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APCHRI TRAVELLING FELLOWSHIP REPORT STREAM 10

SKILL MIX TRANSLATION; TOP DOWN OR SKILL MIX TRANSLATION: TOP DOWN OR BOTTOM UP? AN INTERNATIONAL COMPARISON

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BACKGROUND

Primary health care skill mix is one of the major issues now occupying the mindsets of Australian clinicians, policy makers and researchers alike. The change of Federal government in late 2007 has resulted in increased ministerial interest in the diversification of skills within primary care and led to a number of enquiries into ways this might be achieved. The APHCRI Stream Six review entitled "Optimising skill mix in the primary care workforce for the care of older Australians" identified skill mix changes that could be implemented to meet the challenges of an ageing population with a rising incidence of chronic disease [1] and was commissioned and completed prior to the 2007 election.

The conceptual framework devised by Bonnie Sibbald *et al.* [2] was used to explore skill mix using task substitution, delegation, enhancement and innovation as parameters of skill mix change. Key findings of improved adherence to guidelines and patients' physiological measures of disease, with both nurses and pharmacists substituting for GPs, when providing health promotion or disease management for chronic disease. There was no evidence of reduced health service use. Enhanced nursing practice roles were shown to have improved patient's adherence to treatment, improved quality of life and their functional status.

The Sibbald *et al.* (2006) review found only four Australian studies with experimental evidence for skill mix change. These Australian studies involved Aboriginal health workers in a rural location and three pharmacist projects.At a practice level there was descriptive evidence of uptake of innovative primary health care skill mix in rural areas at a higher rate than urban areas. The rural stakeholders interviewed reported significant skill mix change occurring at the grassroots or practice level with a number of innovations being piloted. Stakeholders described skill mix innovation such as therapy assistants, Aboriginal health workers [3], remote paramedics [4] and physician assistants [4, 5]. These role changes tended to arise out of need and were supported informally at the practice level. New programmes supporting physician assistant training and remote paramedics are being piloted at Mt Isa Centre for Rural and Remote Health and James Cook University in Queensland [6].

Professional groups have been heavily engaged in the debate whenever skill mix change is mentioned. Nursing organisations, medical student groups and doctor's professional organizations have been quick to question potential role changes [4, 7] and the development of new health worker roles.

In spite of the health professional debate at a policy level there is increasing interest in skill mix in particular as a solution to increasing workforce shortages [8]. The 2005 report by the Productivity Commission [9] suggested the establishment of a workforce improvement agency to "support innovation and objectively evaluate, facilitate and drive those skill mix changes of national significance". This new body "Health Workforce Australia", is working on new registration and accreditation legislation as well as commencing projects to explore role re-design, initially in aged care and rural and remote settings [10]. More recently the National Hospitals and Reform Commission's interim report recommends better use of workforce capabilities and suggests the development of a framework for competency based practice [11] .This is also an area being considered by the Primary Health Care Strategy Review and the national preventive care taskforce.

While Australia sees practice level changes particularly notable in rural areas, translation of these skill mix changes in a more systematic way across other sectors of the health system is yet to occur. The development of collaborative models of training, definition of scope of practice, competencies, licensing and supervision requirements have occurred in innovative models at the practice level [1]. Systemic barriers such as funding mechanisms, indemnity, and attitudinal blocks between professionals [12] have contributed to the lack of translation of these models to the wider health system [8, 13].

Other countries appear to have moved beyond the current Australian perspective to explore the policy and practice implications to develop change at the system, professional and practice level.

This leads us to the question why the experiences in other countries might be different? Are there issues of a system, professional and practice based nature that are facilitating or preventing change? How have other countries tackled the skill mix issue, and how sustainable are the skill mix changes they have made[14][15, 16].? It is important that skill mix change is context specific and the Stream 6 review looked primarily at older Australians in ambulant primary health care. We noted differences in rural and urban environs at a practice level and wondered whether these differences might be experienced in international settings.

AIMS

- To reflect on the experience of skill mix translation, concentrating on the systemic /professional and practice based dimensions in two locations: the UK and Canada.
- To compare and contrast policy-driven skill mix change with current experience in Australia, The focus of enquiry being those nurses substituting care in Canada (Nurse Practitioner NP) and UK (advanced practice nurse APN)
- To understand the operations of linkage and exchange between researchers and policy makers
- What are the dimensions of system, professional and practice level policies and practices that have allowed skill mix change to occur?
- Given the more “ground up” approach from rural areas, how can these innovations be supported to allow innovation to become a more systemic reality?
- What are the components necessary for a successful and sustainable model?

DEFINITIONS

Internationally there are:

Nurse practitioners: In the Canadian context this refers to a qualified nurse with Masters level qualifications.

Advanced practice nurses: In the UK context this refers to a qualified nurse with specialist qualifications, but not necessarily to masters level.

In Australia there are:

Practice nurses: A practice nurse is a registered nurse or an enrolled nurse who is employed by, or whose services are otherwise retained by, a General Practice[17].

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

Australian Nursing and Midwifery Council (ANMC 2006) [18]

Remote area nurses: A registered nurse whose day-to-day practice encompasses all or most aspects of primary healthcare. This most often occurs in an isolated or geographically remote

location. The nurse is responsible either solely or as a member of a team for the continuous co-ordinated and comprehensive healthcare in that location (College of Remote Area Nurses Association 1993)[19]

METHOD

A series of semi-structured interviews and discussions were undertaken with key researchers, clinicians and policy makers from the National Primary Care Research and Development Centre at the University of Manchester and the University of Northern British Columbia Prince George. Contact was also made with Professor Jane Farmer (University of Inverness) to discuss some current issues with skill mix in the Scottish rural environ.

The locations chosen have been at the cutting edge of skill mix facilitation in Canada and the UK. In the UK the role of nurses, particularly in mental healthcare and chronic disease management [20, 21], has been the focus of research and evaluation of skill mix interventions at the National Primary Care Research and Development Centre, University of Manchester. They have been involved in the evaluation of the "Evercare" trials assessing the role of nurse case managers [22, 23], the evaluation of the National Service Improvement Frameworks [24, 25] and the Quality and Outcomes Framework which has been a major driver of skill mix change [26]. The Health Services Management Centre, University of Birmingham has looked at the role of different health professionals in the management of people with long term conditions. [27]

There has also been involvement in projects looking at retention and distribution of GP workforce, and how changing the skill mix of the workforce affects health care quality and costs [16, 28]. The existing links with Professor Sibbald for Stream 6 provided a unique opportunity to build on the findings with insights from UK researchers and policymakers into translational barriers and facilitators. The two practices visited were contrasting, one being owned by a practice principal in a village and the other a university-auspiced large urban practice in a relatively under serviced city area.

In Canada, at the University of Northern British Columbia skill mix change is being evaluated in a rural and regional setting. The Rural and Northern Research program is evaluating the use of nurse practitioners and physician assistants as part of integrated primary health care teams as well as work looking at primary health care models and roles. There is also a programme of research into roles of nurse practitioners. Practices were visited at Fraser Lake and Bella Coola.

RESULTS

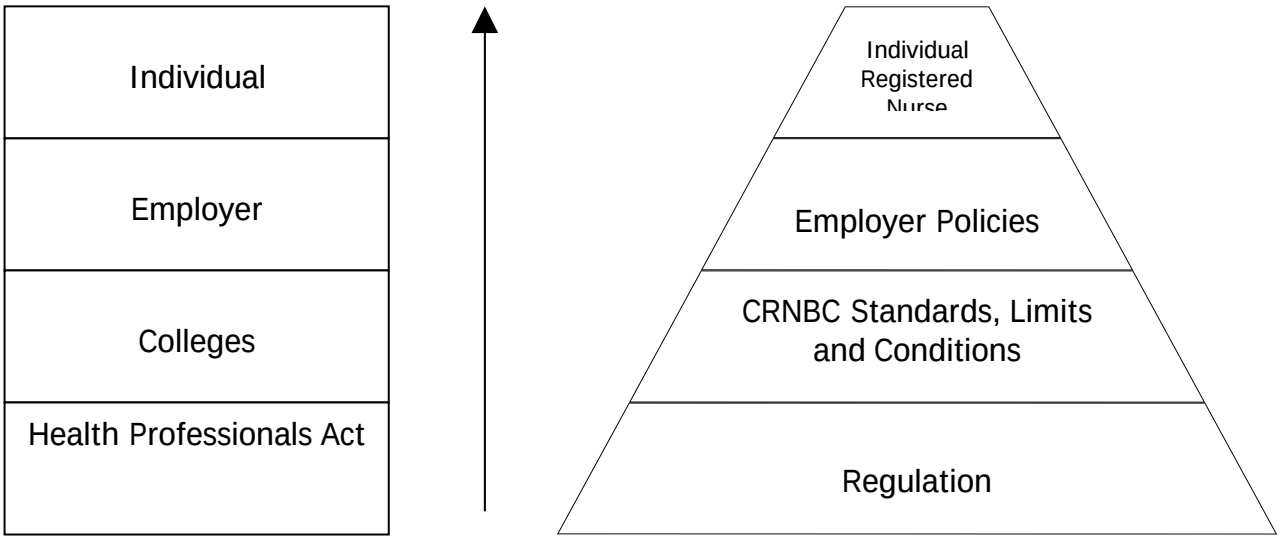
One Canadian approach to integration of nurse practitioners

Canada has similar demography to Australia with quite geographically dispersed small populations. Northern British Columbia is home to a sizable Aboriginal population who live in many small communities across British Columbia (BC), particularly in the north. The population includes young people with a need for maternity and procedural services. Access to which is complicated by climate and geography, which may reduce retrieval options. In addition, high levels of chronic disease combined with poor access to health services has resulted in poor health outcomes with the worst being amongst Aboriginal communities.

The northern BC area has a regional referral hospital and many dispersed small communities served by general practice clinics and hospitals. It has a new medical school, undergraduate and postgraduate nursing courses including a Masters of Nursing in Family Nurse Practitioner or an Academic Master of Science in Nursing stream, that commenced in 2003. The overall goal of the nurse practitioner stream was to improve health outcomes through enhanced access to primary health care and filling the gaps that exist in the Canadian health care system. Streams offered include a primary care practitioner to provide generalist primary care services.

The Canadian medical system has a fee for service arrangement but patient co-payment is illegal. All Canadians who hold a Social Service Card are entitled to care. In more remote areas there has been the option of an Alternate Payments Funding system for remunerating medical practitioners (the equivalent of a cashing out of Medicare in Australia to salary practitioners) to better support smaller rural communities, particularly where fee for service drivers were unlikely to encourage medical practitioners to work. This model recognizes hospital work and on-call as part of a salary package, and include options to address things such as housing. These funding arrangements have not spread to other areas, and have remained focused on areas of poor recruitment and retention, particularly very remote areas where the need has arisen. Most primary care nurse practitioners have been employed within these locations, and not in fee for service locations. The gazetting of the Health professionals Act in 2001, has allowed overlapping scopes of practice with competencies being closely defined by professions in association with Ministry of Health representation. The separate colleges are responsible for enforcement of standards, codes of practice and conditions for their professions, and the employer is responsible for OH and S issues and context. Individuals remain responsible for continuing professional development to validate their ongoing competence [29].

Controls on Practice (Canada) Accessed from http://www.crnbc.ca/NursingPractice/Requirements/ScopeofPractice.aspx[30]



Indemnity is covered by individual practitioners and nurse practitioners are seen to have autonomous practice. Indemnity costs are low.

The UNBC postgraduate nurse practitioner course is offered as a distance learning course but there are some required on-campus sessions. It was originally hard to access by existing practitioners due to on-site expectations but is now more accessible by distance. There are three streams offering one applicable to primary care in rural communities concentrating on generalist skills. It is two years full-time or four years part-time and costs approx $10 000 per annum. The course, similar to some of the Masters of nurse practitioner courses in Australia. This course is structured to learn inductive reasoning, a significant change. The shift from a protocol base to an interpretative base and understanding the underlying path physiology of disease incorporates general practice skills.

There are currently vacancies for nurse practitioners across the province. However, some of these are not being filled as some nurse practitioners are taking positions in acute and tertiary care settings rather than in the rural, remote or Aboriginal setting. This is also mirrored in Australia where 80% of nurse practitioners are choosing to work in metropolitan areas. Additionally, there are current issues around sustainability of funding, with initial establishment being grant based, and the need for health authorities to fund after this period. Wages are higher than for registered nurses in the region of CA $80-130,000. There are significant reaccreditation expectations. Nurse practitioners in British Columbia are authorized prescribers and have rights to refer patients. There is an evolving scope of practice with changing capacity and interests. Some wish to do more acute care, some more chronic disease management

There is still ongoing uncertainty around roles both between physicians and nurse practitioners and between other nurses and health care professionals. Some GPs are unsupportive of nurse practitioner activities within salaried practices. With little clarity amongst GPs of the extent of the potential role –the scope of practice remains a negotiated one within individual locations.

Manchester UK

The National Primary Care Research and Development Centre is a multi-disciplinary, academically independent centre, established by the Department of Health in 1995 to undertake a programme of policy-related research in primary care. The unit derives a significant funding from Government and has a large practice based network where primary care interventions and health service models can be piloted.

Current projects include collaboration with *Kaiser Permanente* in the USA on two projects, analysing data which they hold that is relevant to health policy issues in the UK. They have research data which will allow a longitudinal view of how quality of care and patient satisfaction has varied as primary care practices moved to larger multi-specialty teams in the 1990s in the US and then moved back to smaller teams subsequently with a differing mix of health professionals. They are also studying what happens to quality of care when indicators are taken out of a financial incentive package.

Observations from practice visits

Funding within the NHS has undergone very significant changes over the last 5 years with fundamental shifts in contractual arrangements between primary care trusts to practice entities rather than individual doctors. The advent of the Quality Outcome Framework (QOF) payments on top of practice payments with incentivized outcomes has moved more money into general practice and supported increased numbers of nurses. This is a very BIG carrot for GPs to make use of nurses. There has also been an increasing number of salaried rather then practice owning GPs.

Nurses acquire further competencies following their initial diploma or bachelor level nursing qualifications. Courses are sanctioned by the Royal College of Nursing .Independent nurse prescriber training is a minimum of 5 weeks face to face learning with another 12 days protected time becoming familiar with prescribing and support from a designated medical practitioner (within the general practice).

At a practice level there is almost universal uptake of electronic records and much effort in recall and reminder systems as practices are responsible for collection of large amounts of practice level data to meet QOF indicators.

In both practices there were advanced practice nurses with prescribing and referral rights. Both practices were fully computerized and were accredited teaching facilities.

LESSONS FROM THE VISIT

APHCRI 6 and other systematic evidence have shown that nurses and pharmacists can substitute certain roles with general practitioners with similar or improved patient satisfaction and health outcomes. However the optimal use of this role substitution is still being negotiated in the UK and Canada. At a policy level both Canada and UK have national primary health care policies and now legislation supporting an extended scope of practice for nurses, and in some cases pharmacists Nurses in the UK have no title protection so the nomenclature is confusing, The extended role of nursing in general practice might be fulfilled by a nurse with a masters degree, bachelor degree and competencies or a diploma plus a combination of competencies and experience. Confusion also exists in many jurisdictions about the difference in role between physician assistants and nurse practitioners[31].In the Australian context nurse practitioners are preferred to have masters qualifications however this is currently not mandatory. In UK and Canada, at a professional and systemic level education accreditation and certification have been organized and institutionalized to support these primary care policy positions. At the practice level however there remains much conjecture over roles and whether some nurse activities are a supplementation of care rather than substitution of care.[32] Nurses interviewed described their impact as often additional in providing regular structured chronic care programmes that were new and improved from those provided by GPs previously. Bonnie Sibbald noted that workload improvements for GPs and efficiency gains were only likely if doctors do focus on the tasks that they only can perform [33].In all locations visited, acute care workload was being shared with nurses doing a variable amount depending on confidence .Nurses tended to be doing most of the chronic disease management and health promotion activities.

Wilson in evaluating GP concerns noted three areas that may act as barriers to the development of the nurse practitioner role [34].They were Threats to GP status including job and financial security, confidence about nursing capabilities and scope of practice and structural and organisational barriers. These were echoed by practitioners in both countries and seemed major contributors to the variable substitutions being achieved.

1. THREATS TO GP STATUS INCLUDING JOB AND FINANCIAL SECURITY

It seems negotiation of roles at this practice level requires “buy in” from the existing staff as well as considerable flexibility on the part of the practitioner bringing the new skill set. Nurses felt they often had to “sell” their value to doctors and other health professionals although already certified as competent. Lead champions in the way of supportive doctors often provided the key to successful placements. In Fraser lake a small community in northern British Columbia the GP has been able to support and mentor the nurse practitioner and started innovative projects such as group consultations In the UK, practice principals were often more supportive when the value adding through QOF became evident, and keen to support the nurse providing chronic disease management and screening services. One nurse pointed out that her capacity to work to her scope of practice was influenced by her employers’ financial calculations as to the most remunerative area in which she could be deployed.

2. CONFIDENCE ABOUT NURSING CAPABILITIES AND SCOPE OF PRACTICE

There was articulated concern by some GPs that skills that had required medical school and post graduate training could be learnt in a post graduate 2 years Masters course or competency based course. These concerns related to complex diagnostic and therapeutic interventions or procedures that required knowledge bases of physiology, anatomy, pathology and biochemistry.

Confidence and competence was also reported by practitioners as changing with time so individual negotiation was required for mentoring and support [35, 36]. This process was seen

as not dissimilar to general practice registrar training and supervision. An overlap of up to 80% of GP skills was reported by practitioners in both countries with experienced nurses who have significant exposure to primary care environs and had passed competencies in prescribing ,For most, the skill set was seen as an evolving one requiring clinical supervision and support ,as the skills were used. In a report on the future of the NHS in the UK, Wanless et al (2002) [37] quoted suggested only 20-30% overlap and Lomas and Stoddart (?200) [38] suggested 40-90% overlap of competencies. What was obvious was that individual nurses had different interests and skills and the overlap and scope of practice was highly variable depending on location and capacity. In the two Canadian rural areas visited, nurse practitioners were not providing on-call services with GPs articulating that this contributed considerably to the physician burnout. This may have been a remuneration issue with the dual need for a nurse on-call and a "covering" physician for problems outside the nurse's scope of practice. Similar models such as this have been used in rural areas in Australia involving ambulance, nursing and medical personnel sharing on-call. This provides an Australian model for remote environments where there is by necessity already GP substitution.[39]

3. STRUCTURAL AND ORGANIZATIONAL BARRIERS

A supportive practice environs with good communication systems and an easily interrogated shared (electronic medical record) was seen as paramount. The new General Medical Contract 2004 and the need for accurate patient level data to satisfy the Quality Outcome Framework has been successful at improving data collection and the development of "intelligence on chronic disease"[26]. Both UK practices felt there was improvement in the amount and value of data now being collected at a practice level. The challenges of providing team based care were articulated with practitioners, both GPs and nurses, unsure as to whether the benefits of continuity of care could be transferred within a practice team [33, 40]. The consumers that were seen to be vulnerable to loss of continuity of care were those with severe mental illness and severe and multiple physical illnesses. Sibbald et al. [33] notes that as the number of staff in a team increases so does the transaction cost, as more time is spent in conferring with each other.

Also noted by practitioners were the following issues

Funding mechanisms

The strong message from clinicians was that the GMC (General Medical Contract) being with GP practices rather than individual doctors and the development of QOF has driven skill mix change in the UK. This has required a significant increase in funding into primary care. It has increased both the number of nurses and their skill level. Given that the money flows to the practice, there is anecdotal evidence that some GPs are not providing as much training to nurses, realising that some tasks can be done without extra training. This could lead to devaluing of post-graduate nurse education support from some GP practices. In Canada, the fact that funding for primary care came from fee for service income to GPs, salaried nurse practitioner positions and alternate payment plans(salaried positions for GPs) has made the development of sustainable integrated models more difficult. Where models of practice and funding sources can be pooled the decision about task transfer seems more straightforward when all have similar conditions and incentives.

Consumer attitudes

Consumers of care will need to be involved and educated around skill mix changes. Nurses in both UK and Canada described consumer resistance to their increasing role with the expectation that they could "see the doctor as well". Studies have shown increased patient satisfaction and a preference for the longer consultations provided by nurses [35]. Australian consumers expectations of practice nurses suggested they wished for choice and would not be happy to

see practice nurses taking any gate keeping role [41]. This study however only reflected practice nurses not the advanced skill set held by advanced practice nurses in Canada or UK.

The Australian Context

Policy positions are moving towards extending scope of practice for nurse practitioners and remote area nurses [11] .National registration with uniform standards and an approach to competencies and scopes of practice is being instituted. The move to a new model of registration and accreditation remains under construction, with concern being expressed by professional bodies (AMA,RACGPSpecialist colleges). Concerns surround a move to the Canadian-style Health Professionals Act where decisions about scope of practice can be made by Health Ministerial appointees with consultation with the professions. This is due to commence in July 2010. Proposals for alternate funding mechanisms other than traditional fee for service (MBS) are also in train [11] and the recent draft report of the Health and Hospitals Reform Commission suggesting equitable and flexible funding mechanisms and funding on the populations basis of health need. The Primary health care and Prevention task force discussion papers also suggest alternate payment options. Competency based frameworks; educational realignment, clinical placements and ongoing certification are all likely to be the province of the new National Health workforce Commission. There is no doubt the discussion above hinges on an available workforce with reasonable geographic distribution. These are both assumptions that may not be achievable in the short term As Australia addresses some of the policy and system barriers (the top down) there needs to be attention to the practice environ and there needs to be clarity of purpose (issues from the bottom up). Are we trying to increase the numbers in the primary care workforce to provide more comprehensive primary care so often being articulated in recent reviews [11] and policy documentation? This would involve supplementation of existing care with a greater emphasis on chronic disease management, health promotion and support to patient education or are we looking to more efficiently to use available workforce by substituting nurses for GPs. This required the development of overlapping skill sets. By understanding how much of the “job” is overlapping and how much is supplementary is important at the practice level. Once the main motivation to proceed is clarified then the change can be “sold” to the existing workforce and mechanisms negotiated and modelled about how the overlap, or supplementation should work. The principles of mutual respect, professional competence, responsibility and good communication skills will also be pivotal on successful skill transfer. In remote areas where there is already a high degree of GP substitution, the “catch up “ of policy and systemic enablers will be welcome to legalise the existing extended roles for many remote area nurses. Clinical support, ongoing CPD and recruitment and retention incentives will be important to the maintenance of this workforce.

Other practice enablers will include consumer education and improvements in IT and information management to enable. System enablers still requiring work will be indemnity, accessible education and training and ongoing certification and training-issues no doubt to be addressed by the new National health Workforce Commission. There is much to learn from the way the UK and Canada have gone about workforce redesign The close alignment of research to policy priorities, such as skill mix and workforce supports, has ensured a climate of reflective practice in the UK and a supported funding stream to health services research. In Canada the development of new courses and the need to work closely with the clinical practice setting has led to lead champions in practices and support to ongoing research effort. The opportunity exists to design Australian systems and practice that build on much of this fruitful effort and ensure that we support both the top down (policy enablers) as well as the “bottom up” or practice end (policy realities!) to ensure sustainable skill mix translation.

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