Executive Summary

BACKGROUND

In March 1999, the provincial government announced a pilot project to introduce primary health care Nurse Practitioners into long-term care facilities, as part of the government's response to the Provincial Nursing Task Force Report *Good Nursing, Good Health - An Investment for the 21st Century*. Subsequently, in 2000, the Ontario Ministry of Health and Long-Term Care funded 20 full-time Nurse Practitioner positions in long-term care as part of a larger provincial Nurse Practitioner initiative. This initiative has also provided funding for an additional 76 positions for under-serviced areas, five positions for aboriginal health centres, and five positions for primary care networks. The pilot project was scheduled to be two years in duration, from July 1, 2000 to June 30, 2002, but has been extended to March 30, 2003.

The participating projects represent municipal homes, charitable homes, profit, and not-for-profit homes. Each is unique in their partnerships (including Community Care Access Centres, outreach programs, the Alzheimer Society, and other partners), number of facilities involved (ranging from 1 to 18), number of residents (ranging from 65 to 600), and specified focus (e.g., primary health care, management of behavioural and psychogeriatric problems).

This report describes the methods and results of an interim evaluation of the Nurse Practitioner initiative in long-term care.

EVALUATION OBJECTIVES AND METHODS

The main objectives of this evaluation were:

1) to describe the major roles and activities of the Nurse Practitioners involved in the long-term care pilot projects (including their linkages with community agencies;
2) to identify factors and elements that facilitate, or pose barriers to, the successful implementation of a Nurse Practitioner role in long-term care, with specific attention to the implementation of this role in under-serviced areas as well as Nurse Practitioner preparation for work in long-term care; and
3) to identify potential positive and negative outcomes of the nurse practitioner pilot projects.

A number of sources of information were used to inform this evaluation:

i) *Document review:* A review of background documents and project descriptions, including the project summaries provided in the "Knowledge Bank" on the project website.

ii) *Focus group interview with Nurse Practitioners:* A focus group interview was conducted, via telephone, with Nurse Practitioners working in the pilot project.

iii) *Site visits:* Site visits were carried out at three sites purposefully selected to represent varying geographical regions and locations (urban *vs* rural), facility size, and partnership situations. During these visits, a total of 18 individual interviews were conducted with Administrators, Directors of Care, Medical Directors, physicians, registered nurses, and Nurse Practitioners.

iv) *Individual interviews with other key informants:* Individual interviews were conducted, via telephone, with key informants including Ministry of Health and Long-Term Care Compliance Advisors and representatives of community organizations and agencies.

v) *A survey of Nurse Practitioner work activities*: This survey, suggested by the Nurse Practitioners themselves, was carried out to get a "snap shot" of the Nurse Practitioners' workload over the course of a week.

Information through the focus group, site visit interviews, and other individual key informant interviews was gathered from all seven regions of the province, as defined by the Ministry of Health and Long-Term Care.

MAJOR EVALUATION FINDINGS

Major Roles and Activities of the Nurse Practitioners in the Long-term Care Pilot Project

- Nurse Practitioners have assumed a wide scope of practice activities.
- Responsibilities vary across facilities and projects depending upon resident needs, physician preferences, service agreements, and the presence of established programs (e.g., immunization clinics), and on-site specialists (e.g., wound care specialists).
- Their clinical activities are varied and include the assessment and management of episodic and chronic illness, psychogeriatric assessments, palliative care, pain and symptom management, counseling with families and residents, and prevention initiatives (dehydration, falls, immunizations).
- They consult with community resources or partner agencies to meet resident's treatment needs and facilitate access to High Intensity Needs funding.
- Nurse Practitioners are involved in various educational activities including bedside teaching and in-service programs on various topics relevant to resident care, teaching nursing courses at local community colleges, continuing education programs, preceptoring student Nurse Practitioners, involvement in curriculum development, serving as resources for multi-disciplinary teaching, and the development of specific treatment initiatives (e.g., wound care teams) for which they provide ongoing continuing education and clinical support.
- Professional development activities include conferences, workshops and courses to increase their level of expertise (e.g., pyschogeriatrics, wound care, palliative care, and continence management), and involvement in professional associations ranging from general membership to active participation in administration and executive committees.
- Committee work such as organizational and strategic planning committees, wound care committees, and health professional advisory groups.

- Development, implementation and evaluation of care protocols, best practice guidelines, and new care procedures.
- Additional activities include presentations to various community groups about the role of Nurse Practitioners in long-term care (e.g., to Nursing and Medical Advisory Committees, local hospital committees, Rotary Clubs), media interviews about the Nurse Practitioner role, research studies and clinical trials, and staff recruitment.

Linkages with Community Agencies

- The extent to which Nurse Practitioners have been involved in community outreach has been dependent upon the terms of their service agreement, specific needs of the facility and community, and Nurse Practitioner workload and interests.
- Nurse Practitioners have been involved in many educational initiatives and have provided consultation to a variety of organizations.
- In general, Nurse Practitioner links with Community Care Access Centres are weak.
- Many opportunities for Nurse Practitioners to link with community agencies and organizations exist, but there is divided opinion about the emphasis that should be placed on these roles (such as collaboration with Community Care Access Centres on pre-admission assessments) because of the high Nurse Practitioner workload and their primary responsibilities for care of residents currently within the facilities.

Workload

- A very heavy workload is one of the main challenges facing the Nurse Practitioners in the pilot project.
- A heavy and complicated clinical workload challenges them to find time to conduct timely follow-up of specific resident problems; complete administrative documentation such as data collection, report preparation and letter writing; prepare for educational activities; attend committee meetings; and participate in outreach activities. This is compounded for Nurse Practitioners who cover more than one facility.
- A survey of work activities indicated that Nurse Practitioners consistently work in excess of 40 hours per week with over half of their time devoted to direct resident care. Few Nurse Practitioners take regularly scheduled breaks throughout the day and some work on weekends. They spend a great deal of time doing clerical work (average of 6 hours, but up to 11 hours, per week). There is concern that with the current workload, Nurse Practitioners are at risk for burn out.

The Implementation of Nurse Practitioner Roles in Long-Term Care: Facilitating Factors and Challenges

Factors Identified as Necessary for Facilitating New Nurse Practitioner Positions in Long-term Care

- There is strong support for permanent, full-time Nurse Practitioners in long-term care.
- Financial support is needed for an adequate salary, educational opportunities, equipment and resources, and adequate remuneration for physicians working in collaboration with Nurse Practitioners.
- It is critical to secure support for the Nurse Practitioner position from administrators, physicians, staff, residents and families, prior to a Nurse Practitioner starting a position in a long-term care facility.
- Ongoing education, networking, sharing of experiences, and mentoring (through mechanisms such as the regular Nurse Practitioner teleconferences and the project website) have been extremely valuable.
- Physician willingness to work in a fully collaborative relationship with Nurse Practitioners is essential for Nurse Practitioners to work to their full scope of practice.
- Education or marketing of the role of Nurse Practitioners in long-term care would be valuable to provide information on their qualifications, scope of practice, roles, responsibilities, and collaborative relationships, and on career opportunities for Nurse Practitioners in long-term care.
- There is a need for a clear recruitment plan for new Nurse Practitioners, particularly in under-serviced and remote areas.
- There is great potential for Nurse Practitioners in long-term care to be pulled in many different directions and to be overwhelmed with any of a number of clinical or educational challenges. There is a corresponding need for an appropriate program model that provides clear guidelines, expectations and priorities for the Nurse Practitioner role, keeping in mind the need for flexibility depending on the needs of a particular facility.
- A reasonable workload was identified as essential for Nurse Practitioners to work effectively and efficiently. It was recommended that the ratio of Nurse Practitioner to facility should be 1:1, but no greater than 1:3; or one Nurse Practitioner per 200 - 300 residents at a maximum - but this should vary based on the number of facilities covered and their unique needs and geographical locations.

Challenges for Nurse Practitioners Working in Long-Term Care

- A very heavy workload is the major challenge for Nurse Practitioners working in long-term care. This workload compromises their ability to do their jobs efficiently across facilities, to provide adequate follow-up, to establish collaborative relationships, and to participate in non-direct resident care activities.
- Additional challenges are:
  - establishing collaborative relationships when there is hesitation or resistance, and a need to address fears and lack of knowledge of the role

- system-wide problems in long-term care, including a lack of resources, the increasingly complicated health care needs of residents, and support staff issues
- limitations to work activities imposed by legislation that does not recognize the full scope of Nurse Practitioner practice, by agencies that do not accept referrals from Nurse Practitioners, and by limitations in the medications they are able to prescribe.

- The specialized and increasingly complex care needs of the residents in long-term care require a specialized expertise beyond that provided currently by the Nurse Practitioner curriculum. Key informants reported that in addition to a good knowledge of the assessment and treatment of episodic, chronic, and co-morbid illnesses, Nurse Practitioners require training at an expert level in palliative care (including ethical issues), pain and symptom management, wound care, psychogeriatrics (PIECES training), pharmacology specific to geriatrics, continence management, behaviour management, and counseling with families.

Under-serviced Areas

- There are great opportunities for Nurse Practitioners to work to their full scope of practice in under-serviced areas
- Nurse Practitioners in under-serviced areas experience challenges related to limited access to medical supports and educational resources, excessive workload, and isolation.
- It is difficult to recruit Nurse Practitioners to work in remote or under-serviced areas.
- Suggestions to facilitate the work of Nurse Practitioners in under-serviced areas include:
  - providing physicians adequate remuneration for consulting in these areas;
  - increasing funding to recruit and support those working in under-serviced areas; and
  - educational opportunities and the use of technology (computer access, videoconferencing) for education and specialist consultation.
- The long-term care sector as a whole is seen as under-serviced.

Program Evaluation

- Key informants perceived program evaluation as critical for assessing the success of, and improving the use of, Nurse Practitioners in long-term care.
- There was concern that the proposed overall, end-of-project provincial evaluation will not provide valid information.
- Informants expressed concern that outcome variables or quality indicators were not defined so that data necessary for a thorough evaluation could have been gathered throughout the projects. They are also concerned that a primarily quantitative evaluation will not provide an in-depth understanding of the Nurse Practitioner role or related issues.

Positive Outcomes and Potential Concerns of the Nurse Practitioner Pilot Project

Positive Outcomes

The following positive outcomes were identified:

- Improved quality of resident care:
  - general improvement in the level of care
  - increased resident access to resources
  - timely access to medical care
  - continuity of care for residents
  - more appropriate use of medications
  - improved discharge planning
- More efficient use of physician expertise and time, with the potential benefit that this will increase physician satisfaction and help to attract and retain physicians to work in long-term care.
- Improved use of acute care facilities as the number of transfers to hospitals are reduced and hospital resources are used more efficiently (e.g., emergency departments are not used to access diagnostic testing)
- Improved communication with residents and families as Nurse Practitioners are able to spend more time on educating and counseling.
- Improved skill level of staff as the Nurse Practitioners model and teach assessment skills, introduce evidenced-based or new care approaches, and provide formal and informal opportunities for continuing education.
- Improved communication between long-term care facilities and community agencies as Nurse Practitioners act as a liaison to discuss and resolve any concerns about meeting the needs of residents being admitted into long-term care.

Potential Concerns

No negative outcomes of Nurse Practitioners working in long-term care were identified. One issue was identified as a potentially major concern - that of a possible impact on physician remuneration as a result of their collaborative relationship with Nurse Practitioners.

RECOMMENDATIONS

Based on the findings of this interim evaluation, the following recommendations are suggested:

- Preparation should be made for the possible continuation and expansion of Nurse Practitioner positions in long-term care, following the end of the pilot project period. If a decision is made to continue this initiative, any delays in implementation could be seriously disruptive to the long-term care facilities currently involved in the project. Moreover, the Nurse Practitioners currently in the project could find employment elsewhere, thus losing the knowledge and expertise they have gained during the pilot period.

- If future programs for Nurse Practitioners in long-term care are approved, their development should be guided by an Expression of Interest or Request for Proposal, or a similar process, so that goals, partnerships and linkages are well formulated and support for the Nurse Practitioner's role is secured.

- There should be continued support for Nurse Practitioners in under-serviced areas. The role of Nurse Practitioners in long-term care is a good illustration of the potential benefits in a less well-resourced sector of the health system. Under-serviced areas provide good opportunities for Nurse Practitioners to work to the full scope of their practice.

- Funding should be provided for adequate remuneration of Nurse Practitioners. Determination of an appropriate salary and benefits package should be made in consultation with Nurse Practitioner and nursing associations (e.g., RNAO).

- Additional funding should be made available for:
  - equipment and resources necessary for Nurse Practitioners to meet the unique needs of the facilities in which they work. Nurse Practitioners should have some control over this funding.
  - educational opportunities to improve knowledge and skills in areas relevant for the facilities in which they work.
  - clerical and administrative support (data collection, letters, reports, etc).

- Provision should be made for continuing the networking opportunities for Nurse Practitioners (such as those facilitated by the project education consultant, including the project website and regular teleconferences), so that they can work together to share experiences, discuss issues of mutual concern, brainstorm common solutions, address challenges, and provide mutual support.

- The introduction of Nurse Practitioners in long-term care has an impact on the work of physicians practicing in long-term care and issues related to collaborative relationships with physicians will need to be addressed. Resolving issues related to remuneration and "on-call" activities and addressing any concerns that physicians have about establishing or working in collaborative relationships with Nurse Practitioners are critical to the success of this program. The effectiveness of Nurse Practitioners is significantly compromised when physicians do not support this program and are unwilling to work collaboratively with Nurse Practitioners. Further in-depth investigation of the specific factors, issues, and concerns that impede collaboration is needed so that a plan to work with partners to strengthen working relationships can be developed.

- A working model or job description consisting of clear guidelines for Nurse Practitioner roles and responsibilities should be developed. A process for identifying priorities and role delineating boundaries should be developed, recognizing the need for flexibility to take into account the unique needs of each facility, the expertise and interests of the Nurse Practitioner, and that allows for a reasonable workload.

- A program model for Nurse Practitioners should describe an appropriate Nurse Practitioner to resident/facility ratio that is guided by the needs and priorities of the facilities and geographical distances. It is difficult to extrapolate from this pilot project, because there was considerable variability in goals and emphases across projects. Key informants interviewed in this evaluation suggested that the ratio of Nurse Practitioner to facility should be 1:1, but

not greater than 1:3, or one Nurse Practitioner per 200-300 residents. There was also a feeling that with increased numbers of residents or facilities, Nurse Practitioners become less effective. In the study reported by Burl and colleagues (1998), each Nurse Practitioner followed approximately 110 residents across one to three facilities. In their description of the EverCare Nurse Practitioner program in the United States, Kane & Hucks (2000) report that the number of residents per Nurse Practitioner ranges from 66 to 110; each Nurse Practitioner has one or two homes.

- Nurse Practitioners can and should have a key role in linking with specialized or consultative resources (such as Regional Geriatric Programs or psychogeriatric consultants), with educational initiatives (such as PIECES, and including collaboration with in-house psychogeriatric resource persons), and with best practice initiatives (such as the RNAO's Best Practice Guidelines project or the Long Term Care Best Practice Resource Centre being developed in Central South Ontario). Nurse Practitioners are in a good position to facilitate adherence to consultative recommendations and to translate research evidence and educational information into everyday practice. Encouragement of Nurse Practitioners in this role could have major benefits for the success of other initiatives aimed at improving the quality of long-term care.

- The fully informed support of administrators, physicians, and facility staff needs to be secured to facilitate new positions. There should be some collaboration between the Ontario Ministry of Health and Long-Term Care and Nurse Practitioner and nursing associations to promote the role of Nurse Practitioners in long-term care facilities, community agencies, acute care facilities, and the general public.

- Education or marketing on the role of Nurse Practitioners in long-term care would be valuable to provide information on their qualifications, scope of practice, roles, responsibilities, and collaborative relationships, and on career opportunities for Nurse Practitioners in long-term care.

- A strong recruitment plan should be developed to interest Nurse Practitioners to work in long-term care and to work in under-serviced and remote areas. Emphasis should be placed on the opportunities to work to their full scope of practice, and on networking and educational opportunities. A special recruitment plan involving educational assistance is necessary for remote areas. It may be beneficial to work with or collaborate with those currently involved in trying to recruit physicians to work in remote areas. (A collaborative relationship with a Nurse Practitioner may be an incentive for physicians).

- The Nurse Practitioners in this pilot project could act as consultants and mentors in the development and implementation of new projects related to Nurse Practitioners in long-term care, particularly strategies for facilitating collaborative relationships.

- Limitations to the Nurse Practitioner scope of practice imposed by legislation (Public Hospitals Act and Long-Term Care Act) as well as other government and community agency policies should be assessed.

- Additional training in issues relevant to geriatrics is needed to better train Nurse Practitioners to work with a growing elderly population, both in the community and in long-term care facilities. Strategies to address this should include recommendations to the Council of University Programs in Nursing (COUPN). Nurse Practitioners in the pilot project could act as consultants for identifying specific needs and how to best address these.