University/Hospital Collaborations to Promote Research and Evidence Based Practice in Clinical Environments

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Introduction

Evidence-based practice (EBP) has modest goals. It is about using evidence from clinical research, patho-physiological reasoning, caregiver experience and patient preferences to make decisions about best practice in a given clinical setting (Johnson & Griffiths, 2001; Rycroft-Malone et al., 2004). Although EBP has been promoted among health professionals for many years, few clinicians are familiar with the methods used to assess the evidence, and even fewer have completed research that contributes to the generation of evidence to support clinical decision making (Grol & Wensing, 2004). Research has made a major contribution to health care, particularly in technology led areas, for example: pharmacology, diagnostics and surgery. At the bedside, however, clinical decision making continues to reflect convention and tradition (Grol & Wensing, 2004; Rycroft-Malone et al., 2004)

Why then do so few clinical procedures demonstrate evidence from research and evidence of critical appraisal?

One reason for the theory/practice gap is that while EBP has been promoted among health professionals for many years, in reality few clinicians contribute to the development of evidence for their disciplines (Grol & Wensing, 2004; Johnson & Griffiths, 2001). The challenge for managers and educators in health is to develop evidence-based clinicians with the knowledge and skills to identify sources of evidence for their practice and to critically analyse the data (Kitson, Harvey, & McCormack, 2004). Until processes are developed to assist clinicians to be actively involved in generating evidence, evidence-based care may remain a philosophy that is not translated into clinical practice

This paper is based on my presentation at the 2007 Seoul National University Centennial Conference that focused on my experiences of collaborations between the University of Western Sydney (UWS) and hospitals in Western Sydney.

The School of Nursing at UWS is one of the largest nursing schools in Australia with around...
3,000 students, 60 full time academic staff and a large number of casual staff. The School of Nursing offers post-graduate course work programs at Graduate Diploma and Masters degree level and there is a strong Higher Degree Research program with 60 Doctor of Philosophy (PhD) and Masters by Research students enrolled currently. The School also co-hosts, with the Sydney South West Area Health Service (SSWAHS), the New South Wales Centre for Evidence Based Health Care (NSWCEBHC) which is the New South Wales Collaborating Centre of the Joanna Briggs Institute (JBI).

University/Health Service research collaborations in Western Sydney

In keeping with the theme of collaboration, this paper focuses on the strong research links that have developed between the UWS and area health services in Western Sydney. The School of Nursing established a model for promoting collaboration that could be adopted or adapted by other facilities to promote both research and teaching.

There are three main components of the collaboration strategy: 1) Clinical Professors of Nursing; 2) research centers located in major health facilities, and 3) adjunct appointments.

Clinical Professors of Nursing

The majority of Schools of Nursing in Australia have established Clinical Professor positions, referred to as Clinical Chairs, in collaboration with health services. The Clinical Professors are usually based in a health facility and the aim is to provide a clinical focus for nursing research and to encourage nurses from the clinical areas to engage in research.

The positions and supporting infrastructure are funded jointly by the partner tertiary education and health organizations, and while there are generic components of the role, the functions of each professor are determined by the priorities of the supporting education and health organisations. Supporting a Clinical Professor is a significant investment for the partner organisations, particularly the hospitals and as a consequence, the positions are established with varying levels of support.

The UWS currently has five Clinical Professors appointed to positions funded jointly by the UWS and area health services (AHSs) in Western Sydney. Each Clinical Professor is based at the health facility and is supported by a designated research centre that includes administrative staff, other researchers and Higher Degree Research students. The aim of these collaborations is to engage in multidisciplinary research with clinicians across the AHSs, with a particular focus on developing the research capacity of nurses. The professors assume all of the roles of a senior academic, and in addition take leadership roles in the health facilities.

The Clinical Professors appointed by UWS have diverse interests including midwifery, management of chronic disorders, palliative care, nursing services development, clinical leadership, patient safety and mental health. The Clinical Professors also have research collaborations with other professors in the School of Nursing in areas of aged care, women’s health, adolescent health, midwifery and child health. Although each Professor has a different research focus, the model that has been used to establish the position is similar. I will use my position as an example.
I was appointed Clinical Professor of Nursing and Director, South Western Sydney Centre for Applied Nursing Research (CANR) in 1999. CANR is a collaboration between the UWS and the Sydney South West Area Health Service (SSWAHS) and is based at Liverpool Hospital. The hospital is a tertiary referral and medical teaching hospital for the medical schools of the University of New South Wales and UWS, and provides clinical placements for nursing students from a number of Universities including the UWS. The Professor of Nursing has a mandate to facilitate research between academics at UWS and clinicians from various facilities across the SSWAHS.

There are four full time research positions and one administrative position at the CANR. Two of the research positions are funded jointly by UWS and the SSWAHS, and two are fully funded by SSWAHS. The administrative assistant is funded by SSWAHS. In addition, there are three project officers currently supported by project funding and three full-time PhD students. There are also four part time research students who are not based at CANR but are supervised by myself and other members of the research team. There are currently 13 research projects in progress.

The Clinical Professors have proved to be a very effective model to build research capacity in the School of Nursing and in the hospitals, as the research outputs demonstrate. Collectively the Clinical Professor and their teams published 58 peer reviewed journal articles, 16 books, monographs and book chapters, 70 conference presentations and editorials during 2006 and had new and on going research grants.

The ability of clinicians to meet with researchers and academics in their workplace has produced significant outcomes for the health service that may not have been achieved had the position and the supporting infra structure not been in place. The New South Wales Collaborating Centre of the Joanna Briggs Institute (JBI) is an example. The research utilisation activities of JBI are promoted across SSWAHS, raising awareness and encouraging clinicians to develop skills to identify, critique and adapt research to their clinical practice problems. The NSWCEBHC also promotes programs for clinical development in the participating hospitals to support clinicians to generate evidence based guidelines and strategies to implement research in their clinical areas.

**Expectations of Clinical Chairs**

The idea of having a researcher working in both academic and clinical settings is sound. However, successfully combining positions in organisations with divergent philosophies, priorities and performance indicators can compromise the potential of these positions unless the organisations clearly articulate the scope and functions of the position (Griffiths, 2007; Lumby, 1996).

Whether or not an organisation considers the appointment of a Clinical Professor to be successful depends on several factors. The first is the expectations of the partner organisations in establishing the position. Health facilities engage in these positions to build a research culture and promote EBP. Effecting organisational change of that magnitude is a challenge for one person to achieve, particularly if the catalyst for the partnership was to remedy issues in the facility, for example the reduction of adverse events involving nurses. The second factor is the extent of
commitment from partner organisations to maintain the positions and to provide adequate and appropriate infrastructure. The third factor is the stamina of the incumbent. Burnout commonly occurs and is frequently addressed by a professor moving to a clinical chair established by another organisation!

Research Centers

Research centers jointly funded by the UWS and health service partners have been established in three of the major hospitals in Western Sydney. The centres are designed to build on the strength of the professors based there and provide support to extend their research programs.

CANR Research Program

The CANR was established at Liverpool Hospital in 1994 to:

- provide the research infrastructure and expertise to complete research projects;
- provide training for clinicians in research synthesis and research utilisation;
- link nurse researchers with clinicians;
- complete clinical research projects; and
- provide research training for clinicians and Higher Degree Research students.

To meet those aims, the CANR has established two research streams: Primary Research and Research Synthesis and Utilisation. Within those streams, we have identified four primary research programs: patient safety; clinical practice; nursing services development; and EBP. The majority of projects in the primary research program are completed by the CANR team, although we do work with clinicians who have research experience and assist them to complete research projects and publish their findings. The Research Synthesis and Utilization program was established to enable clinicians who have little research experience to participate in projects and learn research skills by joining groups completing systematic reviews and developing evidence based guidelines.

Research synthesis is the completion of Systematic Reviews (SRs) which is a rigorous process for combining and reanalysing data from similar studies. To complete a SR, the researcher(s) analyses all of the relevant literature to provide evidence of the effectiveness, or otherwise, of a practice (Pearson, Field, & Jordan, 2007). In the United States of America, the term meta-analysis is used to describe a similar process. Two well known groups who publish systematic reviews are the Cochrane Collaboration based in the United Kingdom and the Joanna Briggs Institute based in Australia. Both groups have centres and groups in many countries of the world.

Clinicians identify the topics for the SRs and researchers from CANR work with a group of clinicians to complete the research and develop practice guidelines (Griffiths & Fernandez, 2002). The SSWAHS has funded a research position to work primarily on the SRs, although that researcher also works on other projects and is currently completing a Doctor of Philosophy degree at the UWS.

CANR has adopted the following process to guide the SR projects.

1. Clinicians identify a practice problem or issue
2. Researchers collaborate with clinicians to:
   a. develop the research question
   b. review literature
3. A clinician is seconded to CANR to work
with the researchers to complete the SR
4. The SR report is written by researchers
5. Researchers collaborate with clinicians to develop recommendations

To date we have published 14 SRs on the Cochrane Library and JBI Library and we currently have five in progress. A SR can also be one component of research to be completed for a Masters by Research or Doctor of Philosophy degree.

Research Utilisation is “...a process by which the products of research are applied to verify current practice or to change practice” (McCormack et al., 2002). The process requires clinicians to review the evidence and make decisions to adopt, adapt or reject research based on characteristics of the research and / or the local environment.

The research utilization program was established to enable researchers from the CANR to engage clinicians in the process of identifying evidence and using it to develop guidelines and change practice. The focus is on nurses using research undertaken by others rather than doing their own research.

**Promoting Practice Development in an Area Health Service**

Clinicians can change practice. To do so, however, requires support from all levels of the organisation (Kitson et al., 2004). Practice Development is a continuous improvement process that focuses on the context and the culture of care and the development of knowledge and leadership among clinicians (McCormack et al., 2002). This initiative aims to develop a framework to support practice development at the ‘coalface’.

The purpose of practice development is to provide increased effectiveness in patient-centred care by developing knowledge and skills, thus enabling nurses and healthcare teams to transform the culture and context of care through skilled facilitation and a systematic, rigorous and continuous process of change (McCormack et al., 2002).

The CANR team has recently established a project to form Practice Development Groups (PDGs) across the health service. The PDGs will provide leadership and support to assist clinicians to translate research into a format that is useful to and used by clinicians to support EBP. The PDGs will focus on developing evidence based guidelines and evaluating practice change. Underlying that prima facie role is the potential of the groups to change culture, develop leaders, provide education and assist skills acquisition.

Participation in a project will provide clinicians with opportunities to develop the skills, knowledge and attitudes to question practice and identify appropriate evidence to support practice change; qualities that identify evidence based practitioners among their peers. The PDGs will have core members and other clinicians will be involved for projects as appropriate. Senior nurse clinicians are central to the process and will take responsibility for part or entire projects as they develop their skills.

**Adjunct Positions**

Like many other universities, UWS has a process to recognize eminent clinicians and academics from outside the organisation, and formalise a link with an adjunct appointment. The UWS extends that process to recognise the
contribution made by exceptional clinicians and managers from the AHSs who are working closely with the UWS academics in teaching or research. Appointments are made at the level of Fellow, Senior Fellow, Associate Professor or Professor.

**Conclusion**

Evidence based clinicians are the future leaders of clinical practice change and should therefore remain at the forefront of clinical review. However, they will require supportive structures and technical support to actively engage in the discovery and implementation of evidence. Nurse academics are well placed to provide the technical support required. The challenge for practice based professions such as nursing is for academics, who are responsible for educating students and developing the body of knowledge through scholarship and research, to retain links with clinicians.

Schools of Nursing and health facilities across Australia have formal agreements to work together to provide infrastructure and other resources that support clinicians and academics to develop and implement best practice. The challenge for health facilities, if they are truly committed to becoming evidence-based facilities, is to develop and maintain procedures and processes that will assist clinicians in their endeavours as researchers and change agents in clinical settings.

**References**


Abstract

University/Hospital Collaborations to Promote Research and Evidence Based Practice in Clinical Environments

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Systems and processes to provide clinical education to students of nursing have been established between universities and health facilities in all countries where nurse education is tertiary based. However, systems and processes to link nurse researchers based in universities to their clinical colleagues are less well developed. When collaborations are established they are frequently based on personal networks, and while the rhetoric of the organizations encourages these collaborations, they are largely unrecognised by senior administrators in health facilities. The research is frequently “invisible” and the clinician researchers usually do not have access to appropriate infrastructure and other resources that are required to support large projects that have the potential to change practice across organisations. This situation influences the focus and scope of nursing research and limits opportunities for clinicians to be engaged in the generation of professional knowledge.

The University of Western Sydney (UWS) has taken a strategic approach to the development of collaborations for research and has linked with health services in Western Sydney to establish and maintain research centres and adjunct appointments. The partner organisations jointly fund the infrastructure of the centres which include a Professor, research assistant position(s) and administrative staff. Five Professors of Nursing have been appointed to positions in one of three nursing research centres.

This paper describes the approach established by the School of Nursing at UWS to build collaborations with clinical areas to promote research. This approach could be adopted or adapted by other facilities.

Key words: collaboration, evidence based practice, nursing research

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