APPENDIX B
Website: "Knowledge Bank" Project Summary

A project website (http://npltc.medix.ca) was established to facilitate communication among the projects participating in the Nurse Practitioner in long-term care pilot project. This website includes a "Knowledge Bank", in which Nurse Practitioners provide summaries of their project, a review of which follows.

Clinical Practice

Nurse Practitioners reported that their range of clinical activities has increased as physicians, staff, residents, families, and the community have become more knowledgeable and comfortable with the extended functions that Nurse Practitioners are capable of assuming, and as collaborative working relationships are established. Nurse Practitioners are engaged in a wide range of clinical activities. Initially, their practice was primarily focussed on specific activities, such as episodic illness assessment and management, wound care, and behaviour management, but this has broadened to include, but is not limited to:

- assessment (including ordering appropriate diagnostic tests) and management (including prescribing appropriate medication) of episodic illness
- chronic disease assessment and management
- assessment and management of mental health issues (psychogeriatric assessments)
- assessment and management of cognitive impairment
- assessment and management of general decline (decreased mobility, decreased functioning, increased confusion, agitation, depression)
- assessment and management of challenging behaviours
- palliative care
- pain and symptom management
- ear syringing
- wound care
- bowel management
- hydration programs (intravenous, hypodermoclysis)
- counselling with families and residents,
- prevention initiatives (dehydration, falls, immunizations)
- death certification

In assuming these activities Nurse Practitioners consult with physicians, staff, and community resources or partner agencies (e.g., Community Care Access Centres, Alzheimer Society) as necessary regarding treatment plans, interact with families, providing them with information about residents status, assessment results, and treatment planning, and access High Intensity Needs funding to support the provision of care for residents with complex and intensive

treatment needs (e.g., advanced wound care products, pressure relief mattresses, emergency oxygen, and intravenous equipment) Two Nurse Practitioners have been granted courtesy privileges at a local hospital and another has been given access to medical information on hospitalized residents and those who have applied for admission, providing Nurse Practitioners the opportunity to follow residents while in hospital and to provide timely information to facility staff, and families. Many Nurse Practitioners attend resident care conferences.

The specific activities and responsibilities that Nurse Practitioners assume varies across facilities depending upon resident needs, physician preferences (e.g, some have expressed a preference for conducting their own admission physicals) and Nurse Practitioner service agreements with facilities (e.g., one Nurse Practitioner is associated the Behaviour Urgent Services and primarily accepts referrals for psychogeriatric assessments). Most Nurse Practitioners have signed service agreements with their facilities; not all have a collaborative practice contract. All Nurse Practitioners report that they have established collaborative relationships with staff, interdisciplinary teams and physicians, which tend to vary in strength but are primarily positive and strong. For many Nurse Practitioners the strongest collaborative relationships are established with facility Medical Directors, with Nurse Practitioners being actively involved with the residents under the Medical Directors care, although they also receive referrals from other physicians within the facility. Several (5) Nurse Practitioners report that some physicians do not want their residents referred to the Nurse Practitioner, preferring to assume full responsibility for their residents' care.

All Nurse Practitioners report that their clinical workload is high, and often requires them to work more than 40 hours per week. Some report working without breaks, and working overtime evenings and weekends. This overtime is usually required for follow-up of specific residents and for administrative work. Most Nurse Practitioners report that because of the high clinical workload they have minimal time for paperwork (administrative documentation such as, data collection and report writing) and preparation for educational activities.

Educational Activities

All Nurse Practitioner are involved in educational initiatives within their facilities. These include, but are not limited to:

- bedside teaching and in service programs to nurses on various topics approaches such as wound care, immunizations, TB testing, pain management, psychogeriatric assessment, behaviour management, depression screening, ostomy care, catheter care, skin care, restraint use, diabetes management, IM injections, constipation, urinary incontinence, urinary retention, urinary tract infections, respiratory assessment, post-fall assessment, hypdermoclysis, G-Tube feeding, and interveneous use
- continuing education and clinical support for specific treatment initiatives, such as

palliative care programs, wound care teams, bowel management teams, pain and symptom management
- development of a resource library for nursing staff

Some Nurse Practitioners have been involved in educational programs outside of their facilities. These include, but are not limited to:

- teaching nursing courses at local community colleges
- nursing continuing education programs, such as gerontology programs and the PIECES program, for which they provide training and study groups
- preceptoring (mentoring and supervising) student Nurse Practitioners
- curriculum development, and serve as resources for multi-disciplinary teaching
- the development of a multi disciplinary framework for preceptoring Nurse Practitioners, medical students and residents in long-term care facilities

Community Outreach

Nurse Practitioners have extended their work into their community. Nurse Practitioner involvement in community outreach has been dependent upon the specific needs of the community, and Nurse Practitioner workload and interests. These activities utilize their nursing skills and knowledge to provide education and consultation for other health care providers, to participate in support groups for seniors in the community and their families, and to participate in specific treatment initiatives such as the development of region-wide standardized care protocols (e.g., wound care protocols). Some of the community outreach activities engaged in by the long-term care Nurse Practitioners include, but are not limited to:

- Respite care: facilitating admission and discharge from respite care; consultation and information sharing with families and community physicians,
- Acute care: facilitating admission to hospital and return to long-term care facility; consultation with families and physicians
- Community Care Access Centre: consultation regarding admission and discharge of residents to their home or other facility
- Day programs: consultation to specific day programs and educational initiatives
- Workshops: educational programs with local community organizations on a variety of topics such as psychosocial assessment, wound care, stress management for health care providers, Alzheimer Disease
- long-term care consultation: contract work with long-term care facilities that do not have access to Nurse Practitioner services, consultation with other facilities regarding infectious breakouts (e.g., Strep B, scabies)
- Support Groups: development, facilitation, or guest speaking with various support groups, such as groups for those caring for someone with Alzheimer Disease
- Prevention Programs: immunization clinics, fall prevention initiatives

- Multi-agency or regional initiatives: membership in various committees such as multi-agency wound teams, psychogeriatric assessments, stroke management, regional palliative care, infection control, and mental health groups, health alliances and planning committees, senior's networks and advocacy groups, Alzheimer Society,
- Community Medicine: collaboration with community specialists (e.g., gynaecologists, ophthalmologists) to provide onsite care for residents
- Counselling: short-term brief counselling to family members and caregivers of seniors with mental health problems.

Professional Development

All of the Nurse Practitioners have participated in professional development activities including but not limited to the following:

- Continuing education and training programs on topics such as PIECES, AIM accreditation program, geriatric medicine, wound care, dementia, palliative care, rural and remote medicine, pharmacology in the elderly, senior abuse, opioid therapy, and medical certificates of death for Nurse Practitioners. Continuing education activities range from one-time workshops and refresher days (half-day, full-day) to semester long university courses. One Nurse Practitioner is as a registered part-time student working towards her Master of Science degree. Many Nurse Practitioners report that they engage in self-directed learning on topics of immediate relevance to their facility.
- Conference presentations on various topics, such as wound care, geriatric assessment, bowel hygiene care, and the role of Nurse Practitioner in long-term care. Nurse Practitioners have presented at conferences such as, Registered Nurses Association of Ontario - RNAO education day, Nurse Continence Advisors Conference, OLTCA, OANHSS, and GNA conferences
- Attendance at professional conferences (e.g., Geriatric Medicine, Canadian Gerontological Nursing Conference, Ontario Psychogeriatic Association Conference, Toronto Alzheimer Symposium, Ontario Hospital Association - Nurse Practitioner conference, Geriatric Nursing Association, American Association of Nurse Practitioner national conference, Canadian Association of Wound Care national conference)
- Involvement in professional organizations (e.g., Gerontological Nursing Association of Ontario, RNAO, Osteoporosis Society) ranging from general membership to executive committee membership (e.g., president)
- Conference planning committees (e.g., Dementia Care, Y2K conference for Advanced Practice Nursing

Additional Activities

In addition to their clinical activities and community outreach Nurse Practitioners have engaged

in a variety of work-related activities, which include, but are not limited to the following:

- Presentations to various groups about the role of Nurse Practitioner in long-term care (e.g., Nursing and Medical Advisory Committees, local hospital committees, Rotary Clubs)
- Presentations to Family/Residents councils on the role of the Nurse Practitioner, advanced directives, power of attorney for personal and health care
- Establishment of links (consults and networks) with service providers (Nurse Practitioner, Nurse specialists) in other regions or settings
- Initiating or assisting in research studies (e.g., a pneumonia and UTI study and a quality of care and communication study being conducted by a local universities, project with Community Care Access Centres on long-term care placements) and clinical trials
- Memberships in long-term care research groups or consortiums
- Publication of research results and clinical experiences in scientific and nursing practice journals
- Membership in long-term care facility committees such as, organizational and strategic planning committees, amalgamation committees, palliative care, falls and restraints, wound care, infection control, restraint policy, health professional advisory, pharmacy and therapeutics committees, nutrition assessment, quality of care, quality of work life, in which they are involved in corporate policy development related to resident care, evaluation and development of care protocols/best practice guidelines, evaluation and implementation of new care procedures
- Involvement in staff recruitment (interview and selection process)
- Other group memberships: Facility Operators Group (FOG), which includes Ministry of Health representatives, compliance advisors, Administrators and Directors of Care for all long-term care facilities in the municipality; one Nurse Practitioner is a member of her regional District Health Council; another Nurse Practitioner is attempting to coordinate a Nurse Practitioner TLC professional practice group in order to communicate issues and feedback to the NPAO and the college
- Evaluation of Nurse Practitioner pilot project; Nurse Practitioners are assisting in the development of evaluation forms and data collection tools
- Participation in facility accreditation
- Media interviews related to Nurse Practitioner role in long-term care
- Meetings with pharmaceutical equipment supply company representatives to learn more about new products
- Networking and consulting with other Nurse Practitioners and other long-term care Nurse Practitioners

Issues

Several issues were highlighted as the Nurse Practitioner summarized their progress in the pilot project:

- Workload: Many Nurse Practitioners commented on the overwhelmingly high clinical workload and the need for overtime hours due to the unpredictable nature of referrals and complex resident needs. Given the high clinical workload, Nurse Practitioners note that it is challenging to balance time between all activities (direct resident care, administrative, and educational activities) and there is often very little time left for community outreach activities. Although the Nurse Practitioner role is supposed to be primarily clinical several Nurse Practitioners report that a lot of time is devoted to administrative work such as meetings, designing evaluation forms, curricula, and teaching materials and planning for outreach activities. All of these activities require clerical support, which is very limited, or non-existent for some Nurse Practitioners. Moreover, some Nurse Practitioners report that the documentation and data collection required for their clinical activities are very time consuming. Nurse Practitioners working in more than one facility sometimes spend much time travelling between facilities. One Nurse Practitioner reported that she drives a minimum of 300 km per week travelling between facilities. Almost all Nurse Practitioners report working more than a 40 hour work week, and needing to work additional hours (evening and weekends) to do paper work, research, reading, and presentation preparation. Concern was expressed that the workload presently assumed by Nurse Practitioners during the pilot project will become the expected norm. Concern was expressed also that this high workload, in conjunction with isolation experienced when there is not another Nurse Practitioner in the same setting to strategize, collaborate, coordinate and share workload, would result in Nurse Practitioner burnout.

- Scheduling: Nurse Practitioners who work in more than one facility have found it challenging to divide their time between facilities, to schedule visits to facilities to accommodate their specific resident needs and programs, and particularly to follow-up with specific residents, and to minimize travel time. Being away from the facilities for one day in a week usually results in longer working hours during subsequent visits. Moreover, Nurse Practitioners note when there is a gap in attendance at a facility nursing staff will contact physicians to 'get the order' rather than the Nurse Practitioner.

- Communication and Documentation: Follow up and communication with physicians is often difficult due to distance between facilities and workload. It was noted that there is a critical need for up to date information on residents in order to accurately and adequately assess and treat specific problems, to determine appropriate resource utilization, and to ensure proper responsibility for resident care. Most Nurse Practitioners have developed specific tools to improve communication between physicians and Nurse Practitioners, and facility staff.

- Scope of Practice: Several Nurse Practitioners report that their ability to work to the full scope of their practice has been hindered by a lack of equipment. For example, they have

been unable to suture or use intravenous therapy because they do have the necessary equipment. One Nurse Practitioner noted that due to the high number of physicians who work with facility residents she has minimal direct contact with physicians and as a result her role has been limited primarily to assessment and recommendations. One Nurse Practitioner noted there is a need for Nurse Practitioners to assume more a preventative and health maintenance focus rather than to focus primarily on problem-solving (i.e., "putting out fires"). It was noted that visibility of the Nurse Practitioner is important, but that visibility is difficult in large facilities with private rooms.

- Collaborative relationships: Nurse Practitioners report that the willingness of physicians to participate in collaborative practice has ranged from very enthusiastic to very guarded. Several Nurse Practitioners have noted that some physicians appear to be most receptive to Nurse Practitioner involvement with episodic illness or behavioural issues and do not utilize their services to the full scope of their practice. Several Nurse Practitioners have encountered physicians who do not want to participate in this pilot project, preferring to treat their residents independently.

- Continued Funding: Several Nurse Practitioners report that administrators have expressed concern about losing the Nurse Practitioner position because without ongoing ministry support facilities will be unable to independently fund a Nurse Practitioner.

- Educational Activities: While Nurse Practitioners spend much time providing informal training opportunities to staff (e.g., bedside teaching, teaching in the moment), one Nurse Practitioner commented that opportunities for staff education are limited by heavy workloads, 4 work shift periods, part-time and unregistered staff, limited education and poor literacy levels of workers in long-term care.

Strategies to Facilitate Nurse Practitioner Work Activities:

Several Nurse Practitioners have used the Knowledge Back to share implementation strategies that have been effective.

- Communication and Documentation: To facilitate communication with physicians and staff, many Nurse Practitioners have developed specific forms to chart relevant resident medical information. For example, one Nurse Practitioner reported that residents under the care of the Nurse Practitioner have a problem list form in each resident's chart (lists problems, care plan, drug list), 'labs' form, and space for Nurse Practitioners and physicians to list questions to each other. This form is kept in a clear plastic sheet prior to the Medical Orders section in the chart. This is used by the Nurse Practitioner and physician to have quick access to the most important information about the resident. One Nurse Practitioner noted

that a connected computer systems between facilities allows her to access information about residents (computer files) from either site, which is both convenient and time efficient. One Nurse Practitioner described the use of a digital camera to photograph or video medical conditions (e.g., wounds, unusual choreiform movements) to local experts for consultation.

- Scheduling: Several Nurse Practitioners commented that they circulate a monthly schedule of their time, specifying scheduled time at each facility so that there is consistent and predictable contact with facilities and physicians. Days on which the Nurse Practitioner is not scheduled to be at a specific facility, staff are encouraged to page or voice mail less urgent situations. One Nurse Practitioner noted that having a cell phone allows all staff to have quick access to her services. One Nurse Practitioner altered her daily work hours to overlap with all 3 shift time periods so that she works Monday to Thursday 7:45 to 17:45, providing her with access to staff on all shifts.

- Scope of Practice: Several Nurse Practitioners noted that participation in professional advisory meetings and other in-house committees was an excellent opportunity to provide updates on Nurse Practitioner role and to familiarize staff with the Nurse Practitioner scope of practice. One Nurse Practitioner reported that she reviews physician concerns book with nursing staff to assist them to identify resident problems that are within the Nurse Practitioner scope of practice.

- Collaborative relationships: Several Nurse Practitioners reported that attending rounds with physicians was an effective way to get to know the physician, to develop a working relationship, and to discuss resident treatment needs. Similarly, several Nurse Practitioners reported regular meetings with administrator and directors. One Nurse Practitioner reported that she held an orientation and review of the program 6 months into the pilot project to discuss and resolve issues.

Positive Outcomes

Although the Knowledge Bank template did not specifically request Nurse Practitioners to report any positive outcomes arising from their work, several outcomes related to improved resident care, cost efficiency, and satisfaction with Nurse Practitioner activities were identified.

- ***Improved patient care:***
  - The Nurse Practitioners interaction with hospital health care team when a resident is hospitalized has resulted in improved care of resident and family through increased support, communication, education, improved discharge planning, and improved communication between the facility and health care team.
  - Nurse Practitioner modelling and coaching with nurses has resulted in an improvement in

nursing skills (e.g., palliative care, comprehensive assessment).

- With the introduction of IV therapy, nursing staff have become more competent in the use of IV lines and therefore residents do not need to be hospitalized, and when hospitalized residents' discharge to the facility is not delayed if they have an IV.
- Nurse Practitioners are able to facilitate access to High Intensity funding to support residents' treatment needs, which allows them to be treated in long-term care facilities and avoids admission to acute care facilities.

- ***Cost efficiency***
  - Nurse Practitioner ability to assess and treat resident medical problems has resulted in more timely intervention and a decrease in the number of physician visits, especially late shift call-back and the use of on-call staff.

- ***Satisfaction with the Nurse Practitioner role:***
  - Several Nurse Practitioners report that there has been much support for the Nurse Practitioner role. One Nurse Practitioner noted that project partners have demonstrated formal support and advocacy on behalf of the Nurse Practitioner. Several Nurse Practitioners have noted that they have received positive feedback about the Nurse Practitioner role from residents and their families.

Recognitions

Two Nurse Practitioners were inducted into the Nurses Honour Society, University of Windsor.