COMMERCIAL-IN-CONFIDENCE

Promoting Advanced Practice Nursing in Health Service: Phase 1, Paper 2

Nursing the Health System

A discussion paper

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Introduction

There is growing awareness globally that nursing is central to service improvement and that the knowledge and skill of nursing is underutilised[1]. The international perspective, that is now gaining momentum[2] poses an important backdrop to this paper. Equally, this paper contributes a uniquely Australian analysis to the global dialogue.

It is likely that every person's life has, at some time, been touched by a nurse. Nurses* work across all sectors and locations of health. Nursing is practised in all speciality and sub- speciality fields and with people across the total lifespan. Nurses work in hospitals and communities, in care facilities and clinics, out of car boots and backpacks. Nursing is mobile and patient /community-centric. Nursing goes to all places that people live and work. And nursing is the largest single professional group in health systems in Australia and globally.

Given the centrality of nursing to health systems, the agility of nursing service models and the size of the workforce, questions must be asked about the extent to which nursing is mobilised to address the widely acknowledged pressures on health systems and health budgets.

This discussion paper analyses the issues related to these questions. In so doing the paper invites and challenges the reader to adjust their perceptions and to consider the potential of advanced practice nursing, to discard long-held assumptions, to question, to enter a new world of health service possibilities and to gain a deeper, clearer knowledge of the health industry's least understood discipline.

The purpose of this paper is to engage nurses in discussion of the nursing workforce and the place of advanced practice nursing in tackling 21st century health challenges.

Nursing is underutilised in Australian health systems. Furthermore, the latent service value of senior nurse clinicians is discounted by governments, policy makers and service planners at the cost of effective, affordable and equitable health service.

In summary, the paper will examine the historical and contemporary factors that influence nursing service and the potent influence of these factors on perceptions of nursing in contemporary health systems. The size and structure of the workforce will be analysed in terms of its profile and presence, its strengths and limitations and its ordered levels of expertise through to advanced practice. The paper will conclude with a challenge to professional leaders, governments and to policy makers to take courageous action in unlocking the potential of advanced practice nursing.

* Throughout this paper the term 'nurse' is implicitly taken to mean **Registered Nurse** as defined by the Nursing and Midwifery Board of Australia (NMBA). Whilst acknowledging the importance of the enrolled nurse to health care, the inclusion is outside the remit of this paper.

Background

Nursing has a proud history, it's story of innovation, courage, compassion and service is chronicled by numerous books, papers and orations. This long and splendid history has assured nursing's place as a profession at the centre of the health industry.

Nursing continues to develop through the work of leading professional, educational and industrial nursing organisations. Notably, in relation to this discussion paper is a program to nurture and build professional leaders. The Australian College of Nursing's *Emerging Nurse Leader Program*[3] is designed to populate the nursing workforce with leaders who have the confidence and skill to drive change and influence health service into the future.

This goal is essential in the contemporary health service environment. Despite its strong presence, nursing has, to date, failed to gain professional influence in the industry. Nursing does not have a history of supplying, from their ranks, health ministers, directors general or any other high-level government decision makers. Traditionally, nurses do not Chair influential advisory committees or shape health policy and funding strategies.[4] Furthermore, those nurses who do gain appointments in key industry roles are often required to forgo their professional status if their role does not 'require' registration as a nurse.[5]

Historically, nursing has been invisible in the design and leadership of specialist health services.[6] Despite their capacity to do so, senior nurse clinicians are not widely available as health care providers in primary care. And, despite the superior fit of their model of care, advanced practice nurses do not influence and set a direction for the primacy of primary health care in Australian communities.

In the hospital setting the clinical work of nursing is underplayed and overt decision-making is limited.[7] Nurses need to navigate layers of authority before acting autonomously in many areas of patient care. These layers include a professional nursing hierarchy,[8] and a medical hierarchy that includes residents, registrars and consultants. The term *Doctor's orders* is still part of the lexicon in health care settings across the world, and these doctors' orders often include directions to nurses for nursing activities.[9, 10]

Even patient assessment practices, the essential basis of nursing care, are corralled and formularised into minimal data on colour-coded patient records.[11] This system bypasses the acute care nurses' ongoing, holistic patient assessment by replacing these practices with minimal vital signs measurements recorded as data for medical attention.[12]

This recent history of nursing sits upon a foundation of the 19th Century construction of *modern nursing* that, as a product of its time, urged attention to *god's work and the authority of doctors.*[13] The development of nursing in subsequent decades continued to be based upon these maxims. Whilst the religious elements had morphed into different types of institutional control, the practice, education and oversight of nursing remained subject to the needs of healthcare institutions, and the authority and good grace of medical doctors until the middle of the 20th century.

Nursing in the 21ST century

In this 21st century context the health industry, government policy machines and society, still retain remnants of 19th and early 20th century thinking about nursing. This lasting perception partially explains the lack of nursing presence in positions of influence in the broader health industry, and nursing's delimited clinical practice and limited autonomy.

Major change is now an imperative. The systems and assumptions of our health industry are outdated, operating in the face of developments that must, and will, herald reform. The profile of the health care consumer population has changed and increased in complexity. Consumers are older, likely to have chronic disease, and many are marginalised and disadvantaged by geography, culture and poverty.[14] Health services are ill-equipped and out of step with consumer needs, and the rate of health spending continues to increase.[14]

Imperceptibly, amidst this set of industry challenges, nursing has evolved. In the long history of nursing the past 30 years have seen the most rapid development, transforming nursing into a health profession for its time.

Devolved education and research

The decree, in 1984, to centre Australian nurse education in the higher education sector set the direction for nursing as an autonomous, science-based profession. The preceding apprenticeship model relied on opportunistic clinical learning and classroom teaching that was supplied and controlled by the employer hospital. The student/employee and subsequent graduates were trained according to the needs of the organisation and in accord with the practice model of medicine.[13, 15]

Higher education has forever changed this and re-oriented the focus of nursing away from the organisation towards a professional model of responsibility and priority to patients, clients and communities. The higher education sector also provided a framework for masters' level education and research training. Graduates from these programs are the profession's specialists, advanced practice nurses, nurse practitioners and researchers.

This shift in education achieved the definitive development of the profession into a distinct discipline[16] with a unique professional knowledge, science, and research evidence base for education and practice. Nurses have a strengthened autonomy and logical frameworks for decision-making about patient/client care.

A strong education and research framework bring to nursing collectively and individually, an unarguable authority over nursing practice. This authority has clinical and legal primacy over orders, procedure manuals and organisational routine.

Leadership in service innovation

Despite the well-published imperatives for health service reform, nursing has been the only health discipline in Australia that has successfully developed and implemented sustainable models of service reform. These reform models are advanced practice nursing (APN) and nurse practitioner (NP) service.

Furthermore, nursing's contribution to service improvement through reform has outpaced commonwealth government policy, state and territory health service planning, and health economics planning.

Advanced practice nursing is a level and type of nursing that is well suited to the changing care needs of contemporary consumers. This includes care of aged communities, patients with chronic disease and coordination of transitional care programs. These are categories of health care consumers that are increasing in size and demand on health services.

Nurses working at the advanced level draw upon professional knowledge and skills that are at the full scope of RN practice. Practice is patient-centred with advanced skills that include specialty expertise, clinical monitoring, self-care coaching and care coordination. Despite the relevance of the APN model for service innovation, deployment of these clinicians mostly remains locked into outdated service delivery methods.

Nurse practitioner is an APN with practice that is supplemented by skills and legislated practice privileges that enable the NP to complete an episode of patient care in time and in context without the necessity to refer the patient to a medical practitioner.

The NP role was established in an environment of resistance and obstruction by sectors of the medical profession. Despite this, nurse leaders proceeded with an approach to service innovation that was measured and strategic. Demonstration projects showed evidence of clinical safety and consumer acceptance of the NP role[17, 18] followed by research to develop a framework of standards for practice, education and legislation.[19] Current and ongoing research continues to support the effectiveness, safety and acceptability of NP service.[20, 21]

Despite this strong foundation, NP service in Australia has not met the promise of its service potential. There are several institutional and community-based NP services providing patient-centred care and addressing unmet service needs,[22, 23] but funding is intermittent and there is no sustainability despite strong consumer attendance and high satisfaction.[22]

Until and unless the Australian government develops a comprehensive policy mandate to support APN and NP-led services in community, aged care, rural and regional services, Australians are unnecessarily deprived of timely, accessible, clinical and cost-effective health service.

To date there is no national strategy to fully harness the health service potential of APN and NP service models. Yet, these are a ready service innovation for the Australian community with significant potential benefit for populations with diverse health care needs.

A logical professional framework

Despite these important education, scientific and health service developments, the capacity of nursing to play a major role in health service reform is seriously hindered by its lack of a professional framework.

There is no clear, national structure of the professional nursing workforce and thus no capacity to communicate its composition and clinical deployment capacity.

The nursing workforce is large and complex, varying by levels of expertise and the achieved position on career structures. Nursing is nationally regulated through the Australian Health Practitioner Registering Authority's (AHPRA) Nursing and Midwifery Board of Australia (NMBA) but, is primarily funded, deployed and categorised at jurisdiction level. There are over 300,000 NMBA registered nurses (RN) in Australia[24] and the only titles that are nationally consistent are RN and NP.

Additional to these two official titles are 64 titles that describe Australian nursing and its levels and foci of practice.[25] These are dispersed across the commonwealth's eight states and territories with no mutuality in the meaning and usage of these titles.

Furthermore, nurses can be given titles by non-nursing members of a health care team according to a specific activity (e.g. venous access nurse) or consumer population (e.g. haemophilia nurse). These titles have no cross-reference to levels of expertise or education nor have they needed to gain professional sanction.

At a national level the consequence is an illogical proliferation of titles and roles, the public, other health professionals, policy makers and nursing itself generally have no understanding of the meaning and level of these disparate titles.

This poses significant difficulty for the profession and for health policy reformers seeking to engage the expertise of the nursing workforce. Within this confusion of titles there is no facility to identify and strategically deploy nurses working at an advanced practice level. Recent Australian research has addressed some of these issues.

Researching the nursing workforce

In 2014 an Australia-wide survey of registered nurses working in a clinical setting (N=5,662) was conducted.[25] A validated survey instrument[26] was used to collect data on the amount of time nurses spent on activities across the identified domains of nursing practice [27, 28] namely: Clinical Care - Systems Support – Education – Research – Leadership

The research aimed to identify the practice patterns of the Australian RN workforce by position title, and to map these titles across all jurisdictions. The study also aimed to delineate advanced practice from other nursing practice levels and titles.

The mean scores of all 66 nursing titles and roles from all jurisdictions were compared and grouped by title scores, creating just seven homogeneous titles with distinct and statistically different practice profiles.[25] The seven titles in the following table capture the clinical categories of the national nursing workforce as identified in this research.

National Clinical Nursing Workforce Titles						
Registered nurse	Nurse specialist	Clinical nurse manager	Organisational nurse manager	Educator	Advanced practice nurse	Nurse Practitioner

Importantly, for the focus of this discussion paper, this research identified and delineated the practice characteristics of APN in Australia. The research showed that whilst nurses in all seven title groups practiced to varying extent across all domains, the titles that fell into the APN grouping scored significantly higher than the other title groups across most domains, with exception of the NP. See Figure 1 for comparison of four of the seven titles, those that are directly engaged in clinical practice.

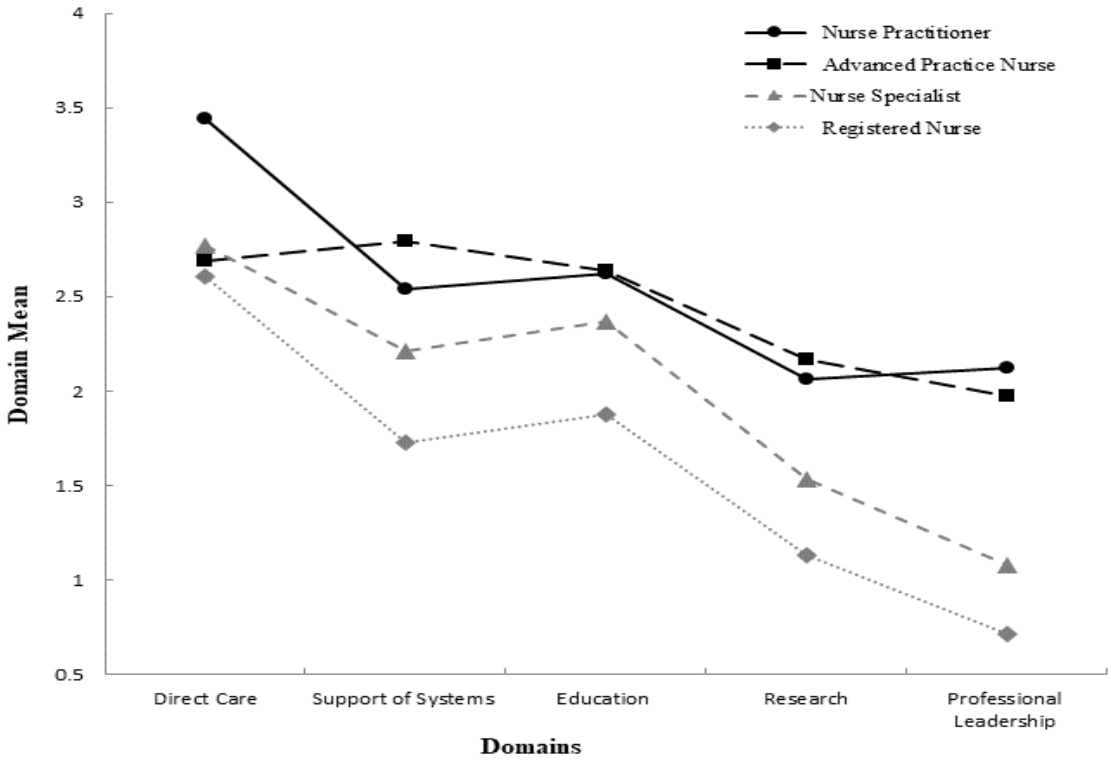

Figure 1 Comparison of nursing title categories on extent of practice in nursing domains. (Adapted from Gardner et al 2016[25])

The findings from this research provide the evidence and a basis from which the potential of the Australian nursing workforce can be clearly communicated. The platform for change is established.

Advanced practice nursing

It is likely that there is no topic in the international nursing literature that has raised more discussion, confusion and ambiguity than the title and meaning of *advanced* in relation to nursing and nursing practice. The terms 'advanced nursing practice' and 'advanced practice nursing' are used interchangeably to denote a range of titles and roles including NP.[29] This is an escalating problem in Australia for specific and unique reasons.

Implementation of the NP role in Australia in contrast to most other countries, was unaccompanied by confusion about NP role differentiation; title protection and role definition were established at inception.[19] However, it does mean that the title APN begs a specific definition and a recognised place in Australia's senior nurse clinician structure. Furthermore, our federated system will benefit from a national understanding of APN in addition to the now established NP role.

If not addressed, ongoing confusion about the name and nature of our senior RN clinicians will block clear communication about their service potential, and compromise health service reform in Australia.

Conform or clarify

The body of international literature on the topic of APN continues to examine the confusion and meaning of this ubiquitous title. It is not the purpose of this paper to re-examine this body of literature, it is already well enough reported. Instead this paper seeks to engage the reader in the idea that we can set the rules, use the evidence and define APN for the Australian health service context.

However, we do need to start by acknowledging the International Council of Nurses' Advanced Practice Nursing Network's official definition:[30]

Advanced Practice Nursing (synonymous with Advanced Nursing Practice):
"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 master's degree is recommended for entry level." (ICN APN Network)

With this definition are supplied an additional seven titles that are synonymous with the title "advanced practice".

The international definition supports global communication and progress towards development of senior nursing roles and health service improvement in specific countries. It does however, reflect the North American context and thus has limited direct application to Australian nursing.

Many definitions, clarifications and proposed solutions have been published by Australian scholars to address the confusion in nomenclature for APN.[31, 32, 33] However, the studies are mostly small in

scale and relative to a single jurisdiction. Additionally, most non-empirical attempts to bring clarity to the terminology lack semantic methodology and definitive outcomes.[34]

There is development towards achieving understanding of APN.
The first, is two thoughtful and well-argued publications, both using methods of logic to problematise the notion of *advanced* in nursing and both reasoning from first principles.[34, 35]

Respectively, these publications concluded that:

a) APN relates to clinical practice, and is therefore appropriately termed *advanced practice nursing,*[35] not *advanced nursing* practice and
b) That advanced practice describes the best or advanced of nursing practice not the extended practice skills that move beyond the RN scope[36]

These conclusions chime well with Australian usage. A newly graduated NP must demonstrate their current status and experience in APN in order to gain NMBA authorisation as a NP. Their advanced practice in nursing is then augmented with practice activities that were traditionally associated with medical practice.

The second development is the findings from a ten-year program of research, with very high engagement from Australian nurses, examining APN.[25, 26, 37, 38] The research, one study of which is briefly reported above, investigated and classified the Australian RN workforce using tools with a high level of face and construct validity[26]. They measured practice in domains of practice that all RNs engage in, to a greater or lesser extent. From this, the research identified those nurses (in title categories) that were practicing at a statistically more advanced level than all other categories of nurse in the clinical environment except the NP.

Advanced practice nursing is identified as the most complex level of practice within the legislated RN scope and this provides a foundation for the regulated practice of the NP.

Defining Advanced Practice Nursing

The combined results from world-leading empirical research, and the process of philosophical semantic reasoning-based research provide a strong evidence base to inform a definition of APN.

This paper proposes that there is no reason for Australian nursing to continue with the current ambiguity or to struggle with a way forward in defining APN. Furthermore, a definition of APN that is evidence-based will have validity and relevance for professional, educational, industrial and regulatory definitional requirements.

A definition of APN needs to meet specific criteria to avoid the pitfalls that plague existing and previous attempts. The following points will support the development of a definition for APN:

- Draw upon evidence to define advanced *practice* characteristics

- Define a level of practice – not a type of nurse
- It will specify practice *within the RN scope*
- It is not an alternative title for NP
- The definition needs to be specifically about *clinical* practice, as opposed to education, administration or research practice
- Advanced practice is enabled by postgraduate education.

Establishing APN in Australia

This paper has demonstrated that It is possible to define, measure and identify APN in Australia. But this category of the nursing workforce is not visible. The members are not visible to each other and, as a nursing workforce category, APN is not visible to the broader nursing community. Titles of APN vary across jurisdictions with at least five sanctioned individual titles[25] and many more informal titles. Furthermore, due to the ambiguity related to the term, advanced practice is self-identifying by a nurse or conferred by a position title; there is no other process to ascertain those nurses who are or are not practising at an advanced level.

The consequence of this is that to date there has been no mechanism to foster the APN workforce. Measures are in progress to address this issue.

To effectively deploy APN in a reformed system of health care delivery measures must be taken to fully develop, formalise and grow the APN workforce.

The Australian College of Nursing has been proactive in identifying this problem and has established a national Community of Interest (COI) for APNs.[39] The goal of this COI is to support APNs through providing a forum for members to connect with each other to share views, experiences and information. This growing movement may well lay the foundations for building an identifiable, cohesive APN workforce with common goals and a strong voice for health service reform.

A further resource to support the establishment of APN as a distinct sector of the nursing workforce, is an individualised self-appraisal tool that enables nurses to measure the extent to which they are practicing at an advanced level.[40] The tool provides a standardised understanding of advanced practice and thus may contribute to the common goal of the AP COI towards strengthening development of the APN workforce in Australia.

Nursing's place in health systems

The changing profile and health care needs of populations mandate for change that includes shifting the care focus from a dominance of hospital service to transitional, community and home-based care. This calls for development of innovative health care delivery models that are holistic and patient-centred rather than reductionistic and provider-centric. Economic sustainability of services is an imperative. Advanced practice nurses and NPs are central to developing new service models that will meet these service goals.

There are obstacles. If nursing is to be a central player in sustainable health service solutions, the profession will need to address the issues raised in this paper. An additional and related obstacle is that the place and presence of nursing in an altered system of health service is unmapped.

To effectively map nursing's place in a reformed health system there must be agreement on key features of nursing service, and nursing must have a strong presence at the planning table of systems reform.

Mapping nursing: ***A nursing model of practice***

Nurses in hospital settings provide care that includes diagnosing and managing illness and injury, and this is primarily guided by the medical model of practice. The medical model has shaped the nature and direction of health care for centuries.[41] It is concerned with the physical and biological aspects of disease and illness. Illness, injury and recovery are defined by the individual's biological determinants of health. Science, technology and research are central to the model and major advances in treatment and cure are the result.

The nursing model of practice incorporates both the medical and the social models of practice.[42, 43] This defines nursing's distinctive profile in that both biophysical care and the biographical person are considerations in planning and delivering care. The nursing model of practice therefore brings unique and distinctive clinical service to the health care continuum.

The characteristics of a nursing model of practice include:

- Biophysical and psychological care
- Patient centred focus
- An emphasis on prevention,
- Holistic care and
- Attention to the influences on health that move beyond biological determinants.

This model of practice is the basis of all levels of nursing, specifically APN and NP practice. A most distinguishing characteristic of the nursing model is the nature of the relationship that nurses develop with individuals and communities. This distinctive nurse/patient relationship provides a

solid basis for trust, health education, and consequent patient engagement in health literacy and self-care.

The nursing model of practice is central to the care needs of the contemporary health care consumer, particularly in community-based care models.[42]

In a reformed health system, the nursing model needs to be defined, acknowledged and differentiated from the medical model. If this is achieved and if health policy takes account of the distinction, the service potential for both professions will be enhanced and health service will be optimised.

The nursing model is well suited to span the hospital/community interface and to take a dominant role in shifting categories of care into community-based health services.

Mapping nursing: ***Contexts of practice***

Whilst hospital-based nursing currently makes up over half of the clinical workforce, almost 30% of RNs practise in the community with an additional 6% in aged care settings.[25] Those RNs in the community context include practice nurses working in general practice settings.

In Australia's health system general practitioners'(GP) clinics are the main location for primary care, and practice nurses contribute an important element of nursing-focused health care to these clinics.[44] But their potential is broader than this. The nursing model of practice brings capacity to enhance clinical and primary health care services to community, aged care and rural and remote settings. However, the funding models for these nursing positions shines a spotlight on the conflict between state-based funding for nursing, and the current and future demand for nursing service in the wider community. Registered nurse and APN positions in the primary care context are currently only viable through Commonwealth funding initiatives[45] and their status as GP employees.

Practice nurses are limited in their capacity to practice to the full scope of the RN role or to develop advanced practice in this role.[46] Reportedly, these limitations are enforced by practice managers. Other limiting factors included lack of peer support, lack of nursing workspace, activities of management and the practice's business model having primacy over the practice of nursing.[46]

The potential for nursing in the community context to practice at an advanced level, and according to the evolving and complex needs of consumer populations is reliant upon full autonomy over nursing practice and service that is independent of the medical model and GP governance.

Advanced practice nurses in a reformed community-based health system have the potential to deliver a sustainable, clinical and cost-effective

service, consistent with the goals of health service reform and in keeping with predicted service needs of populations towards 2030.

Mapping nursing: ***A professional nomenclature***

The size of the nursing workforce is one of the profession's main strengths. Nursing covers all elements and sectors of the health industry arming nursing with deep corporate knowledge of systems and services. But the size and the ubiquitous nature of this workforce can also make nursing, with its variable practice titles and levels of expertise, invisible at the government and organisational level of health service policy and planning.
For nursing to be a main player in delivering a modernised health service the language about nursing must be meaningful to the community and pragmatically useful for education, policy-makers and health service planners. Importantly, it needs to describe nursing and its service focus as it is practiced, across the many contexts in which communities seek health care.

Health service reformers need to know how to identify the senior nurse clinicians, where specialisation sits within the workforce structure and the non-clinical nursing roles necessary to support the clinical workforce. This information is unavailable, and the full value of nursing service is buried within a screen of meaningless titles and industrial and jurisdictional barriers. The findings from the research described above provides a strong starting point in establishing an evidence-based professional language for nursing's structure.

Addressing the problem of a stable nursing nomenclature requires collaboration between leading nursing organisations and authorities including the:
Australian College of Nursing,
Australian Nursing and Midwifery Federation,
Australian and New Zealand Chief Nursing and Midwifery Officers Forum,
Chief Nursing and Midwifery Officer, Department of Health
Council of Deans of Nursing and Midwifery (Australia & New Zealand)

A question of readiness

There is agreement across governments, communities and the health industry that action is needed to meet increasing demand for health services, to contain health spending, to reduce inequity and to fashion a health service for the changing needs of consumer populations.[14] This paper lays the groundwork for comprehensive health workforce reform. It argues from the premise that a fully utilised APN and NP workforce with the requisite policy and professional levers to work to the full scope of practice, is a major player in achieving these goals.

It is not overstating the issue to claim that what we do now, the decisions and commitments made, will chart the direction of health service in Australia towards the year 2030. Big thinking and courageous action are needed if Australia is to deliver and sustain an effective, accessible and affordable health system.

Nursing has significant *presence* in the health care system in terms of workforce size, service reach and, respect and trust from consumer populations. Nursing is ranked at the top of "most trusted professions" by the Australian population.[47]

> Nursing is well placed to progress a reformed health service. Our senior clinicians can establish generalist and specialist service models that are collaborative, and community based, networked throughout populations and regions, and focused on consumer engagement.

But change won't happen until major elements of the system are readied for change. If nursing is to be part of the solution the profession must be proactive and examine the issues of readiness in those elements that can influence successful systems change.

Readiness of nursing

Australian nursing must look to itself to define and **classify its workforce**. We must respect our community of health care consumers, our professional colleagues and governments by providing for them a clear, accessible language about our categories of practice, our clinical focus and our service potential. Within this our APN and NP workforce must be identifiable.

It is time for nursing leaders and leadership organisations to speak with one voice about nursing's potential to lead and sustain reform. The profession must achieve jurisdictional harmony and organisational cohesion to develop and broadcast a common goal. Our profession must be seen to be a single dynamic force for change to improve quality, affordability and accessibility of health service for all sectors of the Australian community.

Readiness of nursing includes the capacity to calculate the **value of nursing** in a reformed health service. Nursing has traditionally been valued according to cost effectiveness in structural variables such as the number of registered nurses to achieve improved patient outcomes or effectiveness studies of nurse-delivered interventions. These measures are important to inform appropriate skill

mix in clinical settings and to support evidence based clinical care, but they do not show the process value of nursing. In an environment of reform, nursing will be practiced in different ways, in different settings with a more direct connection to consumer populations.[48]

Nursing needs to have a value proposition that is more nuanced to the way that care is delivered; that positions *nursing* as both a service and an intervention. The study of process variables requires new ways of measuring the impact of this practice model on access, self-care competencies and health outcomes.

Nursing education is not readied for the role nursing will play in the health service reform agenda. Training skill sets for hospital work will be a smaller component of future curricula, with greater emphasis on the learning of clinical skills, knowledge and capacity for work in non-hospital and interface environments. Furthermore, interdisciplinary education is essential to emulate authentic multidisciplinary health care practice.

Nursing service reform cannot proceed without producing **graduates that have altered expectations,** that challenge the prevailing and received wisdom of nursing's place in the industry. Readiness calls for university and service collaborative support networks to sustain a generation-driven cultural shift. Additionally, postgraduate courses need to increase capacity to **build a senior clinician workforce,** and to provide learning content and experiences for leadership in a reformed health service milieu.

Readiness of consumer populations

There is ample evidence that sectors of the health care consumer population are underserviced and marginalised by the current expensive and urban-centric health service.[49, 50] None-the-less **Consumer expectations** are part of the prevailing culture that assumes medical practitioners to be leaders and primary providers in the community and hospital settings, and the centrality of hospitals to health service. Government service innovations such as Healthcare Home[51] consistently reinforce this expectation. Furthermore, the ongoing growth in demand for, and spending on, hospital services[52] emphasises the century-old acceptance of the dominance of hospital-based health care.

To ensure readiness of populations for a reformed health service, the health industry, health professions and government agencies need to campaign for **increased community awareness** of the need for change, and of the service potential for improved transitional and community-based health services. The nursing profession must have a ready narrative to prepare communities for the new paradigm of health service that includes nurses' autonomous and collaborative practice model as a central element of service improvement, and to broadcast a better understanding of authentic multidisciplinary health care.

Readiness of policy

The goals of health service reform cannot be achieved without government engagement and action through **major policy change**. Strengthening primary health care has been a priority for successive governments over several years. Yet the focus of policy is unchanged, and funding is inevitably directed towards entrenched medical solutions.[51] To date there has been **no substantial policy reform** involving development and engagement of the nursing workforce.

Nursing is a vast, untapped resource for change and health service improvement. Nurse practitioners are increasingly active in non-hospital settings including primary care, aged care and rural/regional services. But current **funding models** and insufficient access to medicare subsidies inhibit the full potential of NP service. Specialist APNs are an educated and ready workforce to take leadership roles in primary health care, but current funding models exclude this service potential. Health service reform models are dependent upon intelligent and courageous health **workforce and service funding decisions**.

Readiness for governments to drive an improved, equitable, clinically and cost-effective health service is dependent upon courageous and ground-breaking policy reform initiatives.

Conclusion

There is a tension between two arms of the Australian health system. One has nurtured scientific, pharmacological and technological advances, producing new knowledge and treatment modalities that have reduced mortality and morbidity. The other arm is struggling to deliver clinical services for the 21st century consumer population that is the product of these advances.

The current health service models are, in common with outdated thinking about nursing, remnants of previous systems. Contemporary health service has not evolved in step with the demands of clinical service and consumer needs. The consequences of this tension are rising costs, inequitable access to health care, unmet demand, and increasing pressure on hospital and other existing services.

It is time to reconcile the treatment success and care needs of contemporary health care consumers, with a responsive and contemporary system of health service. This discussion paper has argued for health service reform and the centrality of nursing, particularly APN to health service that is designed for 21st century health care consumers.

Nursing has long been un-noticed and underutilised in health service. Within this period of ostensible obscurity, nursing has matured and evolved into a profession most suited to the health service and care needs of the contemporary consumer population. Nursing's APN are part of a new wave of clinicians that are educated, collaborative and community focused. This clinician workforce is essential to an authentic health service reform agenda.

The issues discussed here must be addressed for the Australian community to move towards a health system for the future. The nursing profession, the health industry and governments need to start now to fashion an equitable, affordable and effective system of health service.

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References

1. All-Party Parliamentary Group on Global Health: Triple Impact - how developing nursing will improve health, promote gender equality and support economic growth; London 17 October 2016 https://www.appg.globalhealth.org.uk/
2. Nursing now campaign – raising the status and profile of nursing http://www.nursingnow.org/launch/
3. Australian College of Nursing – Emerging Nurse Leader Program https://www.acn.edu.au/leadership/emerging-nurse-leader-program
4. Khoury C, Blizzard R, Wright M, *et al* (2011) Nursing leadership from bedside to boardroom: A Gallup national survey of opinion leaders. *JONA* 41(7/8): 299-305
5. Aranda S (2015) We still have to work the break the silence. *Collegian* 22: 351-352
6. Calkin S (2013) Nursing has still not escaped its 'subservient past' *Nursing Times* July: 1-2
7. Douglas C, Osborne S, Reid C, *et al* (20014) What factors influence nurses' assessment practices? Development of the Barriers to Nurses' use of physical assessment scale. *JAN* 70(11)
8. Douglas C, Windsor C, Booker *C, et al* (2016) Nursing and medical perceptions of a hospital rapid response system. New process but same old game? *J. Nurs Care Qual* 31(2): E1-E10
9. Gordon S. (2002) Following doctors orders. *The Nation* March 4
10. Reuter C, Fitzsimons (2013) Physicians Orders. Echoes from military and religious history *AJN* 113(8:) 8
11. Kyriacos, U., Jelsma, J., Jordan, S., 2011. Monitoring vital signs using early warning scoring systems: a review of the literature. J. Nurs Manager. 19: 311–330
12. Osborne S, Douglas C, Reid C, *et al* (2015) The primacy of vital signs – acute care nurses' and midwives' use of physical assessment skills: a cross sectional study. *IJNS* 52: 951-962
13. Nightingale F (1969 republication) Notes on Nursing, what it is and what it is not. Dover Publications Inc. New York
14. Australian Institute of Health and Welfare 2018. Australia's health 2018. Australia's health series no. 16. AUS 221. Canberra: AIHW.
15. Bessant B (1999) Milestones in Australia Nursing. *Collegian* 6(4): i-iii
16. Bender M.(2018) Re-conceptualizing the nursing metaparadigm: Articulating the philosophical ontology of the nursing discipline that orients inquiry and practice. Nurs Inq. 2018;25:e12243.
17. The ACT Nurse Practitioner Project. Final report of the Steering Committee. (2002) ACT Government, Department of Health
18. NSW Health Department (2001) *NSW Nurse Practitioner Project*. Sydney
19. Australian Nursing & Midwifery Council (2004) *Report to the Australian Nursing and Midwifery Council Nurse Practitioner Standards Project* ANMC
20. Gardner G, Gardner A, O'Connell J. (2013) Using the Donabedian framework to examine the quality and safety of nursing service innovation. *Journal of Clinical Nursing,* Jan; 23 (1/2): 145-55
21. Schoenwald, A, Windsor C, Gosden E, *et al* (2017) Nurse practitioner led pain management the day after caesarean section: A randomised controlled trial and follow-up study *IJNS 78: 1-9*
22. Bonner A, Havas K, Tam V, *et al* (2018) An integrated chronic disease nurse practitioner clinic: Service model description and patient profile Early online https://doi.org/10.1016/j.colegn.2018.07.009
23. Currie J, Chiarella M, Buckley T. (2017). Privately practising nurse practitioners' provision of care subsidised through the Medicare Benefits Schedule and the Pharmaceutical Benefits Scheme in Australia: Results from a national survey. *Australian Health Review,* online. doi:10.1071/AHI7130
24. Nursing and Midwifery Board of Australia, quarterly data profiling Australia's nursing and midwifery workforce. https://www.nursingmidwiferyboard.gov.au/about/statistics.aspx Accessed 21st November 2018
25. Gardner G, Duffield C, Doubrovsky A, *et al* (2016) Identifying Advanced Practice: A national survey of a nursing workforce *IJNS* 55: 60 - 70

26. Chang A, Gardner G, Duffield C, *et al* (2012) Advanced practice nursing role development: factor analysis of a modified role delineation tool. *J Adv Nurs*, 2012 Jun; 68(6):1369-79.
27. Ackerman M, Norsen L, Martin B, *et al* (1996). Development of a model of advanced practice. *American Journal of Critical Care* 5: 68-73
28. Mick D., Ackerman M. (2000). Advanced practice nursing role delineation in acute and critical care: Application of the Strong Model of Advanced Practice. *Heart & Lung*, 29: 210-2
29. Jokiniemi K, Pietila A-M, Kylma J, *et al* (2012) Advanced nursing roles: A systematic review *Nursing and Health Sciences* 14: 421-431
30. International Council of Nurses IAPN https://internationalapn.org/what-is-an-apn/ Accessed 21st November 2018
31. Cashin A, Stasa H, Gullick J *et al* (2015) Clarifying clinical nurse consultant work in Australia: A phenomenological study *Collegian* 22(4):405-412
32. Stasa H, Cashin A, Buckley T, *et al* (2014) Advancing advanced practice – Clarifying the conceptual confusion *Nurse Education Today* 34: 356-361
33. Gardner G, Chang A, & Duffield C. (2007) Making nursing work: breaking through the role confusion of advanced practice nursing *Journal of Advanced Nursing* 57(4): 382-391
34. Hutchinson M, East L, Stasa H, *et al* (2014) Deriving consensus in the characteristics of advanced practice nursing. *Nursing Research* 62(3): 116-128
35. Thoun D. (2011) Specialty and advanced practice nursing. *Nurs Sci Q*, 24(3): 216-22
36. Rolfe G. (2014) Understanding advanced nursing practice. *Nursing Times* Jul 2-Jul 8: 20-23
37. Gardner G, Duffield C, Doubrovsky A, *et al.* (2017) The Structure of Nursing: A national examination of titles and practice profiles. *INR* Jun 64(2):233-241
38. Duffield C, Gardner G, Chang A, *et al* (2009) Advanced nursing practice: A global perspective, *Collegian*, 16(2): 55-62
39. Australian College of Nursing https://www.acn.edu.au/
40. Gardner G., Duffield C., Gardner A., Batch M. (2017). The Australian Advanced Practice Nursing Self-Appraisal Tool DOI: 10.6084/m9.figshare.4669432 https://eprints.qut.edu.au/105518/
41. Engel G (2012) The need for a new medical model: A challenge for biomedicine *Psychodynamic Psychiatry* 40(3): 377-396
42. Auerbach D, Staiger D, Muench U, *et al* (2013) The nursing workforce in an era of health care reform *The New England Journal of Medicine* 368(16) 1470-1472
43. Fawcett J (2016) Thoughts About Nursing Conceptual Models and the "Medical Model" *Nurs Sci Q* 30(1):77-80
44. Halcomb E, Stephens M, Bryce J *et al* (2017) The development of professional practice standards for Australian general practice nurses *JAN* 73(8)1958-1969
45. Jolly R (2007) Practice nursing in Australia Research Paper no. 10 2007-08 https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/RP0708/08rp10 Accessed 23rd November 2018
46. McKenna L, Halcomb E, Lane R, et al (2015) An investigation of barriers and enablers to advanced nursing roles in Australian general practice Collegian 22: 183-189
47. Roy Morgan Image of Professions Survey 2017: June 07 2017 Finding No. 7244 http://www.roymorgan.com/findings/7244-roy-morgan-image-of-professions-may-2017-201706051543 Accessed 22nd November 2018
48. Kagan P (2013) Innovation in nursing: Only radical change will do *Advanced in Nursing Science* 36(4): 268-270
49. Starfield B (2011) The hidden inequity in health care *International Journal for Equity in Health* 10(15)
50. Leeder S (2003) Achieving equity in the Australian health care system *MJA* 179(Nov): 475-478
51. Better Outcomes For People with Chronic and Complex Health Conditions December 2015 https://www.health.gov.au/internet/main/publishing.nsf/Content/76B2BDC12AE54540CA257F72001102B9/$File/Primary-Health-Care-Advisory-Group_Final-Report.pdf Accessed 22nd November 2018
52. Duckett S (2016) The problem with Australia's hospitals – and how they can be fixed *The Conversation* March 15