways of thinking and managing primary and emergency patients need to be considered, due to issues such as decreased access, little after hours community care, ambulance ramping of patients, long waiting times, and bed block within EDs (Ryall, 2007; Working Group for Achieving Quality in Emergency Departments, 2008; New Zealand Quality Improvement Committee, 2009; Ministry of Health, 2009g; Provost, 2010). The term 'ramping' refers to the wait ambulance patients sometimes have to even enter the ED. This can be related to the concept of 'bed block', where there are no beds within the ED to place an ambulance patient on, if needed. This can occur often due to beds being used by other unwell patients who have self presented, or other patients who are waiting for ward beds, where there are none. Ryall (2007) discusses the formation of Integrated Family Health Centres (p.30), which are viewed as one possible solution to freeing up emergency services by encouraging access to diagnostics and interventions within primary care. The shift towards community based care has certainly been indicated over many years, and implementation at times has been difficult (Gauld, 2001), though with some successes (James, 2008; Bennett et al., 2008). Nine primary health care providers were successfully shortlisted to develop business plans for Integrated Family Health Centres by 2010 (Ryall, 2009). Ford (2009) discusses NP innovations within the US, including providing assessment and health advice within retail shops or grocery stores.

The New Zealand Quality Improvement Committee (2009) discusses how the work and skills of NPs needs to be understood and defined. Within rural and suburban areas, ENP skills need to be appropriately utilised, which may include the ED, primary, pre-hospital or transport environment. Another ministry document discusses how the volume and type of hospital presentations to EDs is in part influenced by the success of the primary care system (Ministry of Health, 2009c). It goes on to state that four million dollars has been allocated over the next four years for training of health professionals in rural areas; it does not define what 'rural' is, or who these health professionals might be.

Recommendation twelve, from the Working Group for Achieving Quality in Emergency Departments (2008), discusses roles for advanced emergency nursing when it examines best workforce models for EDs. Furthermore, the government discuss enhanced nursing interventions to meet shorter stays in EDs, with a target of six hours within the next two years (Ministry of Health, 2009f). These 'enhanced nursing interventions' are not clarified further, and it needs to be kept in mind that advanced nursing practice may include clinical nurse specialists, or other advanced registered nurse roles, as well as ENP. These options are being considered both within New Zealand and overseas (Ministry of Health, 2002; Royal College of Nursing, 2008; Cashin et al., 2007; Ministry of Health, no date [b]; Alberti, no date). The Nursing Council of New Zealand had considered extending the scope of practice of the registered nurse, by credentialing nurses in certain specialist areas (Nursing Council of New Zealand, 2009d). This is at registered nurse level only, and may well have implications for nurses, EDs and all NPs into the future. Results from this examination were expected in 2010 (NZNO, 2009a). For some nurses, this area or scope specific credentialing may be seen as preferable or more easily obtainable, compared to the NP professional pathway currently within New Zealand. The registered nurse scope of practice, after consultation during 2009/2010 with stakeholders, is to be made more flexible. Nurses will need to notify the Nursing Council that they are working in an extended scope of practice. This will equally be monitored by the Nursing Council, professional organisations and employers (Kai Tiaki Nursing New Zealand, 2010; Nursing Council of New Zealand, 2010).

For the ENP role to progress and broaden, lists of protocols or guidelines may have to be seriously reconsidered, as to their appropriateness and considering the registered nurse scope expansion. Protocols or guidelines potentially limit access to care by patients, and also reduce types of patient presentations that ENPs can assess and treat in their everyday practice. Once an ENP has been mentored and supported into the role, and perhaps a period of

'internship' is completed, ENPs should be able to assess a wide range of patient presentations (Steiner, McLaughlin, Hyde, Brown & Burman, 2008; Bahouth & Esposition-Herr, 2009; Lee & Fitzgerald, 2008; ENA, 2008). The use of an ENP seeing 'fast track' patients may well be appropriate in some areas and at certain times of the day, though in others, may not be what is best for the ED to keep patients flowing, for patient access needs, and for meeting current Ministry of Health goals.

Although it can be argued that rural and semi-rural EDs have different needs to their urban counterparts and requirements from the NP role, the Ministry of Health appear to have set ideas across EDs and their needs in all geographical areas. That is, EDs are all the same and have similar needs and demands upon them. This is despite rural areas historically being harder to staff, access to healthcare for consumers is difficult, with less regular community services and resources available, as examined in the background chapter (Ryall, 2007; Howie, 2008; Brown 2008; Robson, 2008; Crampton & Foley, 2008; Provost, 2010). The Ministry of Health appears not to have considered the issue of geography and the value of continuity of care for these patients. Morgan and Simmons (2009) state that smaller District Health Boards need to be absorbed into larger neighbours, which is also discussed by other authors (Gauld, 2009). Morgan and Simmonds (2009) also state that the number of EDs within New Zealand is too large for our population, for them to be 'effective' (p. 246). This issue is not further clarified by these authors, and the latter comment perhaps reflects the view of an economist, where the authors are focusing on cost effectiveness versus utilisation of resources. These two points, that being small District Health Board mergers and reducing the amount of EDs, may occur in the future depending on public and political opinion at the time. Regardless of whether or not the number of EDs within New Zealand decreases, ENPs working in regional areas need to have a broad base of skills, and must be able to assess and treat a wide range of patients, depending on the work flow of the department, the acuity of patients, and what services are available to support the patient in the wider community upon discharge.

The NP concept is one of an independent practitioner, who, like any healthcare professional, consults, collaborates and refers to others as needed to promote high quality healthcare outcomes (Nursing Council of New Zealand, 2004). To enable a population access to appropriate healthcare, the option of NPs needs to be recognised and continually strived for, if NPs are to take a meaningful role in healthcare (Cooper et al., 2002; Kelleher Keane, 2008; Wilson, Cameron & Jennings, 2008; ENA, 2008; Menchine et al., 2009; Hoyt & Proehl, 2010; Semonin-Holleran, 2010; Morgan & Simmons, 2010). District Health Boards and smaller

health groups such as trusts need to recognise the value of NPs, and their role and scope. Whilst NPs themselves need to lead this education, other professional organisations and colleges must continue to lobby groups such as the Ministry of Health and the government, to influence healthcare managers to enable NPs to be considered an option within their health workforce. NPAC – NZ, which is part of NZNO and the College of Nurses Aotearoa, plays a role in this lobbying, to educate and establish more NP independence within New Zealand (NPAC - NZ, 2008).

4.6 Implications for practice

The ENP role must be able to expand, to meet the needs of the local population. Expanded scope of practice for ENPs should include urban and rural areas, and needs further examination in consultation with all healthcare colleagues and stakeholders. Expansion may depend on the local EDs resourcing, population base demographics, geography, and level of staff retention. As the NP role continues within New Zealand, colleagues are becoming more supportive of ENP role expansion within EDs (Safih, 2009; Safih, 2010; Yarwood, 2010; NZNO 2009b). Based on evidence from the US and the UK (Cole & Ramirez, 2000; Zimmermann & Pierce, 1998; Blunt, 2008; Campo et al., 2008; Tachakra & Stinson, 2000; Fisher et al., 2006; Alberti, no date; ENA, 2008), there is a case for ENPs to expand their role from a minor injury or illness focus, especially where emergency nursing and medical positions are increasingly difficult to fill (Schneider et al., 2010).

To be able to meet Ministry of Health target times of six hours for ED patients (Ministry of Health, 2009b; Tenbenschel, 2009), an integrated acute care plan is suggested, encompassing the broad community, ambulance services, GPs and nursing homes (Working Group for Achieving Quality in Emergency Departments, 2008). As discussed in the background section, the determination of best workforce models and a collaborative system between the primary and secondary interface, requires “fresh thinking” about the roles and ranges of health workers employed in the wider health sector (Working Group for Achieving Quality in Emergency Departments, 2008, p. 56). Innovation and consideration of broad community health needs is discussed in other governmental documents (Ministry of Health, 2009e; Provost, 2010).

From later UK, US and Australian literature, evidence discusses the under-utilisation of ENPs, and how they can care for more unwell patients (Fisher et al., 2006; Campo et al., 2008;

Wilson et al., 2008; Gardner et al., 2009; Nursing Review, 2009; Haley & Kellermann, 2009). These ideas are also supported by New Zealand authors (Safih, 2009; Ministry of Health, 2009, cited in Nursing Council of New Zealand, 2009d; Safih 2010). A change in thinking of traditional health roles I believe is relevant to urban but especially to rural areas, where often there is less resourcing. The public and health administrators need educated in regards to the ENP role and potential (Balogh & Berry, 1998; Brown & Draye, 2003). As Benner (1984) deduces, expert performance is characterised by a vision of “what is possible” (p 35).

4.7 Future recommendations

Further research is needed as to the ENP role, and its future potential and scope within the New Zealand context. These areas of research may include holistic healthcare provision, satisfaction with ENP service, patient healthcare outcomes with NP care, and the area of rural and pre-hospital ENPs. A repeated literature review of the UK, Canadian and US research within the next five years, would be useful to evaluate the progress and growth of the ENP role in these countries. Australian research needs to continue, on areas such the everyday tasks and role of NP, the amount of primary care completed by ENPs, and broadening of the ENP role both within hospitals and rural bases. Our Australian neighbours have similarities to New Zealand, including wide geographical regions and scarce resources in isolated areas. New Zealand specific research needs to be conducted and published, as to the scope of NP roles, and their implementation in a broad range of situations. Specifically, ENP role and value within EDs needs to be evaluated. Once the ENP role within EDs in New Zealand is established, a broad view of the provision of emergency care and where and how this occurs, needs to be considered (New Zealand Quality Improvement Committee, 2009; Morgan & Simmons, 2010).

Reflecting on my own emergency care and rural health interest, I potentially see the role of the ENP perhaps not being solely confined to the ED (although this was the focus of the literature review within this dissertation). Whilst many ENPs will only work within EDs, envisaged is an expanded scope of practice to include pre-hospital care. The concept requires collaboration with other professional groups, but again if health staff resource is not available or slim in the regional areas, the implementation of ENPs with a broad scope of practice may be very useful and appropriate (Ministry of Health, 2009, cited in Nursing Council of New Zealand, 2009d). The ENP could co ordinate this role or lead a team of likeminded health professionals, out of the traditional hospital and ED environment.

Therefore, my recommendations from this literature review and review of the New Zealand grey literature are:

1. Further research into the ENP role needs to occur both overseas and in New Zealand, on aspects such as ENP assessment and care of patients, and their role as a cost effective, holistic healthcare provider across a wide range of settings. ENP themselves as research scholars and with experience of their role, need to complete this research. Ideally, a similar literature review of this nature should be repeated within five years, to examine progress of the ENP role and to assess if or how it has broadened. Tertiary institutes and the Nursing Council of New Zealand need to support this research, and also investigate the option of Doctorate training for NPs in the future. Further detail of other research required has been discussed above. This recommendation relates to the theme of education and preparation of ENPs.
2. The role of ENP may begin with fast track or low acuity patients within EDs, but should be reviewed six months approximately after initiation, as to ENP being able to assess a wider range of patients including those with higher acuity needs within EDs. The ENP needs to complete this review themselves, along with all relevant stakeholders to the position including those in the community and consumers. This recommendation is related to the theme of by whom and how the role is defined, but also to the theme of barriers to ENP practising autonomously.
3. As the numbers of ENPs increase, health stakeholders in the wider community need to be educated and consulted on the scope of ENP potentially expanding and bridging primary and secondary care needs, including the pre-hospital and patient transport area especially in more rural zones. New Zealand has a unique geographical setting, and Ministry of Health documents partly indicate this need. Recommendation three, as evolved from the literature, is related to the theme of practice setting of ENPs.

4.8 Conclusion

With the ENP role in its infancy in New Zealand, it is crucial that consideration is given to role development in order to address how such nurses may meet future healthcare needs. This dissertation has provided evidence of ENP practice within a range of countries, with the intent that the information be used to clarify and recommend a way forward for New Zealand.

Nineteen articles were selected for critical analysis. Whilst there were limitations with some of these articles, they were deemed to provide sufficient detail to inform the review and achieve my objective. Four themes emerged from the literature reviewed including ENP education, by whom and how the role was defined, where did ENP commonly practice, and what were the constraints or barriers to practising autonomously.

The process of an integrated literature review has been a steep 'learning curve' and challenging at times, but completing this process step by step as documented in the method section made this achievable. The findings have been interesting and stimulating, and reassuring to the fact that ENPs are more than able to assess and treat unstable patients, and are not solely confined to minor injury or illness. Considering my interest in emergency patients, pre-hospital care and the transport environment, potential for the ENP role in New Zealand including the more rural or remote areas, needs to be reviewed.

By following the recommendations of this review, there is potential for the ENP role to develop broadly both within EDs, and including the primary and pre-hospital care interface. With healthcare personnel becoming scarce in many areas and the increasing cost of locum staff, healthcare needs to be provided by remembering access to healthcare should be seamless, and the needs of the local and national population should be the prime consideration.

REFERENCES

- Accident Compensation Corporation. (2008). *Introduction to ACC*. Retrieved from <http://www.acc.co.nz/about-acc/overview-of-acc/introduction-to-acc/index.htm>. Accessed 17/11/09.
- Accident Compensation Corporation. (2010). *Why does ACC help tourists?* Retrieved from http://www.acc.co.nz/about-acc/media-centre/frequently-asked-questions/ABA00105#P190_16414. Accessed 10/11/10.
- Alberti, G. (no date). *NHS Emergency Care checklist*. Retrieved from http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4060891.pdf. Accessed 26/8/10.
- Ambulance New Zealand. (no date). *About Registration*. Ambulance New Zealand: Wellington, New Zealand.
- American Academy of Nurse Practitioners. (2007). *Scope of Practice for Nurse Practitioners*. Retrieved from <http://www.aanp.org/NR/rdonlyres/FCA07860-3DA1-46F9-80E6-E93A0972FB0D/0/Scope-of-Practice.pfd>. Accessed 24/3/09.
- American Academy of Nurse Practitioners. (2010). *Frequently asked questions*. Retrieved from <http://www.aanp.org/NR/rdonlyres/A1D9B4BD-AC5E-45BF-GEBO-DEFCA1123204/4271/FAQsWhatisanNP83110.pdf>. Accessed 13/10/10.
- American College of Emergency Physicians. (2007). *Guidelines regarding the role of Physician Assistants and Nurse Practitioners in the Emergency Department*. Retrieved from <http://www.acep.org/PrintFriendly.aspx?id=29492>. Accessed 29/5/09.

- Australasian College of Emergency Medicine. (2006). *Policy on the Australasian Triage Scale*. Retrieved from http://www.acem.org.au/media/policies_and_guidelines/P06_Aust_Triage_Scale_-_Nov_2000.pdf. Accessed 17/11/09.
- Australian College of Nurse Practitioners. (2009). Letter regarding national registration and accreditation consultation. Retrieved from http://www.acnp.org.au/images/stories/national_registration_submission_nov_09.pdf. Accessed 4/10/10.
- Australian Government. (2010). *The Australian Health System*. Retrieved from <http://www.medicareaustralia.gov.au/about/whatwedo/health-system/index.jsp>. Accessed 18/10/10.
- Australian Nursing and Midwifery Council. (2004). *National Competency Standards for the Nurse Practitioner*. Retrieved from <http://www.anmc.org.au/.../Competency%20Standards%20for%20the%20Nurse%20Practitioner.pdf>. Accessed 20/7/09.
- Australian Nursing Federation. (2009). *Fact Sheet 6 – A snapshot of Nurse Practitioners in Australia*. Retrieved from http://www.anf.org.au/pdf/Fact_Sheet_Snap_Shot_Nurse_Practitioners.pdf. Accessed 4/10/10.
- Bagg, J. (2004). Rural Nurse Practitioners in South Australia: Recognition for Registered Nurses already fulfilling the role. *Australian Journal of Rural Health*. 12, 3-5.
- Balogh, D., & Berry, A. (1998). A challenge for clinical nurses: A new nursing role. *Heart & Lung*. 27(6), 355-359.
- Bahouth, M., & Esposito-Herr, M. (2009). Orientation program for hospital-based Nurse Practitioners. *Advanced Critical Care*. 20(1), 82-90.

- Belgrave, M. (2008). A historical perspective on the politics of healthcare. In K.Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand*. Dunedin, New Zealand: Otago University Press.
- Bennett, W., Ryder, E., Governor, M., James, K., Simcox, M., & Ormsby, L. (2008). Stories from people working with high need populations. In K.Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand*. Dunedin, New Zealand: Otago University Press.
- Benner, P. (1984). *From Novice to Expert: Excellence and power in clinical nursing practice*. Menlo Park, California: Addison Wesley Publishing Company.
- Bezzina, A., Smith, P., Cromwell, D., & Eagar, K. (2005). Primary care patients in the Emergency Department: Who are they? A review of the definition of the 'primary care patient' in the Emergency Department. *Emergency Medicine Australasia*. 17, 472-479.
- Blunt, E. (1998). Role and productivity of Nurse Practitioners in one urban Emergency Department. *Journal of Emergency Nursing*. 24(3), 234-239.
- Boushy, D., & Dubinsky, I. (1999). Primary care physician and patient factors that result in patients seeking emergency care in a hospital setting: The patients perspective. *The Journal of Emergency Medicine*. 17(3), 405-412.
- Brabyn, L., & Barnett, R. (2004). Population need and geographical access to general practitioners in rural New Zealand. *The New Zealand Medical Journal*. 117(1199). Retrieved from <http://researchcommons.waikato.ac.nz/bitstream/10289/2019/1/Brabyn%20population%20need.pdf>. Accessed 10/11/10.
- Bragg, M. (2009). Alternate models of care and the role of the Emergency Nurse Practitioner. *Emergency Medicine Australasia*. 21, 161-162.
- Brown, J. (2008). Hospital-based emergency nursing in rural settings. *Annual Review of Nursing Research*. 26, 117-141.

- Brown, J., Hart, A., & Burman, M. (2009). A day in the life of rural advanced Practice nurses. *The Journal for Nurse Practitioners*. 5(2), 108-114.
- Brown, M., & Draye, M. (2003). Experience of pioneer Nurse Practitioners in establishing advanced practice roles. *Journal of Nursing Scholarship*. 35(4), 391- 397.
- Burns, N., & Grove, S. (2005). *The Practice of Nursing Research*. 5th Edition. Missouri, USA: Elsevier Saunders.
- Campo, T., McNulty, R., Sabatini, M., & Fitzpatrick, J. (2008). Nurse Practitioners performing procedures with confidence and independence in the emergency care setting. *Advanced Emergency Nursing Journal*. 30(2), 153-170.
- Canadian Institute for Health Information. (2006). *The Regulation and Supply of Nurse Practitioners in Canada: 2006 update*. Retrieved from http://secure.cihi.ca/cihiweb/products/The_Nurse_Practitioner_Workforce_in_Canada_2006_Update_final.pdf. Accessed 16/10/09.
- Canadian Nurse Practitioner Initiative. (2006). *Nurse Practitioners: The time is now*. Retrieved from http://206.191.29.104/documents/pdf/Nurse_Practitioners_The_Time_is_Now_e.pdf. Accessed 16/10/09.
- Canadian Nurse Practitioner Initiative. (no date). *Nurse Practitioners in the Emergency Department*. Retrieved from http://206.191.29.104/documents/pdf/NP_emergency_department_2005_e.pdf. Accessed 29/4/09.
- Canadian Nurses Association. (2002). *Role of the Nurse Practitioner around the World*. Retrieved from http://www.cna-nurses.ca/CNA/documents/pdf/publications/FS11_Role_Nurse_Practitioner_March_2002_e.pdf. Accessed 20/7/09.

- Canadian Nurses Association. (no date). *Nurse Practitioner role to strengthen Canada's primary health-care system*. Retrieved from http://206.191.29.104/documents/pdf/Cdn_Nurses_Assoc_Page_1_e.pdf. Accessed 25/10/10.
- Carr, J., & Tan, L. (2008). The promise of primary health care. In K.Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand*. Dunedin, New Zealand: Otago University Press.
- Carryer, J. (no date). *Implementing Nurse Practitioner prescribing on behalf of the College of Nurses Aotearoa (New Zealand)*. Retrieved from http://www.nurse.org.nz/submissions/subm_np_prescribing.htm. Accessed 18/12/09.
- Carter, A., & Chochinov, A. (2007). A systematic review of the impact of nurse practitioners on cost, quality of care, satisfaction and wait times in the Emergency Department. *Canadian Journal of Emergency Medicine*. 9(4), 286-295.
- Cashin, A., Waters, C., O Connell, J., Christofis, L., Lentakis, A., Rossi, M., et al. (2007). Clinical Initiative Nurses and Nurse Practitioners in the Emergency Department: What's in a name? *Australasian Emergency Nursing Journal*. 10(2), 73-79.
- Chang, E., Daly, J., Hawkins, A., McGirr, J., Fielding, K., Hemmings, L., et al. (1999). An evaluation of the Nurse Practitioner role in a major rural Emergency Department. *Journal of Advanced Nursing*. 30(1), 260-268.
- Cole, F., & Kleinpell, R. (2006). Expanding Acute Care Nurse Practitioner practice: Focus on Emergency Department practice. *Journal of the American Academy of Nurse Practitioners*. 18, 187-189.
- Cole, F., & Ramirez, E. (2000). Activities and procedures performed by Nurse Practitioners in emergency care settings. *Journal of Emergency Nursing*. 26(5), 455-463.
- Cole, F., & Ramirez, E. (2005). Nurse Practitioners in emergency care. *Topics in Emergency Medicine*. 27(2), 95-100.

- College of Emergency Nurses New Zealand – New Zealand Nurses Organisation. (2009). *CENNZ- NZNO Position Statement – Triaging away*. Retrieved from [http://www.cennz.co.nz/CENNZ Postn Statement Triaging Away 2009.pdf](http://www.cennz.co.nz/CENNZ_Postn_Statement_Triaging_Away_2009.pdf). Accessed 14/10/09.
- Considine, J., Martin, R., Smit, D., Jenkins, J., & Winter, C. (2006). Defining the scope of practice of the Emergency Nurse Practitioner role in a metropolitan Emergency Department. *International Journal of Nursing Practice*. 12, 205-213.
- Cooke, M. (2006). Emergency Care Practitioners: A new safe effective role? *Quality and Safety in Healthcare*. 15, 387.
- Cooper, M., Hair, S., Ibbotson, T., Lindsay, G., & Kinn, S. (2001). The extent and nature of Emergency Nurse Practitioner services in Scotland. *Accident and Emergency Nursing*. 9, 123-129.
- Cooper, M., Lindsay, G., Kinn, S., & Swann, I. (2002). Evaluating Emergency Nurse Practitioner services: A randomised controlled trial. *Journal of Advanced Nursing*. 40(6), 721-730.
- Cooper, S., Barrett, B., Black, S., Evans, C., Real, C., Williams, S., et al. (2004). The emerging role of the Emergency Care Practitioner. *Emergency Medicine Journal*. 21, 614-618.
- Council of Australian Governments. (2008). *Intergovernmental agreement for a national registration and accreditation scheme for the health professionals*. Retrieved from http://www.coag.gov.au/coag_meeting_outcomes/2008-03-26/docs/iga_health_workforce.pdf. Accessed 15/10/09.
- Covington, C., Erwin, T., & Sellers, F. (1992). Implementation of a Nurse Practitioner staffed fast track. *Journal of Emergency Nursing*. 18(2), 124-131.

- Crampton, P., & Foley, J. (2008). Why are we weighting? Equity considerations in primary health care resource allocation formulas. In K.Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand*. Dunedin, New Zealand: Otago University Press.
- Cullen, C. (2000). Autonomy and the Nurse Practitioner. *Nursing Standard*. 14(21), 53-56.
- Currie, J., Edwards, L., Colligan, M., & Crouch, R. (2007). A time for international standards?: Comparing the Emergency Nurse Practitioner role in the UK, Australia and New Zealand. *Accident and Emergency Nursing*. 15, 210-216.
- Cusson, R., & Strange, S. (2008). Neonatal Nurse Practitioner role transition: The process of reattaining expert status. *The Journal of Perinatal and Neonatal Nursing*. 22(4), 329-337.
- Da Costa Santos, C., de Mattos Pimenta, C., & Nobre, M. (2007). The PICO strategy for the research question construction and evidence search. *Rev Latino-am Enfermagem*. 15(3), 508-511.
- Dealey, C. (2001). Emergency Nurse Practitioners: Should the role be developed? *British Journal of Nursing*. 10(22), 1459-1468.
- Didsbury, P. (2003). *Benefits of best practice guidelines: Evaluating and applying the evidence*. Retrieved from http://www.nzgg.org.nz/download/files/Didsbury_Oct03.pdf. Accessed 4/12/09.
- Dillon, D. (2008). Rural Contexts – Islands. In J. Ross (Ed.), *Rural Nursing: Aspects Of Practice*. Dunedin, New Zealand: Ministry of Health.
- District Health Boards of New Zealand. (2010). Areas of practice for Nurse Practitioner scope of practice as at 15 September 2010. Retrieved from http://www.dhbnz.org.nz/Site/Future_Workforce/Nursing-Midwifery/Nursing-Projects/Nurse-Practitioner/Default.aspx. Accessed 30/10/10.

- Dow, D. (1995). *Safeguarding the public health*. Wellington, New Zealand: Victoria University Press.
- Drummond, A. (2003). Nurse Practitioners in the Emergency Department: A discussion paper. *Canadian Journal of Emergency Medicine*. 5(4), 276-280.
- Durie, M. (1998). *Whaiora – Maori health development*. 2nd Edition. Auckland, New Zealand: Oxford University Press.
- Easton, B. (2008). Does poverty effect health? In K.Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand*. Dunedin, New Zealand: Otago University Press.
- Elley, C., Randall, P., Bratt, D., & Freeman, P. (2007). Can primary care patients be identified within an Emergency Department workload? *The New Zealand Medical Journal*. 120(1256), 57-68.
- Emergency Nurses Association. (no date). *White paper – the essentials of doctoral education for advanced nursing practice in Emergency care*. Retrieved from <http://www.ena.org/IQSIP/NursingPractice/advanced/Documents/DNPWhite> Paper.pdf. Accessed 16/11/10.
- Emergency Nurses Association. (2001). *Standards of practice for the Nurse Practitioner in the Emergency care setting*. Retrieved from <http://ena.org/publications/scopes/Standards.pdf>. Accessed 26/12/08.
- Emergency Nurses Association. (2008). *Competencies for Nurse Practitioners in Emergency care*. Retrieved from <http://www.ena.org/IQSIP/NursingPractice/advanced/Documents/ENANP> Competency.pdf. Accessed 16/11/10.

- Emergency Nurses Association. (2009). *Scope of practice for Nurse Practitioners in Emergency care*. Retrieved from <http://www.ena.org/IQSIP/NursingPractice/Scopes/Documents/NPscope.pdf>. Accessed 10/11/10.
- Fineout-Overholt, E., Melnyk, B., & Schultz, A. (2005). Transforming health care from the inside out: advancing evidence-based practice in the 21st century. *Journal of Professional Nursing*. 21(6), 335-344.
- Finkel, M., & Adams, J. (1999). Professionalism in Emergency Medicine. *Emergency Medicine Clinics of North America*. 17(2), 443-450.
- Fisher, J., Steggall, M., & Cox, C. (2006). Developing the A&E Nurse Practitioner role. *Emergency Nurse*. 13(10), 26-31.
- Ford, J. (2009). *Why Nurse Practitioners? Innovative providers lead the charge*. Retrieved from <http://nurse-practitioners.advanceweb.com/Article/Why-Nurse-Practitioners-1.aspx>. Accessed 14/9/09.
- Galicyznski, S. (2006). Top 10 reasons to become a Trauma Nurse Practitioner. *Journal of Trauma Nursing*. 13(3), 107-110.
- Gardner, A., Gardner, G., Middleton, S., & Della, P. (2009). The status of Australian Nurse Practitioners: The first national census. *Australian Health Review*. 33(4), 679-689.
- Gardner, G., Carryer, J., Gardner, A., & Dunn, S. (2006). Nurse Practitioner competency standards: Findings from collaborative Australian and New Zealand research. *International Journal of Nursing Studies*. 43, 601-610.
- Gardner, G., Dunn, S., Carryer, J., & Gardner, A. (2006). Competency and capability: Imperative for Nurse Practitioner education. *Australian Journal of Advanced Nursing*. 24(1), 8-14.

- Gauld, R. (2001). *Revolving doors: New Zealand's health reforms*. Wellington, New Zealand: Institute of policy studies and the health services research centre, Victoria University of Wellington.
- Gauld, R. (2009). *Revolving doors: New Zealand's health reforms – the continuing saga*. 2nd Edition. Wellington, New Zealand: Health Services Research Centre and Institute of Policy Studies, Victoria University of Wellington.
- Gentil, R., Ramos, L., & Whitaker, I. (2008). Nurses' training in pre-hospital care. *Rev Latino-am Enfermagem*. 16(2), 192-197.
- Greer, G. (1970). *The Female Eunuch*. Aylesbury, Great Britain: Granada Publishing Ltd.
- Gunnarsson, B., & Warren Stomberg, M. (2009). Factors influencing decision making among ambulance nurses in emergency care situations. *International Emergency Nursing*. 17, 83-89.
- Haley, L. & Kellermann, A. (2009). Adapt and survive. *Academic Emergency Medicine*. 16(10), 984-985.
- Hamilton, H., & Clare, J. (2004). Reviewing the literature: making 'the literature' work for you. *Collegian*. 11(1), 8-11.
- Hart, L., & Mirabella, J. (2009). A patient survey on Emergency Department use of Nurse Practitioners. *Advanced Emergency Nursing Journal*. 31(3), 228-235.
- Hartley Jones, J. (2004). On target in A&E. *Nursing Management*. 11(7), 19-21.
- Hawkes Bay Today. (2009). *There are never enough nurses*. Retrieved from <http://www.hawkesbaytoday.co.nz//local/news/there-are/never/enough-nurses/3904069/>
Accessed 15/9/09.
- Health Canada. (2010). *Canada's health care system (Medicare)*. Retrieved from <http://www.hc-sc.gc.ca/hcs-sss/medi-assur/index-eng.php>.
Accessed 18/10/10.

- Health Insurance Consultants Australia. (no date). *Health Care funding in Australia*. Retrieved from http://www.hica.com.au/Health-Insurance_Learn-more-about-Health-Insurance_health-care-funding-in-australia.aspx. Accessed 19/07/09.
- Health Policy Consensus Group. (no date). *Options for Healthcare Funding*. Retrieved from <http://www.civitas.org.uk/pdf/hpcgSystems.pdf>. Accessed 3/8/09.
- Holloway, I., & Wheeler, S. (2010). *Qualitative research in nursing and healthcare*. 3rd Edition. West Sussex, United Kingdom: Blackwell Publishing Ltd.
- Horner, C. (2008). Emergency health provision and maintaining competency. In J. Ross (Ed.), *Rural Nursing: Aspects of Practice*. Dunedin, New Zealand: Ministry of Health.
- Howden-Chapman, P., & Bierre, S. (2008). Reducing health inequalities by improving housing. In K.Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand*. Dunedin, New Zealand: Otago University Press.
- Howie, L. (2008). Rural Society and Culture. In J. Ross (Ed.), *Rural Nursing: Aspects Of Practice*. Dunedin, New Zealand: Ministry of Health.
- Hoyt, K., Coyne, E., Ramirez, E., Peard, A., Gisness, C., & Gacki-Smith, J. (2010). Nurse Practitioner Delphi study: competencies for practice in emergency care. *Journal of Emergency Nursing*. 36(5), 439-449.
- Hoyt, K., & Proehl, J. (2010). From the Editors - resuscitating healthcare reform. *Advanced Emergency Nursing Journal*. 32(2), 97-101.
- Hudson, P., & Marshall, A. (2008). Extending the nursing role in the Emergency Department. *Australasian Emergency Nursing Journal*. 11, 39-48.

- Hurlock-Chorostecki, T., & Loft, M. (2008). *Nurse Practitioner role implementation: Transitions, reflections, directions*. Retrieved from http://www.rnao.org/Storage146/4106_Student_Lunch_Mokina.handout.npao08.ppt. Accessed 30/12/09.
- International Council of Nurses. (2002). *ICN Announces Position on Advanced Nursing Roles*. Retrieved from http://www.icn.ch/PR19_02.htm. Accessed 25/7/09.
- Irvine, B. (2002). *Background Briefing on US Healthcare*. Retrieved from <http://www.civitas.org.uk/pdf/USABrief.pdf>. Accessed 20/7/09.
- Irvine, B., Ferguson, S., & Cackett, B. (2005). *Background Briefing: The Canadian Healthcare System*. Retrieved from <http://www.civitas.org.uk/pdf/Canada.pdf>. Accessed 20/7/09.
- James, O. (2008). The Otago health story. In K.Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand*. Dunedin, New Zealand: Otago University Press.
- Jennings, N., O Reilly, G., Lee, G., Cameron P., Free, B., & Bailey, M. (2008). Evaluating outcomes of the Emergency Nurse Practitioner role in a major urban Emergency Department. *Journal of Clinical Nursing*. 17(8), 1044-1050.
- Joanna Briggs Institute. (2008). Summari system information. Retrieved from <http://www.joannabriggs.edu.au/services/sumari.php>. Accessed 25/11/09.
- Joniak, L. (no date). *The qualitative paradigm: an overview of some basic concepts, assumptions, and theories of qualitative research*. Retrieved from http://www.slis.indiana.edu/faculty/hrosenba/www/Research/methods/joniak_qual_par.pdf. Accessed 2/10/10.

- Kai Tiaki Nursing New Zealand. (2006). *Nurse initiated discharge underway at Christchurch hospital*. Retrieved from http://findarticles.com/p/articles/mi_hb4839/is_4_12/ai_n29267975/. Accessed 17/11/10.
- Kai Tiaki Nursing New Zealand. (2010). Registered Nurse scope of practice to be made more flexible. *Kai Tiaki Nursing New Zealand*. 16(7), 7.
- Keating, S., Thompson, J., & Lee, G. (2009). Perceived barriers to the sustainability and progression of Nurse Practitioners. *International Emergency Nursing*. doi: 10.1016/j.ienj.2009.09.003. Accessed 5/1/10.
- Kedgley, S. (2008). *Inquiry into the provision of ambulance services in New Zealand*. Retrieved from http://www.parliament.nz/NR/rdonlyres/EA7A27CE-1581-4COB-A815-75180664BB5B/86847/DBSCH_SCR_4100_6073.pdf. Accessed 20/8/10.
- Keenan, J. (1999). A concept analysis of autonomy. *Journal of Advanced Nursing*. 29(3), 556-562.
- Keenan, R. (Ed.) (2010). *Healthcare and the Law*. 4th Edition. Wellington, New Zealand: Brookers Ltd.
- Kelleher Keane, A. (2008). Advanced Nurse Practitioners: Improving patients journey. *Emergency Nurse*. 16(6), 30-35.
- Klein, T. (2008). Credentialing the Nurse Practitioner in your workplace. *Nursing Administration Quarterly*. 32(4), 273-278.
- Krakau, I., & Hassler, E. (1999). Provision for clinic patients in the ED produces more nonemergency visits. *American Journal of Emergency Medicine*. 17(1), 18-20.
- Lamont, S. (2005). "See and Treat": spreading like wildfire? A qualitative study into factors affecting its introduction and spread. *Emergency Medicine Journal*. 22, 548-552.

- Lancaster, J., Lancaster, W., & Onega, L. (2000). New directions in health-care reform: the role of Nurse Practitioners. *Journal of Business Research*. 48, 207-212.
- Law, K., & Aranda, K. (2010). The shifting foundations of nursing. *Nurse Education Today*. 30, 544-547.
- Lectric Law Library's Lexicon on... (no date). Vicarious liability definition. Retrieved from http://www.icn.ch/PR19_02.htm. Accessed 25/7/09.
- Lee, G., & Fitzgerald, L. (2008). A clinical internship model for the Nurse Practitioner programme. *Nurse Education in Practice*. 8, 397-404.
- Lega, F., & Mengoni, A. (2008). Why non-urgent patients choose Emergency care over primary care services? Empirical evidence and managerial implications. *Health Policy*. 88, 326-338.
- Long, A. (2010). *Kapiti Coast Ambulance Practitioners*. New Zealand Emergency Department conference presentation. Retrieved from <http://www.ecct.govt.nz/user-content/502-andy-long.ppt#10>. Accessed 4/11/10.
- Loveridge, B. (2001). The Boston experience. *Accident and Emergency Nursing*. 9, 86-91.
- Lowe, B. (2005). Trauma Nurse Practitioner: A work in progress. *Topics in Emergency Medicine*. 27(2), 142-144.
- Manchester, A. (2010). Delivering effective services to Pacific peoples. *Kai Tiaki Nursing New Zealand*. 16(7), 20-21.
- Martin, D. (2010). *A revolution in the GP's surgery: doctors will take over NHS budget from managers...but will it save any money?* Retrieved from <http://www.dailymail.co.uk/news/article-1294203/Doctors-NHS-budget-managers---save-money.html>. Accessed 21/10/10.

- Maurice, H., & Byrnes, M. (2001). Is there a role for Nurse Practitioners in Australian metropolitan Emergency Departments? *Australian Emergency Nursing Journal*. 4(2), 9-11.
- Maw, H. (2008). The challenge of developing primary health care Nurse Practitioner roles in rural New Zealand. In J. Ross (Ed.), *Rural Nursing: Aspects Of Practice*. Dunedin, New Zealand: Ministry of Health.
- McLaughlan, R. (2007). Preparation for negotiating scope of practice for Acute Care Nurse Practitioners. *Journal of the American Academy of Nurse Practitioners*. 19, 627-634.
- Melnyk, B., & Fineout-Overholt, E. (2005). *Evidence-Based Practice in Nursing and Healthcare*. Philadelphia, USA: Lippincott Williams & Wilkins.
- Menchine, M., Wiechmann, W., & Rudkin, S. (2009). Trends in midlevel provider utilisation in Emergency Departments from 1997 to 2006. *Academic Emergency Medicine*. 16(10), 963-969.
- Miller, K. (2007). Feeling the heat – Nurse Practitioners and malpractice liability. *The Journal for Nurse Practitioners*. 3(1), 24-26.
- Miller, S. (2001). PICO worksheet and search strategy. Retrieved from <http://www.usc.edu/hsc/ebnet/ebframe/PICO%20Worksheet%20SS.pdf>. Accessed 2/9/10.
- Mills, A., & McSweeney, M. (2005). Primary reasons for ED visits and procedures performed for patients who saw Nurse Practitioners. *Journal of Emergency Nursing*. 31(2), 145-149.
- Mills, G. (2009). Nursing comprehensively in a rural community: Returning to nursing in the community she grew up in has provided unique challenges, opportunities and satisfactions for one rural nurse. *Kai Tiaki: Nursing New Zealand*. 15(3), 30-33.
- Ministerial Taskforce on Nursing. (1998). *Report of the ministerial taskforce on nursing*. Wellington, New Zealand. Ministry of Health.

- Ministry of Health. (no date [a]). *Guidance paper for New Zealand Emergency Departments regarding the interface with Primary Healthcare*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/9534/\\$File/guidance-emergency-depts-interface-primary-care.doc](http://www.moh.govt.nz/moh.nsf/pagesmh/9534/$File/guidance-emergency-depts-interface-primary-care.doc). Accessed 26/8/10.
- Ministry of Health. (no date [b]). *Examples of DHB interventions*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/9550/\\$File/dhb-initiatives.pdf](http://www.moh.govt.nz/moh.nsf/pagesmh/9550/$File/dhb-initiatives.pdf). Accessed 26/8/10.
- Ministry of Health. (1999). *Roadside to Bedside – a 24 hour clinically integrated acute management system for New Zealand*. Retrieved from [http://www.moh.govt.nz/moh.nsf/Files/roadbed/\\$file/roadbed.pdf](http://www.moh.govt.nz/moh.nsf/Files/roadbed/$file/roadbed.pdf). Accessed 16/10/09.
- Ministry of Health. (2000). *The New Zealand Health Strategy*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/2285/\\$File/newzealandhealthstrategy.pdf](http://www.moh.govt.nz/moh.nsf/pagesmh/2285/$File/newzealandhealthstrategy.pdf). Accessed 9/11/09.
- Ministry of Health. (2001). *The Primary Health Care Strategy*. Retrieved from [http://www.moh.govt.nz/moh.nsf/0/7BAFAD2531E04D92CC2569E600013D04/\\$File/P HCStrat.pdf](http://www.moh.govt.nz/moh.nsf/0/7BAFAD2531E04D92CC2569E600013D04/$File/P HCStrat.pdf). Accessed 9/11/09.
- Ministry of Health. (2002). *Nurse Practitioners in New Zealand*. Wellington, New Zealand. Ministry of Health.
- Ministry of Health. (2003). *Tier one Emergency Department services*. Retrieved from <http://www.cennz.co.nz/ED%20service%20specifications.pdf>. Accessed 18/12/09.
- Ministry of Health. (2006). *Population by DHB table*. Retrieved from <http://www.maorihealth.govt.nz/moh/nsf/indexma/population-by-dhb>. Accessed 25/11/09.

- Ministry of Health. (2008). *Health Practitioners Competence Assurance Act 2003 – responsible authorities*. Retrieved from <http://www.moh.govt.nz/moh.nsf/UnidPrint/MH7389?OpenDocument>. Accessed 23/12/09.
- Ministry of Health. (2009a). *Health Practitioners Competence Assurance Act 2003*. Retrieved from <http://www.moh.govt.nz/hpca>. Accessed 23/12/09.
- Ministry of Health. (2009b). *Health Targets – shorter stays in Emergency Departments*. Retrieved from <http://www.moh.govt.nz/moh.nsf/indexmh/healthtargets-targets-emergencydepartments>. Accessed 16/7/09.
- Ministry of Health. (2009c). *Implementing the New Zealand Health Strategy 2009*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/9851/\\$File/implementing-nz-health-strategy-09.pdf](http://www.moh.govt.nz/moh.nsf/pagesmh/9851/$File/implementing-nz-health-strategy-09.pdf). Accessed 24/12/09.
- Ministry of Health. (2009d). *Milestone for Nurse Practitioners*. Retrieved from <http://www.scoop.co.nz/stories/print.html?path=GE0912/S00044.htm>. Accessed 21/12/09.
- Ministry of Health. (2009e). *Nurse Practitioners – a healthy future for New Zealand*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/9806/\\$File/nurse-practitioners-a-healthy-future-for-New Zealand.pdf](http://www.moh.govt.nz/moh.nsf/pagesmh/9806/$File/nurse-practitioners-a-healthy-future-for-New Zealand.pdf). Accessed 21/12/09.
- Ministry of Health. (2009f). *Shorter stays in Emergency Departments health target – guidance document for DHB's*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/9552/\\$File/moh-target-guidance-for-dhbs.pdf](http://www.moh.govt.nz/moh.nsf/pagesmh/9552/$File/moh-target-guidance-for-dhbs.pdf). Accessed 2/10/09.
- Ministry of Health. (2009g). *Statement of intent – 2009-2012*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/9083/\\$File/soi0912.pdf](http://www.moh.govt.nz/moh.nsf/pagesmh/9083/$File/soi0912.pdf). Accessed 17/9/09.

- Ministry of Health. (2009h). *The impact of Emergency Department overcrowding on in-patient length of stay, mortality and time critical conditions*. Retrieved from [http://www.moh.govt.nz/moh.nsf/pagesmh/9552/\\$File/impacts-ed-overcrowding.doc](http://www.moh.govt.nz/moh.nsf/pagesmh/9552/$File/impacts-ed-overcrowding.doc). Accessed 26/8/10.
- Moran, M. (1999). *Governing the healthcare state*. Retrieved from http://www.sfaa.gov.hk/doc/en/scholar/seym/9_Moran.doc. Accessed 26/7/10.
- Morgan, G., & Simmons, G. (2009). *Health Cheque*. Auckland, New Zealand: Phantom House Publishing.
- Morgan, G., & Simmons, G. (2010). *A prescription for change*. Retrieved from <http://www.healthcheque.co.nz/Files/PrescriptionBooklet.pdf>. Accessed 29/9/10.
- National Health Service [NHS]. (2008). *What services do minor injuries units provide?* Retrieved from <http://www.nhs.uk/chq/Pages/1090.aspx?CategoryID=68&SubCategoryID=153>. Accessed 18/11/10.
- National Nursing and Education Taskforce. (2006). *Myth Busters*. Melbourne, Australia. Retrieved from http://www.nnnet.gov.au/downloads/mythbusters_np.pdf. Accessed 18/9/09.
- New Zealand National Nursing Organisations. (no date). *New Zealand National Nursing Organisations – Glossary of terms*. Retrieved from <http://www.nzno.org.nz/LinkClick.aspx?fileticket=NX5YTzJJ0SU%3D>. Accessed 18/11/10.
- New Zealand Nurses Organisation [NZNO]. (2009a). No decision on RN scope of practice until next year. *Kai Tiaki Nursing New Zealand*. 15(10), 7.

- New Zealand Nurses Organisation (2009b). *Submission to the Ministry of Health on the Recommendations to improve quality and the measurement of quality in New Zealand Emergency Departments*. Retrieved from http://www.nzno.org.nz/Portals/0/2009_02_Recommendations_to_improve_quality_in_ED_departments,_NZNO_submission.pdf. Accessed 3/11/10.
- New Zealand Nurses Organisation. (2010). *Submission to the Ministry of Health on the Draft guidance paper for New Zealand Emergency Departments regarding the interface with primary health care*. Retrieved from <http://www.nzno.org.nz/Portals/0/Docs/Activities/Submissions/2010-06%20Guidance%20paper%20for%20ED's%20regarding%20interface%20with%20PHC,%20NZNO%20Submission.pdf>. Accessed 3/11/10.
- New Zealand Quality Improvement Committee. (2009). *Feedback from participants at collaborative learning event 3 on the recommendations to improve quality and the measurement of quality in New Zealand Emergency Departments*. New Zealand. New Zealand Quality Improvement Committee.
- New Zealand Society of Anaesthetists (Inc). (no date). *Submission from the New Zealand Society of Anaesthetists implementing Nurse Practitioner prescribing*. Retrieved from <http://www.anaesthesia.org.nz/Portals/1/Files/Submissions/Nurse%20Prescribing%20Submission.pdf>. Accessed 8/12/09.
- Norris, T., & Melby, V. (2006). The Acute Care Nurse Practitioner: Challenging existing boundaries of emergency nurses in the UK. *Journal of Clinical Nursing*, 15, 253-263.
- Nurse Practitioner Advisory Committee of New Zealand [NPAC – NZ]. (2005). *Business Case Toolkit*. Retrieved from http://www.dhbnz.org.nz/Site/Future_Workforce/Nursing-Midwifery/Nursing-Projects/Nurse-Practitioner/Toolkits/Business-Case.aspx. Accessed 18/12/09.

- Nurse Practitioner Advisory Committee of New Zealand. (2008). *March Newsletter*. Retrieved from http://www.nurse.org.nz/nurse_practitioner/NPACnewsletter/NEWSLETTER%2011_0308.pdf. Accessed 16/10/09.
- Nurse Practitioner Advisory Committee of New Zealand. (2010). *Draft Nurse Practitioner Training Programme*. Retrieved from <http://www.nursepractitioner.org.nz/includes/download.aspx?ID=112769>. Accessed 20/11/10.
- Nursing Council of New Zealand. (2004). *Scopes of practice*. Retrieved from <http://www.nursingcouncil.org.nz/nursepractitioner/html>. Accessed 20/2/09.
- Nursing Council of New Zealand. (2009a). *Consultation on the Registered Nurse scope of practice under the Health Practitioners Competence Assurance Act (2003)*. Retrieved from <http://www.nursingcouncil.org.nz/Consultation%20doc,%20RN%20scope%20of%20practice%20May%2009%20.pdf>. Accessed 17/9/09.
- Nursing Council of New Zealand. (2009b). *News Update*. July 2009. Wellington, New Zealand. Nursing Council of New Zealand.
- Nursing Council of New Zealand. (2009c). *Nurse Practitioner Scope of Practice/Guidelines for Applicants*. Retrieved from <http://www.nursingcouncil.org.nz/Review%20of%20Guide%20to%20applicants%20NP%20Sept09.pdf>. Accessed 14/11/09.
- Nursing Council of New Zealand. (2009d). *Consultation on the Registered Nurse scope of practice under the health Practitioners Competence Assurance Act (2003). Analysis of submissions*. Retrieved from <http://www.nursingcouncil.org.nz/download/171/analysis-Oct.09.pdf>. Accessed 25/8/10.

- Nursing Council of New Zealand. (2010). *Changing the conditions in a scope of practice*. Retrieved from <http://www.nursingcouncil.org.nz/index.cfm/1,118,0,0,html/Change-of-condition>. Accessed 26/10/10.
- Nursing Review. (2009). Highly skilled nurses a wasted resource. *Nursing Review*. Dec 2009. Retrieved from <http://www.nursingreview.co.nz>. Accessed 26/2/10.
- Nursing Review. (2010). Australia's NP Prescribing setback. *Nursing Review*. 10(9), 2. Retrieved from <http://www.nursingreview.co.nz>. Accessed 2/1/10.
- O'Connor, M. (2010). *Free to care, proud to nurse*. Wellington, New Zealand: Steele Roberts Publishers.
- O'Connor, T. (2008). What's happening with Nurse Practitioners? *Kai Tiaki Nursing New Zealand*. 14(3), 11-13.
- Oermann, M., Nordstrom, C., Wilmes, N., Denison, D., Webb, S., Featherston, D., et al. (2008). Information sources for developing the nursing literature. *International Journal of Nursing Studies*. 45, 580-587.
- Orsman, H. (Ed.) (1979). *Heinemann New Zealand Dictionary*. Auckland, New Zealand: Heinemann Publishers New Zealand Ltd.
- Partin, B. (2006). Who, if not you, will determine NP scope of practice? *The Nurse Practitioner*. 31(2), 6.
- Paterson, J. (2007). A case study of pre hospital emergency care in a remote rural setting. *Emergency Nurse NZ*. (Dec), 6-8. Retrieved from http://www.cennz.co.nz/CENNZ_Journal_Dec_2007.pdf. Accessed 13/10/10.

- Pedersen, C. (2008). Nurse-led telephone triage service in a secondary rural hospital. In J. Ross (Ed.), *Rural Nursing: Aspects Of Practice*. Dunedin, New Zealand: Ministry of Health.
- Pharmaceutical Agency of New Zealand [PHARMAC]. (2010). *Proposal to amend definitions of prescriber types in the Pharmaceutical Schedule*. Retrieved from <http://www.pharmac.govt.nz/2010/06/03/Consultation%20on%20amending%20the%20definition%20of%20certain%20prescriber%20types%20in%20thePharmaceutical%20schedule.pdf>.
Accessed 18/11/10.
- Polit, D., & Hungler, B. (1997). *Essentials of Nursing Research*. 4th Edition. Philadelphia, USA: Lippincott – Raven Publishers.
- Polit, D., & Tatano Beck, C. (2008). *Nursing Research*. 8th Edition. Philadelphia, USA: Lippincott, Williams & Wilkins.
- Polit, D., & Tatano Beck, C. (2010). Generalisation in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*. 47, 1451-1458.
- Pomare, E., & de Boer, G. (1988). *Hauora – Maori standards of health*. Wellington, New Zealand: Department of Health/Medical Research Council.
- Priest, L. (2008). *Emergency-room nightmares spur calls for action*. Retrieved from <http://license.icopyright.net/user/viewFreeUse.act?fuid=MTA2MzI4NTQ%3D>.
Accessed 3/11/10.
- Provost, L. (2010). *Performance audit report – District health boards: Availability and accessibility of after-hours services*. Retrieved from <http://www.oag.govt.nz/2010/after-hours-services/docs/after-hours-services.pdf>.
Accessed 5/11/10.

- Pulcini, J., & Wagner, M. (no date). *Nurse Practitioner education in the United States*. Retrieved from <http://66.219.50.180/NR/rdonlyres/eghts6f2qqae5hmknha7shtrws46y4m2yh3e34yak3h325lftfuwszkfgu46pa3tj3jttj4ciai14gizkzvg47kyesna/pulciniarticle0305.pdf>. Accessed 4/10/10.
- Ramirez, E., Tart, K., & Malecha, A. (2006). Developing Nurse Practitioner competencies in emergency care settings. *Advanced Emergency Nursing Journal*. 28 (4), 346-359.
- Read, S., Jones, N., & Williams, B. (1992). Nurse Practitioners in Accident and Emergency Departments: What do they do? *British Medical Journal*. 305, 1466-1470.
- Richardson, S., Ardagh, M., & Hider, P. (2006). New Zealand health professionals do not agree about what defines appropriate attendance at an Emergency Department. Retrieved from <http://www.nzma.org.nz/journal/119-1232/1933/>. Accessed 7/10/10.
- Richardson, S. (1999). Emergency Departments and the inappropriate attender – is it time for a reconceptualisation of the role of primary care in emergency facilities? *Nursing Praxis in New Zealand*. 14(2), 13-20.
- Rivett, G. (no date). *A guide to the NHS*. Retrieved from http://www.nhshistory.net/a_guide_to_the_nhs.htm. Accessed 18/10/10.
- Robson, B. (2008). What is driving the disparities? In K.Dew & A. Matheson (Eds.), *Understanding health inequalities in Aotearoa New Zealand*. Dunedin, New Zealand: Otago University Press.
- Ross, J. (1999). The development of the advanced role of rural nurses in New Zealand. *Australian Journal of Rural Health*. 7, 253-257.
- Royal College of Nursing Australia. (2009). *RCNA Media Release – Nurse Practitioner access should not be delayed*. Retrieved from <http://www.rcna.org.au/AnnouncementRetrieve.aspx?ID=26163>. Accessed 18/11/09.

- Royal College of Nursing Australia. (2010). *Becoming a nurse or midwife*. Retrieved from <http://nurseinfo.voodooweb.com/au/Default.aspx?PageID=1011281&A=PrinterView>. Accessed 10/11/10.
- Royal College of Nursing. (2008). *Advanced Nurse Practitioners*. Retrieved from http://www.rcn.org.uk_data/assets/pdf_file/003/146478/003207.pdf. Accessed 21/3/09.
- Rural Expert Advisory Group. (2002). *Implementing the Primary Health Care Strategy in rural New Zealand*. Retrieved from [http://www.moh.govt.nz/moh.nsf/0/E371A046A4A44994CC256C0D0017DE98/\\$File/RuralPrimaryHealthStrategyImplementation.pdf](http://www.moh.govt.nz/moh.nsf/0/E371A046A4A44994CC256C0D0017DE98/$File/RuralPrimaryHealthStrategyImplementation.pdf). Accessed 9/11/09.
- Ryall, T (Hon). (2007). *Better, sooner, more convenient: Health discussion paper*. Retrieved from http://www.national.org.nz/files/_0_HEALTH_lowres.pfd. Accessed 16/11/09.
- Ryall, T (Hon). (2009). *Nine short listed for next steps in primary care*. Retrieved from <http://www.national.org.nz/Article.aspx?articleId=31261>. Accessed 9/11/09.
- Safih, S. (2009). *Managing Resources*. New Zealand Emergency Department conference presentation. Retrieved from <http://www.ecct.govt.nz/user-content/424-challenge-8-shameem-1.ppt#13>. and <http://www.ecct.govt.nz/user-content/424-challenge-8-shameem-1.ppt#18>. Accessed 26/7/10.
- Safih, S. (2010). *Clinical Networks*. New Zealand Emergency Department conference presentation. Retrieved from <http://www.ecct.govt.nz/user-content/497-shameemsafih.ppt#14>. Accessed 22/10/10.

- Sandoval, E., Smith, S., Walter, J., Henning Schuman, S., Olson, M., Striefler, R., Brown, S., & Hickner, J. (2010). A comparison of frequent and infrequent visitors to an urban Emergency Department. *The Journal of Emergency Medicine*. 38(2), 115-121.
- Schneider, S., Gardner, A., Weiss, L., Wood, J., Ybarra, M., & Beck, D., et al. (2010). The future of Emergency medicine. *The Journal of Emergency Medicine*. 39(2), 210-215.
- Schneider, Z., Whitehead, D., Elliott, D., Lobiondo-Wood, G., & Haber, J. (2007). *Nursing and Midwifery Research*. 3rd Edition. New South Wales, Australia: Elsevier (Mosby).
- Scott, S. (2008). 'New professionalism' – shifting relationships between nursing education and nursing practice. *Nurse Education Today*. 28, 240-245.
- Semonin-Holleran, R. (2008). Ambulance safety: Is it an emergency nursing problem? *Journal of Emergency Nursing*. 34(2), 98-99.
- Semonin-Holleran, R. (2010). Editors message – What can Nurse Practitioners do for emergency care? *Journal of Emergency Nursing*. 36(4), 298-299.
- Shea, S. & Selfridge-Thomas, J. (1997). The ED Nurse Practitioner: Pearls and pitfalls of role transition and development. *Journal of Emergency Nursing*. 23(3), 235-237.
- Smith, N. (2009). *Media statement – law changes needed to make ACC affordable*. Retrieved from <http://www.scoop.co.nz/stories/PA0910/S00158.htm>. Accessed 17/11/09.
- Southland & Otago District Health Boards. (2009). *One DHB consultation paper*. Retrieved from <http://intranet.healthotago.co.nz/reports/documents/onedhb/OneDHBConsultation.pdf>. Accessed 14/11/09.
- Spithoven, A. (2009). Why U.S. health care expenditure and ranking on health care indicators are so different from Canada's. *International Journal of Health Care Finance Economics*. 9, 1-24.

- Sprivulis, P., da Silva, J., Jacobs, I., Frazer, A., & Jelinek, G. (2006). The association between hospital overcrowding and mortality among patients admitted via Western Australia Emergency Departments. *The Medical Journal of Australia*. 184(5), 208-212.
- Statistics New Zealand. (2006). *Quickstats about Southland/Otago region*. Retrieved from <http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/Snaps-hot.aspx>.
Accessed 13/10/10.
- Steiner, I., Blitz, S., Nichols, D., Harley, D., Sharma, L., & Stagg, A. (2008). Introducing a Nurse Practitioner into an urban Canadian Emergency Department. *Canadian Journal Emergency Medicine*. 10(4), 355-363.
- Steiner, S., McLaughlin, D., Hyde, R., Brown, R., & Burman, M. (2008). Role transition during RN-to-FNP Education. *Journal of Nursing Education*. 47(10), 441-447.
- Stirling, C., O'Meara, P., Pedlar, D., Tourle, V., & Walker, J. (2007). Engaging rural communities in health care through a Paramedic expanded scope of practice. *Rural and Remote Health*. 7, 839.
- St John Ambulance. (2009). *St John Ambulance nurse – pilot project*. Retrieved from <http://www.stjohn.org.nz/jobs/job.aspx?jobid=4530>.
Accessed 21/12/09.
- Strange, P. (1994). The Nurse Practitioner in A&E. *Australian Nursing Journal*. 1(9), 20-23.
- Swain, A., Hoyle, S., & Long, A. (2010). The changing face of prehospital care in New Zealand: The role of extended care paramedics. *The New Zealand Medical Journal*. 123(1309). Retrieved from <http://www.nzma.org.nz/journal/123-1309/3985/>.
Accessed 4/11/10.
- Swerissen, H. (2004). Australian primary care policy in 2004: Two tiers or one for Medicare? *Australia and New Zealand Health Policy*. doi: 10.1186/1743-8462-1-2.
Accessed 10/11/10.

- Tachakra, S., & Stinson, A. (2000). Emergency Nurse Practitioners should manage major cases. *Emergency Nurse*. 8(5), 12-15.
- Tapper, L. (2008). To the editor. *Canadian Journal Emergency Medicine*. 10(6), 509-510.
- Tenbenschel, T. (2009). Emergency Department waiting time targets. *Health Policy Monitor*. Retrieved from <http://www.hpm.org/survey/nz/a13/2>. Accessed 5/11/10.
- The McGraw-Hill Companies Inc. (2002). McGraw-Hill Concise Dictionary of Modern Medicine. *The Free Dictionary*. Retrieved from <http://medical-dictionary.thefreedictionary.com/scope+of+practice>. Accessed 22/8/09.
- Thorne, S. (2009). The role of qualitative research within an evidence-based context: Can metasynthesis be the answer? *International Journal of Nursing Studies*. 46, 569-575.
- Thrasher, C., & Purc-Stephenson, R. (2007). Integrating Nurse Practitioners into Canadian Emergency Departments: A qualitative study of barriers and recommendations. *Canadian Journal of Emergency Medicine*. 9(4), 275-281.
- Timmings, R. (2006). Rural and Isolated Practice Registered Nurses (RIPRN) –Emergency nurses of the Queensland ‘bush’. *Australasian Emergency Nursing Journal*. 9, 29-34.
- Tingle, J. (1996). Clinical guidelines: Risk management and legal issues. *British Journal of Nursing*. 5(5), 266-267.
- Trzeciak, S., & Rivers, E. (2003). Emergency Department overcrowding in the United States: An emerging threat to patient safety and public health. *Emergency Medicine Journal*. 20, 402-405.
- Tuohy, C., Flood, C., & Stabile, M. (2004). How does private finance affect public health care systems? Marshaling the evidence from OECD nations. *Journal of Health Politics, Policy and Law*. 29(3), 359-396.

- Tye, C., Ross, F., & Kerry, S. (1998). Emergency Nurse Practitioner services in major Accident and Emergency Departments: A United Kingdom postal survey. *Journal of Accident and Emergency Medicine*. 15, 31-34.
- University Department of Rural Health, Tasmania. (2002). *Emergency services in Australia and New Zealand: Problems and prospects for Volunteer Ambulance Officers*. Retrieved from <http://www.ruralhealth.utas.edu.au/band-aid/Emergency-service-publication.pdf>. Accessed 8/4/09.
- University of Maine. (2001). *The US health care system: Best in the world, or just the most expensive?* Retrieved from <http://dll.umaine.edu/ble/U.S.%20HCweb.pdf>. Accessed 18/10/10.
- Upper Midwest Rural Health Research Centre. (2007). *Policy brief – rural Emergency Department staffing: Potential implications for the quality of emergency care provided in rural areas*. Retrieved from http://www.uppermidwestrhc.org/pdf/policybrief_ed_staffing.pdf. Accessed 24/1/10.
- Van Mook, W., Luijk, S., O’Sullivan, H., Wass, V., Zwaveling, J., Schuwirth, L., et al. (2009). The concepts of professionalism and professional behaviour: Conflicts in both definition and learning outcomes. *European Journal of Internal Medicine*. 20, e85-e89.
- Walsh, M., & Ford, P. (1989). *Nursing rituals – research and rational actions*. Oxford, UK: Butterworth-Heinemann Ltd.
- Wellington Free Ambulance. (2009). *Press release – treat at home ambulance service to go 24 hrs*. Retrieved from http://www.wellingtonfreeambulance.org.nz/News/Pressreleases/080709_UCC%20News%20Release.pdf. Accessed 3/9/09.
- Whittemore, R., & Knaf, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing*. 52(5), 546-553.

- Williams, B. (2006). The Nurse Practitioner in Emergency care: where to from here? *Journal of Emergency Primary Health Care*. 4(4). Retrieved from <http://www.jephc.com/uploads/990225CH2.pdf>. Accessed 25/10/10.
- Wilson, A., & Shifaza, F. (2008). An evaluation of the effectiveness and acceptability of Nurse Practitioners in an adult Emergency Department. *International Journal of Nursing Practice*. 14, 149-156.
- Wilson, K., Cameron, P., & Jennings, J. (2008). Emergency Nurse Practitioners: An underestimated addition to the emergency care team. *Emergency Medicine Australasia*. 20, 453-455.
- Working Group for Achieving Quality in Emergency Departments. (2008). *Recommendations to improve quality and the measurement of quality in New Zealand Emergency Departments*. Retrieved from [http://www.moh.govt.nz/moh.nsf./pagesmh/8783/\\$File/quality-ed-jan09.pfd](http://www.moh.govt.nz/moh.nsf./pagesmh/8783/$File/quality-ed-jan09.pfd). Accessed 16/7/09.
- World Health Organisation. (2008). Urban and rural definition. Retrieved from <http://www.wpro.who.int/NR/rdonlyres/CDC5360C-E3B4-47F3-A317-1ABFA33FE4AB/0/44Definitions08.pdf>. Accessed 23/7/09.
- Worley, G. (2009). Helicopter air medical transport safety: What is the role of the emergency nurse? *Journal of Emergency Nursing*. 35(2), 152-153.
- Worster, A., Sardo, A., Thrasher, C., Fernandes, C., & Chemaris, E. (2005). *Understanding the role of Nurse Practitioners in Canada*. Retrieved from http://www.cma.ca/index.cfm/ci_id/43590/la_id/1.htm. Accessed 20/7/09.
- Wright, S., Erwin, T., Blanton, D., & Covington, C. (1992). Fast track in the Emergency Department: A one year experience with Nurse Practitioners. *The Journal of Emergency Medicine*. 10, 367-373.

- Wynd, C. (2003). Current factors contributing to professionalism in nursing. *Journal of Professional Nursing*. 19(5), 251-261.
- Yarwood, S. (2010). Do target waiting times in Emergency Departments affect patient care? *Kai Tiaki Nursing New Zealand*. 16(9), 26-28.
- Zimmermann, P., & Pierce, B. (1998). Managers forum. *Journal of Emergency Nursing*. 24 (5), 439-440.

**APPENDIX A:
COUNTRIES REVIEWED DEFINITION
OF NURSE PRACTITIONER**

1) **Australian** definition:

A nurse practitioner is a registered nurse educated and authorised to function autonomously and collaboratively in an advanced and extended clinical role. The nurse practitioner role includes assessment and management of clients using nursing knowledge and skills and may include but is not limited to the direct referral of patients to other health care professionals, prescribing medications and ordering diagnostic investigations. The nurse practitioner role is grounded in the nursing profession's values, knowledge, theories and practice and provides innovative and flexible health care delivery that complements other health care providers. The scope of practice of the nurse practitioner is determined by the context in which the nurse practitioner is authorised to practice.

(Australian Nursing Federation, 2009. Retrieved from http://www.anf.org.au/pdf/Fact_Sheet_Snap_Shot_Nurse_Practitioners.pdf.

Accessed 4/10/10)

2) **UK** definition:

An advanced nurse practitioner is a registered nurse who has undertaken a specific course of study of at least first degree (Honours) level, and who

- makes professionally autonomous decisions, for which he or she is accountable
- receives patients with undifferentiated and undiagnosed problems and makes an assessment of their health care needs, based on highly developed nursing knowledge and skills, including skills not usually exercised by nurses, such as physical examination
- screens patients for disease risk factors and early signs of illness
- makes differential diagnosis using decision-making and problem-solving skills
- develops with the patient an ongoing nursing care plan for health, with an emphasis on preventative measures
- orders necessary investigations, and provides treatment and care both individually, as part of a team, and through referral to other agencies
- has a supportive role in helping people to manage and live with illness
- provides counselling and health education
- has the authority to admit or discharge patients from their caseload, and refer patients to other health care providers as appropriate

- works collaboratively with other health care professionals and disciplines
- provides a leadership and consultancy function as required.

(Royal College of Nursing, 2008. Retrieved from http://www.rcn.org.uk/data/assets/pdf_file/003/146478/003207.pdf.

Accessed 4/10/10)

3) **Canadian** definition:

Nurse Practitioners (NP's) are registered nurses with additional educational preparation and experience who possess and demonstrate the competencies to autonomously diagnose, order and interpret diagnostic tests, prescribe pharmaceuticals and perform specific procedures within their legislated scope of practice

Role description:

Nurse Practitioners are experienced registered nurses with additional education who possess and demonstrate the competencies required for nurse practitioner registration or licensure in a province or territory. Using an evidence-based, holistic approach that emphasises health promotion and partnership development, nurse practitioners complement, rather than replace, other health-care providers.

Nurse practitioners, as advanced practice nurses, blend their in-depth knowledge of nursing theory and practice with their legal authority and autonomy or order and interpret diagnostic tests, prescribe pharmaceuticals, medical devices and other therapies, and perform procedures.

(Canadian Nurse Practitioner Initiative, 2006. Retrieved from [http://206.191.29.104/documents/pdf/Nurse Practitioners The Time Is Now e.pdf](http://206.191.29.104/documents/pdf/Nurse_Practitioners_The_Time_Is_Now_e.pdf).

Accessed 4/10/10)

4) **US** definition:

NPs are advanced practice nurses who provide high-quality healthcare services similar to those of a doctor. NPs diagnose and treat a wide range of health problems. They have a

unique approach and stress both *care and cure*. Besides clinical care, NPs focus on health promotion, disease prevention, health education and counseling. They help patients make wise health and lifestyle choices. They are truly your Partners in Health.

(American Academy of Nurse Practitioners, 2010. Retrieved from <http://www.aanp.org/NR/rdonlyres/A1D9B4BD-AC5E-45BF-GEBO-DEFCA1123204/4271/FAQsWhatisanNP83110.pdf>. Accessed 13/10/10)

**APPENDIX B:
JOANNA BRIGGS TOOLS
IMPLEMENTED FOR
QUALITATIVE CRITIQUE**

JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research

Reviewer _____ Date _____
 Author _____ Year _____ Record Number _____

	Yes	No	Unclear
1. Is there congruity between the stated philosophical perspective and the research methodology?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is there congruity between the research methodology and the research question or objectives?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is there congruity between the research methodology and the methods used to collect data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there congruity between the research methodology and the representation and analysis of data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there congruity between the research methodology and the interpretation of results?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is there a statement locating the researcher culturally or theoretically?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the influence of the researcher on the research, and vice-versa, addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are participants, and their voices, adequately represented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include Exclude Seek further info

Comments (Including reason for exclusion)

**JBI QARI Data Extraction Form
for Interpretive & Critical Research**

Reviewer _____

Date _____

Author _____

Year _____

Journal _____

Record Number _____

Study Description

Methodology _____

Intervention _____

Setting _____

Geographical _____

Cultural _____

Participants _____

Data analysis _____

Authors Conclusions

Comments

JBI Critical Appraisal Checklist for Narrative, Expert opinion & text

Reviewer _____ Date _____
Author _____ Year _____ Record Number _____

- | | Yes | No | Unclear |
|--|--------------------------|--------------------------|--------------------------|
| 1. Is the source of the opinion clearly identified? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Does the source of the opinion have standing in the field of expertise? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are the interests of patients/clients the central focus of the opinion? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is the opinion's basis in logic/experience clearly argued? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is the argument developed analytical? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is there reference to the extant literature/evidence and any incongruency with it logically defended? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is the opinion supported by peers? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Overall appraisal: Include Exclude Seek further info

Comments (Including reason for exclusion)

JBI Data Extraction for Narrative, Expert opinion & text

Reviewer _____ Date _____
Author _____ Year _____ Record Number _____

Study Description

Type of Text: _____

Those Represented: _____

Stated Allegiance/
Position: _____

Setting: _____

Geographical: _____

Cultural: _____

Logic of Argument: _____

Authors Conclusion:

Reviewers Comments:

Conclusions	Illustration from Publication (page number)	Evidence		
		Unequivocal	Credible	Unsupported

Extraction of findings complete YES