



**AUSTRALIAN PRIMARY HEALTH CARE
RESEARCH INSTITUTE**

AUSTRALIAN GENERAL PRACTICE NETWORK

CHARTING NEW ROLES FOR AUSTRALIAN GENERAL PRACTICE NURSES

Abridged Report
of the
AUSTRALIAN GENERAL PRACTICE NURSING STUDY

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CHAPTER 1: GENERAL PRACTICE NURSING IN AUSTRALIA

BACKGROUND AND RATIONALE

General practice in Australia is changing rapidly. Altered patient and professional demographics, increased levels of chronic disease, rising health expenditure, and changing patient expectations have led to a need for general practices to develop new modes of working and models of health service provisionⁱ.

There is a growing recognition of the contribution that practice nurses can make within this changing primary care environment in Australia. Several policy initiatives to increase the number of nurses in general practice, and the scope of their work, have been instigated.

Support for general practice nursing in Australia is also widespread and growing with the Royal College of Nursing (Australia), the Royal Australian College of General Practitionersⁱⁱ and the Australian Medical Association (AMA)ⁱⁱⁱ all endorsing the role of nurses in general practice. Studies of consumer perceptions of practice nurses found acceptance by consumers of defined practice nurses roles, especially where these facilitate access to services and patient choice of providers^{iv,v}.

Initial work by the Australian General Practice Network (AGPN) demonstrates the increasing willingness of general practices to employ practice nurses. AGPN's 2003 national practice nurse survey indicated that 45% of surveyed practices (n=1,485) employed practice nurses, with 40% of these employing only one nurse^{vi}. By 2007 a substantial increase in practice nurse numbers had occurred, with the total almost doubling to 7824. Fifty eight percent of practices now employ at least one nurse and the proportion of practices employing 5 or more has increased by 23.4% since 2005^{vii}.

REVIEWING THE LITERATURE

Despite this growing profile for practice nursing, at the commencement of this study there had been little systematic research or published literature on practice nursing in Australia^{viii}. The Australian research at that time was mainly descriptive and addressed three areas: profile and demographics^{ix,x,x}, some roles and activities^{xi,xii,xiii,xiv}, and limited explorations of the extent of collaboration between doctors and nurses in primary care^{xii,xv,xvi,xvii}. These studies also tended to be restricted to specific population groups or geographic constraints^v and were conducted using self report, survey and/or interviews.

Since this time, the Australian literature has focused on further description of nurse characteristics^{xviii}, drawing attention to the paucity of research, scholarship and evidence despite the rapid evolution of health workforce policy initiatives^{xix,xx}. Regardless of the largely positive rhetoric in the medical and mainstream media^{xxi}, the exact nature of nursing roles and scope of professional nursing practice remain poorly understood^{xxii}. Other research has included nurses within an exploration of the configuration and function of teams in Australian general practice^{xxiii}, but has added little to an understanding of how nursing roles are constructed in this context, the nature of influencing factors and how these can be modified, or the impact of nursing on the practice as an organisation.

Irrespective of the variations in nursing role within and between practices, there is a general consensus in the literature that even with the introduction of government driven practice nurse funding initiatives, the clinical skills of practice nurses in Australia are often under-employed^{xxiv}. A number of barriers around insufficient educational preparation for primary care, and a lack of career pathways in this sector, have been identified. It is also unclear how current funding measures impact on costs or health outcomes^{xxv}.

The international literature suggests a number of benefits that enhanced roles for nurses in general practice can bring - to the patient, to the practice, to the nursing and medical professions and to the health system^{xxvi,xxvii,xxviii,xxix,xxx,xxxi,xxxii,xxxiii,xxxiv}. This research generally suggests that most benefits occur when models of working between nurses and doctors are collaborative^{xxxv}.

However, recent pay for performance reforms in the UK have also led to unexpected outcomes, and potential internecine tensions, in terms of workload distribution and accountability for outcomes^{xxxvi, xxxvii, xxxviii}.

Generally however there is a lack of systematic research in Australia into practice nurse employment models, including how nurse roles and relationships operate within general practice. Understanding the way in which these different structural and other factors function to affect the nurse role is largely unexamined and there is no detailed observational research systematically exploring how nurses' practice is determined by the structures of particular general practices, local community needs, workplace relations and / or the funding basis of primary care.

Identifying the operational components of nursing roles in general practice and the factors that influence these roles is important in advancing an understanding of how nursing roles can be developed, and how to implement the necessary changes within the general practice sector. It is therefore timely to investigate closely the work behaviour and environment of practice nurses, the ways in which their work contributes both to patient care specifically and to general practice more broadly, the possibilities for enhancing that contribution, and the means by which to facilitate it.

THE AUSTRALIAN GENERAL PRACTICE NURSING STUDY (AGPNS)

This report outlines the findings of the AGPNS research collaboration, an ethnographic study of 32 general practices in Australia, undertaken in two phases between mid 2005 and late 2008. The research aimed to examine nurses' contribution to general practice organisations and to use these findings to inform the development of a series of incremental change management projects which could be monitored longitudinally.

The study consisted of two sequential phases: a cross-sectional, multi-method descriptive study of a number of practices at one point in time; and a longitudinal study of a smaller sample of general practices following a deliberately instituted change process.

Research questions for the study were:

- How do nurses operate within the structure of general practice?
- What are the local, individual and structural factors that determine the role development of nurses in different general practice settings?
- What contribution do practice nurses make to the safety and quality of general practice?
- How might the development of new models of practice nursing be facilitated?

Chapter Two presents a detailed description of the methods used in the two phases of the study. Chapter Three describes the six operating roles adopted by practice nurses: patient carer, organiser, quality controller, problem solver, educator and agent of connectivity; while Chapter Four takes a broad contextual perspective on the determinants of these roles. Chapter Five addresses the practice-level determinants of practice nurse roles, and Chapter Six addresses the individual determinants of nurse role behaviours. Chapter Seven focuses in detail on the contribution of nurses to quality and safety.

Chapter Eight reports on the experiences of the seven practices which participated in Phase Two of the study, undertaking to change the role of the nurse over a one year period. Chapter Nine presents theoretical perspectives which have been central to the research process and interpretation of the findings. Chapter Ten explores the roles of Divisions of General Practice in this study, and reviews their part in supporting change. Chapter Eleven outlines the policy implications of this research, and makes recommendations which may enhance the development of practice nursing in Australia and prevent attrition of the general practice nursing workforce.

CHAPTER 2: METHODS

The roles of nurses in Australian general practice are in a state of accelerated evolution. Charting these evolving roles requires a supple method which is able to incorporate the perspectives of different workers, and the ways that interrelationships between these workers, patient needs, the built environment of the general practice, and the organisational and community context all frame the kinds of activities undertaken by nurses.

In developing the design of the AGPNS the following principles were applied:

- The study would need to capture diversity between practices as well as macro-, micro- and meso-level factors that are drivers for change in the nurse's role.
- The study would need multiple methods of data collection to capture the ebb and flow of practice life, the disconnect between what people say and what people do, and the ways general practices and nurses' roles adapt to local needs
- Data collection should not be obtrusive or disruptive to general practices
- Data analysis would be iterative and reflexive, drawing on the different skills and professional backgrounds of team members.

The study team consisted of eight investigators with backgrounds in practice nursing, medical general practice, social science, health care funding, and health care policy. The study itself was a collaboration between the Australian General Practice Network (AGPN) and the Australian National University (ANU).

This study drew on two theoretical frameworks: critical interpretivism and complex adaptive systems theory. In contrast to hospitals, general practice has been seldom studied by ethnographers. From a critical interpretive perspective, we viewed general practices as small worlds which create and enact cultural norms and routines, often constrained by hierarchies in and out of the general practice. To explore this we borrowed the stance, but adapted the traditional methods, of ethnography, seeking to compile a thick description, attentive to overt and hidden meanings^{xxix}. As general practices are entities widely dispersed across the country, we undertook to collect rich data from multiple sites to give a multifaceted picture of nurses and their work in general practice^{xi}.

The second theoretical framework used draws on complex adaptive systems (CAS) theory. This has become a focus of interdisciplinary research in the natural and social sciences over the last decade, with a more recent focus on the properties of self-organising systems^{xii}. In particular, some researchers have drawn parallels between health systems, including general practice, and non-linear dynamic systems or CAS^{xlii,xliii,xliv}. This research took a perspective that general practices, as small, dynamic organisations that are closely linked, warrant examination through this theoretical lens.

PHASE 1: CROSS-SECTIONAL MAPPING STUDY

Data for this phase were collected using a rapid appraisal tool method, which was perceived as an unobtrusive, wide-ranging, and short-lived way of collecting multi-method data from general practices. This method involved one visit to each practice by a trained, but general practice naïve, fieldworker over a period of one day, who collected a range of data:

- (a) Semi-structured interviews with practice nurses, general practitioners, and administrative workers (practice managers or receptionists, as nominated by the practice).
- (b) Time-motion observation of nurses over two one-hour periods, with observations broken into ten minute reporting periods.
- (c) Photographs of the nurse's main workspaces. These were frequently taken by nurses, or when not, the locations to be photographed were identified by nurses.
- (d) Spatial mapping of the general practice. The layout of the general practice was either drawn by the observer, or a copy of the practice floorplan was given to the observer.
- (e) General practice texts, such as practice information leaflets, and websites were perused and collected by the observer to supplement other data.

(f) Social scanning of each practice which encompassed local demographic and contextual information about the availability of health services including RRMA classification, distance from acute and community based health services, local primary care and allied health service availability, population data and socioeconomic indicators.

Practices were recruited by advertising through Divisions of General Practice. For logistical reasons, the practices were all located in NSW and Victoria. A purposive sampling frame was constructed to enable the inclusion of practices with a range of illustrative characteristics, and participating practices received an honorarium in recognition of the time cost associated with participation.

Data were analysed using an emergent, iterative and reflexive process. All researchers committed to regular meetings through which different perspectives on the data were encouraged; this process resulted in the gradual emergence of a multi-faceted but coherent interpretive presence^{xiv}. Presentations of the preliminary data to a study reference group, and at conferences and meetings with policy officials were used to “reality-test” our emerging interpretations. Analysis of the total dataset focussed on two levels. The first level, the intra-case analysis, occurred at the level of the general practice. The purpose of this level of research was *synoptic*, as we sought coherences across the different data types to make a statement about a particular practice, and a nurse’s role in that practice. The second level, the inter-case analysis, was *thematic* in purpose. Data for each theme were analysed in depth by two researchers from different backgrounds working independently, who then presented interpretations to the research team. A third researcher was appointed to assist in synthesis and identify discrepancies in the analysis, preventing superficial synthesis, or discordant analysis, of the data.

PHASE 2: LONGITUDINAL CHANGE STUDY

This study occurred after the cross-sectional study, and incorporated some of the insights gained through preliminary analysis of that study. The longitudinal study examined:

- a) the impact on the practice of a change to the role of the nurse; and
- b) the way a nurse could act as a change agent within a practice.

The change management approach used for this study was an action research sequence^{xv} which has many similarities to the plan-do-study-act (PDSA) cycle^{xvii} - an accepted quality improvement tool in general practice.

Participating practices were asked to nominate a change to the role of the nurse in their own practice. The researchers did not intervene in the selection or outcome of the change process, but provided tools and support to develop the change and to evaluate it. This study therefore had two levels: the naturalistic study of change occurring in a dynamic system, and its impacts on the role of the nurse and on team climate; and for the practices themselves, a change process which needed to be evaluated against the outcomes that they had sought for it. The research also sought to understand the role of Divisions of General Practice in supporting change within general practices.

Practices were again recruited through the Divisions network and the sampling frame deliberately sought to include practices that were both self-identified “change leaders”, as well as practices that were more representative of “typical” general practice. Divisions were asked to identify for their regions suitable practices that were considered “practices like us” and “practices that are innovators”. Seven practices were selected from five states and each practice was funded \$4000 to participate. Of these, four were described by their Divisions as being leaders, while three were more conventional general practices. Further details of the changes they introduced are presented in Chapter 8.

A GP (or manager) and a practice nurse from all participating practices, along with a support person from the relevant Division, attended a workshop in Canberra at the commencement of the change project. At this time the study approach was outlined, planning processes and proformas for change were presented, and the participants undertook a series of culture-mapping exercises designed to elucidate potential impediments to change within each practice microculture. Practices then undertook to implement their change. A second workshop was held in Melbourne six months after the initial workshop, at which each participating practice gave an update, and

developed their evaluation plan. These workshops also functioned as a valuable information exchange opportunity, which was particularly embraced by participants.

Baseline data collected for each practice included: developing a "practice genogram"^{xlviii} of hierarchical relationships within the general practice, descriptive statistics of current workforce configuration, and narratives of important drivers of practice activities. Sequential data were then collected by the research team once during the change process and six months after the change process. This consisted of open ended interviews discussing the success or failure of the change process, the impact on the practice and on the role of the nurse, and the role of the nurse in effecting change. Telephone interviews were conducted with nurses, doctors and/or practice managers and Division staff, and synthesised by the interviewer into narrative templates to enable comparison across the cases. Baseline, interim and outcome data on the change itself were provided by practices according to the planning and evaluation proformas they developed.

For analytical purposes, a narrative summary of each practice was developed by two researchers, following initial team based discussions, and reviewed by other team members. The practice innovation (change) was assessed on its own merits, using criteria for successful innovations developed by Greenhalgh and colleagues^{xlix}. Teamwork and new roles adopted by nurses were assessed through an emergent analytical process with researchers working in different pairs to review the material. Narrative data, practice documentation and interview transcripts from the longitudinal study were imported into NVivo 7^l and coded by two research assistants against the coding framework established for the cross-sectional study. This framework had been further refined and developed during the course of earlier analysis and additional emergent themes were added where they occurred.

SYNTHESIS OF CROSS-SECTIONAL AND LONGITUDINAL STUDIES

All themes were analysed across the two datasets collected from the cross-sectional and longitudinal studies. A simple data matrix was developed for each practice as a means of comparing practices, and for each general practice, the roles of the nurse were mapped onto the matrix through a process of decision-making in which the research team consciously challenged one another in order to develop a robust model. An example of this grid is given in Figure 2a, at right.

ETHICAL APPROVAL

The longitudinal and cross-sectional studies were approved by the Australian National University Human Research Ethics Committee and the Royal Australian College of General Practitioners Research Ethics Committee.

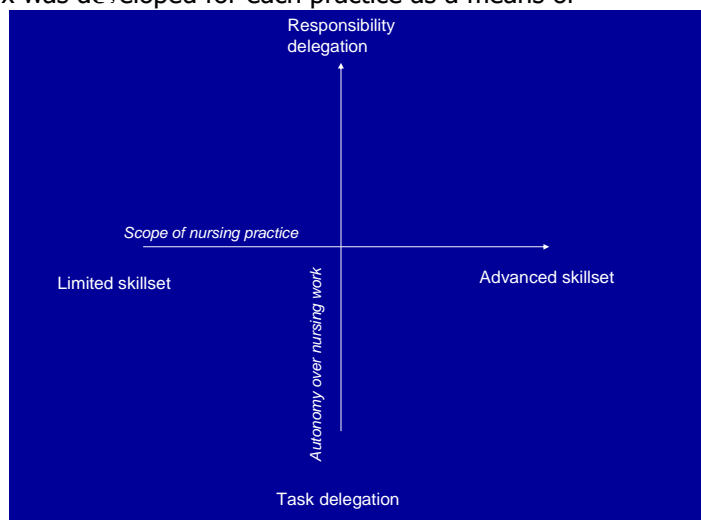


Fig 2a Activity/autonomy grid

CHAPTER 3: THE SIX ROLES OF NURSES IN GENERAL PRACTICE

ROLES AND HOW WE ACQUIRE THEM

The working definition used for the concept of 'role' in this study was:

- a suite of predictable activities undertaken by a person; and
- an expectation of activities to be undertaken by a person in the practice setting.

The first of these definitions is an individualised definition of the nurse's role. It reflects individual attributes, as well as external factors which determine the types of activities undertaken by a person. The second definition of role is externally driven and normative.

In sociological theory, roles can also be ascribed or achievedⁱⁱ. A role can be *ascribed* or defined by society using a set of normative assumptions about behaviours and activities (e.g. the roles of brother or mother, which are associated with accepted sets of behaviours towards one's kin). The individual has little control over ascribed role, as the ascription occurs without regard to individual merit^{xxix}. A role can be *achieved* (ie a social position is achieved based on personal merit, with some status). Many nurses in this study have achieved their roles in the practice. They have worked out what they want to do and have overtly or covertly been able to bring about a situation in which they have status in the practice associated with their own merits.

Conflicts in role understanding between some nurses and doctors in this study may reflect distinction between achievement and ascription of role. This is an unacknowledged challenge for practice nurses.

OPERATING BEHAVIOURS AND OPERATING ROLES

This study found that nurses have six key operating roles:

- patient carer
- organiser
- problem solver
- quality controller
- educator
- agent of connectivity.

These roles are oriented towards patients, the practice itself and the community. These operating roles extend beyond the clinical and administrative roles, which are generally understood to be part of nurses' work. Nurses appear to play a key role in creating resilient general practices, through their capacity to cycle rapidly through these six operating roles and their particular connectivity function.

The rapid cycling between these roles is made possible by some of the ways in which nurses work in general practice:

- Nurses are highly mobile, in contrast to GPs and administrative staff around the practice. Their offices are often located in central places like treatment rooms or in thoroughfares.
- Nursing time is often regarded as a fluid commodity, which is constantly accessed and utilised by different people.
- Nurses are highly focused on 'doing', with their activities being varied and often reactive to patient or medical need.
- Nurses are relatively spontaneous and unstructured, especially in their contact with patients.

NURSES AS PATIENT CARERS

Nurses in this study demonstrated particular ease in articulating their role as patient carer. They saw this role as their core function. This operating role includes clinical care, advocacy and nurture and is centred on the nurse-patient relationship. The role was observed to unfold on two levels:

- clinical care and activities (nurses providing services to patients)
- relationships with patients (nurses interacting with patients).

Talking and listening are dominant features of this behaviour and reflect a 'responsive and receptive' orientation by practice nurses. In their narratives, nurses talked frequently about their relationships with patients. They appeared to link successful care and role satisfaction as much with relationships as with clinical activities.

"But basically my role is to support the patients in their general care at whatever level I'm able to help them. And basically that's what I do..... The patient comes first..... And as you can see, with people coming and going all the time, sometimes it's hard to fit that time in but sometimes you just have to. Just have to stop and listen.....It's the most important thing in our role." [PN, practice 3]

NURSES AS ORGANISERS

Organising practice life was a key role for all nurses in this study, and a role that doctors and other staff seem to acknowledge very readily. The study demonstrated an extensive array of tasks that practice nurses engage in as part of this role, presented in the following Table, 3.1.

Table 3.1: Examples of organisational tasks undertaken by nurses

Organisational element	Clinical care	<ul style="list-style-type: none"> • actioning recall and reminders • setting up for procedures • undertaking telephone and face to face triage • monitoring the waiting room • managing daily pathology results • following up specialist appointments and other care for patients
	Practice management	<ul style="list-style-type: none"> • managing and ordering stock • cleaning and sterilising instruments • maintaining a safe working environment • writing policies and procedures • clearing contaminated waste

The role includes the traditional 'housekeeping' aspects often associated with nursing practice (sparkling clean surfaces, immaculate storage), but crosses between the clinical, administrative and 'servicing' domains of practice nurse work to undertake activities like stock control, sterilisation, cold chain management, and organising of the doctor's bag.

Unlike GPs, whose time is structured into regular scheduled appointment blocks and who tend to deal with one patient at a time, these activities occur in a much more unpredictable fashion for the nurse, and demands can be simultaneous across a number of activities and people.

Organising is presented by nurses as the main way they can bring some form of structure and control to what is often an unpredictable, chaotic and demanding workload. The organising role is also part of the way in which nurses 'protect' doctors:

"[The] most important thing is overseeing what goes on out on the floor. I do the rostering which doesn't take much because everyone does the same shifts. So that's sort of not really very exciting. But the ordering of the stock and the making sure that everything runs smoothly out on the floor, is probably the most important thing. Make sure that, you know, that everything is running smoothly for the doctors, because they're usually flat out here. So as long as we can keep our area going well, then it takes pressure off them. And they can concentrate on other things." [PN2, practice 13]

NURSES AS PROBLEM SOLVERS

The nurse problem solver role is closely related to, but distinguishable from, the organiser role. This role entails more proactive and responsive behaviour, and involves complex thinking in which scanning, observing and rapid response strategies are constantly used. Nurses are both reactive and strategic problem solvers. In real time nurses restore order and coherence in response to change, and develop ad hoc solutions and responses, enabling them to foresee and pre-empt problems within the practice.

"Jacinta [name changed] is the one who will pick up on when – in those rare circumstances with follow ups, she will think of all the things that could go wrong before they go wrong." [PM, practice5]

At the strategic level, they function as innovators, thinkers and reflectors, advocating and acting as agents for change. They have particular affinity for time management approaches and the applications of systems and procedures.

Practice managers seem to have the strongest grasp of the contribution of nurse problem solving to the practice, and describe this in terms of 'anticipating before things go wrong' or 'nurses making things happen'. They also acknowledge the role of the nurse in maintaining accord amongst the practice team: suggesting they are 'crucial to the smooth running and harmony' of the practice. Nurse problem solving is under-recognised by doctors, and the few examples doctors do provide usually relate to the nurse saving doctors' time.

NURSES AS QUALITY CONTROL

Nurses play a clear and important quality control function for general practices. They are instrumental in establishing and maintaining processes which support practice responses to external quality imperatives, such as practice accreditation and legislative requirements around occupational health and safety. They often have a specific role in supporting practice accreditation processes, and in ensuring compliance with quality, safety and risk management measures through educative and monitoring behaviours which address the conduct of others. These activities tend to be ascribed roles, and they are seen by others in the practice to excel in this domain due to their comfort with systems and procedures.

"[W]e wouldn't be doing it without them. We totally rely on them for the sterilisation procedures that happen inside the building, the vaccination procedures, the cold chain, and they also have a fair bit to do with our - checking our doctors' bags and checking the practice manual and procedures are up to date. We don't look at that at all, so they are totally independent on that." [GP, practice 7]

Nurses also perform a second, less obvious, function in response to internal or personal quality drivers; this relates to intrinsic notions of 'good' nursing and 'caring' for patients and is largely an achieved role. Nurses display strong internal and unofficial notions of quality which are centred on 'caring' for patients and linked to job satisfaction.

"And you walk away after a shift - and I've always felt like this - that you walk away after that shift thinking that you've done the best you can for that person... I think if you can sort of interact with the client, give them the best nursing care that you can and that's appropriate, whether it be treating them for an asthma attack or an anaphylaxis or a wound or whatever and in a professional manner.....But walking away after the day thinking gee, I've done a good job today, you know, that feeling of just job satisfaction." [PN1, practice 8]

NURSES AS EDUCATORS

Within a general practice, nurses educate patients, other nurses, GPs, registrars and other practice staff. The majority of education occurs in informal ways with patients and staff in the practice. For nurses, education is regarded as a resource for others, and there is an explicit responsibility to pass on this education to others.

Twenty-six episodes of education occurred during the observations (Table 3.2), of which half were clinical and directed towards patients. In the remainder of cases, nurses educated other nurses, receptionists and doctors, although their education of senior doctors is often non-directive. These educational interactions tend to be focused on system or practice organisational matters.

These data almost certainly under-estimate actual education episodes, as we did not directly observe patient-nurse interactions, but instead recorded the nurse’s characterisation of the patient interaction. Since nurses tend to incorporate education into episodes of clinical care, it is likely that there was more inter-current patient education occurring within these interactions. It is also likely that staff education is under-estimated, as nurse and doctor accounts indicate that much of that education is not actively recognised by nurses and doctors as such, and often occurs informally (e.g., over lunch in the tearoom, or in discussions at the end of the day) - times excluded from our observation periods.

Table 3.2: Observed episodes of practice-based education by nurses[^]

		PATIENTS	OTHER NURSES	RECEPTIONIST	DOCTORS	
					Registrars	New doctors
Clinical issues	Immunisation	5	1		1	1
	Wound management	1	1			1
	Asthma education	3				
	Women’s health	1				
	Travel medicine	2				
	Injury prevention	1				
	Crush injury				1	
System	Practice procedures		3			1
	IT systems		2	1		

[^]Excludes telephone contacts

Nurses have a collectivist attitude to education as something which occurs in the workplace, to be undertaken as part of a team, and to be shared as a social good. GPs did not demonstrate the same understanding of education as occurring in the workplace. This cultural orientation of nurses can help accelerate the transformation of general practices into learning organisations, although this work is currently underfunded through Medicare.

NURSES AS AGENTS OF CONNECTIVITY

In this role, nurses operate as agents of connectedness between different disciplines within the practice, enacting the role through an unwritten duty of responsiveness to others, and a cultural rule which enables nurses to enter all spaces in the practice, including doctors’ rooms. Nurses often adopt the stance of balancing patient needs within the team, and are described as “keeping it all glued together”, an expression also used in a recent report exploring the roles of hospital nursesⁱⁱⁱ. Brokering connectivity incorporates a broad and flexible range of activities, and is largely dependent on the highly fluid nature of nursing time.

“Between the practice staff, the reception staff and the doctor she forms almost a link.” [GP, practice 1]

“Yeah the doctor is constantly busy all the time so that they see patients constantly where as the nurse is sort of distributing herself through...from patient to practice if you know what I mean...within the practice and the role and looking after things within the practice and then to the patient and then to the practice .” [PM, practice 20]

Nurses also act as agents of connectivity between the practice and the community. As more doctors work part-time, continuity of patient care is increasingly vested in the nurse, who often ensures continuity of care between different doctors in the practice, across the spectrum of healthcare providers outside general practice, and by the patient at home.

“[T]hey just provide that link between basically the reception staff and the doctors, the patients and the doctors...So the doctors will often get the nurses to phone somebody and see how they are or, you know, follow up on something for them. [I] think the nurses have got that credibility that they have got the medical knowledge and also I think - just nurses in the community have a very high standing. People trust them, they’ll talk to them... I think the patient’s still reassured because they’re speaking to somebody who’s medically trained.” [PM, practice 9]

Nurses bring an intangible 'added benefit' to general practices and their capacity to deliver comprehensive and holistic care, creating a whole that is greater than the sum of its parts. The role of nurses as agents of connectivity has not been previously articulated, and is central to this capacity. This role helps bond the practice and make it resilient and responsive to change.

CHAPTER 4: NURSING IN SOCIAL CONTEXT: STRUCTURAL DETERMINANTS OF ROLE

For the purposes of this study, it was assumed that a role arose out of a combination of structural (macro), practice-level (meso), and individual factors (micro). It was anticipated that there would be significant interactions between these different levels, and that the distinctions made would be heuristic. The structural determinants of health were conceptualised in terms of three different orbits of influence, each of which separately and together could impact upon the role undertaken by the nurse. These orbits of influence are categorised as *environmental*, *cultural* and *policy*. A model of these orbits, their inter-relationships, and their constituent elements are presented in Figure 4a at right.

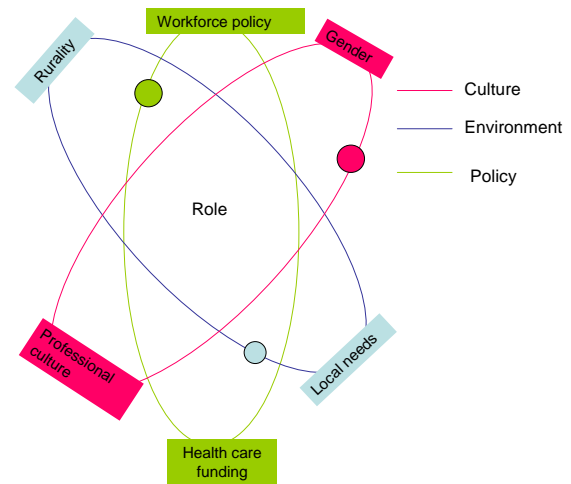


Fig 4a Orbits on influence on practice nursing role

ENVIRONMENT AND NURSING ROLES

The environmental orbit includes the geographic location of a general practice, and the specific local needs of the practice. All 32 practices in this study were categorised using RRMA classifications^{liii}. No urban/rural differences in the adoption of the agent of connectivity, problem-

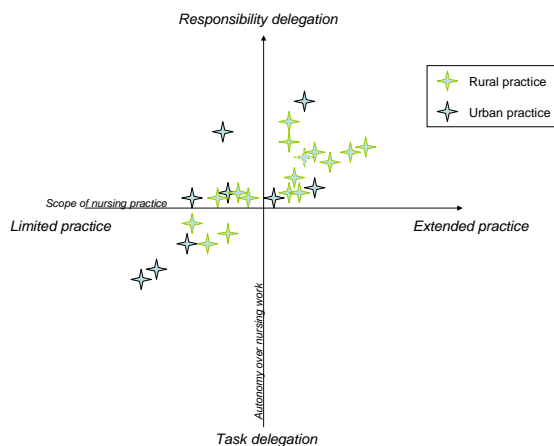


Fig 4b Distribution of practices on grid

solver, organiser and quality controller roles were noted. Rural nurses adopted slightly more extended patient care roles, and were more likely to function as educators within their own practices and their communities. In order to explore the differences in patient care roles more closely, practices were mapped onto the activity/autonomy grid shown in Figure 4b, beside.

Most of the nurses in rural practice occupy the half of the grid where they had more control over their activities. Overall, more than half of the rural nurses were in the quadrant which displayed both greater autonomy and

more extended skill-sets.

The three rural nurses located in the low-autonomy, limited-activity quadrant were, in two cases Division 2 (enrolled) nurses who divided their roles between nursing and reception desk work, and in one case a nurse who worked in a highly hierarchical workplace in which the nurse had always undertaken a limited set of activities.

The three urban nurses in the autonomous-decision making, broad-activity skills quadrant included two nurses who were highly individualistic and had brought to the practice a skill-set which they continued to use. Each of these nurses functioned autonomously in their practices, but this was largely a function of their personality and drive, rather than reflective of a practice-level approach to their roles. Only one urban practice was structured in a way that would enable subsequent nurses to practise with an expanded skillset in an autonomous way. On the other hand, almost all the 10 rural practices located in this quadrant were structured in a way that would support more advanced roles by the nurse.

Rural practices were provided with the practice incentive grant for nurses in 2001, several years before it was extended to urban practices in areas of medical workforce shortage^{iv}. In 2007, 60% of practice nurses were employed in rural locations^{iv}. A Medicare item for rural nurses to perform Pap smears was introduced in January 2005^{vi}, nearly two years ahead of the extension of this to nurses in urban areas of medical workforce shortage^{lvii}. This may mean that rural practices have moved further along an institutional evolution into organisations which make better use of nurses than urban practices.

Nurses can make working in rural areas more sustainable for rural GPs, and due to workforce dynamics they are increasingly likely to be the “practice veterans” in rural general practices. It is also possible that the willingness of some rural doctors to share decision-making may be an index of their own level of overwork. One rural GP who had worked for many years in a solo practice described the decision to employ a practice nurse as:

“[T]he best thing I have ever done personally for myself....[I]t’s enabled me to reinvent myself yet again as I get older, and to be able to cope with this impossible workload in some sort of reasonable way without drowning in it...The practice nurse idea was based not on altruism at all, but on saving, on saving my skin and enabling me to continue effectively”
[GP, practice 15]

The physical structure of many rural general practices enabled them to showcase nursing clinical skills. Some practices were purpose-built to include a quasi-emergency room, where nurses oversaw a number of patients in beds. In one practice, the nurses wore blue scrubs as their uniform, adding to the “general practice hospital” feel of the practice. Another practice was located in a decommissioned part of an old rural hospital. By contrast, urban practices had limited space and tended to locate the nurse in an alcove or in the treatment room, generally out of view of the patients.

Many nurses had developed their roles in response to specific local needs Occupational medicine appeared to form part of the nurses’ suite of activities more in rural areas. In one town, nurses recounted immunisation programs for workers in abattoirs, and in another, nurses had become highly skilled in complex wound management as a result of industrial accidents. A practice located near a very large industry held a contractual relationship to provide occupational health assessments and interventions. The nurses perceived this to be skewing their time away from care for the general community, and to be “paperwork rather than care”. This was not perceived to be very rewarding work, and added to the sense of frustration and disempowerment experienced by nurses in this practice. None of the urban practices undertook occupational medicine on the scale of that seen in rural practices, even though a number of urban practices were located near outer metropolitan industries. As with other services, rural areas lack the critical mass to justify specialist services, and mainstream general practices pick up the occupational health work that in cities is undertaken by a specialised cadre of health professionals. As a general rule, nurses in rural areas have a wider range of clinical responsibilities and greater autonomy than nurses in urban areas.

CULTURE

The elements of the culture orbit that were most germane to this study were gender and professional culture. Gender was examined through an emergent process which first attempted to examine the practices in the different quadrants in the scope of activity/autonomy grid for any gender patterns, and then explored particular cases. The discourse around gendered roles by nurses, doctors and practice managers was also explored. In general, there was little direct evidence of a straightforward correlation between gender and types of roles adopted by nurses, though it was noted that the casualisation of relations between nurses and doctors, which is a feature of general practice, was not completely reciprocal, and a number of traditional nursing roles (organising, quality control) can be read as traditional female “housekeeping” roles. General practice overall is undergoing a process of feminisation, with an increase in female doctors entering practices, and some female doctors may undertake a whole-patient model of care that is similar to nursing models of care. However, nurses are often the oldest female clinician in general practice, and can play a mentoring and educative role for younger female GPs. Although professional hierarchies exist in general practice, these are often disciplinary or employment based, and role delineation along gendered grounds is frequently interrogated as inter-professional modes of working are reworked in general practice.

Key aspects of nursing professional culture in this study were: appreciation for systems and regulated practice; the affective, intersubjective dimension of patient care; and collectivist modes of practice. A nursing preference for collectivist modes of practice was observed and this underpins a cultural valorisation of teamwork in their approach to working with others. This is consistent with previous work by Degeling and others^{lviii, lix}.

For GPs, the common sense understanding of nursing culture centred on two aspects. The first was an appreciation for systems, governance and regulated practice. This was in contrast to the approach of the GP, which was often to rail against the government-driven need to establish regulatory systems and routines within the practice. This notion of nursing as *culturally suited* to regulation was used by others to rationalise the ceding to nurses of the quality controller and organiser roles. The other aspect of nursing culture noted by doctors was the close attention paid by nurses to patient needs, although they often had trouble articulating how this differed from their own practice.

Nurses themselves emphasised patient care as an intersubjective phenomenon^{lx}, and privileged the affective dimension of care – ‘the importance of recognising and responding to patient needs’. In their accounts of good days in general practice, nurses repeatedly stated that a good day was a day in which they were emotionally replenished by their ability to care for patient, distinguishing this from expressions of gratitude by patients. A good day could occur even when a patient had not expressed gratitude, but the nurse had provided a service which would improve their quality of life. For the nurses in this study, caring for patients included being open to emotions, caring *about* as well as *for* patients. This meant that they might also reciprocate emotions, recognising shared experiences with the patients.

“I sit here and cry with them if they’re crying, oh, I’m very soft. One mum came in and her baby was six week old and she was breastfeeding him and ...she’s sitting here crying and I’m getting the tissues for me more so than her because I was really upset for her. That’s just, anyone who cries in here basically reduces me to tears; so I’m pretty soft. But you know, I can be hard if I need to.” [PN, practice 15]

POLICY

Nursing roles can be channelled or constrained by policy decisions, even when those decisions are not aimed at nurses. Funding and other policy initiatives are often filtered at the practice or individual level producing variable and even unintended responses. Current health workforce policy focuses on supporting doctors in general practice, rather than using nurses to change the workstyle.

Practice nurses in Australia are currently funded through a blended payment system, although fee-for-service (FFS) is the funding stream most recognised by GPs. Although most nurses are salaried, there is no national salary scale, creating wide discrepancies between practices and States in terms of practice nurse remuneration. Medicare FFS items accounted for only 6% of nurse activities in this study, and 20% of their time (see Ch5). However, expanding the work of nurses using FFS items may paradoxically limit nurses’ work and frustrate them, as new activities focus increasingly on specific funded activities^{xxxvii, xxxviii} and reduce time available for other roles.

Although the Medicare schedule may be a lever for change, it can be resisted by very hierarchical practices, or allow financial benefits to be realised by GPs who hold provider numbers, rather than nurses who undertake the work^{xxxvi}. Decisions to align access to the MBS item for Pap smears with distance from the CBD further constrain the clinical role of nurses in some locations. Beliefs about unsupervised work by nurses not being indemnified are common, and have led to limitation of, and frustration among, nurses. Workforce policies that place GP registrars and OTDs in rural practice effectively ask the PN to undertake education, but do not subsidise it.

CHAPTER 5: NURSING IN A SMALL ORGANISATION: PRACTICE-LEVEL DETERMINANTS OF ROLE

In this section, the meso-level determinants of role are discussed. The three primary role determinants identified in this domain are relationships, space and use of time. The exact configuration of nursing roles in a general practice will vary depending on these organisational or meso level attributes, and the individual characteristics of the nurse(s). This relationship is outlined in Figure 5a, at right, where individual colours represent nursing roles refracted through the prism of the practice environment.



Fig 5a Influence of practice attributes on nurse role

NURSES AND RELATIONSHIPS

While the organizational literature has a range of terms to denote the ways in which a group of workers relate to one another, including "organizational climate" and "trust", "relationships" was the term chosen to best denote the interpersonal dimension of practice working life.

The defining relationship endeavours of general practice are with doctors, with other nurses and with practice staff - the "relationship climate" in the workplace – and with patients. Relationships with patients are often cited by nurses as the most enjoyable and important aspect of their work. Field notes taken during the observational component consistently recorded nurses' disappointment or distress that their interactions with patients would not be observed. The benefits of nurses developing relationships with patients are commonly discussed, particularly in regards to patient care. On a practice level, the beneficial nature of nurses' relationships with patients may be seen as an incentive to foster nurse-patient interactions, thus shifting or maintaining the nurse in a more patient-centred role. Allowing nurses the time and scope for relationship development is a fairly common practice and sometimes patient-related activities, seen as a nurse forte, may be reallocated away from the doctor:

"Angela [name changed] is just a phenomenal girl, she's just one of the most amazing nurses and people that you'll meet. People come from far and wide because they hear about the way she vaccinates kids because they just don't cry. They don't even know it's happened. They're just sitting there and it's done and, you know, they've had dah, dah, dah, dah and they're out. So I don't know she does it but she's amazing." [PM, practice 5]

On an individual level, the nurse-patient relationship may affect nurse role design as a result of nurses favouring patient-related activities. While the data suggest that nurses will not disregard administrative and non-patient activities in favour of patient care, there are some examples of nurses' willingness to 'drop everything' when a patient is in need. These examples represent a de-prioritisation of non-patient activities and ultimately, a time management strategy, highlighted in the following example:

"...but I think the thing [that takes up most of our time] is ... the paperwork and that is huge also but that's not our priority. Our priority is looking after the patients first and looking after those that need us on the phone as well. So the rest fits in around that." [PN1, practice 2]

The relationship between nurses and doctors had the most influential impact on the role development of nurses. A key feature of this relationship is the balance of power between nurses and doctors, which affects operating behaviours such as decision making in patient care, task or responsibility delegation and overall autonomy levels. Doctor-nurse relationships are critical to improved team culture, and the transition towards more practice nurses has often been a challenging adaptation for older GPs unused to working closely with a parallel health professional. Expansion of the clinical care role is sometimes impeded by notions of the “proper” hierarchical relationship between doctors and nurses.

"I think in years gone by you probably couldn't say so much. But times have changed and we have younger doctors in here now and that makes a little bit of a difference. Probably when I first came and the doctors were a lot older and so set in their ways you just did what you were told. But I was probably more used to that because that was the training I did. I was from that era where you were just the handmaiden and just did what you were told. But younger nurses now would not accept any of that. I am older and I have been here a lot longer and so I can say more what I think." [PN, Practice 25]

The progression away from traditional nurse roles towards enhanced ones may be viewed as part of a life-course journey for practices, in which practices move from hierarchical structures to ones based on inter-professional teams. A theoretical lifecourse of a nurses' role within a practice's evolution is depicted in Figure 5b, left.

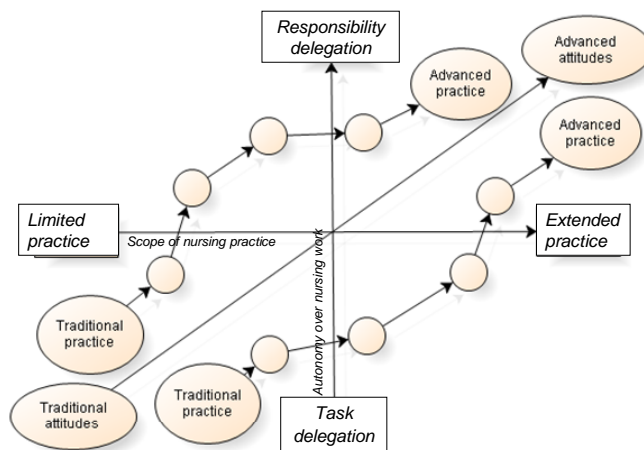


Fig 5b Theoretical life-course nurse's role in evolving practice

of a life-course journey for practices, in which practices move from hierarchical structures to ones based on inter-professional teams. A theoretical lifecourse of a nurses' role within a practice's evolution is depicted in Figure 5b, left.

The progression of attitudes and related doctor-nurse relationships is in some cases a matter of changing individuals' ideals, however, the overall attitudinal life course also involves generational change, which is exerting its effects through newly educated

primary health care workers.

"A lot of the challenges are in [getting] some of the GP's to accept the nurses to work with them and for them. I mean I have here GP's averaging in age from, well registrars are in their 30's, through to guys at 55. So, a very broad spectrum. The old guys have done it all themselves for a very, very long time, and so to have to change that ethos and say well now look it really is much better if you work with the nurse as a team..... Some of the middle aged guys are coping with it very well, others are struggling with the concept, and it purely comes out of how they've been taught and how things have gone over the last 30 years of practice. It's not a negative but it's a challenge to get some of the older GP's to accept it." [PM, Practice 24]

NURSES AND THE ARRANGEMENT OF GENERAL PRACTICE SPACE

Nurses have a dispersed workspace, often covering more parts of the surgery than that of the doctors or reception staff. This space tends to be a more accessible work environment, compared to the closed, consulting room location favoured by doctors. This open environment was a feature of both the older style surgeries, and the purpose-built ones. Nurses are comfortable with, and in some cases favour, an open working environment. They saw it not just as a set of task-determined spaces, but as an expression of their openness and the more relaxed relationship that they have with patients when compared with the doctor. These workspaces reflect the combination of clinical and non-clinical nursing roles in general practice.

All but one practice had a treatment room as a centre of nurse clinical activity, whilst several had either dedicated consulting or clinical rooms. The average number of locations used for work was 6.2 (SD 2.86) and 14% of tasks took place in the nurse's station or the nurse's room. The most common location of work was the treatment room (25% of total). Many nurses had an arrangement for time-sharing consulting rooms when not in use by a doctor. While they clearly focused on treatment rooms and consulting rooms, nurses also identified cupboards and stockrooms as key work areas, emphasising workplaces which were not "premium space" in the general practice. During observation, nurses often moved to different locations in the general practice, entering and working in the receptionist area, the waiting room, the store cupboard, the consultation rooms and most commonly the treatment room. This licence to 'access all areas' may be one of the reasons why nurses seemed to commonly be the people who go in search of lost files, or mislaid equipment. Nurses are also generally able to adapt and modify their workspaces to fit the needs of their workflow.

The most prominent concern about the built environment was the lack of space available in general practice to perform the tasks required. This space shortage applied to all activities of the practice, as well as to the nurses themselves.

"Room, space is...that would be the most difficult thing here, lack of space it just makes everything difficult. I don't know if you noticed this morning I went and asked if there was any free consulting rooms, you know if there is a free consulting room it is sort of like a present "
[PN, practice 2]

As a result, practices tend to locate the practice nurse in the treatment room, or in a transitional space, such as a behind the reception area, or near the sterilising equipment, see Figures 5c and 5d, below. Paradoxically though, because of the fluid and variable nature of nursing work, nurses actually require greater floor space than doctors. Most urban, and many rural, nurses work within modified residential buildings. This limits their capacity to expand their patient care role, but fosters the connectivity role.



Fig 5c Practice nurse space in treatment room



Fig 5d Practice nurse space in transitional space

It is likely that requirements for dedicated space for nurses in future will increase, as roles expand and develop. The provision of adequate computing infrastructure will also be crucial as the general practice becomes more computerised, and processes become increasingly electronic.

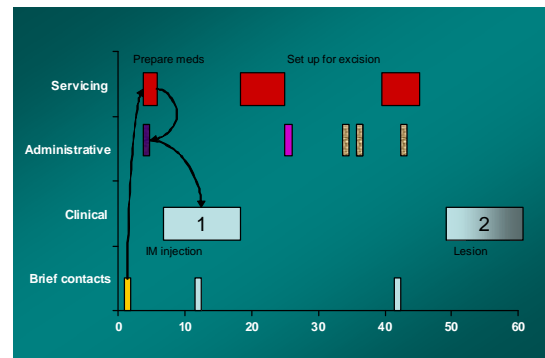
NURSES AND TIME-USE PATTERNS

Nurses are very busy in general practice, with nearly half of their time engaged in direct patient contact. The breadth of nursing activity tends to be under-estimated by doctors, and using Medicare practice-nurse items to gauge nursing activity significantly under-represents nursing clinical work.

In this study, 35 practice nurses were observed for 2,012 minutes, and time data was collected from 25 practices. Twenty-two practices had 120 minutes of observation, one had 180 minutes, one had 102 minutes, and one had 90 minutes. Fifty-one pictograms were developed, with 24 practices having two pictograms each, and one practice having three pictograms. Figure 5e, at right, is an example of a pictogram.

Practice 21, 3.45-4.45

Nurses undertook, on average, 17.4 activities per hour (range, 5 to 36). In one practice, there were 36 separate activities undertaken in one hour, a rate of one activity every 100 seconds. Practice nurses cycled rapidly between activities, often undertaking multiple tasks simultaneously. A nurse assisting in a procedure, might break the activity to take phone calls about a patient's results, or to stock the drugs cupboard. These data represent a minimal estimate, as the study's Hawthorne effect resulted in an under-representation of clinical work done by nurses.



Receptionist
Doctor
Pathology Recall

Locations: Treatment room, reception,

Fig 5e Pictogram of practice nurse observation

Nurses were often responsive to the requests of others, and seemed to act as a reference point for patients, receptionists, doctors and other staff members asking questions. Almost without exception they altered their tasks in order to respond rapidly to these requests. Many other staff deferred to a nurse as the "go-to" person to solve immediate practice problems which ranged from coordinating patient transfer to hospital, to locating lost files and fixing the waiting room radio.

In total, there were 889 tasks and interactions undertaken during the 51 hours of observation. Practice nurses undertook more administrative tasks (31%) than servicing tasks (15%). Practice nurses were also observed to spend more time on interpersonal or interaction based activities – either with patients or others (61% of total) than individual tasks (39% of total). Although brief interactions were the most frequent activity, clinical interactions took up almost twice as much time. Practice nurses spent 45% of their total available time interacting with patients combining time spent in clinical interactions and brief contacts with patients), as shown in Figure 5b, below.

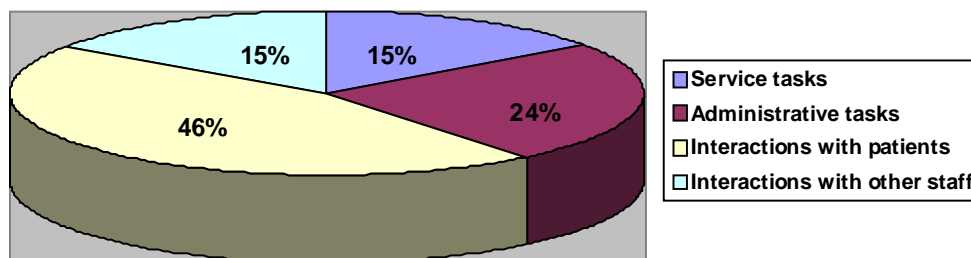


Fig 5f Distribution of a practice nurse's attention

A distinction was evident between the limits of medical time and the non-contingent, open nature of nursing time^{xi}. Nursing time was viewed as a commodity which did not need rationing, in contrast to medical time which was rationed according to “worth” of the medical problem. The relatively free use of time by nurses enabled them to have more unstructured contact with patients, and this often allowed them to see patients in new ways. Patients appear to understand the value of nursing time as different to the value of doctor’s time, and access it more freely.

CHAPTER 6: NURSES THEMSELVES: INDIVIDUAL DETERMINANTS OF ROLE

This section addresses the micro-level determinants of nurses' roles: the individual attributes that nurses themselves bring to form the role. Individual attributes contributing to this framework reflect personal and professional priorities and experiences. They include education (knowledge), skills and attitudes of the nurse, their experience, and their sense of professional identity as well as community standing. Rural nurses, in particular, are often women with considerable local standing and organisational skill, and they bring this to their role. The nurses in this study varied greatly in life histories, years of experience in general practice, and the types of skills they had acquired. All were women, and all were committed to nursing. This chapter draws on the life experiences and priorities as recounted by these practice nurses to sketch the people that inhabit this discipline and the ways they shape the roles of nurses in general practice on a day-to-day basis. Their colleagues in general practice observe that nurses "have their own relative strengths" and that there are "things they do better than other people". This is both a personal and disciplinary observation.

There are a number of common attributes exhibited by nurses in this study who reported themselves to be both successful and satisfied in general practice:

- They are comfortable with, and even stimulated by, ambiguity and see 'flexibility' as an important enabler of their position
- They like the freedom to be 'responsive' and connected to patients in a longitudinal sense
- They operate as 'boundary spanners', bridging the interface between different realms of practice life.

EXPERIENCE

Overwhelmingly, the study sample is made up of older, more experienced nurses with a range of personal and professional experiences. Most of the nurses in this sample had recent experience of working in hospitals. More than half had midwifery qualifications. Only two nurses had come to general practice having only worked in hospitals, with most having worked across three or more parts of the health sector. Most of the rural nurses had had relatively recent experience working in rural hospitals doing generalist work, a process one described as "surprisingly good" preparation for working in general practice. These nurses' work experiences are marked by a strong internal locus of control over their activities and many had high levels of autonomy in their previous working lives. Those who described themselves as "escaping" to general practice were leaving hospitals, not blue-collar employment. Several nurses had been head-hunted by GPs who knew them professionally and were anxious to fill a position with someone they knew was capable, having worked with these nurses previously in different settings.

"[T]he old adage, the practice nurses are the happy nurses. I've very much seen that this is a bliss job for her. Doing the job she's eminently well trained for, but which she's not able to put into practice in the current awful restrictive bureaucratic hospital." *[GP, practice 15]*

ATTITUDES

In general, nurses in this study tended to view general practice as an enabling environment. They expressed a fairly consistent desire to be 'holistic' in their practice, and saw general practice as a more 'holistic' place (relative to tertiary health care settings). Many nurses contrasted the sense of autonomy in general practice with their experiences in hospitals. Nurses also saw their role in general practice as being about empowering and enabling patients. In this respect they adopt an advocacy stance towards 'their' patients, which is complementary to and supportive of the GP-patient relationship.

"Because it's a holistic approach to health care. You see patients regularly. You see their families growing up, you look after their parents, grandparents, you know, kids. That's what I love about it. It is a family approach to medicine really, yeah. It's lovely." [PN, practice 3]

KNOWLEDGE

Generally speaking, nurses in general practice possess a knowledge base that is broad ranging in nature, and is recognized as being supplemental to that held by doctors, although it may be underestimated. For example, it often involves the detail of complex or technical issues that are not highly intellectually prized, such as the immunization schedule or wound management techniques.

"..... because really I've done this 3000 times and I'm not learning anything doing it, you know, maybe the nurse could do it." [GP, practice 3]

When discussing nursing knowledge, few GPs mentioned the knowledge sets that their nurses had amassed through their previous working experience, even when this clearly advanced their capacity to provide good quality care.

Nurses tend to function as knowledge intermediaries and information brokers and are common sharers of new or important information. They are very aware of the notion that once acquired, knowledge needs to be shared to be maximally effective. This is possibly reflective of their collective mindset and shared approach to learning, described by Degeling and colleagues^{lviii,lix}. Prior training of nurses had obvious impacts on the nursing role in some practices (e.g., where midwives ran antenatal clinics), but in many cases, nurses complained that their clinical training was not engaged in determining the kinds of roles they undertook in the practice.

Many of the nurses in this study commented on their educational needs and were somewhat self driven about maintaining and acquiring education to suit their needs, although they were most comfortable with an organizational approach that supported and fostered this. At the same time, individual nurses with specialist expertise like to be acknowledged.

"I've also taken on some extra study in that I've done an asthma course. I've done the advanced care planning so that we can then utilise all these programs with these incentives. I'm currently doing a cervical pap smear course and the main reason we've done this is the last six months we had a female GP here but we haven't got any female that can actually do a pap smear." [PN1, practice 23]

SKILLS

This study suggests four areas of skill are important for a nurse working in general practice. These mirror the skills routinely associated with nursing, with several key additions:

- Clinical skills
- People skills
- Organisational skills
- Small business orientation.

Doctors also tend to talk, from an employment perspective, about nurses' ability to acquire new skills quickly and competently. GPs repeatedly emphasised their trust in the nurse's judgement. This may relate to both the collegiate collaboration between doctors and nurses, but also to the employment relationship which is often overlaid on this.

General practice nurses are perceived by their colleagues to have relative strengths – and some (usually GPs and managers) talk about creating and defining 'roles' around these differential skill sets. For example, assessment skills are highly variable. This capacity to adapt & tailor roles is potentially something unique to the general practice environment, compared to other settings in which nurses work.

".....as recently as the last 2 weeks we had a major exercise where we appraised the nurses' current strengths and have seen there are some areas we need to see some improvement onone of our nurses isn't so good on that and I think strategically we might have to get to the point where we say well perhaps only 2 out of 3 of our nurses will do health assessments and the other ones who've got skills in other ... so it's a question of identifying what their skill base is, utilising those and perhaps just pulling them back from those that they're not so good atthat's recognising diversity and utilisation of their abilities and gifts." [GP, practice 14]

PROFESSIONAL IDENTITY

Gender-based behaviours, such as maternalism, form part of the nurse's expressed professional identity. Nurses are often highly protective of doctors time and of access to them. There is also a concept of 'nurse stuff', articulated by both nurses and non-nurses, which seems to be comprised of the traditional 'soft' but clinically oriented components of nursing. Non-nurses tend to describe this as valuable for nurses to do, while nurses can sometimes be dismissive of it. Generally speaking, nurses tend to be highly communal in their outlook and approach to working with others, and see this as an integral feature of their role.

"I think this is very much a cohesive unit. It has its little in-fights, which every place has, but I think generally speaking this could not work if we weren't a team. I don't think that anybody can work in isolation in a general practice, and I think that that's very much a family thing." [PN 2, practice 16]

Nurses also seem highly emotionally connected to their work, and are seen as being the obvious people to deal with emotionally distressed patients.

"You're there to listen to them, because sometimes they just need someone to listen, like, because they can't tell all their problems to the doctor, there was one patient that was depressed and all that, and so, being a Christian she tells me all her problems and that, and I'm just there to listen.....They just want someone to listen to them, and just let them talk, and sometimes they cry on your shoulder, yes." [PN1, practice 20]

This may relate to the availability of time, but also seems to be about doctors preferring to avoid this type of engagement. Study data also illustrate patients disclosing unsolicited information to nurses rather than doctors. While patients' motivation to turn to the nurse are represented by nurses and doctors as "not wanting to bother" the doctor, they do not have the same reservation about 'bothering' the nurse. This may reflect a hierarchical perception about the value of time, but may also be a reflection of nurses being engaged in a way that is more emotionally accessible to patients.

FRUSTRATION, DISSATISFACTION AND DISCOMFORT

Main sources of frustration for nurses relate to challenges to their ability to perform their role as they believe it should be undertaken. These include: insufficient time with patients or to complete necessary tasks; others (particularly doctors) making excessive demands on nurse time; doctors (or employers) holding back the expansion of the nurse role or not allowing greater role autonomy or responsibility. Discomfort is also observed about difficult working conditions and problematic relationships. Under-utilisation and under-recognition were both raised by nurse interviewees. Most often these tend to be in cases of more traditionally hierarchical (medically dominant) practice relationships. Some nurses seem trapped (often according to the observation of others, sometimes by themselves) in more limited "traditional" nursing roles.

CHAPTER 7: QUALITY, SAFETY AND THE GENERAL PRACTICE NURSE

This chapter reviews the contribution of nurses to quality and safety in general practice. Nurses have an established role as quality and safety wardens in hospitals,^{lxii, lxiii} but how or if these activities are also undertaken in the small business, general practice setting has not been examined in the literature.

Quality in Australian general practice specifically is underpinned by the Standards for General Practice promulgated by the Royal Australian College of General Practitioners (RACGP)^{lxiv}. These standards cover all aspects of general practice, from patient records and appointments to processes such as sterilisation, compliance drug regulations, restricted substances, and Occupational Health and Safety (OH&S) requirements. Practices may choose to be assessed against the standards every three years by one of two private companies. This voluntary practice accreditation process has been in place for only eight years, and is one of the most significant changes to general practice in recent times. However, discussion about the overall contribution of nurses to quality and safety is complex because of a lack of definition of the roles that nurses perform^{lxv} and inter-country variation in the roles of practice nurses.

In this project, the research team chose to use the National Health Performance Committee (NHPC) framework^{lxvi} because it included continuity, which had been repeatedly raised by respondents in this study as a dimension of health care quality enhanced by nurses. The Australian Commission on Safety and Quality in Health Care (ACSQHC) has advocated the national adoption of this framework^{lxvii} which operates on three levels: health status (individual), health determinants (environmental) and health system. At the level of system performance, it identifies nine domains of health care quality. For this section, the data were re-analysed for each of the nine quality domains:

- **Effectiveness** - Nursing care was felt to be complementary to medical care in achieving outcomes often through the use of nursing inter-subjectivity to complement formal structures of care instantiated through protocols. Inter-subjectivity, or the sharing of subjective states between individuals, is the basis of 'good' nursing care as recognised by nurses and patients, in contrast to the type of measurable 'quality' of care contained in more formalised processes such as accreditation or health outcomes assessment. For nurses, this dimension is seen as related to the degree to which a patient's physical, psychosocial and additional care needs are met^{lxviii}.
- **Appropriateness** - Doctors in this study echoed some of the concerns expressed by GPs in the literature about protocols leading to "cookbook medicine", which may not be appropriate for every patient, especially those with multiple morbidities^{lxix, lxx}. Such a concern was never expressed by nurses, who had no difficulty accepting that patient-centred medicine could be practised within a "formulaic" chronic disease framework. In many cases, system level protocols that are used to define nurses activities also give them power, licensing them to change patient management and staff behaviour.
- **Efficiency** - Nurses, doctors and managers all commented on the efficiency of nurses in delivering care, generally because nursing time was a less precious commodity for the practice than doctors' time. The savings in doctor time achieved by nurses were seen as the main efficiency gain by GPs. Nurses often reported being conscious of business overheads in a way they had not been in hospitals. Nurses also make efficient use of space. Although many managers and doctors in this study commented that their ability to hire more nurses was limited by space, in fact all nurses had been employed originally without any expansion of space. They occupied space that was not assigned to anyone previously, and which could not be used by doctors.
- **Responsiveness** - Nurses increase the responsiveness of general practices to their community in a range of ways. Rural nurses are often the ongoing link to the community, while rural GPs come and go. The relative freedom of movement across the practice space which is accorded to nurses enabled them to rapidly respond to changing needs. In

practices where nurses had some decision-making autonomy, the practice exhibited a built-in surge capacity enabling them to deal with walk-in trauma or emotional distress.

- **Accessibility** - in this study, nurses were seen to increase accessibility of care to patients because they increased the critical mass of health professionals in a practice, supplementing resources and facilitating patient choice. In addition to this, nurses increased access to doctors through their triaging function. While in some cases this acts as a filter on GP access, this role enables timely access for patients to clinical assessment and it is acknowledged that nurses can ensure that patients with urgent needs are facilitated access to a doctor. Nurses, through telephone and home visits, also make the practice more accessible to patients who are unable to attend the practice.
- **Safety** - Nurses are often assigned the twin roles of guardians of patient and staff safety, and demonstrate high Occupational Health & Safety literacy. When asked to indicate their key workspaces, most nurses photographed both the treatment room and a 'backstage' room dedicated to safety in some way: the locked drugs cupboard, the steriliser room, or storage sites for soiled equipment. Patient safety was seen as a key concern though nurses tended not to distinguish this from the safety of other people inhabiting the practice space and saw their role as maintaining the safety of the practice space, for example through good infection control practice.
- **Continuity** - As general practices become larger, with more part-time doctors, continuity of care for patients is increasingly vested in nurses. Continuity is extended within a practice (between different doctors) and outside the practice (when patients are at home and need outreach services). Nurses emphasised a commitment to personalized continuity of care, indicating an internalized locus of responsibility and embeddedness in the community, something noted in this study more frequently in rural communities.
- **Capability** - The clinical capability of nurses was felt by many respondents to be constrained in general practice, although nurses usually did not feel this was obstructed by doctors but by beliefs about the Medicare items for nurses and nursing indemnity. The data displayed more diversity in attitudes relating to the exercise of nursing capability than to any other quality domain. Nurses added considerably to the capability of practices as organisations. The ability of nurses to create 'surge capacity' through their autonomous and fluid time disposal has already been identified. There was general consensus among interviewees that nurses enhance the resilience of general practices, often in unanticipated ways. Resilience is the ability of a system to absorb change gracefully while retaining core properties or functions, or to continue achieving core objectives in the face of adversity^{lxix}.
- **Sustainability** - The one quality domain that was discussed more frequently by doctors than by nurses was sustainability. Many of the GPs in this study could recall a time when they had not had nurses – for some the recent past. For many, employing a nurse had been the one thing that had made general practice sustainable. Several of our respondents described changing their minds about leaving their rural general practices once they had employed nurses. Although nurses often talk of "protecting" their doctors from overwork, it was doctors who articulated what this had personally meant to them in terms which were often heartfelt.

Of these nine quality domains, nurses contribute particularly to appropriate, responsive, continuous, safe and sustainable care. While nurses help make general practice sustainable for doctors, in some practices the roles of nurses may require development and expansion to be sustainable.

ACCREDITATION: A SPECIAL CASE

Practice accreditation is one of the ways that practices instantiate their commitment to quality, and nurses are universally recognised as key players in accreditation, drawing on their capacity to work within a systems focus that promotes benchmarking and protocols. Accreditation is also one of the ways that practices overtly demonstrate their commitment to quality (this is further discussed in Chapter 3). In this study, nurses had developed an autonomous and authoritative role within their practices when it came to accreditation, having great freedom to change practice organisation and a “policeman” role to ensure that the relevant standards were met on the day.

“I’m the one responsible for infection control and sterilisation, that’s a major part of accreditation. I’m also the girl with the big stick that goes around and says you have to do this and you have to do that (laughs).” *[PN, Practice 16]*

This role was reinforced by the workspace allocation of the nurses, which was usually in a relatively public space, and their predilection for systems and procedures, which often resulted in them taking on a key role in developing manuals and protocols for accreditation, and operationalising guidelines and requirements.

“Our practice nurse is a person that is involved in systems and changing systems and as I also hinted she’s the one who possibly implemented this - you know, from what is actually suggested from policy to a procedure, to actually implementing that to make sure that doctors do that. She’s very useful in doing that, like making sure people put in the recalls and reminders and take off the recalls and reminders when they have done it and things like that, like, you know.....it’s not like she’s the only one that runs the whole accreditation, but her contribution to it is really invaluable.” *[GP, Practice 2]*

QUALITY AND PATIENT CARE: THE LIFEWORLD

Nurses distinguished the systems aspects of quality (exemplified in Accreditation) from a personal construction of quality exemplified by their relationship with, and the effects of their activities on, patients. This can be likened to the Habermasian notion of ‘lifeworld’, and the tension that exists between this and the ‘system’^{lxxii}. In this study, nurses constantly negotiated their work between these two equally important contexts for quality.

Nurses often described a sense of fulfilment when a patient recovered well. Despite the ‘busyness’ apparent in the observations, nurses reported that providing patients with the time they need, and helping with the ‘little things’ that ‘make a difference’ is a key source of satisfaction. If absolute outcomes are beyond reach then the satisfaction of offering comfort or support suffices. Demonstrations of trust by patients as well as expressions of gratitude and positive feedback are strong contributors to ‘good days’ for nurses. Continuity and the ability to build on relationships with patients, both over time and within the patient’s context, are important. A common issue raised by nurses was the desire to have sufficient time to ensure their patient care and clinical work is of substantial ‘quality’.

GPs repeatedly described the most important quality contributions of nurses as being related to systems issues, especially accreditation and Occupational Health & Safety. As a rule, the medical literature around quality care focuses on “system” level interventions. Conversely, the nursing literature on caring frequently calls on phenomenology and Habermas’ lifeworld to explain the intense experience of inter-subjectivity that nurses report with patients.^{lxxiii}

Nurses are integral to safety and quality in general practices, exhibited through the nine domains of health system quality and through their facilitatory role in practice accreditation. They also contribute another element to practice quality which is subjective and experiential. Current funding systems often fail to recognise the importance of the particular elements of nurse contributions to quality and safety in primary care. Fee for service Medicare funding may drive nurses towards task-based activities, with a resultant loss of unstructured time and the capacity for fluid and responsive quality care this supports. Excessive focus on accreditation and OH&S as nursing roles by organisational managers may also lead nurses to spend more time on paperwork than with patients.

CHAPTER 8: NURSING FOR A CHANGE: FACILITATING CHANGE IN GENERAL PRACTICE

If you want truly to understand something, try to change it. - Kurt Lewin

ASSIMILATION OF INNOVATION IN ORGANISATIONS

The introduction of nurses into Australian general practices is one of the great quality improvement initiatives of the last decade. Between 2005 and 2007, the absolute number of nurses in general practice increased by nearly 60%^{lxxiv}. Those practices which have nurses report that their value for the practice extends beyond the fee-for-service income they bring in.

Many respondents in the first phase of this study expressed a belief that nurses could have a more advanced role in general practice, though what this new role might be was not always clear. Integrating nursing into general practice is not necessarily easy. Policy levers can effect a certain amount of change, and if the work of nurses is to be maximised, there needs to be close attention to processes within a practice that facilitate enhanced models of care.

Results from the cross-sectional study suggested that practice nurses have a role in assisting practices to assimilate innovation. They also have a role in enabling practices to cope; by enhancing organisational resilience and assisting in the orientation to change. There was little evidence in the data of the "change fatigue" described in larger health systems or hospitals.^{lxxv,lxxvi} This may have reflected a selection bias. A manager in one practice described the practice as "change junkies", while a doctor in another practice described the importance of change to renewing his own interest in his job. Nevertheless, many respondents (nurses, doctors and managers) spoke of the personal strain of driving change through practices.

SEVEN CHANGE STUDIES

In Phase 2 of the AGPNS, the change focused component, seven practices in five states undertook to introduce small scale change projects. In these projects, the objective was to institute either a change to the existing role of the nurse (at baseline), or a broader change within the practice that relied on the nurse(s) to be successful.

These projects employed an action research approach which is further described in Chapter 2. The case studies were developed through the synthesis of project documentation including implementation and evaluation plans, genograms (a technique to describe practice structure and relationships), archetype development (to reflect hidden perceptions and mental models of participants), individual project results, and interviews conducted with practice managers, nurses, doctors and Division staff. Two narratives were completed by a research team member assigned to each practice at eight month intervals. Where appropriate, before and after statistical comparisons were made using t-test or chi-square statistics (Epi-Info, version 6^{lxxvii}).

The seven case studies are summarised in Table 8.1 below, with an example given in Box 1. The role most frequently addressed by the change studies was the patient carer role, with all but one practice addressing this. Three practices also addressed the organiser role, with one practice each addressing the educator, problem solver and agent of connectivity roles. No practice sought to enhance the quality controller role, possibly because the scope for nurses' work in this area is already very high.

Table 8.1: Summary of seven case studies

Practice*	Change sought	Change reached	Change sustained at six months	Nurse's role to be enhanced	Change in role of nurse reached	Change in role of nurse sustained
Mawinik	Nurse-led clinics	Yes	Yes	Patient carer Organiser	Yes	Yes
Santa Sarita	Workplace education for nurses	Yes	No	Educator	No	N/A
	Nurse health assessments	No		Patient carer		
Meldas	Nurse health assessments	Yes	Yes	Patient carer	Yes	Yes
Huskiville	Evening clinic	Yes	Yes	Patient carer	No	N/A
	Integrated nurse health assessments	No				
Bennet Lane	Nurse & GP run rapid assessment clinic	Yes	Yes	Organiser Patient carer	Yes	Yes
Gilder	Nurse-led collaboration for better mental health care communication	Yes	Yes	Agent of connectivity Problem solver	Yes	Yes
Ganina	Nurse appointment books	Yes	Yes	Organiser Patient carer	Yes	Yes

Practice names have been changed

Box 1: Case study of multiple role enhancement (Bennet Lane Practice)

This urban practice, consisting at baseline of seven doctors, one part-time nurse and a manager, had long waiting times and struggled to accommodate "walk-in" patients. GPs spent a lot of unpaid time on the phone providing advice, or following up patients. At the beginning of the study, the practice nurse roles were primarily quality control and patient care as directed by doctors. Because the nurses had not previously been employed in the practice, many GPs were not attuned to working collaboratively with them.

The practice introduced a rapid assessment clinic for simple medical needs. The nurse assessed the patient, and then advised the GP on care needs. Appointments were ten minutes in length, were generally available within 24 hours, and were usually bulk-billed. Six months after the change had been introduced, the practice had doubled the number of people seen in the rapid assessment clinics. Telephone requests for scripts had halved. The practice now employed three nurses. Because GPs rotated through the rapid assessment clinic, all gained experience in collaborative working with the practice nurse

"The most significant [unexpected outcome] would be the relationship between the GPs and the practice nurse... There is a much more collaborative feel about how they interact on a professional level now....I know yesterday for instance, one of the GPs actually went into Sandra's [name changed] room, closed the door and sat down and said, "I need to have a chat with you about this patient, this is where I'm going with it, what do you think?" Now if you'd had told me that was going to happen 18 months ago... " [PM]

This change led to significant improvements in team culture, as well as meeting a direct patient need to make their service more responsive. The change was intended to enhance the patient carer and organiser role, but had also enhanced the agent of connectivity role and educator roles.

THE INNOVATIONS

Greenhalgh and colleagues^{xlviii} list a number of features of innovations which have been successfully assimilated by health care organisations. These features are:

- *Relative advantage* to the organisation.
- *Compatability* with the organisation.
- *Trialability* in that it can be test-run without overwhelming the organisation.
- *Observability* of the benefits should be readily apparent.
- *Re-invention* or adaption to suit different contexts should be a possibility.
- *Fuzzy boundaries*, allowing flexibility around the edges while the core remains unchanged. For example, certain activities are required as a condition of funding, but implementation can be tailored to suit individual circumstances.
- *Risk management* is feasible and easily achieved without threat to the power base of key players.
- *Task relevance* to the performance of the intended user's work. The innovation will be seen to be especially useful if it improves task performance.
- *Nature of knowledge* - if the knowledge required can be codified and transferred to different contexts it is more likely to be adopted.
- *Augmentation and support* for technologies, for example help desk and customised training (in the case of computer innovations).
- *Freedom from complexity*. Innovations that seem simple will be more readily assimilated.

The case studies were assessed by the research team against operationalised criteria for the presence or absence of these features (Table 8.2, below). The two practices that scored 11/11 had the most ready acceptance of their innovation. Their innovations were relatively simple to understand, though not necessarily easy to develop. The innovations were trialable, with results being apparent after the first week, making them well suited to the action research cycle this project used. Practices which could demonstrate small wins early in the project had less difficulty "selling" the project to the wider practice circle. This was a challenge for some of the more

conceptual projects, such as the Gilder project where better communication structures and processes was the goal.

Table 8.2: Assessment of case studies against innovation criteria

INNOVATION FEATURE	MAWINIK	HUSKIVILLE	GILDER	BENNET LANE	MELDAS	SANTA SARITA	GANINA
Relative advantage	-	√	√	√	√	-	√
Compatibility	-	√	√	√	√	-	√
Trialability	√	√	-	√	√	√	√
Observability	√	√	-	√	√	-	√
Re-invention	-	-	√	√	√	√	√
Fuzzy boundaries	√	√	√	√	√	√	√
Risk management	√	√	√	√	-	-	√
Task issues	√	-	-	√	-	-	√
Nature of knowledge	-	√	√	√	√	-	√
Augmentation/ support ^a	-	√	√	√	√	-	√
Complexity	-	√	√	√	√	-	√
TOTAL	5	9	8	11	9	3	11

^aIncluding Divisional support

The most complex innovations were those trialled in Mawinik and Santa Sarita. For some nurses, Mawinik's innovation may not have appeared to confer a relative advantage, although the practice itself benefited from the innovation. The change introduced in this practice was the most ambitious, and from the perspective of the nurses, the least congruent with their previous experience and ways of operating. The transition to this ambitious model was challenging for all staff members. Given the complexity, and low compatibility and adaptability of this model, more external augmentation and support may have assisted in smoothing the progress of the innovation.

TRACING THE TRAJECTORY OF NURSE ROLES

The working conceptual model of nurse roles extended the activity/autonomy grid described in earlier chapters to describe the relationship between these factors and practice level effects (Figure 8a, right). In this model the quadrant of *optimized roles* is the area where nurses have an extended scope of practice and responsibility for managing activities is delegated to them by the other health workers in the practice, and the zone of *under-utilisation* refers to those practices where nurses had limited practice scope, and little or no clinical autonomy. In this model there are two dangerous zones: the zone of *chaos*, where nurses have limited scope of practice but disproportionate freedom to make their own decisions about how they use their time; and the zone of *boredom and instability*, where nurses had extended scope of practice, but were not accorded the autonomy to practise this.

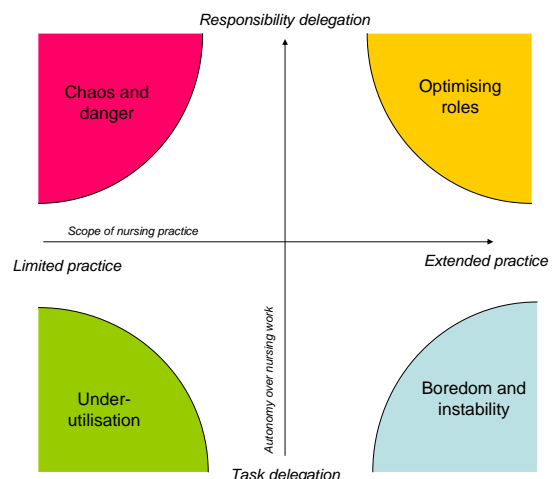


Fig 8a Activity/Autonomy grid & practice level effects

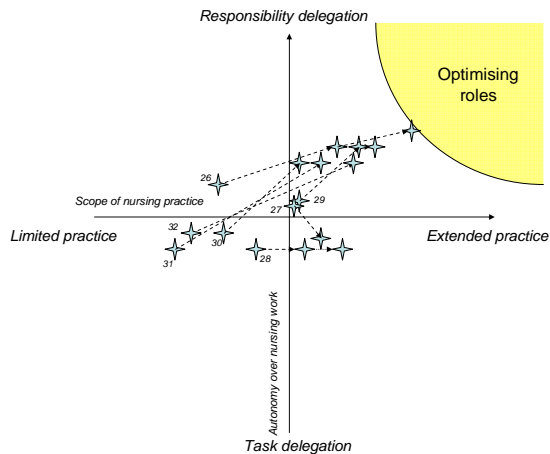


Fig 8b Trajectory of change within practices

Figure 8b, at left, summarises the trajectory of each practice in pursuing their change project. Most practices have moved into the zone of optimizing roles with extended practice and more responsibility delegated to the nurses. Two practices moved into the instability/boredom zone, although for one (Practice 27) this only applied to the actual change project, which resulted in some diminution of role for the nurses.

ORGANISATIONAL FACTORS

All practices reported that the change was harder to introduce than they had anticipated, and that keeping focus on the change process was challenging. Five of the seven practices underwent significant changes in staff during this project. In most, doctors were not deeply engaged in the development and roll-out of the project. The success of the change in these cases depended on several organisational factors: common commitment to the vision and processes of change; the quality of both formal and ad hoc communication within the practice; the capacity of nurses to forge external links because of their often weak internal ties; the quality of practice management, especially in establishing and maintaining momentum; and provision of time to reflect and plan.

EXTERNAL FACTORS

Three external factors also carried considerable weight in supporting innovation diffusion and the institution of change. These were the use of: workshops as swapshops for exemplary ideas and cultural cross-fertilisation; Divisions of General Practice as supporters and external motivators; simple forms to frame planning and evaluation.

A NEW MODEL OF ASSIMILATION OF ENHANCED NURSE ROLES

In general practices, many staff work part time, while others don't engage with management processes. As a result, some can be unintentionally excluded from the change process, manifesting in two sub-groups - one that practises in a new way, and one that clings to more familiar ways of working - in the same practice. Traditional reflective action cycles such as PDSA often leave out the vital second-order communication which results in integration of a new change across an organisation. On the evidence of this study three processes occur in effective communication with the outer practice community:

1. *Reviewing* - the core group inform others of their plans and emerging results
2. *Reflecting* - the outer community reflects on the emerging results and explore how it fits with their own preconceptions
3. *Revising* - the outer community has the opportunity to revise their views on normative working by practice nurses, and to embrace broader roles.

An adjusted PDSA model of innovation assimilation, incorporating this process, is presented graphically in Figure 8c, at right.

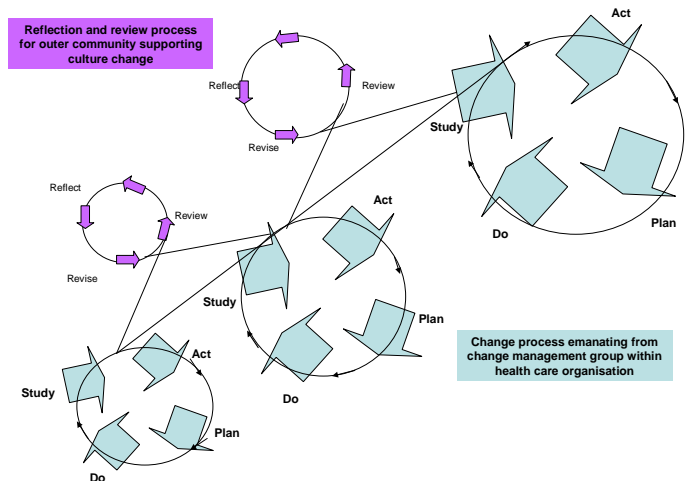


Fig 8c Modified PDSA model

This is an interrupted cycle model, with time allowed for communicating in the "outer community" of the organisation. This is the community of workers in a general practice who will turn the innovation into a routine^{lxviii}, but do not have time to undertake the direct planning.

At each step of a successful communication with an outer community, the resilience of the innovation grows, and more of the organisation are engaged in the action research process. This additional review-reflection-revise cycle (which corresponds to double loop learning for organisations) drives culture change and is important in underpinning teamwork. In this study, this appears to have been an important addition to the PDSA cycle as generally practised in overcoming barriers to change.

Box 2: From Quick Fix to Fast Track: dissemination of innovation

The principal of Bennet Lane Medical Centre had read in the Australian Family Physician about a Swift Solutions clinic. Her practice had long waiting lists, and her practice struggled to have same day appointments for people with pressing medical needs. The practice manager at Meldas Medical Centre reported that her clinic already had such a clinic (the Quick Fix clinic), and advised the group on some of the pitfalls around setting up a special needs service. Listening to this discussion were the nurse, doctor and manager from Huskiville. On their return, the Huskiville Health Service manager and nurse decided to rapidly establish a similar clinic, termed Fast Track, for these needs. They successfully set it up over a period of a few weeks. This innovation occurred in the background of the project under discussion. It succeeded and was mainstreamed as part of routine medical work. While the planned change – the introduction of an evening clinic - stumbled a little as the practice responded to an unexpected patient population, and the reluctance of some staff to work in the clinic, the Fast Track clinic was regarded by patients and nursing staff as a successful initiative that enhanced the partnership of nurses and doctors.

In the AGPNS, workshops were highly successful ways of prospecting new models of working, allowing practice staff to communicate their best practice ideas. An example is provided in Box 2 above. Other ways of disseminating to the broader external community have traditionally included academic fora like conferences and publications. However, these larger academic gatherings were difficult for small scale change projects to penetrate, possibly because the valorised knowledge of academic conferences does not include small-scale case studies, laced with wisdom rather than numbers.

LESSONS FOR DRIVING CHANGE

The role of the nurse can be changed in a supportive environment with minimal levers.

- It is possible to introduce marked change in the roles of the nurse very rapidly, but this requires commitment from key decision-makers and the agents undergoing change.
- The change should work in ways that are congruent with practice culture.
- Frustration can be effectively channelled into the development of a new model of working.
- Moving nurses into the quadrant of extended practice, but without enhanced responsibility this may be counter-productive and actively drive nurses from general practice, creating problems with sustainability and retention.

Project management requires time and energy.

- The processes of introducing change are more complicated than they first appear.
- To generate buy-in, the project objective needs to be an issue of common concern, and change champions or opinion leaders are useful in getting initial action and achievements.
- A key person in a position of influence in the practice needs to be committed to driving the change through. Skilled practice managers can drive change through persistence, capitalizing on serendipity, and keeping all stakeholders engaged to create commitment.
- Quarantining time for project activity is difficult but important. It helps to have a timeline providing a sense of urgency or expectation.
- It can be hard to generate momentum and sustain enthusiasm. The initial work may involve a lot of process development, which might not provide much reward.
- Achieving small outcomes early and promoting those is beneficial. "Early wins" on the board are important in persuading uncommitted staff members.
- Breaking a project down into its component parts can be challenging, and may require input from many people at the practice.
- The processes for instituting change may be cumbersome, but once staff have internalized it they will be able to introduce change rapidly.

Doctors are the numerically and financially dominant force in general practice, and they need support to understand new models of teamwork with nurses.

- Nurses and doctors come from different traditions. Inter-professional working may be best supported by recognizing the ways each construct their professional identities.
- Enabling GPs who are unfamiliar with the work of nurses to practise collaborative working can enhance the development of trust and create a demand for further nurse collaboration.
- Structured opportunities for the uncommitted to learn about collaborations are valuable and help to create a space for nursing endeavour in general practices.
- Appointment books are a way of publicly documenting for the practice the value of nursing time. They can have benefits in terms of inter-professional working beyond better organization of the working day.

Small changes can have large impacts in practices that have a positive team culture.

- It's important to prepare patients for a change, and to actively solicit their input.
- There is a need to invest in collaboration with the key stakeholders and feed back consistently. A smaller change team feeding back to the larger group can work well.
- A trusted external support for the practice may be necessary if marked change is contemplated in inter-professional working.

CHAPTER 9: NEW APPROACHES TO TEAMWORK IN GENERAL PRACTICE

This section addresses the concept of teamwork as it applies to nurses and GPs in Australian general practice, and explores some of the distinct disciplinary traditions that have led to different notions of teamwork. The chapter then reviews general practice using complex adaptive systems theory and draws out the uses of this perspective for understanding nursing, teamwork, and functional organisations in the general practice context.

TEAMS, GENERAL PRACTICE & PUBLIC POLICY

There is, in Australia, an evolving public discussion about working relationships between nurses and doctors in primary care. Much of this dialogue assumes a shared understanding of what constitutes a “team” in health care. Our research suggested, on the contrary, that there were multiple ways nurses, GPs and managers understood and practised teamwork. The experience on the ground suggests that teamwork as lived by workers in general practice bore little relation to the way it was spoken about in policy documents.

Interprofessional teamwork has repeatedly been proposed as a strategy to mitigate the impacts of primary care service shortfall in many communities^{lxix}. There is a second policy debate about bringing nursing and some allied health professions in from the periphery of primary health care. This debate is largely couched as a debate about substitution or task transfer in service delivery. At the same time, medical interest groups have signalled they will be resistant to diversity in teamwork models if this is not predicated upon GP leadership of teams, and if it encompasses “substitution” models where nurses take on tasks that were seen to be the province of doctors

THEORETICAL WORK ON TEAMS IN THE HEALTH WORKFORCE

The literature on teams in the health workforce is relatively thin and lies across a number of different disciplinary fields. Concepts tend to be shopped between these disciplines without necessarily importing some of their underlying theoretical perspectives. As a result, “team” has become polysemic: it is a term with multiple, related meanings.

The lexicon of teamwork emphasises different elements of working together for the good of others. “Multidisciplinary teams” emphasise process issues, “communities of practice” are animated by concerns about language and knowledge transfer, while “collaborations” highlight relationships. However, the ways in which teams can effect change is poorly articulated.

Accounts of teamwork in the medical and health services organisational literature tend to draw on what Hudson calls the “pessimistic tradition”^{lxxx}. This asserts that professional barriers are so strong they cannot be overcome. However on the evidence of this, and other studies, there is room for Hudson’s “optimistic hypotheses” around interprofessional work in primary care. Two of them are very relevant to this work:

1. That the promotion of professional values of trust and service to users can form the basis of interprofessional partnership.
2. That socialisation to an immediate work group can override professional or hierarchical differences amongst staff.

TEAMWORK IN CONTEMPORARY AUSTRALIAN GENERAL PRACTICE

Although medical interest groups frequently represent the GP as being the “necessary leader” of the team, in general practices a more fluid arrangement often occurs for clinical care. Many nurses made the point that they would never “presume to” advise the doctor on treatment issues, while at the same time they arranged outreach and family-based support for the person with chronic disease. In urban practices where there were likely to be more part-time doctors in the practice, the nurses generally were given responsibility for continuing the care of the patient in between doctors’ sessions. One of the signifiers of better interprofessional relationships is the doctor actively soliciting advice or support from the nurse.

Nurses and doctors do not always work as members of ‘teams’ per se, but rather as professionals who can work in parallel, independently, or towards a common purpose, and the observed instances of collaborative or shared care of patients did not fit readily within the multidisciplinary care model. Interprofessional routines (appointment books, shared clinics, meetings) are ways of driving interprofessional working for practices that are not used to working this way. The patient with chronic illness is a critical member, and often the conductor, of this interprofessional work.

A central barrier to enhanced teamwork was the belief of doctors and practice managers that the medicolegal responsibility for patient care was imperfectly shared between nurses and doctors. If doctors feel that they will in the end be held accountable for the care of the patient, they are likely to also feel they have to adopt a supervisory role over the management of care. However, doctors do tend to cede leadership of teams for quality improvement which require systems work to nurses and express gratitude about this onerous task being taken away from them.

MODELS OF TEAMWORK

Examples of several different models of teamwork are evident in the study data:

- **THE TIGHTLY HONED UNIT: *Community of practice***
This practice employs a very visible collaborative model. Both nurse and doctor greet the patient in the waiting room, and then divide up the assessment and management tasks, with the doctor overseeing, albeit often at one remove. The GP and the nurse were both experienced, and already knew one another from health sector work years ago, so they trusted one another. This practice is closest to the idea of a community of practice, where productive relationships form the milieu in which creative collaboration occurs.
- **THE INDEPENDENT NURSE: *Collaborative or parallel practice***
The nurse who worked in a university health service was salaried, and was the senior health professional in the practice. She was a member of the interview panels for the appointment of doctors. This nurse brought a great deal of remote area nursing experience and training in their job. Neither she nor the doctor saw her role as chronic disease care, apart from psychological health. This practice uses a fluid collaborative model, with the nurse and doctor often working in parallel.
- **THE PARLIAMENT OF NURSES: *Multidisciplinary teams***
Unusually, this practice has a positive nurse/doctor ratio in which the total number of nurses exceeded the total number of doctors. In this practice nurses run women’s health, diabetes, and asthma education clinics, undertake independent assessments and management, and were asked for advice by the doctors. This practice’s model of interprofessional work is similar to a multidisciplinary team.

Although “teams” are discussed frequently in the medical literature, the applicability of this literature to nurse/doctor teamwork in general practice is complicated by the fact that doctors perceive themselves as carrying higher burdens of medicolegal accountability, and patient needs demand more fluid arrangements of health professionals. Teamwork involves instances of parallel, independent care around patient needs, with for some underlying health issues, a more sustained model of teamwork for ongoing management and prevention of complications.

CHAPTER 10: THE ROLE OF DIVISIONS OF GENERAL PRACTICE

One of the functions of Divisions of General Practice is linkage and support for general practice. For many practices, Divisional support – ranging from support and education for nurses to direct recruitment of practice nurses – was instrumental in their decision to employ a nurse. This chapter reviews the roles of Divisions of General Practice in this study.

DESCRIBING DIVISIONS

The cross-sectional study was conducted at a relatively early time in terms of the uptake of practice nursing in Australia, and many practices reported on the role of Divisions in supporting them to make better use of practice nurses. In general, Divisions were seen as helpful and the importance of Divisions in the work of general practice was highlighted. The “pioneering” role of Divisions was cited by a number of respondents in relation to practice nursing. The resource capacity of a Division (compared to a practice) was seen to be a key benefit in helping with the roll-out of programs in practices and in providing practices with practice nurses, as well as with other health workforce components.

“..I think since the Division has come really on board that has been a real plus...it’s been invaluable... Lucinda* [name changed] from the Division she’s then said to me right...you write down a list of things where you think we can help you. So I’ve just said to her righto, asthma education, target that. Target things like sterilising, target things like diabetes. You know, having talks on diabetes and improving ourselves that way. So...that’s how I’ve thought about helping us better meet our needs here.” [PN, practice 1]

In several instances, Divisions also owned and managed practices. In one rural practice, where the practice was owned by the Division, based in another town, and the GPs were relatively mobile, the two constant general practice staff were the nurses and the Division provided ongoing resourcing and service management. The nurses in this practice were particularly adept problem solvers, reflecting the personalities of the nurses but also the enabling presence of the Division. Some practice nurses have a shared role between the Division and the practice. In these cases, practice nurses undertake work for the Division, such as lecturing/presentations, in addition to and separate from their practice nurse role.

Overall, interviewees appeared to place a high premium on the work of Divisions. Even though Divisions were often seen as behind the scenes support agencies, their contribution was viewed as significant, and at times as essential.

“... having...the face-to-face visits from the Division staff to implement immunisation and...EPC items, change, new programs, has been integral.” [Practice Manager]

There is evidence that practices in this study have developed a degree of organisational trust in the Divisions, and that “the Division” has become a metonym for its staff, programs and resources. Becoming a metonym is a developmental stage for an organisation; it indicates that it has developed its own presence as a signifier of a relationship and an orientation towards its stakeholders or customers^{lxxxii}.

DIVISIONS AND CHANGE MANAGEMENT

In the second phase of the research project Divisions were asked to provide support, on an ‘as required’ basis, to assist one of their general practices to implement a small scale change project.

On the whole practices identified the role of their local Division as a significant ingredient for support in undertaking the change project. Although most of the practices saw themselves as leading or advanced practices that could implement and drive change in their own right with only minimal action from their Division, all were grateful to have the Division involved for support and advice.

The key themes that practice staff described in their narratives about the role their respective Division played in supporting change implementation at the practice level were:

- help in getting started
- provision of an independent (external to the practice) perspective
- encouragement, monitoring and organisation
- assistance with collection and evaluation of data
- being available to the practice if needed.

The study showed that practices often wanted different levels of support from their local Division and that their Divisions were able to assess the support required and respond accordingly. None of the practices identified that their Division was a hindrance to the success of their project or that the support that the Division provided was in any way counterproductive.

WHEN THE GOING GETS TOUGH

The role for Divisions in supporting their practice came to the fore in situations when the practice was experiencing difficulty implementing their change. This involved keeping the momentum going when there was practice staff turnover and helping the practice team navigate through times of conflict or uncertainty.

WHAT DIVISIONS LEARNT

When asked to reflect on lessons from their participation in the study Divisions identified the following key themes:

- be open, be prepared for the unexpected, and be flexible
- take small steps, don't try to be too ambitious with the project and be content with making small changes
- there is often a need to keep the practice team on track with a common vision
- as an outsider to practice the Division can play a part in engaging and 'smoothing the path' for change particularly with GPs in the practice.

DIVISION SPIN-OFFS

Building a closer relationship with practices was viewed by many Divisions as a key outcome. Although the Division may already have had a good relationship with the practice, they believed that their involvement with the practice as part of this study helped to strengthen this.

Some Division staff identified that they had developed new skills, or new ways of working with practices to assist the practice to implement change. One commented that they had not previously been able to work with different professional members in the same general practice. This understanding of the different perspectives of team members in general practice was the most valuable aspect of the study.

It is interesting to note that most participating Divisions believed that they had played a very minor role in assisting their practice with the change project, and tended to down play the role. Participating practices also agreed that the role for their Division in implementing the change project at the practice was also relatively minor in many cases, however on closer examination of the interview data, the role played by Divisions has been of value to both the participating practices and the Divisions themselves. The process of Division support for general practice change appears to have mutually beneficial, although not without pain.

CHAPTER 11: POLICY IMPLICATIONS

To date, policy-making in this area has been pragmatic and effective. By beginning with a program of small-scale funding of work identifiably situated in the nursing domain (e.g., wound management, immunisation), and gradually supporting initiatives that promote teamwork and systematised chronic disease management, policy-makers have charted a course which offered a feasible way of promoting and expanding practice nursing without alienating key stakeholders.

This section continues this pragmatic approach by reviewing the policy environment for Australian practice nursing, and then addressing the policy implications of the study in the two roles where nurses' contribution could be significantly expanded: patient care, and education. It proposes a program that will foster the recruitment and retention of practice nurses, and addresses ways to enhance practice infrastructure to enable the expansion of the nursing role in general practice.

There are, in essence, two health policy problems for which nurses in general practice can provide a solution: (1) the need to find new models of clinical care for changing patterns of disease and population demographics and (2) the need to expand the health workforce at a time when the numbers of available doctors are falling. These two health policy problems are not completely unrelated, but it is useful to think of them as different problems, as their solutions require different policy emphases.

Policy solutions which focus on the nursing contribution to new models of primary care will:

- Encourage genuine collaborative work between nurses and doctors, and de-emphasise rather than promote traditional hierarchies
- Provide a platform for nurses to have some decision-making autonomy in general practice
- Recognise and foster nursing skill-sets in general practice, especially when these are complementary to the skill-sets of GPs
- Evaluate in terms of clinical outcomes.

Policy solutions which focus on nurses as a solution to the health workforce undersupply in general practice will:

- Encourage task substitution with nurses performing clinical work that is currently, or has previously been, performed by doctors
- Recognise and respect the incumbency of the medical workforce in general practice, and clarify the locus of leadership for clinical care
- Risk perceiving nurse roles in terms of the 'work' that can be transferred from medical practitioners in order to save time and redistribute workload
- Evaluate in terms of clinical safety and cost.

Overall then, policy directed at finding health workforce solutions will tend to emphasise task transfer between disciplines and derive value from work that can be redistributed – often according to the hierarchical value of time for different disciplines. On the other hand, policy focusing on new models of clinical care will tend to emphasise complementary modes of working and highlight the supplementary components or additional quality that can be achieved through collaborative interprofessional practice.

These approaches are not mutually exclusive and can be leveraged off one another to some extent. Based on the findings of this study, the AGPNS investigators recommend a focus on complementarity and quality enhancement, from a policy perspective, as this will accommodate the workforce support needs of many general practices at the same time as allowing the nursing role development which is important to maximise return on investment and sustain these changes in the longer term.

POLICY RECOMMENDATIONS

Based on the findings of this study, policy approaches to advance the roles of general practice nurses in Australia should focus on four major areas:

1. Enhancing the clinical work of nurses
2. Enhancing the educative role of nurses
3. Enhancing recruitment and ensuring retention of the general practice nursing workforce
4. Enhancing the physical infrastructure to support nursing

ENHANCING THE CLINICAL WORK OF NURSES

While the business case for nurse employment in general practice is well established, incremental additions will be important in developing the innovative potential of team based care. These should be progressively more flexible and less structured to prevent an unhelpful focus on task substitution, and to facilitate realisation of the full value nurses can bring to a practice. Diffusion of this innovation (interprofessional practice) is likely to be undermined if it is possible to subvert incentives to increase uptake and work by practice nurses while institutionalising traditional doctor-nurse hierarchies.

Although fee-for-service items will probably always have a role in reimbursing nurses, funding models which allow nurses some capacity to exercise autonomy over decision-making and deployment of their time (e.g., health assessments or care planning in many practices) are likely to foster more interprofessional collaboration than highly circumscribed Medicare items. Open ended FFS items, in which the nurse could potentially charge for time based units of service, may be useful but may also paradoxically reinforce hierarchical notions of teamwork if the items are endorsed and used by doctors with rigid views of the nurse as helpmeet.

The second strategy that may enhance the scope of clinical work by nurses is to clarify the indemnity status of practice nurses. Many doctors expressed concern that they were insufficiently protected if they did not personally supervise the nurse, as nurses did not carry their own indemnity. This perception of liability limited the work that nurses do, and is likely to continue to do so. This perceived risk is often poorly managed in an organisational sense, where clinical risk management is generally handled through the personal indemnity insurance of medical practitioners, and tends to be reinforced by the behaviour and advice of medical defence organisations in this country. This approach fails to recognize that nurses are trained and registered as independent health professionals who do not require supervision by medical personnel in order to practice. This situation is further compounded by the fact that professional boundaries for nurses are different to those of medical practitioners although they have traditionally functioned in concert with them, and the fact that a hierarchical employer–employee relationship also exists between many GPs and practice nurses.

In the UK, practice nurses are indemnified through their national registering body at very low cost. The Australian Practice Nurses Association advises practice nurses to indemnify themselves^{lxxxii}, and has negotiated an indemnity package specifically for nurses, but this currently represents a significant cost to nurses. It may be possible to draw on greater economies of scale, or for government to part-fund the process, to ensure that indemnity packages are accessible for low-income (relative to their medical counterparts) nurses. Nurses are very low risk, and are rarely sued, but the perception that they are risky limits their potential in many practices.

In light of the growing recognition of the valuable role that nurses play, and the increasing focus on utilising nurses in more ways in primary care settings^{lxxxiii}, advocated by groups such as the National Health & Hospitals Reform commission^{lxxxiv}, it is vital that the general practice organisational environment allow and enable the development and expansion of nursing roles that can support high quality, individually appropriate, integrated, comprehensive primary care delivery.

ENHANCING THE EDUCATIVE ROLE OF NURSES

Nurses already function as de facto practice educators. Nurses provide a conduit into general practice for new learning or innovations about organisational best practice. This reflects the nursing professional tradition of viewing training as a resource for all, rather than something undertaken in one's own time. The ability of the nurse to wander across all the domains of general practice and her frequent location in a central position gives her an excellent platform from which to launch an education program. Our findings suggest that educational initiatives, especially in areas of nursing's acknowledged expertise (e.g. immunisation, quality and safety, health promotion) will be readily assimilated into the organisation's knowledge base, and make the organisation itself more resilient.

Nurses are also important teaching resources for students, medical registrars and new doctors. As the numbers of medical students and nurses increase, and care is increasingly shifted to the community, it is likely that much of the education of medical students and nurses will be located in community settings, such as general practices. Nurses, already attuned to the idea that work-based education is a social good, are well-placed to expand their roles as inter-professional educators.

ENHANCING RECRUITMENT, ENSURING RETENTION OF THE PRACTICE NURSING WORKFORCE

It is by no means clear that the increase in nursing numbers will continue or if it will taper off as nurses move into other parts of the health sector. Already, concern is being expressed by nurses about the disparity in income between themselves and GPs¹¹ and this will escalate if nurses view themselves as enhancing the doctor's income without financial recompense to themselves. The other risks to sustainability articulated in this study are lack of practice-based training, lack of a career path, and the need to retain hard-earned skills. Sustaining the general practice nursing workforce will be a major challenge for the future, in the light of health workforce shortages. Key issues are:

Salary. Nurses' salaries are currently pegged to different salary structures in different states, and in some cases have grown out of the receptionist's salary structure. This makes it difficult for nurses to move between practices, and can make moving from hospital to general practice less attractive for nurses. Many practice nurses have a flat salary scale with no opportunity for higher salary reflecting experience or capability. The proposed national registration board for nurses offers a platform from which to negotiate a national salary scale for nurses, which would incorporate practice nursing.

Career path. The flat payscale of many nurses is also reflected in their flat career structure. Many of the nurses in our study were in the process of advancing their career (re-entering nursing after working outside the field or in practice reception, for example), but more experienced, career-path nurses in this study were already noting that there was limited structure to advance their careers in general practice. A formal career path for practice nurses, including progression to nurse practitioner status, would support retention of nurses with advanced skills in general practice

Organisational development of general practice. The better the organisational management in general practice, the more the practice can engage with new models of care provision including collaborative work between nurses and GPs. Good management of general practices is key to understanding employer obligations, and in constructing flexible responsible practices that can maximize the skills of all their workers. As practices become more able organisations with sound human resource management, professional development and risk management practices for all staff, the more they are likely to be seen as employers of choice by nurses and other health professionals. This is especially important when considering that many health professionals who have traditionally been salaried and employed by large health organisations (as opposed to small businesses) have established expectations about the obligations and responsibilities of employers, and do not reap the benefits of business ownership and financial success which are generally available to GPs. This study found that partnering of Divisions with general practices enabled them to access tailored organizational support, and advocates that Divisions continue this role, particularly in supporting practice managers.

Professional development of nurses. The professional support provided through Divisions for nurses is an important feature of the Australian health care landscape. A similar system does not exist in the National Health Service, the USA, New Zealand or Canada. Divisional support workers (who not infrequently are nurses themselves) offer ongoing outreach and professional support for nurses as well as GPs. Professional bodies such as the Australian Practice Nurses Association (APNA) the Royal College of Nursing, Australia (RCNA) and the Australian Nursing Federation (ANF) have also become increasingly involved in the educational terrain for practice nurses. This unique infrastructure element is vital for the ongoing professional development of nurses, and needs to continue develop in line with the expansion of roles and career development opportunities.

ENHANCING PHYSICAL INFRASTRUCTURE TO SUPPORT NURSING

Restrictions on space limit role, scope and numbers of nurses. This is especially evident in urban practices where space is often a more limited commodity. Many nurses have rooms in the treatment room, which locates them at the busy hub of the general practice. However, as nurses take on enhanced clinical, organiser and quality control roles, it is likely that they will *also* need a room of their own. Urban GPs in our study had often retrofitted their practices from existing buildings before they had hired a nurse or had extended her roles. Although some rural practices have been able to build specific premises, often using private/public funding models, urban practices will have difficulty meeting the need to ensure the nurse has a suitable workspace without specific support.

SUMMARY: POLICY RECOMMENDATIONS

To enhance the clinical role of nurses:

The Department of Health and Ageing should

1. Iteratively expand the profile of remuneration strategies for practice nurses to allow for value-added role expansion, and especially consider unstructured approaches that are not linked to specific activities - such as extending the PIP incentive to all practices.
2. As an initial step, include in the Medicare Benefits Schedule a preventive care item through the Enhanced Primary Care program, addressing prevention of obesity and lifestyle diseases.
3. Seek greater clarification of the nursing indemnity issues, and support nursing representative bodies to negotiate appropriate, low-cost indemnity packages that enable extended roles for general practice nurses.

Organisational bodies for nurses and general practices should

4. Negotiate appropriate, low-cost indemnity packages that enable extended roles for general practice nurses

To enhance the educative role of nurses:

Department of Health and Ageing should

1. Through the Australian General Practice Training Program explore ways of formally incorporating nurses as educators into the training program for general practice registrars. This may include structuring a practice incentive payment around nursing preceptorship, analogous to that received for GP preceptorship. Particular strengths for nurses to focus on in education would be quality systems, monitoring, and safety in general practice.

Universities should

2. Through University Departments of General Practice, formally recognise the role of nurse-preceptors for medical students undertaking placements in general practice
3. Through University Schools of Nursing, provide formal support for general practice based nurse-preceptors for nursing placements

Divisions should

4. Dissemination via practice nurses of quality improvement initiatives for general practices. This may include clinical updates, audits, and emerging issues such as infectious diseases.

To enhance recruitment and retention of nurses in general practice:

Nursing and general practice organisations should

1. Elaborate and promote a national salary structure for practice nurses

Organisational bodies, Divisions, and the Department of Health and Ageing should

2. Develop a formal career path for practice nurses, from entry level vocational training to advanced practice, and including progression to nurse practitioner status
3. Expand continuing professional development programs for nurses in general practice

Divisions should

4. Provide organizational development support for practices, to support better inter-professional collaboration within the practice

To enhance the physical infrastructure of general practices to support nursing:

The Department of Health and Ageing should

1. Investigate infrastructure funding to urban as well as rural practices to support further retrofitting or expansion to accommodate enhanced nursing work. This may consist of an expanded treatment room, or a nurse consulting room which could double as a teaching room for nurse educators and preceptors.

REFERENCES

- ⁱ Van Der Weyden M. 2003. Australian General Practice: time for renewed purpose. **MJA**; 179 (1) 6-7
- ⁱⁱ Watts I.F., E. Hutchinson, R. Pascoe, T. Whitecross, L. Snowden, T., 2004. **General Practice Nursing in Australia**. Melbourne: Royal Australian College of General Practice/Royal College of Nursing Australia.
- ⁱⁱⁱ Australian Medical Association. 2005. **AMA Policy Statement: General Practice Nurses**. AMA, Melbourne.
- ^{iv} Cheek J, Price K, Dawson A, Mott K, Beilby J, Wilkinson D. 2002. **Consumer perceptions of nursing and nurses in general practice**. Canberra: Commonwealth of Australia.
- ^v Hegney D, Price K, Patterson E, Martin-McDonald K, Rees S. 2004. Australian consumers' expectations for expanded nursing roles in general practice. **Australian Family Physician**; 33(10):845-848.
- ^{vi} Australian Divisions of General Practice. 2004. **National Practice Nurse Workforce Survey Report 2003**. Canberra: ADGP.
- ^{vii} Australian General Practice Network. 2008. **National Practice Nurse Workforce Survey Report 2007**. Canberra: AGPN.
- ^{viii} Willis E, Condon J and Litt J. 2000. Factors impacting on shared care working relationships between practice nurses and general practitioners: a literature review. **Contemporary Nurse**; 9: 120-131
- ^{ix} Tolhurst H, Madjar L, Schultz L, Schmidt A. 2004. Nurses in urban and rural general practice. Who are they and what do they do? **Australian Family Physician**; 33: 185-88.
- ^x Bonawit V and Watson L. 1996. Nurses who work in general medical practices: a Victorian survey. **Australian Journal of Advanced Nursing**; 13(4): 28-34,
- ^{xi} Patterson E, Del Mar C, Najman J. 1999. A descriptive study of nurses employed by general practitioners in south-east Queensland. **Australian Journal of Advanced Nursing**; 17(2):13-20.
- ^{xii} McKernon M and Jackson C. 2001. Is it time to include the practice nurse in integrated primary health care? **Australian Family Physician**; 31: 610-5,.
- ^{xiii} Condon J, Willis E, Litt J. 2000. The role of the practice nurse. An exploratory study. **Australian Family Physician**; 29(3): 272-7,
- ^{xiv} Patterson E, Del Mar C, Najman J. 1999. Nursing's contribution to general practice: general practitioners' and practice nurses' views. **Collegian**; 6(4):33-9,
- ^{xv} Patterson E. and McMurray A. 2003. Collaborative practice between registered nurses and medical practitioners in Australian general practice: moving from rhetoric to reality. **Australian Journal of Advanced Nursing**; 20 (4): 43-48
- ^{xvi} Lockwood A and Maguire F. 2000. General practitioners and nurses collaborating in general practice. **Australian Journal of Primary Health Interchange**; 6(2): 19-29.
- ^{xvii} Taylor J, Blue I, Misan G. 2001. Approach to sustainable primary health care service delivery for rural and remote South Australia. **Australian Journal of Rural Health**; 9(6):304-310
- ^{xviii} Walker L. 2006. Practice nurses. Working smarter in general practice. **Aust Fam Physician**; 35(1/2).
- ^{xix} Halcomb, E.J, Patterson E, et al. 2006. Evolution of practice nursing in Australia. **Journal of Advanced Nursing**; 55(3): 376-388.
- ^{xx} Keleher H, Joyce CM, et al. 2007. Practice nurses in Australia: current issues and future directions **Medical Journal of Australia**; 187(2): 108-110
- ^{xxi} Wiseman H. 2007. Sharing the Load. **Australian Doctor** 9th November, 2007, pp 19-22.
- ^{xxii} Halcomb EJ, Davidson PM, et al. 2005. Nursing in Australian general practice: directions and perspectives. **Aust Health Rev**; 29(2): 156-66.
- ^{xxiii} Centre for General Practice Integration Studies. 2001. **Paper No. 2: Practice Nurses. Developments in Primary Health Care Integration**. Sydney: University of NSW.
- ^{xxiv} Halcomb, E. J., P. M. Davidson, et al. 2008. Nurses in Australian general practice: implications for chronic disease management. **Journal of Clinical Nursing**; 17(5a): 6-15.
- ^{xxv} Keleher H, Parker R, Abdulwahad O, Francis K, Segal L, and Dalziell K. 2007. **Review of Primary & Community Care Nursing**. Stream 6 Reports, Australian Primary Health Care Research Institute, Canberra. http://www.anu.edu.au/aphcri/Domain/Workforce/Keleher_1_final.pdf, accessed 4/6/09
- ^{xxvi} Wagner E, Austin B and Von Korff M. 1996. Organizing Care for Patients with Chronic Illness. **The Millbank Quarterly**;74:511-534
- ^{xxvii} Renders C M, Valk GD et al. 2001. Interventions to improve the management of diabetes mellitus in primary care, outpatient and community settings. **Cochrane Database of Systematic Reviews** 2001(1): CD001481.
- ^{xxviii} Taylor SJC, Candy B et al. 2005. Effectiveness of innovations in nurse led chronic disease management for patients with chronic obstructive pulmonary disease: systematic review of evidence. **BMJ**; 331(7515): 485.
- ^{xxix} Stille CJ, Jerant A et al. 2005. Coordinating care across diseases, settings, and clinicians: a key role for the generalist in practice. **Ann Intern Med**; 142(8): 700-708.
- ^{xxx} Apker J, Propp KM, Ford WSZ, Hofmeister N. 2006. Collaboration, credibility, compassion, and coordination: Professional nurse communication skill sets in health care team interactions. **Journal of Professional Nursing**; 22(3): 180-189.
- ^{xxxi} ³⁸ Rothman AA, Wagner EH. 2003. Chronic illness management: what is the role of primary care? **Ann Intern Med**; 138(3): 256-261.
- ^{xxxii} Buchan, J. 2000. Planning for change: developing a policy framework for nursing labour markets. **Int Nurs Rev**; 47(4): 199-206.
- ^{xxxiii} Richards A, Carley J et al. 2000. Skill mix between nurses and doctors working in primary care-delegation or allocation: a review of the literature. **International Journal of Nursing Studies**; 37(3): 185.
- ^{xxxiv} O'Neill M, Cowman S. 2008. Partners in care: investigating community nurses' understanding of an interdisciplinary team-based approach to primary care. **Journal of Clinical Nursing**; 17(22): 3004-11.

- ^{xxxv} Bower P, Campbell S, Bojke C, Sibbald B. 2003. Team structure, team climate and the quality of care in primary care: an observational study. **Qual Saf Health Care**; 12(4): 273-9.
- ^{xxxvi} Parker R, Keleher H. 2008. Stream 10 Travelling Fellowship: **Preparing nurses for primary health care reforms**. Faculty of Health, University of Canberra & Department of Health Science, Monash University. Accessed at http://www.anu.edu.au/aphcri/Spokes_Research_Program/Stream_Ten.php on 4/6/09
- ^{xxxvii} Campbell SM, McDonald R, et al. 2008. **The Experience of Pay for Performance in English Family Practice: A Qualitative Study**. *Ann Fam Med* 6(3): 228-234.
- ^{xxxviii} Maisey S, Steel N, et al. 2008. **Effects of payment for performance in primary care: qualitative interview study**. *J Health Serv Res Policy* 13(3): 133-139.
- ^{xxxix} Geertz C. 1973. "Thick Description: Toward an Interpretive Theory of Culture" In: **The Interpretation of Cultures: Selected Essays**. New York: Basic Books.
- ^{xl} Marcus GE. 1995. Ethnography in/of the world system.: the emergence of multi-sited ethnography. **Annual Reviews of Anthropology**; 24: 95-117
- ^{xli} Lansing JS. 2003. Complex adaptive systems. **Annual Review of Anthropology**; 32: 183-204.
- ^{xlii} Dick P. 2001. The NHS as an ecosystem. **Br J Gen Pract** 2001; 51: 248-9.
- ^{xliii} Paley J. 2007. Complex adaptive systems and nursing. **Nursing Inquiry**; 14(3): 233-242
- ^{xliv} Crabtree, B. 2003. Primary care practices are full of surprises! **Health Care Manage Rev**; 28(3): 279-83.
- ^{xxv} Siltanen J, Willis A, Scobie, W. 2008. Separately together: Working reflexively as a team. **Int Journal Social Research Methodology**; 11(1): 45-61
- ^{xlvi} Greenwood, D. J. & Levin, M., 1998. **Introduction to action research: social research for social change**. Thousand Oaks, Calif.: Sage Publications.
- ^{xlvii} Deming, W. Edwards. 1986. **Out of the Crisis**. MIT Center for Advanced Engineering Study
- ^{xlviii} McIlvain H, Crabtree B, Medder J, Stange KC, Miller WM. 1998. Using Practice Genograms to Understand and Describe Practice Configurations. **Fam Med**;30(7):490-6
- ^{xlix} Greenhalgh T, Robert G, Bate P, Macfarlane F, Kyriakidou O. 2005. **Diffusion of Innovations in Health Service Organisations: a systematic literature review**. Blackwell BMJ Books, London.
- ^l QSR International Pty Ltd. **NVivo qualitative data analysis software**, Version 7, 2006.
- ^{li} Parsons T. 1951. **The Social System**, London: Routledge, Reprinted 1991
- ^{lii} Duffield C, Roche M, O'Brien-Pallas L et al. 2007. **Gluing It Together: Nurses, Their Work Environment and Patient Safety**. Final Report, July 2007. Sydney: Centre for Health Services Management, UTS.
- ^{liii} Australian Institute of Health and Welfare. 2004. **Rural, regional and remote health in Australia: a guide to classifications**. Rural series no. 4. Cat. No PHE 53. Canberra: AIHW.
- ^{liiv} Australian Government Department of Health and Ageing. 2008. Practice Nurses and/or Allied Health Workers in Urban Areas of Workforce Shortage – Guidelines [document] http://www.medicareaustralia.gov.au/provider/incentives/pip/files/ma_guidelines_for_practice_nurses_allied_health_workers_for_urban_areas.pdf. Undated; Accessed 12 December 2008.
- ^{liiv} Australian General Practice Network.2008. **National Practice Nurse Workforce Survey Report 2007**. Canberra: AGPN.
- ^{livi} Australian Government Department of Health and Ageing. MBS items (10998, 10999) for pap smears taken by a practice nurse in a regional, rural or remote area [document] http://www.medicareaustralia.gov.au/provider/incentives/files/mbs_items_for_pap_smears_nov_2005.pdf. Last updated November 2005; accessed 12 December 2008.
- ^{liiv} Australian Government Department of Health and Ageing. MBS items (10994, 10995) for pap smears and preventative checks taken by a practice nurse on behalf of a general practitioner [document] <http://198.66.226.232/forms/nurses/MBS%20items%20for%20Pap%20smears%20%20preventive%20checks%20-%20Nov%2006.pdf> last updated November 2006; Accessed 12 December 2008.
- ^{liiii} Degeling, P, Kennedy J, et al. 2001. Mediating the cultural boundaries between medicine, nursing and management - the central challenge in hospital reform. **Health Services Management Research** 2001; 14: 36-38.
- ^{lix} ⁶ Horsburgh, M, Perkins R, et al. 2006. The professional subcultures of students entering medicine, nursing and pharmacy programmes. **Journal of Interprofessional Care**; 20(4): 425 - 431.
- ^{lix} Lanzoni S. 2007. An epistemology of the clinic: Ludwig Binswanger's phenomenology of the other. **Critical Inquiry** 2007; 2003-2004.
- ^{lxi} Phillips CB, Dwan K, Pearce C, Hall S, Porritt J, Yates R, Sibbald B. 2007. Time to talk, time to see: changing microeconomies of professional practice among nurses and doctors in Australian general practice. **Contemporary Nurse**; 26:137-144.
- ^{lxii} Besner J. 2005. The RN role in patient safety. **Alta RN**; 60(5): 3.
- ^{lxiii} Mayo A. M., Duncan D. 2004. Nurse perceptions of medication errors: what we need to know for patient safety. **J Nurs Care Qual**; 19(3): 209-17
- ^{lxiv} Royal Australian College of General Practitioners. 2007. **RACGP Standards for General Practice**. South Melbourne: Royal Australian College of General Practitioners.
- ^{lxv} Rosemann T, Joest K, et al. 2006. How can the practice nurse be more involved in the care of the chronically ill? The perspectives of GPs, patients and practice nurses. **BMC Family Practice** 2006;7: 14
- ^{lxvi} National Health Performance Committee. 2001. **National Health Performance Framework Report**. Brisbane: Queensland Health.
- ^{lxvii} Australian Commission on Safety and Quality in Health Care. 2008. Submission to the National Health and Hospitals Reform Commission: Including a safety and quality framework for the future. Sydney: Australian Commission on Safety and Quality in Health Care
- ^{lxviii} Williams, A. M. 1998. The delivery of quality nursing care: a grounded theory study of the nurse's perspective. **Journal of Advanced Nursing**; 27(4): 808-816.

- ^{lxix} Francke AL, Smit MC, de Veer AJ, Mistiaen P. 2008. Factors influencing the implementation of clinical guidelines for health care professionals: a systematic meta-review **BMC Med Inform Decis Mak.** 2008;8:38
- ^{lxx} Carlsen B, Glenton C, Pope C. 2007. Thou shalt versus thou shalt not: a meta-synthesis of GPs' attitudes to clinical practice guidelines. **Br J Gen Pract.**; 57(545):971-8
- ^{lxxi} McManus S, Seville E, Brunsdon D, Vargo J. 2007. **Resilience management: A framework for assessing and improving the resilience of organisations.** www.resorgs.org.nz. Accessed 28 May 2007.
- ^{lxxii} Pearce C, Phillips C, Hall S, Sibbald B, Porritt J, Yates R, Dwan K, Kljakovic M. 2009. Contributions from the lifeworld: quality, caring and the general practice nurse. *Quality in Primary Care* 17;1:5-13
- ^{lxxiii} Rodgers B. L. 2005. **Developing Nursing Knowledge : philosophical traditions and influences.** Philadelphia: Lippincott Williams & Wilkins.
- ^{lxxiv} Australian General Practice Network. 2008. **National Practice Nurse Workforce Survey Report 2007.** Canberra: AGPN. Available from: <http://www.generalpracticenursing.com.au/site/index.cfm>. Accessed 18 December 2008.
- ^{lxxv} Garside P. 2004. Are we suffering from change fatigue? **Qual. Saf. Health Care**; 13: 89-90
- ^{lxxvi} Valusek JR. 2007. The change calendar: a tool to prevent change fatigue **Jt Comm J Qual Patient Saf**;33(6):355-60
- ^{lxxvii} US Department of Health and Human Services, Centers for Disease Control. **Epi Info Version 6.** Atlanta, 2008.
- ^{lxxviii} Greenhalgh T. 2008. Role of routines in collaborative work in healthcare organizations **BMJ**;337:a2448
- ^{lxxix} Roxon N. 2008. "The Light on the Hill: History Repeating". **Annual Light on the Hill address.** 20th September 2008. <http://www.alp.org.au/media/0908/speheag200.php> Accessed 18th December 2008
- ^{lxxx} Hudson B. 2002. Interprofessionalism in health and social care: the Achilles heel of partnership? **Journal of Interprofessional Care**; 16: 7-17.
- ^{lxxxi} Cornelissen J. Metonymy in language about organizations: a corpus-based study of company names. **Journal of Management Studies** 2007; 45: 79-99.
- ^{lxxxii} Caldwell B (undated) Better safe than sorry. Why practice nurses should consider having their own professional indemnity insurance. Australian Practice Nurses Association. http://www.scdgp.org.au/icms_docs/25826_APNA_Professional_Indemnity_Article_-_Better_Safe_Than_Sorry.pdf. Accessed 29 December 2008.
- ^{lxxxiii} Phillips C, Pearce C, Hall S, Kljakovic M, Sibbald B, Dwan K, Porritt J, Yates R. 2009. Enhancing care, improving quality: the six roles of the general practice nurse. *MJA* in press.
- ^{lxxxiv} National Health & Hospital Reform Commission. 2008. A healthier future for all Australians: Interim Report December 2008. Australian Government, Canberra. Accessed at [http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/BA7D3EF4EC7A1F2BCA25755B001817EC/\\$File/CHAPTER%202.pdf](http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/BA7D3EF4EC7A1F2BCA25755B001817EC/$File/CHAPTER%202.pdf) on 24 June 2009.