

the surgical specialties, 400 square foot theatres will be adequate. Teaching and specialty hospitals should consider 600 square foot (usable space) per theatre. Theatres used for open heart surgery should consider the possible need for 700 to 800 square foot theatres to accommodate the array of monitors and other equipment. In determining the square footage of any theatre, it is important to know what the usable square footage is: for example, is the quoted square footage inclusive of cupboards along one entire wall? Built-in cupboards could effectively cut off 30 square feet of working space.

2. Space consideration should also be given the various storage areas, decontamination rooms, instrument processing rooms, soiled holding areas and sterile rooms accessory to the chosen supply system.

3. The offices, laboratories, etc., required by the department of anaesthesia will require attention.

4. The facilities required within the surgical suite by other departments, e.g. radiology and pathology, are other areas needing careful consideration.

5. Storage space for special equipment by all surgical services is another space concern.

6. The patient holding areas.

7. The post anaesthetic recovery room.

8. Hallways wide enough to accommodate equipment and patient beds.

9. Staff facilities including dictating areas, offices for secretaries, nursing supervisors, classroom and/or library space, male and female locker rooms, staff and physician lounges.

Careful attention must be given to all the above mentioned areas. Actual measurements of equipment are usually required to justify to administration the need for a spacious suite. As mentioned previously, operating rooms are notoriously short of space. Any surgical suite larger than two theatres should build in an extra room of 400 to 500 square feet, for which nothing is planned at the time of building. Once the suite is occupied this space will undoubtedly be well used, and will provide an economical way of meeting future needs. To the uninitiated, the research and the formulation of policy statements before the actual drawings begin may seem a waste of time. However, the building or renovation of a surgical suite requires more knowledge and expertise

than is usually recognized by hospital administrators. There can be no realistic allocation of space and location for a surgical suite until the foregoing questions are answered. Careful planning will result in an attractive and efficient department which will facilitate the special care of surgical patients for years to come. The nurse supervisor who is appointed to the users group should welcome the opportunity to make a very significant contribution to her profession, the hospital and to the community. ■

### Bibliography

1. O.R. Environment Panel, "From Design to Evaluation of OR Suite," AORN Journal, Volume 23, Number 1, January, 1976.
2. Foley, E.R., "OR Design Shows Nurses Touch," AORN Journal, Volume 36, Number 2, August, 1982.
3. Sprague, G.R., "Planning the OR Suite in the Operating Room: The Supervisor's Role," AORN Journal, October, 1970.
4. Knoll, S., "Infection Control Strategies in the Operating Room," Canadian O.R. Nursing Journal, Volume 4, Number 4, September, 1986.
5. "Weighing Costs and Benefits of a Case Cart System," Operating Room Manager, Volume 2, Number 6, June, 1986.

### New trends in cardiology expected to reduce costs and shorten stay

Trends in cardiac surgery - new laser techniques and clot-dissolving drugs - are expected to improve survival rates, reduce lengths of stay, and lower hospital costs, according to an article in the May 20, 1988 issue of *Hospitals*.

New catheter tips have the capability to blast through arterial plaque with a hot metal tip, or drill through plaque with a rotating bit.

People with myocardial infarctions will be able to be treated immediately with clot dissolving drugs such as tissue plasminogen activator (tPA). TPA is predicted to reduce the percentage of early fatalities by up to 40% and significantly reduce the severity of heart failure. The use of tPA signals another trend - that of treating heart problems with drug therapy, aspirin, and beta blockers instead of surgery.

Future trends include increased heart-lung transplants; magnetic resonance to keep plaque pushed against the vessel wall; and development of pacemakers that will allow controlled exercise.

# Specialization and certification in specialty practice

By Margaret Fitch, R.N., Ph.D.

Specialization in nursing and certification for specialty practice are rather important developments within the fabric of Canadian nursing. They will have an impact on the majority of nurses who are currently practicing. No longer are we discussing whether or not nursing should be specialized; we are caught in the debate about how we ought to respond to the mounting pressures to formalize specialty practice.

The purpose of this paper is to highlight some of the issues surrounding specialization and certification for specialty practice in general, and highlight their current development in Canada. In particular, the focus will be on clinical specialties (direct care) rather than functional specialties (research, administration, education).

### Nursing beyond the basics

Definitions for the words 'special', 'specialty', 'specialize' and 'specialization' create the notion of dealing in depth with a portion of a whole or singling out a part of something on which to focus with a greater intensity. Transferring that notion to nursing practice we have a picture of specialization that has two characteristics:

1. the practice is narrowed in focus to a particular portion;
2. the practice is delivered with a greater depth of knowledge.

The focus of specialty practice on a portion of nursing practice facilitates a greater understanding of that particular area. While the generalist knows what is useful to apply in all patient situations, the

specialist is able to apply a broad range of theory to a specific field of practice. By narrowing the focus of practice as a specialist, an increased knowledge and skill can be achieved and care can be provided at a level beyond the basic.

### Specialization criteria

The notion of specialization in nursing is not new but has been changing. In the first issue of the *American Journal of Nursing*, Dewitt wrote about the need for specialists to improve care. Specialization in nursing at the turn of the century meant "doing something well", caring for one group of clients only (eg., new mothers and babies) or being educated in a specialty hospital (eg., psychiatry, TB). The criteria for specialization was technical expertise.

Over the years, as more educational programs became available and issues concerning standards of practice were articulated, the notion emerged that specialization required additional educational preparation. More recently, an additional caveat has emerged that one must also be practicing regularly and almost exclusively in one's specialty. The specialist must have extended her knowledge and skill through experience and education beyond the basic generalist preparation. One does not become a specialist simply by working in an area for a number of years.

### A different level of nursing care

We are generalists when we graduate from our basic programs in that we know a little about caring for individuals in a wide variety of health/illness situations. The scope of our knowledge is broad but

the depth is shallow. When we specialize, we build upon that generalist foundation and increase the depth of knowledge/skill in a particular range of content. This means the generalist and the specialist will have some knowledge and skill in common but the specialist will be able to provide a different level of care in a specific area.

## Fundamental questions

Two fundamental questions ought to guide our deliberations regarding specialty practice. These two questions are:

- (1) **Who is a specialist in nursing?**
- (2) **How will the public be protected from the unsafe specialty practitioner?**

Determining who has the right to claim the title of specialist in nursing and ensuring the public does not suffer at the hands of an individual who is not adequately prepared are fundamental concerns. Whether or not we are able to answer these questions lies in our ability as a profession to deal with specific issues. These issues will be outlined below.

### Issue #1. How will nursing be divided and the specialty areas defined and labeled?

Imagine having all the content (knowledge and skills) of nursing practice in front of you like a pie or a cake. Your task is to divide the contents into portions and find a name to describe each. Where would you begin? How would you make a decision? What principles would you use?

Presently there are a number of principles used to divide the field of nursing and label the "specialties". Examples of the principles include organ and body systems (e.g., respiratory, cardiovascular), age of the client (e.g., pediatrics, adolescent), and degree/length of illness (e.g., acute, chronic). The myriad of labels for "specialties" creates a sense of confusion and raises concerns about overlap. What is the difference between the following labels: maternal-newborn, maternal/infant, family-child, parent-child, women/infant health care? What content is so unique to any one of these that it needs a different label?

As a profession we need to determine whether we will let situations determine the divisions of nursing practice or whether we want to take a particular role in molding what divisions ultimately emerge.

In the first instance, we allow creative growth and responsiveness to the public's nursing care needs while risking confusion and fragmentation with num-

erous small specialty groups - each with its own set of standards and levels of competencies. In the second instance, creating a list of "acceptable" specialties provides proactive leadership and guidance but risks stifling creative professional growth and creating rigidity. Somehow, we need to find a balanced approach that provides flexible leadership.

### Issue #2: Can the unique knowledge, skills and competencies necessary for the practice of a specialty be identified?

Usually, a specialty practice begins with one or two practitioners. They do not have role models or teachers and their competencies are judged on their own achievements rather than established standards. These few will teach a few others - probably in an apprenticeship fashion - and those will teach others. This approach is necessary because courses of study or patterns in practice have not emerged. As additional learners arrive, the teaching approach can move to a group or seminar approach. In time, both to decrease costs and to maintain contact with the broad perspective, teaching may move into a formal academic setting. Eventually, articles may be written describing the practice and research may be initiated to test its knowledge base.

This process, however, does not occur quickly and "specialty" practices may not exist long enough to develop. A practice may arise in response to a particular health care need, but if the need does not remain, the practice may disappear before its knowledge base is fully articulated. The growth and development of the specialty is vital if the knowledge, skill and competencies necessary for its practice are to be developed. It takes time, numbers of nurses practicing and a geographic distribution of practice centres, plus a growing literature and research base before a clear notion about the knowledge/skill base (core elements) required for practice in the specialty is evident. Without a clear notion regarding the boundaries of practice, it is impossible to know what should be tested or measured to determine competency to practice. It is incumbent upon the specialty practitioners to identify and communicate the knowledge/skill base required for their specialty practice and to determine the standards of practice which reflect that base.

### Issue #3: How will the nursing specialty be recognized and accepted?

The issue of recognition revolves around determining the appropriate preparation for specialty

practice. There are a variety of viewpoints on this issue and some of the confusion stems from mixing notions of safety to practice in a clinical area and academic preparation. The knowledge, skill and competencies to provide SAFE care for patients in a specialty environment are the same whether a nurse is diploma, baccalaureate or masters prepared.

Gaining the knowledge and skill to be SAFE in a clinical setting may occur in a variety of ways including on the job training, seminars, self-study or formal coursework. Expectations for depth of knowledge and skill in working with complex data sets should increase with additional academic preparation. Specialization at a graduate level provides an avenue to discover new insights and make contributions to a particular area of nursing knowledge. How these skills are used in a clinical setting will depend, among other factors, upon the expectations of the employing agency. Graduate education per se does not prepare an individual for a particular role.

## Identifying the expectations

Clearly we must identify the expectations we hold for the level and nature of specialization before we can determine the appropriate preparation for a specialty practitioner. **Knowing the knowledge, skills and competencies for the specialty, together with the level of performance expected would help immeasurably in determining adequate preparation.** There are many avenues for learning as an adult including seminars, conferences, reading and experience. Specialty groups need to decide which route or combination of routes is most appropriate for their specialty.

Issues arise because of the confusion regarding education. Currently, nurses are attending a variety of courses, workshops and conferences to add to their knowledge base. However, there is no guarantee their efforts will be acknowledged in any manner by their employer or by another agency should they change employers. In addition, there are no mechanisms to ensure a specialty course offered in Ontario produces the same level of skill in a practitioner as a similarly titled course in British Columbia. It is also of interest to note the increasing number of job postings that request for some type of "specialty" preparation.

### ISSUE #4: How can competencies in a specialty be reliably and validly measured?

**Measuring competency in specialty practice means we must measure or test performance beyond the basic level. We want to measure the application of**

**knowledge and synthesis of a multitude of factors.** Experts in the field of measurement suggest it may be difficult to measure these dimensions with current evaluation techniques. We must clearly identify the salient characteristics of specialty practice and determine what measurement approach is best suited for each characteristic. In addition to the multiple choice examinations, we may need to consider panel reviews, peer evaluations, essay examinations or performance evaluations. This is a crucial area, for without a reliable and valid measure of competency, one may not be able to determine if the individual is adequately prepared and the public protected.

## Urging formal recognition

Despite the unresolved nature of these issues surrounding "specialization", Canadian nurses are urging for formal recognition of specialty practice. Nurses are engaged in continuing education and are seeking recognition for their endeavours. The desire for recognition and consistency across the country in education and practice have contributed to the emergence of certification as a means of formally recognizing specialty practitioners.

Certification has emerged as another credential in the context of the credentialing processes in Canadian nursing. Credentialing refers to all the processes whereby individuals and institutions are designated by a qualified agent as having met established standards at a specific point in time (CNA, 1982). Because credentials can distinguish the qualified from the unqualified, they are seen as protective. There is a tendency on the part of society to believe the individual who holds a credential is "better" than one who does not hold a credential. They expect the holder to deliver a certain level or standard of service.

Credentials are established for a variety of reasons. These can include: to recognize excellence, to protect the public, to confer an honour, to recognize academic achievement and to determine salary or selection for employment.

## Confusing issues

Confusion exists when a credential is established for one reason, and over time begins to be used for another. For example, a credential designed to acknowledge **EXPERT PRACTICE** in an area could, over time, be used as **ENTRY TO PRACTICE** in the same area. It could be argued that 'entry to practice' and 'expert practice' require different levels of knowledge and skill. To use a credential designed to measure high level expertise for entry to practice may be inappropriate. Care

**Many specialty nursing associations formed because of identified needs for education and communication among practitioners with similar concerns. All are currently struggling with the issues surrounding standards of practice, educational preparation, and certification.**

needs to be taken so that the purpose of a credential is clear and the credential is used in accordance with that purpose. As long as the purpose of the credential is clearly defined, the other issues of scope, level, control, participation and quality of service are easily resolved.

In Canada, certification is defined as recognition that a registered nurse has demonstrated competence in a nursing specialty by having met pre-determined standards of that specialty (CNA, 1985). In essence, certification refers to the process for measuring whether or not an individual nurse possesses the knowledge and skill required to practice a specialty. It assumes the specialty has developed a suitable means of testing that the individual has mastered the necessary knowledge and skill. It is a voluntary, periodic process controlled by the profession. As a national process it serves the purposes of:

- (1) Providing an opportunity for practitioners to validate their expertise in a specialty;
- (2) Promoting high standards of nursing practice so as to provide quality nursing care for the people of Canada and;
- (3) Identifying nurses who have met the specialty standards.

The Canadian Nurses Association has taken a leadership role in making certification for specialty practice a reality in Canada. Guidelines for the certification process have been developed (CNA, 1985) and a Department of Certification has been established in Ottawa.

### Specialty examination

Within these guidelines, the onus is on the specialty groups to develop a proposal outlining the basis and rationale for their specialty practice. It is critical for specialty practitioners to articulate the nature of their practice, its boundaries and recipients and the preparation required to practice safely. The proposal is subsequently reviewed by the CNA Certification Committee and decisions are made regarding the process for developing an examination. The CNA Testing Service provides the expertise on measurement and evaluation.

To date, the Canadian Association of Neuroscience Nurses has been approved to develop an examination and funds have been allocated by the CNA Board of Directors to support this endeavour. The only other Canadian group that has a certification examination is the Occupational Health Nurses. Their work was completed before the release of the CNA guidelines.

Within Canada, there are a number of specialty nursing associations. Many formed because of identified needs for education and communication among practitioners with similar concerns. All are currently struggling with the issues surrounding standards of practice, educational preparation and certification. For all of them a major endeavour lies in moving any discussion about standards or issues into a national arena where consensus can be reached about the specialty practice and an examination developed that will measure the appropriate knowledge.

### CNA special interest groups

In 1986, the formation of the CNA Advisory Council on Specialty Practice was a major support for the struggling nursing specialty groups. The Council, consisting of the CNA Officers and Board of Directors and representatives from groups with CNA Special Interest Group status, meets once a year to discuss issues of mutual concern. The criteria and procedures for becoming a CNA Special Interest Group are available from the Canadian Nurses Association. The purpose in establishing this Council was to strengthen the linkages between the Canadian Nurses Association and the emerging specialty associations. This was seen as desirable in order to strengthen the profession and enhance the development of specialty practice in Canada. Reports from the three meetings held provide evidence that these objectives are being served. There is ample opportunity to participate, as well, in the evolving certification process.

### Positive and negative outcomes

There are both positive and negative outcomes anticipated from certification. Positive outcomes include the identification and recognition of qualified practitioners, protection of the public from unsafe

practitioners, personal satisfaction and sense of achievement for nurses, provision of evidence that continued learning has occurred and the ability to transfer credentials from one setting to another.

Negative outcomes include the cost of the education and examination process, fragmentation of patient care, role overlap and confusion (generalist and specialist) and the cost of hiring and retaining qualified practitioners. Nurses need to weigh these outcomes in deciding to proceed with a certification process for their specialty.

### Conclusion

There are challenges ahead for nurses in the arena of specialization and certification for specialty practice. As a profession we have progressed in our thinking about specialization and certification over the recent years. We now have a process available allowing us to test some of the notions we hold.

There is a wonderful opportunity for specialty practitioners to influence the development of specialty nursing practice in Canada and the resolution of the issues before us. By working through your specialty association you can establish standards of practice and contribute to decisions regarding how new practitioners in your specialty should be tested. You can influence who will be called a specialist and work to protect the public from unsafe specialty practitioners. Ultimately, the profession will be served, for nurses will be talking about their practice and how they can best meet their patients needs. ■

### About the author

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### Preadmission visits beneficial for children scheduled for surgery

Preadmission visits can help reduce the length of hospital stays and provide educational and emotional benefits for patients and their families, according to an article in the February, 1988 issue of the *Journal of Post Anesthesia Nursing*.

The Children's Hospital of Philadelphia requires preadmission visits within 30 days of scheduled procedures. During these visits, a nurse explains how the family and patient can prepare for the operative procedure. Nurses also provides information about what can be expected on the day of surgery. These pre-

admission visits last between one and three hours and can include health assessment and care planning, anaesthetic evaluation, surgical evaluation, laboratory work, preoperative medication orders, and any other required studies or consultations.

On the evening before surgery, a nurse will call the family and repeat any information about NPO instructions.

According to the article, this system has resulted in less than 1% cancellation rate on the day of surgery due to noncompliance with feeding instructions.

These preadmission visits have been beneficial for the institution, the patient and the family of the child having surgery, a spokesman for the Philadelphia hospital said. If laboratory results are abnormal, tests can be repeated or surgery can be postponed instead of cancelled on the day it was scheduled. This helps in scheduling operating room time and increases the number of patients who can have surgery on a given day. As well, families and patients can wait at home on the day of surgery, a lot more comfortable in that they know just what to expect once they arrive at the hospital.

Postoperatively, the parents feel more comfortable providing care as they have had time to prepare and know exactly what they should do for their child.

### Call for Abstracts.. 1990 ORNAC Conference

The Program Committee for the National Operating Room Nurses Conference, scheduled for Toronto in 1990, is calling for abstracts pertaining to research in the operating room nursing field.

The authors of those abstracts selected will be invited to participate as speakers at the National Operating Room Nurses Conference (11th National) which is scheduled for the Harbour Castle Weston Hotel in Downtown Toronto, April 1 - 6, 1990.

Deadline for presentation of abstracts is April 3, 1989. Abstracts should be sent to the following address on or before this date:

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