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KEY IMPLICATIONS FOR DECISION MAKERS

Regulatory bodies must work together in harmonizing existing competency frameworks and consult with each other in the future development of their respective regulatory documents. **Regulatory bodies and unions** representing the three categories of nurses must work together to help their respective members become more informed about their own and their colleagues' roles in the health system.

Policy makers must address the role ambiguity that currently exists across the health professions. A clear understanding of professional roles and contributions is essential to appropriate health human resources planning, including planning for the right number and type of education seats.

Employers and managers must engage health professionals in discussion of distinct and shared responsibilities among team members to promote effective collaborative practice improve role clarity and enhance quality of care. Continuing education of the current workforce will be an important strategy in moving toward more effective teamwork in health care.

Educators have an important role to play in preparing future health professionals for collaborative practice. That will require that they have and are able to transmit accurate knowledge to their students about the roles and responsibilities of nurses and other providers in the health system.

Employers, regulatory bodies, educators, practitioners, unions and policy makers must engage in dialogue about strategies for improving the utilization of all health professionals. **Employers and managers** must employ effective change management strategies when introducing new staff mix models.

Health care organizations, policy-makers and agencies responsible for monitoring and reporting on health system performance must collaborate in addressing the current inadequacy of databases that allow linkage of unit or program level staff mix and contextual data to patient, provider and system outcomes.

EXECUTIVE SUMMARY

The term 'scope of practice' has been widely used in a number of recent health care reports ^{1, 2, 3} and professional documents, ^{4, 22} but it is seldom clearly defined, although a thorough understanding of the concept is obviously essential to effective utilization of the health workforce. In this study of nursing scopes of practice, differentiation was made between nursing roles (i.e. pre-defined expectations of nurses' contribution based on professional education and role) and role enactment (i.e. actual practice as delimited by legislation, employer policies, experience, context of practice, etc.).

The primary purpose in this study was to elicit nurses' (Licensed Practical Nurses [LPNs], Registered Nurses [RNs] and Registered Psychiatric Nurses [RPNs]) perceptions of the extent to which they are able to work to full scope and to identify perceived barriers and facilitators to optimizing their roles. Literature searches conducted prior to the study revealed no consistent use of the term and it was therefore considered important to understand how nurses themselves describe what it means to work to full scope and what they recommend as strategies that will enable them to be better utilized. Other members of the health care team were also interviewed to elicit their perceptions of nurses' roles and of similarities and differences between their roles and those of nurses.

The study was conducted in three health Regions – Calgary Health Region and Capital Health in Alberta, and Saskatoon Health Region in Saskatchewan. Patient health needs and the practice environment are known to significantly influence role enactment. ^{4, 22} Considerable efforts were thus made to collect descriptive data about population and contextual factors across the three sites, to examine their effect on descriptions of scope enactment and assess the practicality of collecting outcome data relevant to measurement of the impact of work redesign in subsequent research.

Quantitative data collection for this study proved to be a considerable challenge. Measuring the impact of staff mix changes or of changes in interprofessional roles requires the availability of patient and

provider data at a unit or program level, where the majority of staffing decisions are made. The difficulties encountered in achieving data comparability across the three sites on a number of the variables selected for this study highlighted substantial deficits in the databases currently available to inform unit or program level measurement of the impact of current and emerging models of collaborative practice on provider, patient and system outcomes.

More importantly, this research revealed substantial role confusion within nursing and between nursing and other professional groups employed in acute care settings. Further, it appears that role clarification and redesign of the work of health professionals, certainly within acute care but most likely across all care delivery settings, might well provide an opportunity to mitigate some of the workload pressures that are inhibiting professionals from working to their full scope of practice.

Clarifying roles will require a strong commitment to interprofessional and cross sector (i.e. practice, education, union, regulatory bodies and policy makers) collaboration in redefining the “unique” and “shared” contributions of each professional group, recognizing that substantial overlap exists in many of the activities they perform. Staff-mix decision-making for a specific unit, program or setting and effective long-term health human resources (HHR) planning are difficult to achieve if based simply on a review of the “competencies” or clinical skills that are shared among so many health professionals. In this research, nursing practice tended to be described more often on the basis of ‘functional tasks’ than ‘functional roles.’ The distinct differences that exist in the education, knowledge and skill base of the three regulated nursing groups should distinguish the roles they are expected to perform in providing nursing care. Those differences were not clearly articulated by participants in this study.

HHR planning should begin with an assessment of the most appropriate type of provider needed to carry out particular roles, given the current and emerging needs of the population and predicted changes that will occur in health care and in the external environment influencing health care delivery. The question

that must be asked is not “who can perform this set of tasks or activities?” but rather - “who should and why?” - given the context and population.

It would appear that role clarification should begin with an examination of commonalities and differences in the education of health professionals and a determination of the relevance of that education to employers responsible for appropriate utilization of health professionals and policy makers who fund the delivery of health care. Ultimately, the focus must be on ensuring that we prepare the right number and type of health professionals needed to meet emerging population health needs and achieve intended patient, provider and system outcomes.

CONTEXT

Numerous reports have highlighted the need to address the under-utilization of health human resources. ¹⁻⁴ Ensuring that nurses and other health providers are able to work to their full scope of practice is an important retention strategy, which is crucial to resolving workforce shortages. Achieving role optimization requires a clear understanding of the scope/roles of health providers as well as attention to the environment in which care is provided. Factors such as setting (e.g. acute care), context (e.g. leadership, complexity of the unit) and provider characteristics (e.g. staff mix, education, experience) influence the extent to which health professionals are able to fully enact their roles. ^{5, 6}

The primary purpose in this study was to elicit nurses' (Licensed Practical Nurses [LPNs], Registered Nurses [RNs] and Registered Psychiatric Nurses [RPNs]) perceptions of the extent to which they are able to work to full scope and to identify perceived barriers and facilitators to optimizing nurses' roles. Although the term 'scope of practice' is often referred to in policy and professional documents, it is difficult to find a consistent definition of the concept. It is therefore important to understand how nurses themselves describe what it means to work to full scope of practice and what they recommend as strategies that will enable them to be better utilized.

This research drew primarily on qualitative data obtained from interviews, although considerable quantitative data were also collected to describe the patient care units from which nurses and other providers were sampled. This health human resources research project is the first in a program of research that will continue to involve stakeholders in a number of health regions. The project lays the foundation for redesigning the work of nurses and other health professionals and for measuring the impact of job redesign on patient, provider and system outcomes. It was therefore important to examine the practicality of collecting some data related to outcome measurement across the three regions participating in the study.

Research Objectives

- To examine scope of practice enactment by different categories of regulated nurses.
- To identify barriers and facilitators to maximizing nursing scopes of practice.

- To assess the potential influence of the work environment on role enactment.
- To identify opportunities for redesigning work and optimizing role enactment.
- To document the practicability of collecting comparable data related to patient, provider and organizational variables known to influence role enactment and selected outcomes across settings.

Contribution of this Research

The literature search that preceded onset of this study and subsequent review of the literature (2002 to 2005) revealed that there has in fact been relatively little research on 'scope of practice' as a general concept. We found no evidence of prior research simultaneously examining and contrasting the roles of RNs, LPNs and RPNs. Research on scope of practice has primarily involved Registered Nurses and has tended to address specialist nursing roles, such as in oncology,⁷ acute care,⁸ pediatrics,⁹ pain management,¹⁰ sexual health,¹¹ heart failure clinics,¹² diabetes¹³ or outpost settings.¹⁴

Much of the research on nursing practice has focused on job satisfaction, burnout and the working conditions of nurses, but there is little evidence of prior research that has explicitly linked these factors to the underutilization of nurses. Although there has been a significant amount of research on nursing staff mix and patient outcomes in recent years,¹⁵⁻¹⁸ researchers in these studies have not addressed the utilization of nurses and appear to have simply taken as a given that nursing staff was appropriately utilized. The findings from the research reported herein would suggest that assumption is perhaps not always valid.

Key Messages and Implications (not listed in order of priority)

1) Limited consultation among regulatory bodies when addressing professional roles and developing competency frameworks and practice standards has resulted in substantial similarity in descriptions of professional competencies without clarifying whether differences in educational preparation actually translate into differences in competence or ability to meet particular role expectations.

- **Regulatory bodies** must work together in harmonizing existing competency frameworks and consult with each other in the future development of their respective regulatory documents.

2) There is substantial overlap in activities/tasks performed by nurses and other health professionals, but little concrete evidence that similarities and differences in the knowledge base (i.e. professional role) and expertise of members of the health team are explicitly factored into decision making about the most appropriate staff mix model, given the population served and the context of practice.

- **Managers** may benefit from more information about professional education and complementary roles of various health professionals, to help them make evidence-based staffing decisions.

- **Policy makers** must address the role ambiguity that currently exists across the health professions. A clear understanding of professional roles and contributions is essential to appropriate health human resources planning, including planning for the right number and type of education seats.

3) Nurses and other health professionals have poor understanding of the similarities or differences that exist in the preparation of the three groups of nurses and are relatively unaware of changes that have occurred in nursing education over the past several years. This leads to misinterpretation of the capabilities of professional colleagues and contributes to overall underutilization of the nursing workforce.

- **Regulatory bodies and unions** representing the three categories of nurses must work together to help their respective members become more informed about their own and their colleagues' roles in the health system.
- **Employers** must engage health professionals in discussion of distinct and shared responsibilities among team members to promote effective collaborative practice, improve role clarity and enhance quality of care. Continuing education of the current workforce will be an important strategy in moving toward more effective teamwork in health care.
- **Educators** have an important role to play in preparing future health professionals for collaborative practice. That will require that they have and are able to transmit accurate knowledge to their students about the roles and responsibilities of nurses and other providers in the health system.

4) There is considerable role confusion among the three groups of nurses and between nurses and other health professionals, which results in unnecessary overlap in task performance and introduces inefficiency in health care delivery. Clarification of roles should begin by examination of the similarities and differences in the educational content of the various health professional programs.

- **Employers, regulatory bodies, educators, practitioners, unions and policy makers** must engage in dialogue about strategies for improving the utilization of all health professionals.

5) Substitution of one provider for another (e.g. replacing RNs with LPNs) may be occurring inappropriately in some situations.

- **Employers and policy makers** must focus on quality of care and patient safety in addition to cost when making staff mix decisions.

6) When introducing staff mix changes, it is important to consider what service delivery model is most likely to maximize the complementary roles of health professionals. Staff must be encouraged to refocus their activities as necessary to engage in collaborative patient-centred practice.

- **Employers and managers** must employ effective change management strategies when introducing new staff-mix models.

7) As the focus of health human resources management shifts increasingly toward interprofessional practice, more attention must be paid to the development of databases that permit unit or program level measurement of the impact of new models of collaborative practice on provider, patient and system outcomes.

- **Health care organizations, policy-makers and agencies** responsible for monitoring and reporting on health system performance must collaborate in addressing the current inadequacy of databases.

APPROACH

Methods

A descriptive-comparative exploratory design was used in this cross-sectional research study. Ethical approval for the study was obtained from the Research Ethics Board at each of the three participating sites (Calgary Health Region, Capital Health and Saskatoon Health Region).

Study Setting: The study was conducted in acute care facilities. A total of 14 patient care units representing variability in the mix of nursing providers (RN, LPN &/or RPN) were included in the study - four units in Capital Health, four in Saskatoon Health Region and six in the Calgary Health Region. Over sampling was done in Calgary to ensure an adequate representation of RPNs, since it was not possible to recruit nursing units with a RPN staff mix from Capital Health at the time of the study.

Data Sources: Information about perceived ability to work to scope and barriers and facilitators to role optimization was obtained through face-to-face, semi-structured interviews conducted with nurses and other members of the health team. The Nursing Role Effectiveness Model ¹⁹ guided development of questionnaires. Nursing managers were interviewed to identify factors that inform their decisions regarding work assignment among nurses and their perspectives about what facilitates or hinders maximizing the roles of nursing personnel. Selected members of the interdisciplinary team were interviewed to elicit their perspectives about the roles of nurses and overlap of those roles with theirs. Telephone interviews were also conducted with a small sample of volunteer patients, to examine the extent to which the experiences of patients appeared to reflect the expected focus of nursing (Appendix A).

Information from corporate and administrative databases was collected to facilitate description of contextual factors that might influence enactment of nursing roles, as well as patient and provider outcomes. To augment description of the units and enrich analysis of interview data, all nursing personnel on the study units were invited to complete three validated instruments (Job Descriptive Index (JDI), Nursing Workload Index – Revised (NWI-R) and the Daily Environmental Complexity Scale (DECS). These

instruments captured such elements of the environment as role ambiguity and tension, autonomy, job satisfaction and other factors known to influence role enactment. The overall questionnaire response rate by nurses in the study was 45.3%, with unit response rates ranging from a low of 14% to a high of 70%.

Finally, a thematic analysis was conducted of competency frameworks and other practice documents relevant to three regulated nursing groups, to provide an objective examination of commonalities and differences that should be anticipated in the practice of the three categories of nurses. A theoretical statement of nursing roles was developed to guide the document review and act as a screen against which to compare 'expected' with 'actual' nursing practice (Appendix B).

Sample: A total of 167 interviews were conducted with staff RNs (85), LPNs (31) and RPNs (11); patient care managers [PCM] /assistant PCMs (19) and nurses in specialized roles (21). Although the proportion of RPNs recruited into this study was small, they were proportionately well represented, as were all three nursing groups, relative to the overall number of each category of regulated nurses that make up the total nursing workforce. The mean age of nurse participants was 42.1 years with an average of 16.4 years of nursing experience. About 39% of the respondents had a baccalaureate degree in nursing or a Masters degree (4%). The majority (57%) of participants had a RN or RPN diploma or LPN certificate in nursing. Most participants were employed in permanent full-time (59%) or part-time positions (31%), while about 10% were in temporary or casual positions. Over 90% of respondents were female. A total of 53 interviews were conducted with members of the interdisciplinary health team (i.e., social workers, physical/occupational/recreational therapists, speech pathologists, pharmacists, dieticians, respiratory technicians) and other team members (i.e., health care aides, unit clerks, pastoral care and a physician). Interdisciplinary team members also completed the JDI questionnaire. Although telephone interviews were conducted with a small sample of patients (n=14), they were neither asked nor expected to comment on differences or similarities in the roles of the three occupational nursing groups. Data from patient interviews are therefore not referenced in this report.

Analysis

Given the large number of interviews conducted, a framework for coding was initially developed by three members of the research team, from a thematic analysis of a small sample of interviews. The framework served as the initial coding structure used for analysis. N6™ computer software was used to facilitate analysis of the large volume of data collected through interviews. Consistent with qualitative methods, several iterations of the categories evolved over the period of analysis. Documentation of the coding process was maintained to establish an audit trail.²⁰ Bi-weekly meetings involving coders and members of the research team provided an opportunity to discuss emergence of themes and to compare and contrast new themes against the prior thematic structure. An internal audit of coders was completed on three occasions to assure quality and integrity of the data analysis process. An expert in qualitative data analysis conducted an external audit of the qualitative component of the study (Appendix C). Quantitative data were cleaned and then entered into SPSS (11.0). Descriptive statistics were used in analyzing these data.

RESULTS

Research Question 1: To what extent are nurses (LPN, RN, RPN) in three health regions perceived to be working to scope?

Defining Scope of Practice

Clearly, many nurses and other health professionals in this study understand 'scope of practice' to mean what they actually **do** in performing day to day work and recognize that education, experience and competence influence scope enactment. None of the respondents, however, appeared to differentiate between the meaning of 'full scope of practice' (i.e. a role that is reflected in the knowledge base of the profession) and 'enactment' of scope (i.e. the application of knowledge within parameters defined by legislation, experience, competence and contextual factors in the environment). There was a general tendency to describe scope of practice from the perspective of a series of tasks or activities performed in care delivery.

It [full scope of practice] means doing what I feel competent in doing. If I haven't done something for a while, I usually ask for the educator to be there or the RN or somebody who has practice in it (LPN). It means delivering a certain quality of care . . . within my realm, within my knowledge base, within my education (RN).

It was generally less clear to nurses how professional roles evolve. For some, scope of practice was defined through a combination of education "*what you learn in school*" (RN) and experience "*what you learn from just working and gaining experience*" (RN). Several participants believed that their professional association ultimately determined the scope and boundaries of nursing practice. Many felt that scope of practice was highly influenced by employer practices and policies, which were often inconsistent and perceived to be unnecessarily limiting. Colleagues were often seen to limit others' scope of practice.

It means what you're able to do and what you're allowed to do. What we are allowed to do and what we are able to do are two different things (RPN).

In terms of working as a LPN, they teach us at school a really wide scope of practice, but your hands are really tied once you get into the actual hospital setting (LPN).

Well, I think we have a lot of skills and knowledge and many times you can't use them. Even though many times you're the one telling the doctors we can do this [i.e. give Maalox or Tylenol]... and they say yes ...but it has to be specifically ordered (RN).

Many respondents reported overlap in roles within nursing - "*between the RNs and the LPNs things are pretty much identical. The expectations and the role [are] treated the same*" (RPN) and between nursing and other health professionals. "*I think there is overlap with social work – they deal with families in crisis ... but they also pick up more patients with emotional or spiritual distress. In my mind, that is very much our role*" (RN). Some expressed frustration at the breadth of overlap with other health professionals, believing it to result in confusion and tension in the workplace. With few exceptions, the overlap was described in terms of a variety of specific activities that are shared among health professionals.

[OT, PT, Recreation Therapy], they all do group therapy. ... I'm capable of doing those things, but it's a matter of who can get it done the quickest (RPN).

I also do a lot of the swallowing assessments, so I overlap quite a bit with the respiratory therapist, looking at if patients are managing their secretions, if they are ready to progress to a diet. I work very, very [closely] with the physiotherapist, looking again at mobility range. So it's very much a team approach (Rehabilitation Team Leader).

There was relatively little discussion by participants of the differences that exist in the educational preparation, knowledge base and expertise of various professional colleagues, which account for variations in how health professionals are utilized. It was also evident that many nurses have little understanding of similarities or differences that exist in educational content among the three nursing groups "*We take pharmacology and I don't think RNs take pharmacology*" (RPN) and changes that have occurred in nursing education over the past several years "*LPNs are task oriented mainly... that is what they are taught*" (RN).

It is clear that the lack of role differentiation within and among professional groups results in some nurses devaluing their own contribution "*I have my degree in nursing. I feel I could be doing more. I feel that I'm doing essentially the same tasks as the LPN*" (RN) or that of other colleagues "*the LPNs do a lot of the grunt work*" (RPN); "*LPNs are trained specifically to do task work*" (RN clinical educator).

Although several respondents perceived roles among the nursing groups as complementary, there was a tendency to describe that in terms of specific skill sets rather than as differences in depth or breadth of knowledge and hence in roles. "*RNs have the medical background. They would be more comfortable working with people with medical problems. Suicide assessment - that might be an area where the RPNs are more comfortable*" (Patient Care Manager, PCM). Overall, there was a general sense that little difference existed between RNs and RPNs and in many cases, between RNs/RPNs and LPNs. "*I know a RN because they usually have one of those pins, but I usually don't know if somebody is a RN or a LPN*" (Occupational Therapist). Some of the RPN participants resented the failure to recognize that while their knowledge base is perceived to be at least equal, if not superior to that of RNs - "*RNs I'm sure don't have as in-depth a study in psychiatric medicine*" (RPN), they are not treated equally.

A RN can walk into psych – no problem, but a psych nurse can't walk onto a medical unit, yet we do medical/surgical all the way through for four years, RNs do 6 to 8 weeks of psych but they can walk into psych, no questions asked (RPN; baccalaureate degree in nursing).

There was considerable role confusion among the three groups of nurses and between nurses and other health professionals. Differences in roles were certainly not clearly articulated by respondents in this

study. That being said, it was nonetheless possible to delineate variation in practice among the three groups, in relation to key aspects of role enactment such as nursing assessment and coordination of care.

Assessment

The impression that nurses define themselves at least in part by the nature of their assessments was clearly borne out in this study and was one key element that differentiated the three nursing roles.

My core practice is my assessment. That is where I notice everything that is right or wrong with my patient. And from that I start to pick out things that need some sort of intervention and from that ... I make a plan (RN). My role is to assess the patient and to use my knowledge and skills ...to address the needs of the patient (RN).

As an RPN, our first priority is to do a mental assessment and see how stable they are. We assess them for hallucinations, delusions, their emotional state, their suicidal risk . . . And then we also go into their social, cultural background, their development . . . and then we also do the physical assessment (RPN).

I listen to your chest, I ask if you're coughing. I ask if you're short of breath, I can see if you're on oxygen or not, so just by talking to people you can assess (LPN). And we just go in and assess them and basically see if they are alert and orientated and check the colour of their skin and see if they are perspiring or not (LPN).

Other health professionals also perceived assessment to be a primary role of nurses. "*The key role of the nurse is an awareness of the total patient care picture*" (Respiratory Therapist). "*[The] nursing role is to identify problems [the] patient has and initiate a referral ... hence they need to know what a problem looks like and they don't always*" (Speech-Language Pathologist). Some expressed the view that employers, professional colleagues and sometimes nurses themselves failed to acknowledge that nursing was grounded in a broad theoretical knowledge base.

I think there is a strong theoretical base that backs nursing. But I don't think we see that. I don't think it's visible. As an organization, we don't value the theoretical foundation of nursing. But I don't think nurses also promote themselves. ... I don't think that they see their assessment role very clearly. And I think they are the ideal people to be doing a lot of the assessment because they are the ones that have the daily contact (Social Worker).

All three categories of nurses commented that their confidence and assessment skills improved with experience. There were, however, some clear differences among nurses in the nature of the activities described as assessment. LPNs tended to speak about assessing vital signs, hydration/elimination, glucose

levels, etc. RPNs spoke more holistically about patient assessment than did a number of RNs, although what comprised physical assessment by RPNs was rarely described. *"Because they [patients] are psychiatric, we tend to stick more to the psychological, but I don't think we ever forget about the physical"* (RPN). RNs were more likely to speak of assessment in terms such as neurological, respiratory, cardiovascular, wound, GI, urinary, IV and pain assessment and determination of the effects and side effects of medications. RNs and RPNs also commented that one component of assessment was determining the need for involvement of other disciplines such as physicians, OT, PT, social work or respiratory therapy, whereas LPNs more often made reference to involving RNs or RPNs in helping them respond to patient needs. Other health professionals identified the role of nurses in relation to assessment of vital signs, determining the need for involvement of other health professionals, and monitoring and reporting changes in patients' conditions to others.

Coordination of Care

The notion of the nurse as the 'intermediary' between the patient/family and other health care providers was a recurring element in health professionals and nurses' descriptions of their roles, but was also one of the factors that differentiated the three groups of nurses. Although some LPNs did not perceive they had a role in coordinating care, for others that involved reporting changes in patients' status to the RN or others and organizing the care of particular patients around scheduled treatments and services. *" If the PT is coming at a certain time ... that means I have to make sure that ...the tube feed has run through ... It takes a lot of coordinating ... to make sure everything goes step by step"* (LPN). RNs and RPNs also referred to coordination in the context of setting priorities for care around others' involvement, but were much more likely than LPNs to speak of referrals made to ensure that patient needs were met by appropriate members of the health team, including physicians. This involved coordinating service delivery across departments within the facility or agencies/services outside the hospital. *" We are the ones who need to follow up overall. Nursing is absolutely responsible for the coordination of patient care"* (RN). Other

professionals also recognized nurses' roles in overseeing the care of patients and ensuring that patient needs were met. "*They kind of keep order ... making sure there are no inconsistencies in docs orders, meds, counselling, etc. [They] should know the overall picture, talk to docs most, making recommendations for care, overseeing everything'* (Occupational Therapist).

Coordination was linked with advocacy on behalf of patients, updating physicians and others on the patients' status but also having input into formulating care plans. Other professionals also commented on advocacy as an important element of nurses' roles. "*I think they do a very good job of dealing with very sensitive patient populations'* (Speech-Language Pathologist).

While all nurses spoke of their role in managing or supervising other personnel (e.g. health care aides, new staff, students), only RNs and RPNs addressed the coordinating functions involved with being in charge of the unit. While RNs and to a lesser extent RPNs discussed discharge planning as an important component of care coordination, LPNs spoke mainly of their role in getting everything ready that the patient needed before leaving hospital (e.g. medications, oxygen) and making sure that charting was up to date.

Working to Full Scope and Issues Related to Scope Enactment

Registered Nurses: There were differences among RNs in their interpretation of what it meant to work to full scope of practice. RNs, however, were the only nursing provider to state that whether or not they could apply the full range of their knowledge and skill depended on the type of unit on which they worked and on the range, acuity or complexity of the patient population. They were more likely to report 'working to full scope' in highly technical areas such as ICU. "*Since I am in critical care, I am practicing [to] my scope'* (RN). They commented that specialization in particular areas of practice led to a loss of some skills over time, but also noted that as confidence increased with experience, there was less focus on skilled performance of tasks and more on noticing the big picture. Some, but by no means all RNs spoke about their practice encompassing such activities as holistic assessment (bio-psycho-social-spiritual),

collaborative practice, working with families, patient teaching and advocacy, discharge planning and coordination of care.

I guess every time a patient is admitted . . . we have to employ our full range of skills to assess them physically, mentally, emotionally, spiritually – the whole deal and then use that information to determine what needs the patient has (RN with degree).

Although it appeared that degree prepared RNs were more likely to discuss their practice in holistic terms (as in the quote above), it was difficult to detect any other consistent pattern that clearly differentiated degree from diploma prepared RNs in this study. It was not uncommon for RNs to report that being in charge of the unit and mentoring other nurses and students challenged their thinking and made them feel more fulfilled in their work.

Overall, about half of the RNs (n= 85) reported that they were appropriately utilized, although it is noteworthy that a majority of Patient Care Managers and nurses in specialized roles felt that RNs were overly task focused and not working to full capability. They identified systemic (e.g. pace of work and high patient turnover) and personal reasons (e.g. not wanting to attend in-services) as to why RNs did not respond to the challenge of working to full scope. Other professional colleagues also commented on workload as a factor influencing the optimization of nursing roles.

*The expectation is not there from the organization ... if you're not expected and you're not challenged, often you don't do it. I don't think we foster that in them. The staff on the unit, they are still doing the task-oriented things, trying to look at the big picture, but they don't have the time. I think the Unit Manager works to her full scope of practice. I don't think any of the other RNs do (PCM).
Over the last several years, we've had many changes and it's ... worn people out and they become laissez-faire and just do what they can to get through their eight-hour shift. We need to raise the bar on that and start challenging them (RN - Clinical Educator).*

Registered Psychiatric Nurses: Of the three groups of nurses, RPNs were most likely to report working to full scope, although a majority (n = 8; 73%) reported not being fully utilized at least some of the time – *"well, I'm using some skills all the time."* RPNs believed they were best utilized when they worked as part of an extended treatment team, were able to provide holistic care, patient and family education, counselling, psychotherapy and engage in goal setting with patients. They identified a number of factors

that limited their sense of being well utilized, including differences in approach to management of patients between physicians and RPNs "*a doctor doesn't like to recommend counselling when actually, counselling and medication work best*" (RPN) and the overlap of their role with that of other professionals.

We have a RT and OT that take them off the unit for close to 3-4 hours a day and it's really limiting what we could do. On the one hand, the LPNs are doing one thing and the RT and OT are doing another and we're kind of sitting here looking for patients sometimes (RPN).

A few RPNs indicated they were too busy with physical care of patients to have time to address psychosocial issues and the perceived overlap in roles with other professionals left many feeling they were little more than custodians, while other team members 'treated' the patients.

PCMs and nurses in specialized roles generally felt that like RNs, the RPNs were not fully utilized and that both system factors (e.g. no differentiation between RNs & RPNs in union contracts) and personal factors (e.g. did not keep knowledge and skills current) prevented them from having a more meaningful role. PCMs and nurses in specialized roles tended to see RPNs as "*experts in or more knowledgeable or sensitive to human behaviour*" (Clinical Nurse Educator) and therefore more appropriate than either RNs or LPNs in dealing with mental health issues. In reality, the only differentiation made by PCMs and nurses in specialized roles between RNs and RPNs was that "*RNs have the medical background*" (PCM) and therefore both RNs and RPNs were needed in areas where patients had concurrent medical and psychological issues.

Licensed Practical Nurses: Of the 31 LPNs participating in this study, fewer than 20% (n=6) reported working to full scope and among those, there was a tendency to make reference to what they were allowed to do when explaining whether or not they felt well utilized. "*I believe I am doing everything on the unit that I am allowed to do*" (LPN). It is certainly fair to say that LPNs expressed the least satisfaction with the manner in which they were utilized. Working to full scope was most often described as "*just total care,*" (LPN) meaning basic care of the patient, deciding what patients needed in terms of comfort, measuring vital signs, getting patients settled, taking notes, filling out forms, doing transfers and "*reinforcing to the patients*

that it's not a problem when they ring and I don't mind answering the light" (LPN). Some LPNs reported feeling more fulfilled in their work when they were involved in decision-making with physicians or other team members. Many felt their work was more meaningful if they could do such activities as changing catheters, NG tubes, dressings, assess pain control and monitor IVs. Use of those skills was, however, highly dependent on other team members' perceptions of the LPN's expertise. Many LPNs reported having to upgrade their skills to meet licensing requirements, only to find they were prohibited from utilizing these skills in many settings. Being unable to give medications was the most common restriction reported.

All the LPNs had to upgrade to a certain level. We had to take a med course. So as I'm working on this unit, I have not used all that stuff I learned. ... But I had to take them to remain a LPN. ... I'm not giving meds ... I'm not changing dressings (LPN).

Although a majority of PCMs and nurses in specialized roles felt that LPNs were underutilized, it appeared that resistance or stereotyping on their part were major factors in limiting full implementation of LPN skills.

*Honestly, I just don't think they have the education to do the job (PCM).
Is there room for LPNs on this unit? Potentially - to a really limited degree. I mean help physically getting patients up in chairs. Help delivering laundry bags ... those sorts of things probably. Would I give up a RN FTE to bring in LPNs or NAs? Not given a choice, I think (PCM).*

A few of the other health professionals also perceived a difference in the knowledge base of LPNs and were concerned about their ability to adequately meet the safety needs of patients, although it was impossible to determine whether their views were grounded in factual information. *"Sometimes I can see the lack of knowledge in the LPNs ... And I think sometimes the LPNs compromise safety, thinking the patient is able to walk safely" (Therapy Assistant).*

Research Question 2: What are the personal, professional and organizational barriers / facilitators to maximizing nursing scopes of practice?

Barriers and Facilitators to Practice

There was a general tendency on the part of participants to make reference to facilitators to working to scope by giving examples of conditions in the work environment that could be improved (i.e. barriers). The data on barriers and facilitators are therefore not presented separately in this report.

Interprofessional Relationships

It was evident from this research that the quality of interprofessional relationships influenced nurses' perceptions of autonomy, of being valued for their knowledge and skills and of being able to work to the full extent of their capability. Participants reported feeling valued as members of the health team when they were asked to provide input into patient care plans and were listened to when they expressed concern about their patients. Unfortunately, it was not uncommon for nurses to report they did not feel particularly respected by other team members. "*Some of the people, they figure if you're not a RN, you're not a nurse sort of thing*" (LPN). Lack of respect from colleagues and poor interprofessional interactions, as well as lack of recognition for what nurses do were identified as contributing to failure to recognize others' capabilities and competence. Tension between RNs and LPNs appeared to be fairly common. "*Even though they [LPNs] say you're not responsible for [me], I will be, because I'm the RN. And I don't care what anybody says*" (RN). "*I know the RNs and LPNs are having a real battle*" (Health Care Aide). Lack of trust in others' competence was sometimes cited as a reason for limiting the activities they were allowed to perform. "*The LPN wanted to give the medication because they couldn't contact the MD. And the proper course of action is to withhold it ... the level of judgment . . . was inadequate in my opinion*" (RN).

Although several RNs, RPNs and LPNs said they worked effectively together, 'power struggles' were also reported. "*Within the roles, especially in psychiatry, there is some jealousy ... some protecting of*

different roles and therefore, protecting of jobs" (RN). Tension between younger and older staff was also noted. "Politics on the unit ... there's niches of the older nurses who don't like us younger nurses" (RPN).

Although nurses reported generally positive relationships with physicians, a number of them perceived that there was significant room for improvement. *"When it comes to doctors and nurses, there's good times and there's bad times" (RN). "A doctor who is going to snap at you because of what you're going to tell them, although you're responsible for giving that information" (LPN). RPNs more than the other two groups of nurses reported that communication was often strained between themselves and other professional staff. "What gets in the way is what they [rehab staff] believe is their role and what they believe they should be doing and they're going to protect their turf and we're going to protect ours" (RPN).*

Work Environment

Although ineffective communication and poor interpersonal relationships were identified by all groups of nurses as limiting their ability to fulfill their roles adequately, other features of work environments were also identified. Time, workload and patient acuity were by far the factors most commonly reported as limiting nurses' ability to perform the full range of activities they perceived were necessary to respond to patient needs. It was often reported that workloads were so heavy that people simply did not have the time to consult with each other on patient issues, causing unsafe conditions for patients in many instances.

Because of time constraints, it's very hard to actually sit and have conversations with your patients. ... If someone was to do some good ... intense work with the patient, time factor is a barrier (RPN).

It's very rushed and sometimes you may miss things ... your daily assessments might not be as good as they were if you had more time to spend with that patient (LPN).

So ... you're focusing more on the physical aspects of things and you're not really, I mean it comes into play, but you don't often have time to focus on psychosocial (RN).

A lot of stuff I learned in school, I'm sure I apply it to some degree, but I would like to do it more, but we just don't have time (RN).

It was obvious that nurses regretted the inability to find more meaning in their work *"I feel like I've not done my job and haven't done [for] my patient the best I could ... I'm not maximizing much of my education" (RN).*

PCMs, nurses in specialized roles and several staff nurses commented on the importance of organizational resources (e.g. adequate amount of well functioning equipment, funding for in-service education, opportunities to participate in rounds, access to clinical educators and best practice information, etc.) and supportive management as key elements in enabling staff to work to the full extent of their capabilities.

I think as managers, we need to spark that enthusiasm to get people working to full scope and challenging them to do that. And involve them in decision-making (PCM).
I've been asking [for equipment] for so long, I don't even ask anymore. If they had the right environment and the right stuff to work with, maybe they would actually get some valid work done (PCM).

Many participants recognized the importance of continuing education in maintaining up-to-date knowledge and competence. However, staffing ratios, lack of permanent staff, time and funding to back-fill positions were cited as obstacles to undertaking continuing education and to optimum utilization of professional resources.

Scheduling education days is always a problem. ... To get all staff off to a program and work within the collective agreement ... to make a ... schedule that's suitable for everybody to go is always a challenge (PCM).
Even shift work becomes a huge issue of trying to have staff go off and do workshops. And you have to replace them by a casual (PCM).
If you want to do anything beyond crisis intervention, the workload would not be manageable. If you really want to do full scope of practice, looking at research ... at team building ... at organization ... at leadership, there's no way. There is not enough continuity of full-time nurses that build the capacity of doing that (PCM).

Research Question 3: To what extent do contextual factors such as patient complexity, provider characteristics, workload and organizational supports appear to influence enactment of scope of practice?

Quality of Databases

Data were collected from corporate and administrative databases to describe contextual factors that might influence enactment of nursing roles. In addition, all nurses on the study units were asked to complete questionnaires addressing such issues as satisfaction, autonomy and role tension to augment description of the units and determine to what extent these factors appeared to influence role enactment.

One aim related to quantitative data collection was the intended identification of “like” and “unlike” units from which to examine differences and similarities in descriptions of scope enactment. For example, it was expected that units of low, medium and high complexity (measured using unit activity data and the DECS questionnaire) would ‘correlate’ at least to some degree with the mix of nursing staff across units with similar patient populations (defined by “top ten” CMG / RWI or ICD diagnostic codes). On the basis of the theoretical statement of nursing roles that had been elaborated, it was further assumed that patient acuity and complexity would influence the extent to which nursing roles could be fully enacted. In the end, it was not possible to analyze descriptions of scope enactment using the contextual indicators selected for this study. Comparisons of patient populations either by diagnostic grouping or acuity/complexity could not be made. Acuity and nursing workload measures were not available in the Saskatoon Health Region. In addition, although the same nursing workload measurement system is used in the Calgary Health Region and Capital Health, different approaches to weighting patient acuity scores made comparisons across the two sites impossible. Many of these data comparability issues did not surface until the data analysis phase, when incongruent findings began to highlight the fact that indicators that were presumed comparable at the outset were in fact not so.

The DECS data suggested that all units in the study were generally complex (scores ranging from 6.73- 8.68 on a scale of 0-10). Although units were differentiated to some degree on the basis of higher and lower complexity and organizational attributes, overlapping confidence intervals on both the DECS and NWI-R indicated that caution was needed when drawing conclusions from the data. Data from the three job-related questionnaires provided some evidence of the importance of factors such as autonomy, control over practice and nurse-physician relationships in creating satisfying work environments. This was reinforced during analysis of qualitative data. Nurses who participated in interviews expressed discontent when their assessments and other input were not considered in patient care decisions, when they could not practice

autonomously despite their level of competence and when their knowledge and abilities were not recognized and acknowledged.

When you actually get into the area and it's so restricted, so limited and so confining. You're really at a loss to find your way for a number of years [after graduation]. And I think lots of people give up and actually they let go of a lot of the stuff that they learned and have knowledge of (RN).

In summary, it was not possible to use the selected indicators to make useful comparisons of the practice environments across units or sites. Furthermore, interview data revealed few substantive differences across the units enrolled in the study and the presentation of findings therefore does not differentiate among the three regions. On the basis of the interview data in this study, it was concluded that contextual factors either do not play a major role in how nurses describe enactment of their roles, or that the interview questions did not adequately address contextual factors that influence scope enactment.

Research Question 4: What opportunities exist for redesigning roles and optimizing scope enactment (e.g. enhancing worker contribution to achieving intended outcomes) to make better use of nursing staff?

Differentiating Roles and Clinical Skills/Competencies

In this study, efforts to objectively describe similarities and differences among the roles of the three groups of nurses using their respective competency frameworks and/or practice standards were not successful. Each nursing regulatory body has adopted different approaches in developing its frameworks. All documents reveal similarities in the terms used to describe competencies (e.g. knowledge and ability to assess the client). Limited consultation among the nursing groups when addressing the issue of nursing roles has made it difficult to use existing documents to make an objective determination of what might be the most appropriate mix of nursing providers, given the nature of the work to be performed. For example, the competency "demonstrate ability to collaborate with researchers to plan, conduct and evaluate nursing research" ^{21, p.208} perhaps justifiably applies to all three groups of nurses, but does not explicate whether there is any difference in educational content, and hence in expected research competence among the

three categories of nurses, that would warrant selecting a LPN rather than a RN or RPN to achieve the most appropriate utilization of nurses in a given context.

The study nonetheless clearly demonstrated that there are substantial opportunities to improve nurses' ability to optimize their skills and knowledge, by implementing strategies to overcome the gap that exists between what nurses say they are educated to do and what they perceive they are able to do in practice. "*We learn about group therapy, but we can't run a group. What prevents that? I'm not too sure*" (RPN). Patient care managers in particular described a number of challenges in enabling nurses to work to full scope.

When you're so busy and you're moving them [patients] in and out, you do retrograde back to that functional thing. I've got to get their meds on time, their vital signs, their discharge teaching and we all go back to just getting the tasks done on the list, to get them in and out. And I think that inhibits us from going to where we could go (PCM).

The focus on task performance on the part of many RNs has narrowed the gap in perceived scopes of practice between the two categories of nurses. "*So basically, if LPNs were working to their full scope of practice, which they don't do at this facility, they would be doing exactly the same job*" (RN). Recent expansions in the LPN scope of practice appear to intimidate some RNs, who question what that means to their role. It appears that insufficient attention has been paid to redefining the role of RNs in concurrence with changes in LPN roles. "*The LPNs moved to full scope of practice and we needed to move the RNs ahead at the same time. And that hasn't happened and we continuously define ourselves by the tasks*" (RN).

Many comments from participants in this study provide evidence that more effective change management strategies and improvements in the work environment could contribute to more effective utilization of the nursing workforce. It was evident from this study that substantial effort may be required to redesign the work of nurses, at least in some settings. While there may be overlap in some competencies

across the three groups of nurses, there needs to be more differentiation than is currently evident in the roles that each occupational group is expected to perform.

Research Question 5: How practicable is it to collect and analyze context and outcome data (i.e. indicators) across practice settings and geographic locations, to describe the influence of environment on nursing role enactment and in future research, to measure the impact of job redesign on patient and nurse outcomes?

Comparability of Data across Sites

A major reason for collecting much of the quantitative data in this study was to determine the feasibility of conducting future work redesign research across different health regions. Measuring the impact of role or staff mix changes requires the availability of patient and provider outcome data *at the unit level*, where staffing decisions tend to be made. Given that client needs and the context within which nursing care is delivered are important elements of a staff mix decision-making framework, it is crucial that information about the patient population and the practice environment be available to those making staffing decisions, usually the unit or program manager. As previously noted, patient and contextual data requested for this research were often not available at the unit level, not collected in one or more of the regions at the time of the study, or were not always comparable across the three sites, even when available.

For example, administrative databases in two regions did not differentiate between RNs and RPNs when reporting staff complement. Structural indicators that provide utilization related information on acute care patient units (e.g. the flow of the patients in and out of the unit) were easily accessible and alike across the three regions. Patient incident data, however, were not uniformly accessible or comparable across the three regions, suggesting it would be difficult to conduct research related to the impact of staff mix changes across the sites, using critical incidents as an outcome measure. Patient falls and medication errors were the only two patient outcome indicators collected in all three regions. Nosocomial infection data were not uniform across the health regions and as with other patient incident data, a considerable amount of effort would have been required to extract needed information from existing databases.

The challenges involved in trying to achieve data comparability across the sites led us to the conclusion that it would be too difficult at this time to measure the impact of job redesign for research conducted on a variety of units in different regions.

DISCUSSION

This research was aimed at eliciting nurses' perceptions of the extent to which they are able to work to 'full scope of practice.' Differentiation was made between nursing roles (i.e. pre-defined expectations of nurses' contribution based on professional education and role) and role enactment (i.e. actual practice as delimited by legislation, employer policies, experience, context of practice, etc.). There was substantial evidence of unmatched expectations between what nurses have been educated to do (i.e. full scope of practice) and what they perceive they are 'allowed' to do in the practice setting (i.e. role enactment). Workload, patient acuity, professional relationships, availability of resources and supportive management were described among the factors that influence enactment of scope. Nurses, patients and other health professionals were generally unable to clearly articulate substantive differences in the roles of RNs, RPNs and LPNs, in spite of significant *real* differences in the education, knowledge and skill base of the three occupational nursing groups.

Findings from this research also indicate that considerable role overlap and role ambiguity exists not only within nursing, but across other disciplines as well. The lack of clear understanding of differences in health professional roles contributes to considerable overlap in task performance, underutilization of the health professional workforce, tension in the workplace, less than ideal interprofessional relationships, and potentially the establishment of staff mix models that may not always optimize quality of care or patient safety. We can ill afford to continue in this fashion, in view of current and future workforce shortages.²²

Optimizing the contribution of all health professionals requires that each provider demonstrate clear areas of expertise that complement, rather than compete with the activities of others.²³ This implies that professionals must have a clear sense of their own roles and understand how enactment of those roles is

influenced by the population served and the context of practice. The results of this study indicate that substantial work is required to clarify roles and responsibilities, improve understanding of the education, competencies and skill base of health team members and provide increased opportunities for meaningful collaboration in delivery of care. It is widely acknowledged that effective interprofessional teamwork is a necessary element of health reform in Canada, particularly in view of looming shortages in the health workforce. ^{24, 25}

The recent introduction of greater numbers of LPNs in acute care settings has occurred without a clear articulation of the role they are expected to play, relative to that of RNs. Research linking the proportion of RNs in acute care hospitals to patient outcomes ^{26, 27} suggests that caution is needed when introducing LPNs as substitutes for RNs in these settings. Resistance to the broader use of LPNs may stem at least in part from failure to recognize that it may be more suitable in certain settings to consider the complementary (versus replacement) role that LPNs can play as members of the health care team. It is possible that some managers interpret 'autonomous nursing practice' as meaning that LPNs must be independently assigned responsibility for total patient care. Rather, it should be recognized that authority can be given to initiate particular nursing actions without specific direction from other providers (e.g. monitoring IVs), but still within the framework of shared responsibility among team members for meeting the total needs of patients. In some instances where LPNs have been introduced to replace RNs, they report they have been given more responsibility than they perceive is appropriate.

The key theme emerging from this research is the need for role clarification and redesign of the work of health professionals. Addressing these issues might well provide substantial opportunity to mitigate some of the workload pressures that are inhibiting professionals from working to their full scope of practice.

GENERALIZABILITY AND LIMITATIONS

When early findings from this research were discussed informally with nurses and other professionals from jurisdictions across Canada, they seemed to resonate with those colleagues. We are

therefore reasonably confident that the findings from this research represent a 'current state' that potentially characterizes many health care settings.

The lack of comparability of quantitative data across sites involved in this research made it impossible to fully answer all of the questions raised at the onset of the study. These findings nonetheless point to the importance of improving health care databases, to allow measurement of the impact of emerging models of collaborative practice on patient, provider and system outcomes.

DISSEMINATION OF RESULTS

This study was conducted in collaboration with an Advisory Committee consisting of policy makers, academics, nursing and allied health practitioners and managers, decision-makers and educators, as well as representatives from regulatory colleges, health human resources and the public. Throughout the study, progress reports have been posted on the websites of several of the participating organizations and broadly disseminated through a project newsletter. Discussion of early findings has occurred at meetings of the Nursing Advisory Council of Alberta (NACA) and in other settings (e.g. CHSRF workshop on Effective Teamwork in Health Care). Some of the recommendations from this report will form the basis for development of an action plan to be enacted by the Clinical and Nursing Practice Leaders Network of Alberta, beginning in fall 2005. The results have been or will be presented at a number of conferences over the next several months (Appendix D) and several papers for publication are in progress.

ADDITIONAL RESOURCES

Additional information about this study can be obtained from Dr. Jeanne Besner, Director, Research Initiatives in Nursing and Health, Calgary Health Region. The final report and detailed technical reports are available on the department website at <http://www.calgaryhealthregion.ca/rinh> or by request.

FUTURE RESEARCH

The scope of practice research described in this report will contribute substantially to the ongoing development of our program of research, which is aimed at optimizing management of health human

resources in the context of emerging models of interprofessional, collaborative patient- centred practice. The study has informed three recently initiated research projects, respectively funded by the Alberta Heritage Foundation for Medical Research, Alberta Health & Wellness and Health Canada, as well as others currently under development.

This research focused uniquely on the practice of acute care nurses and findings may not apply to the same extent in the community or long-term care sectors. More research is needed to determine whether the issues identified in this study also impede optimum utilization of health professionals employed in the non-acute care sector. It is likely that role clarification and job redesign among primary care providers are also necessary in order to achieve optimum utilization of health professionals across the entire continuum of care delivery.

Other questions to be answered through subsequent research include: **1)** What do current health professionals need to know about the knowledge, skills and capabilities of their professional colleagues in order to support new models of service delivery that promote effective teamwork and improve patient, provider and system outcomes? **2)** What changes are needed in professional education to promote enhanced awareness of interprofessional roles among faculty and students? **3)** What information and other supports do first line managers need to help them make staff mix decisions that optimize professional roles and promote cost effective delivery of care? **4)** What is the impact of redesigning the work of all health professionals on patient, provider and system outcomes? What key indicators are needed to measure the impact of staff mix changes at the unit and program levels? **5)** How does optimization of the roles of all health professionals influence projected health workforce needs for the future?

Appendix A

Interview Questionnaires

Nurse Interview

Nurse Manager Interview

Inter-Disciplinary Health Team Member Interview

Patient Interview

Nurse Interview

Interviewer Opening Script

The **purpose** of this interview is to obtain information on nursing practice. Specifically, we would like to understand what facilitates or acts as a barrier to utilize the skills and knowledge that you feel has prepared you in your nursing practice. This information will be used to inform how to optimize nursing roles.

- The feedback that you provide will be kept **confidential**. Your name will not be associated with any of the comments you choose to make.
- For efficiency and accuracy I would like to tape record our conversation. You may ask to have the recorder turned off at any time. (Any identifying information will be removed from taped materials).

[Review the consent form with the nurse. Ask them if they have any questions or concerns about the project or interview process. Have them sign the consent if they have not already done so.]

Scope of Practice

1. What does it mean to you to be practicing according to the roles and responsibilities defined by your profession?
2. Would you say that in your practice setting you have been able to use the full range of education, knowledge, and skills that are associated with being a nurse? Why or why not?
3. What differences do you see between your role and that of other groups of nurses (e.g., RNs, or LPNs, RPNs)?
4. How do you determine what are the boundaries between your role and that of others? Can you give specific examples of situations where your role overlaps with that of other non-nurse members of the health care team? Who are these professionals? What are their roles? When these overlaps occur, how do you determine who should take the lead in ensuring the needed care is provided?
5. Is there a specific conceptual approach that guides your practice and care of patients?
6. Could you please comment specifically on the nature or type of nursing assessments you routinely conduct?

7. Could you please comment specifically on the process you follow to evaluate the care given? What do you feel is your responsibility as a nurse in evaluating patient care?
8. Can you please provide specific examples of functions or responsibilities that you initiate on your own and consider yourself totally responsible and accountable for [as a RN, LPN, RPN]?
9. What types of patient care decisions do you routinely make without a need for consultation with other members of the health team?
10. What types of activities or functions do you carry out that other health care professionals rely on for accomplishing their own activities? (e.g. monitoring, reporting changes in condition, coordinating care).
11. Are there functions or responsibilities that you can only carry out with direction from another care provider? Can you give examples of these activities? Who usually gives you direction?

Context

12. Please provide specific examples from your practice setting of situations when you have been able to use the full range of skills and knowledge associated with your role as a nurse?
13. Please provide specific examples of situation when you have not been able to use the full range of skills and knowledge associated with your education as a nurse?
14. Are there factors that act as a barrier in allowing you to practice using your full range of skills and knowledge? Please describe them.
15. Please comment on the workload on this Unit? How do you think that workload affects your nursing practice?
16. How are patient care assignment decisions made on your Unit? What role do you play in this? What are your thoughts about the process?
17. How much influence do you think you have in making decisions about patient care? Do you feel this is satisfactory? If not, what would need to change? Why?

Study Site/ Facility _____
Study Number _____

18. How do you feel about the effectiveness of communication between nurses and other interdisciplinary team members on your Unit? What are the barriers to communication, if any? What are the facilitators to communication? How could communication be optimized?
19. Could you comment on the coordination of care on this Unit? Who is involved? What is your role in coordination of care? How well does coordination of care work on this unit? How do you think it could be enhanced?
20. Are there other comments you would like to make about facilitators and barriers to working to the full range of your nursing education, knowledge and skills? If there is anything you would like to see changed or improved, what is that?
21. **Thank you for taking the time to participate in this interview.**

Nurse Demographic Information

1. What is your education (check all that are applicable)?
 - LPN certificate
 - RN diploma
 - RPN diploma
 - Bachelor's Degree in Nursing
 - Other Bachelor's Degree
 - Master's Degree in Nursing
 - Other Master's Degree
 - PhD

2. Do you have a diploma or certificate in a nursing specialty (i.e., gerontology, obstetrics)?
 - Yes
 - If yes, please specify _____
 - No

3. How many years has it been since you graduated from your highest degree/diploma program? _____

4. Are you currently pursuing another degree/diploma?
 - Yes If yes, which diploma or degree:
 - LPN certificate
 - RN diploma
 - RPN diploma
 - Bachelor's Degree in Nursing
 - Other Bachelor's Degree
 - Master's Degree in Nursing
 - Other Master's Degree
 - PhD
 - No

5. How many years of you been practicing nursing? _____

6. How long have you worked in this facility/hospital?
 - 0-2 years
 - 3-5 years
 - 6-10 years
 - 11-15 years
 - 16+ years

7. How many months _____ or years _____ of experience have you had on this unit?

8. Gender:

- M F

9. Year of Birth: _____

10. Which of the following best describes your current position? (Please check only one)

- Staff LPN
 Staff RN
 Staff RPN
 Patient Care Manager
 Assistant Patient Care Manager
 Nurse Instructor/Educator
 Clinical Nurse Specialist
 Nurse Clinician
 Other, please specify _____

11. a.) How is your present position classified ?

- full-time, permanent
 full-time, temporary
 part-time, permanent
 part-time, temporary
 casual

b.) Is this by choice? Yes No

Answer only if you are part-time or casual.

c.) In the past year, how many hours per week did you work on average?

- 4 hours or less
 5-8 hours
 9-12 hours
 13-16 hours
 17-20 hours
 21+ hours

12. Do you work on more than one Unit?

- Yes No
 If yes how many units do you work on? _____

13. What Unit do you work the *most hours*?

- Medical
 Surgical
 Med/Surg
 Obstetrics
 Intensive Care
 Rehabilitation
 Community Health Centre

- Home Care
- Longterm Care
- Other, please specify _____

14. Please identify how long have you worked on the above Unit?

- 0-2 years
- 3-5 years
- 6-10 years
- 11-15 years
- 16+ years

15. Have you worked with a similar patient population in other settings?

- Yes If yes, for how long?
 - Under 1 year
 - 1-2 years
 - 3-5 years
 - 6-10 years
 - 11-15 years
 - 16+ years
- No

16. What shifts do you *usually* work? (Please check all that are applicable)

- Days, weekday
- Days, weekend
- Evenings, weekday
- Evenings, weekend
- Nights, weekday
- Nights, weekend

17. a) In the last year, how many hours of continuing education opportunities did you participate in?

- 0 hours
 - less than 8 hours
 - 8-16 hours
 - 16-40 hours
 - 40+ hours
- } If yes, then answer part b

b) What was the nature of the continuing education opportunities? (Please check all that apply)

- Conference or workshop *not sponsored* by your employer
- Conference or workshop *sponsored* by your employer
- Education/training offered at your Unit level
- Other, please specify _____

Nurse Manager Interview

1. Does the Unit have a specific model of care delivery?
If yes, can you tell me more about the model of care delivery? How was it selected?
If no, is there a model of care delivery or a blend of models that characterizes this Unit? Please explain. How does this influence your approach to assignment of patient care among nursing personnel?

Is there a specific conceptual approach that guides the nursing practice on the unit?
2. What factors assist you in determining how and to whom to assign the nursing care of patients on your unit? Please give examples to illustrate your decision making process.
3. What does working to the full range of education, knowledge and skills mean to you?
4. Do you think nurses on your unit currently work to the full extent of their education, knowledge and abilities? Are there specific categories of nurses who work to the maximum scope of their practice? Who are they? Why do you think that situation exists?
5. What facilitates working to the full range of education, skills and knowledge? Can you explain? Are facilitators different for different categories of nurses? Please clarify.
What acts as a barrier to working to full breadth of practice? Can you explain? Are barriers different for different categories of nurses? Please clarify.
6. What factors would need to change on your unit to enable nurses to work to the full breadth of their practice?
7. Can you give specific examples of situations where nursing roles overlap with that of other non-nurse members of the health care team? Who are these professionals? What are their roles?
8. How do you determine what are the boundaries between nurses' roles and that of others? Can you give specific examples of situations where boundaries are blurred or overlap?
9. Can you give specific examples of role functions or responsibilities that nurses initiate on their own and consider themselves responsible and accountable for?
10. Can you give specific examples of role functions or responsibilities that nurses [RN/LPN/other nurses] carry out under direction from another provider? Who usually gives that direction?

11. Can you give specific examples of functions that nurses carry out that are partially or totally dependent on the functions of other providers for their accomplishment? How do they negotiate accomplishment of those functions?
12. Could you comment on workload on this Unit? How do you think that workload relates to the nurses' ability to work to full breadth of their practice?
13. How do you feel about the communication between nurses and other interdisciplinary team members on your Unit? What are the barriers to communication? What are the facilitators to communication? How could communication be optimized?
14. Could you comment on the coordination of care on this Unit? Who is involved? How well does it work? How do you think it could be enhanced?
15. Could you comment on the appropriateness of the staff mix on this Unit? Do you think opportunities exist to have a different staff mix? If so, what do you think would be appropriate and why? How do you think you could accomplish that? What would it take to achieve the "right" staff mix?
16. How would you describe the adequacy of equipment and supplies on this unit? Do you think that affects nurses' ability to work to the full breadth of their practice? If so, please explain.
17. How would you describe the adequacy and availability of health records, protocols, health care data, etc. Do you think that affects nurses' ability to work to the full breadth of their practice? If so, please explain.
18. Can you discuss the extent to which nurses on this unit are involved in decision-making about client care? Please give examples. Are nurses involved as much as they could be? If not, how could this be facilitated?
19. What learning experiences and opportunities are available to nurses on this unit? How do you think that influences nurses' ability to maximize their breadth of practice? Are educational opportunities adequate? How could they be improved?
20. What other comments would you like to make about facilitators and barriers to nurses working to their full breadth of practice? If there is anything you would like to see changed, what is it? How could this change be facilitated?
21. Are there any other comments you would like to make that might help us determine what opportunities might exist to make better use of the knowledge and skills of health care providers on this unit?

Thank you for taking the time to participate in this interview.

Inter-Disciplinary Health Team Member Interview

Demographic Information

1. What is your job title? _____
2. What is your highest level of education?
 - High School, if yes completed Grade _____
 - Certificate, if yes in _____
 - Diploma, if yes in _____
 - Bachelor's Degree, if yes in _____
 - Master's Degree, if yes in _____
 - PhD, if yes in _____
 - Other, please specify _____
3. When did you graduate from your highest educational program?
 - 0-2 years ago
 - 3-5 years ago
 - 6-10 years ago
 - 11+ years ago
4. How many years of experience have you had as a health care provider?
 - 0-2 years
 - 3-5 years
 - 6-10 years
 - 11-15 years
 - 16-20 years
 - more than 20 years
5. Gender:
 - M F
6. Year of birth: _____
7. Do you work on more than one Unit?
 - Yes No
8. How many hours per week do you work on average on this Unit?
 - 4 hours or less
 - 5-8 hours
 - 9-12 hours
 - 13-16 hours
 - 17-20 hours
 - 21+ hours

Health Care Provider

9. How long have you worked on this Unit?
- ⊖ 0-2 years
 - ⊖ 3-5 years
 - ⊖ 6-10 years
 - ⊖ 11-15 years
 - ⊖ 16+ years
10. How long have you worked in this facility/hospital?
- ⊖ 0-2 years
 - ⊖ 3-5 years
 - ⊖ 6-10 years
 - ⊖ 11-15 years
 - ⊖ 16+ years
11. How much time do you spend collaborating on patient care with nurses?
- ⊖ No collaboration occurs
 - ⊖ Less than 1 hour/week
 - ⊖ 1-2 hours/week
 - ⊖ 3-4 hours/week
 - ⊖ 5-8 hours/week
 - ⊖ 9+ hours/week

Role Clarity

12. Do you think there is any overlap between your role and that of other health professionals on this Unit? Please provide examples.

Do you think the nursing role overlaps with that of other health care providers on this Unit? Please provide examples.

From your perspective, are the roles of all members of the health care team well defined on this Unit?

Are you clear about what are the roles and the responsibilities of the nurses are on this Unit? Please explain.

13. How do role boundaries or role overlap influence your ability to work to the full extent of your education, knowledge and skills?

Health Care Provider

14. How are patient care assignment decisions made on this Unit? What role do you play in this? What are your thoughts about the process?
15. Can you give specific examples of role functions or responsibilities that you initiate on your own and consider yourself responsible and accountable for?
16. Can you give specific examples of functions or responsibilities (i.e., assessments or skills) that you only carry out under direction from another provider? Who usually gives you direction? How do you demonstrate accountability for these activities [i.e. what do you report back to the person who assigned you the responsibility]?
17. Can you give specific examples of functions that you carry out that are partially or totally dependent on the functions of other providers for their accomplishment? How do you negotiate accomplishment of those functions?

Coordination of Care

18. Could you comment on the coordination of care on this Unit? Who is involved? What are the barriers to coordination of care on this Unit? What are the facilitators to coordination of care on this Unit? How do you think coordination of care could be enhanced?

Communication

19. What is the process for communication about patient care between you and nurses on this Unit? (Prompt for accuracy of information, understanding of information, timeliness of communication, differences in the level of communication between different types of nurses [RNs, LPNs, etc], overall satisfaction with level of communication.)
20. What are the barriers to communication? What are the facilitators to communication? How could communication be optimized?
21. Are there any comments you would like to add to help us understand what opportunities exist on this Unit to make better use of the knowledge and skills of health providers?

Thank you for taking the time to participate in this interview.

Health Care Provider

Patient Interview

Demographic Information

1. Gender Male Female

2. May I ask your year of birth _____

3. What is the highest grade or year of school you have completed?
 - Less than high school
 - High school graduate
 - Technical diploma
 - Some university
 - Bachelor's degree
 - Graduate degree

4. Is there a particular nationality or ethnic/cultural group to which you belong?
 - Caucasian
 - Asian
 - Aboriginal
 - East Indian
 - Arabic
 - Hispanic
 - Black
 - Other, please specify _____

5. What is your marital status?
 - Single
 - Married/co-habiting
 - Separated/divorced
 - Widow

6. What would you say is your overall annual family income?
 - below \$25,000
 - \$26,000 to \$40,000
 - \$41,000 to \$55,000
 - \$56,000 to \$70,000
 - \$71,000 to \$85,000
 - over \$86,000

7. If you needed assistance at home, who would you turn to?
 - Alone
 - Spouse/significant other
 - Family member
 - Friend
 - Other

Perceptions of the Process of Nursing Care

8. Do you feel that nurses focused on your health and well-being (and that of your family)? Can you provide some examples?
9. Do you feel the nurses were sensitive to your concerns/needs (and those of your family)? Please explain.
 - Did they take time to listen and understand? If no, was this a concern for you? Can you expand on this? If yes, can you specify?
 - Did you feel supported? If yes, how did they show support? If no, what could they have done to show support?
10. Did you feel the nurses involved you (and your family) in health planning and health care decision making? Can you provide an example?
How did the nurses address your needs or concerns (and those of your family)? Can you provide an example? (looking for physiological treatments such as medications, psychological treatment such as use of imagery for pain management, cognitive treatment such as health/illness education, and rehabilitation treatment such as promotion of self care)
Did you feel the nurses respected your need to be involved with decisions regarding your care?
11. Did you feel that your privacy was respected? Please explain.
12. Did the nurses provide you (and your family) with information about your condition, the treatment of your condition, etc while you were in the hospital? Please provide examples.
 - How informed did you feel about your condition, the treatment of your condition, etc?
 - How helpful was the nurse in providing you with information?
13. How did the nurses promote or encourage your self care? (For example, recognition of changes or symptoms, management of pain or symptoms, recommendations for maintaining or improving health, guidance for managing at home)
14. How did the nurses assist you (and your family) to plan care for yourself after you were discharged from the hospital? Please explain
 - How informed did you feel?
 - How helpful was the nurse in providing you with information?
15. Did the nurse discuss with you how to access help (resources) that you might need after discharge from hospital?
Did you need to access help? Was the information the nurses gave you helpful?
16. After discharge, did you have any visits to the physician (or other health care provider)? For what reason? Was this planned or unplanned? Do you think this could have been avoided? If so, how?
17. After discharge, did you have an admission to home care, an emergency department visit or readmission to hospital? For what reason? Do you think this could have been avoided? If so, how?
18. Do you have any final comments about the nursing care that you received?

Appendix B

Theoretical Statement of Nursing Roles

Theoretical Statement of Nursing Roles

Purpose

The purpose in articulating a theoretical statement of the expected roles or pre-defined expectations of the different categories of nurses (Registered Nurses, Licensed Practical Nurses and Registered Psychiatric Nurses) is to provide a “theoretical screen.” The expected roles or pre-defined expectations will be compared to nurses’ actual practice. The result will provide information to determine the extent to which nurses’ actual practice is consistent with pre-defined expectations. Professional and regulatory bodies and others may have a theory or set of assumptions about what it means for nurses to “work to full scope of practice,” but that may not be explicit to providers, employers and managers in employment settings. Consequently, nursing roles as they are actually enacted may reflect a different set of assumptions, particularly when many providers are involved, each of who may have his/her own values and beliefs about what those roles are.

General Premises/Assumptions

Entry to practice requirements for Licensed Practical Nurses, Registered Nurses and Registered Psychiatric Nurses differ, reflecting the minimum competencies and standards of practice required by the beginning practitioner, length of programs (e. g. 13 months up to four academic years) and breadth and depth of content. It is nonetheless important to note that there is one discipline of nursing, (albeit three professional groups) and therefore nursing knowledge is derived from the same body of knowledge. It is thus expected that substantial overlap exists in the activities and tasks performed by the three categories of nurses.

Despite the overlap in activities performed by nurses, it is recognised that differences exist in the extent to which they can perform autonomously in their roles. The setting in which providers work, the needs of the recipients of nursing care and the experience and expertise of the members of the nursing team all play a role in determining what the optimum mix of nursing providers. For example, the ratio of RNs to LPNs or RPNs to LPNs and the choice of service delivery model (e.g. functional or team structure) should reflect the degree of interdependence or autonomy in nursing roles appropriate to the population served and the environment in which care is delivered.

It is important that objective criteria be used to determine the extent to which nurses (RNs, LPNs and RPNs) can fully enact their roles. The degree of autonomy, responsibility and accountability that can be exercised by a nurse in a particular context is dependent on factors such as:

- Patient population and health needs
- Theoretical and clinical knowledge acquired during basic and subsequent continuing education
- Experience and expertise
- Environmental factors in the care setting (e.g. organizational supports, unit activity, workload, patient complexity)
- Other factors such as the number and mix of nursing personnel available to meet the needs of the patient population at a given point in time.

Appendix C

Audit Report

A Systematic Approach to Maximizing Nursing Scopes of Practice Examination of Audit Trail

Prepared by Dr. Karin Olson, Faculty of Nursing, University of Alberta

Background

This ethnographic study examined the beliefs and values that drive the perceptions of nursing personnel (e.g. RNs, RPNs and LPNs) regarding the scope and boundaries of their professional practice. It is part of a large research program designed to inform efforts to optimize the scope of nursing practice and lead to improved outcomes for both patients (e.g. safety) and nurses (e.g. improved job satisfaction, staff retention, productivity). The audit questions were developed from the work of flick (2002) and Miles and Huberman (1994) and reflect an assessment of the procedures undertaken in the process of conducting the above study.

Question 1: Are the findings grounded in the data?

The primary concerns in this question pertain to whether the sample was selected correctly and whether the resulting data were weighed correctly.

Sample. The investigators developed their sampling strategy from the point of view that the implicit beliefs and values that drive nurses' perspectives regarding the scope and boundaries of their professional practice could be more easily studied by interviewing nurses who worked in settings explicitly chosen based on nursing staff mix (RNs only, RPNs plus LPNs, RNs plus LPNs and RPNs) and organizational factors (2 health regions in Alberta and 1 health region in Saskatchewan). The 14 units studied in this project were all acute inpatient units for adults with occupancy rates of 20% or more. Since the health regions all proved to be quite similar, the primary point of comparison in this study was perceived scope and boundaries.

Weighing the data. The data were managed using a software program called N6 developed by QSR™. By studying the reports available as part of this software, the connections between the identified categories and the data were more easily accessible in a systematic manner. Notes from team meetings showed that these reports were discussed at length and resulting decisions were based on the data presented. Team meetings documented changes to the coding framework.

Question 2: Are the inferences logical?

The inferences drawn are logical but the data for some codes (critical thinking and problem solving, for example) seemed limited. See Question 3 for additional examples of "thin" codes. If data for a particular code is not available across the majority of participants, the investigators may wish to consider whether the code falls within the mandate of this project.

Question 3: Is the category structure appropriate?

In order to assess the appropriateness of the category structure, I randomly selected 5 nurse cases and 2 patient cases from each site and reviewed all data coded under the following sections of the coding framework:

Nurses: scope of practice (roles, responsibilities, experience), recommendations for change, facilitators and barriers.

Patients: good care, inadequate care, communication, level of professionalism, sensing of needs, privacy, information provided, self care, discharge

planning, getting help, visits, and admissions.

The strategy used to originally identify the coding categories is unclear. I noted that based on the interviews I reviewed, there **did not appear to be sufficient data** across interviews to justify the following codes:

Under roles and responsibilities described by the individual:

Critical thinking, problem solving, satisfaction, isolation, discontent, conflict, respect, and burnout

Under roles and responsibilities as described by others:

Assessment, accountability, responsibility, coordination of care, patient safety, critical thinking, problem solving, general tasks, patient education

Experience

Recommendations, with the exception of unit changes

It is unclear how these codes were established or why they were kept given the lack of data.

Perhaps the cases I selected at random were not representative of the cases as a whole. It is also possible that the codes were originally drawn from the literature and that the initial members of the research team wished to see how closely their findings matched what was already written on this topic. The current members of the research team may wish to review reports written involving these codes to convince themselves that sufficient data (beyond 3 or 4 scattered references across the data set) exist. N6 will carry out many procedures technically that do not “make sense” if codes are not fully saturated.

Codes for which there **appeared to be sufficient data** to support analysis included:

Under roles and responsibilities described by the individual:

Assessment, accountability, responsibility, coordination of care, patient safety, general tasks, patient education

Role overlap

Role clarity

Role ambiguity

Autonomy

Full scope (yes/no)

Conceptual approach

Interdependence

Recommendations for unit based change

Facilitators

Barriers

Under patients:

Good care, sensing of needs, involved in decisions, privacy, information, self care, discharge planning, getting help, visits, and admission

The conclusions drawn by the research team with respect to these codes are very robust and well supported.

Question 4: Can inquiry decisions and methodological shifts be justified?

All decisions must be linked to the working hypotheses and follow closely on from the research question. Given the breadth of this study, the research team did a remarkable job of linking all inquiry decisions to the purpose of the study. The decision to use a structured

interview was discussed with the research team, as it seemed to limit the richness of the data collected. In future studies, the team may wish to use a semi-structured approach that allows modification of the interview questions as the study progresses. This approach is often more efficient, but it does require that data be analyzed as they are collected rather than at the end, as was done in this study.

Question 5: Degree of research bias?

The investigators must show evidence that they have not closed areas of exploration prematurely, that unexplored data do not remain in the field notes, and that they have actively searched for negative cases.

Interviewers made excellent use of follow-up questions in order to collect additional descriptive information related to the interview question.

Given the magnitude of the study, some data still remain in the “free nodes” section of N6. The research team members noted that it was difficult to find the best place for this information to fit their coding scheme and so they made a conscious decision to not force its integration. This makes sense since this project is one part of a large research program and numerous follow up studies are planned. The team did not actively seek negative cases (the deliberate recruitment of participants who might hold views contrary to the research team.) This could be explored further in future studies.

Question 6: Strategies used to increase credibility such as second readers, member checking, peer review, adequate time in the field?

The research team incorporated several strategies to increase the credibility of their analysis. A number of interviews were coded by a second team member and results were compared and discussed. Individuals who shared the same professional qualifications as the study participants were invited to take part in the discussion of the data at advisory committee meetings. Individuals who have shared comments following formal and informal presentations of interim findings have indicated that the findings are in keeping with their experience.

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Appendix D

A Plan for Dissemination of the Findings

Planned Dissemination Activities

Venue	Title of Presentation	Audience	Presenter
Conference Presentations			
<p><u>CNA Nursing Leadership Conference</u> <i>The Changing Face of Nursing Leadership: Diversity, Partnerships and Innovations.</i> Ottawa, Canada, February 13-15, 2005.</p>	<p><i>A Systematic Approach to Maximizing Nursing Scopes of Practice: Fully Enacting the Role of Nurses in the Clinical Practice Setting</i></p>	<p>Managers, researchers, policy makers, practitioners</p>	<p>Dr. D. White</p>
<p><u>6th International Conference on the Scientific Basis of Health Services</u> <i>Improving Health by Advancing Healthcare Linking Research To Policy and Action</i> Montreal, Canada, September 18-20, 2005.</p>	<p><i>Nursing Workforce Utilization: An Examination of Facilitators and Barriers on Scope of Practice</i> (International Panel Discussion)</p>	<p>Researchers, policy and decision makers,</p>	<p>Nelly D. Oelke Dr. D. White</p>
<p><u>6th International Conference on the Scientific Basis of Health Services</u> <i>Improving Health by Advancing Healthcare Linking Research To Policy and Action</i> Montreal, Canada, September 18-20, 2005.</p>	<p><i>Enhancing the Role of Registered Nurses, Licensed Practical Nurses and Registered Psychiatric Nurses: A Gap Analysis of Practice, Regulatory Guidelines and Policy</i> (Poster Presentation)</p>	<p>Researchers, policy and decision makers,</p>	<p>Dr. D. White Nelly D. Oelke</p>
<p><u>3rd International Conference on CHN Research</u> <i>New Challenges and Innovations in Community Health Nursing</i> Tokyo, Japan. Sept. 30 Oct. 2, 2005</p>	<p><i>Optimizing RN Scope of Practice within a PHC context: Linking role Accountabilities to Nursing Outcomes</i> – Keynote Address</p>	<p>Researchers, decision-makers, practitioners</p>	<p>Dr. J. Besner</p>
<p><u>3rd Western Nurse Leaders' Forum</u> <i>Power through Leadership in Practice</i> Edmonton, AB. November 23, 25, 2005.</p>	<p><i>Trends in Health Care in Canada: Opportunities for Nursing</i> – Keynote Address</p> <p><i>Promoting Full Scope of Nursing Practice: Clarifying Roles and Competencies</i> (Concurrent Session)</p>	<p>Nurse Leaders Practitioners Policy Makers Decision Makers</p>	<p>Dr. J. Besner</p>

Other Planned Activities

<p>Presentation to the Federal Provincial Territorial Principal Nursing Advisors' Meeting Ottawa, Ontario October 3rd, 2005</p>	<p>A Systematic Approach To Maximizing Nursing Scopes Of Practice: A Presentation of Research Findings</p>	<p>Principal Nursing Advisors in Canada</p>	<p>Dr D. White</p>
<p>Presentation To The Central And Northern Network For Patient Care</p>	<p>A Systematic Approach To Maximizing Nursing Scopes Of Practice</p>	<p>CNN is a network for information and best practice sharing involving all Central & Northern Regional Health Authorities - Sponsored By Chief Liaison Officer For Capital Health, Donna Towers</p>	<p>Cathy Giblin</p>
<p>Presentation to the Clinical and Nursing Practice Leaders Network of Alberta</p>	<p>A presentation of the findings of the Scope of Practice Research</p>	<p>This forum brings together the chief nursing leader from each of the 9 Health Authorities in Alberta</p>	<p>Dr. J. Besner</p>

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