Research Priorities and Strategies for Improving the Integration of Advanced Practice Nursing (APN) Roles in Cancer Control: Consensus Meeting Results

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Sponsors: Canadian Institutes of Health Research (CIHR) & Canadian Centre of Excellence in Oncology Advanced Practice Nursing (OAPN)

Project Objectives
1) Share evidence on the effectiveness of APN roles in cancer control.
2) Identify national priorities for addressing unmet patient and family health needs and gaps in cancer control through innovative research in two streams:
   • Models of APN care and cancer control, and
   • Interventions to improve the development, use and integration of APN roles in cancer control.
3) Identify practical, organizational and research resource needs and expertise for conducting a national program of research about APNs in cancer control.
4) Promote national collaboration and exchange among interdisciplinary decision-makers, practitioners and researchers with interests and/or expertise in leading and conducting oncology APN related research in one or more of the identified streams.

When and Where
April 29 and 30th, 2010, at McMaster University, Hamilton, Ontario.

Format
• Presentations made by decision-makers, advocates, and national/international researchers.
• Small and large group discussions.
• Computer mediated decision support to establish consensus on research priorities.
• Follow-up teleconference to confirm and clarify priorities and next steps.

Participants
• 42 participants from the United Kingdom, Australia and 8 Canadian provinces.
• Patients, APNs, physicians, nursing faculty, health service researchers, healthcare administrators, healthcare planners, government policy makers, regulatory agencies and professional associations.

Key Findings
• APN roles were identified as a key strategy for developing innovative and sustainable models of cancer control.
• There is substantive international evidence on the effectiveness of well-designed APN roles in cancer control and other specialties on patient provider and health system outcomes, but limited research on APN roles within the context of the Canadian healthcare system.

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Consensus Meeting Results cont.

- Gaps in cancer control that may be met through better APN role integration include: addressing outreach disparities, supporting patient transitions across the care continuum, improving survivorship care, meeting patient information and education needs and increasing access to health promotion, cancer prevention and screening.

- Barriers to APN role introduction are: lack of funding, inadequate funding mechanisms to support interdisciplinary team work and lack of stakeholder understanding of the roles.

- Implementing a national program of research will require: leadership with strong provincial representation, patient engagement, collaboration with key health policy and decision-maker groups, and recruitment of interdisciplinary research team members with expertise in health services research, economics, health policy, ethics, technology, business and knowledge translation.

Ten initial priority research themes were identified (not priority ranked):

1. APN role development and deployment;
2. Defining and measuring outcomes;
3. Survivorship, transitions and chronicity;
4. Funding models and economic factors in role development;
5. Justice, equity and access to effective cancer control services;
6. Interdisciplinary teamwork and care coordination;
7. Economic evaluation;
8. Cancer system performance improvement;
9. Pressing unmet patient health needs and policy issues; and
10. Evaluating the impact of system support models on APN role effectiveness, job satisfaction and retention.

These themes were distilled down to agreement on one centralized research theme:

Evaluating the impact of new models of transitional care provided by specialized and advanced nursing roles at key time points in the cancer continuum (i.e. post-treatment follow-up).

Project Outcomes

- High participant satisfaction with the consensus meeting format and achievement of meeting objectives.

- Improved participant understanding of APN roles, models of APN practice in cancer control nationally/internationally and APN role outcomes.

- Interdisciplinary collaboration and networking among key stakeholders from across Canada and identification of potential research partnerships and research team members.

- Patient participants were important contributors throughout the meeting and provided a practical, humanistic perspective to priority setting and identification of systems barriers to effective cancer control.

- Agreement to establish a pan-Canadian Steering Committee to identify research leaders and provincial champions across research, policy and practice sectors.

Dr. Denise Bryant-Lukosius
Director, OAPN

Dr. Andrew Padmos
CEO, Royal College of Physicians and Surgeons of Canada
Margaret Forbes is a masters prepared nurse practitioner in the breast disease site team at the Juravinski Cancer Centre, Hamilton. Margaret is actively involved in research to examine interventions for the management of lymphedema and menopause within the cancer patient population. She firmly believes that research is the driving force behind developing effective treatment plans. Margaret is very excited about conducting her first clinical trial with an interdisciplinary team with research interests in radiation oncology, complementary medicine and biostatistics, to evaluate the effect of an acupuncture-like transcutaneous stimulation in relieving treatment induced vasomotor symptoms in breast cancer patients. We caught up with Margaret to discuss how research-informed activities shape her clinical practice.

**Tell us about your experience as a participant in the Evidence-Informed Nursing Practice workshop?**

“It was an excellent workshop! The sessions were well planned and designed with nurses in mind. The workshop assisted nurses in identifying researchable questions, conducting literature searches, and critically appraising the literature. The staff and tutors were knowledgeable, well-informed, and helpful”.

**The literature indicates that most APNs have difficulty in developing and integrating research activities in their role. How well have you been able to integrate research in your role?**

“Each week I set aside time to critically appraise studies that are relevant to my practice. Once I have examined the recent research and determined its creditability, I determine its applicability to my clinical practice. I have also found that being involved as a reviewer for different oncology based journals keeps me informed about current and upcoming research”.

**What strategies have you used to integrate research and evidence-informed practice activities into your role?**

“Keeping informed about current research is part of my professional responsibility. At times this can be a challenge. However, I feel that it is important for APNs to negotiate time allocation for research and to advocate for making research a priority within their APN role. Often the clinical aspect of an APN’s role overshadows the other domains of practice. Luckily, finding time for research within my current role is both encouraged and expected”.

**How will you be utilizing OAPN’s resources over the next year to support your research and evidence-informed practice activities?**

“In future research projects I will utilize OAPN’s services to gain assistance in the development of research questions and creation of databases. I am truly impressed with the level at which OAPN is willing to assist APNs in getting research underway”.

**How can APNs like yourself, benefit from OAPN?**

“I want to encourage APNs to visit the OAPN website and learn what OAPN is all about. APNs should take advantage of the outstanding research services OAPN is able to provide. Also, all the different networking opportunities that evolve through OAPN initiatives play an important role in APN role development and recognition. I hope that more APNs will begin to utilize OAPN’s resources and will be encouraged to participate in research knowing that they have access to such positive and strong support through OAPN. The exceptional wisdom and knowledge of the staff of OAPN may make APNs think - ‘If I have this group supporting me, I will be able to do this research’. Once we get more APNs participating in research, we can move the agenda of evidence-based practice forward and in turn contribute to better health for all individuals”.

**Margaret Forbes**

(RN(EC), MN, CON(C))
The Status of Clinical Nurse Specialists and Nurse Practitioners in Canada

Alba DiCenso, RN, PhD1, Denise Bryant-Lukosius, RN, PhD1, Ivy Bourgeault, PhD2, Ruth Martin-Misener, NP, PhD3, Faith Donald, NP-PHC, PhD4, Julia Abelson, PhD5, Sharon Kaasalainen, RN, PhD1, Kelley Kilpatrick, RN, PhD1, Sandra Kioke, RN6, Nancy Carter, RN, PhD7, Patricia Harbman, NP-PHC, MN/ACNP Certificate, PhD(c)8


The Issue
There is heightened demand for advanced practice nursing (APN) roles such as clinical nurse specialists (CNSs) and nurse practitioners (NPs) in Canada and around the world. Advanced Practice Nurses are recognized as an important human resource strategy for improving access to high quality, cost-effective and sustainable models of healthcare. While there has been progress over the past 40 years, the full contribution of APN roles to improving the health of Canadians has yet to be fully realized.

The Purpose
To inform policy and practice recommendations for the best use of NPs and CNSs to meet Canadian healthcare needs.

What did we do?
A scoping review of all Canadian literature and international reviews relevant to APN was conducted, in addition to 62 interviews and 4 focus groups with 19 key stakeholders.

What did we find?
• There is a growing consensus related to the purpose of APN roles.
• NP roles in Canada have shown significant growth and improved integration through the development of legislation to support autonomous practice, an increase in the number of graduates, and funding of new education programs.
• Conversely, there is limited provincial/territorial or national investment in supporting the development of CNS roles, as characterized by lack of formal CNS education programs and credentialing mechanisms, and a decline in the numbers of CNSs between 2003 and 2006, especially in British Columbia and Ontario.
• Key barriers to APN role development include: lack of stakeholder involvement, lack of role standardization Canada wide, lack of role clarity, and lack of sustainable funding models to support APN role development and implementation.
• Key factors influencing the success of APN integration include establishing mechanisms to support a full scope of practice, raising awareness about the function of APNs, clearly defining roles, and ensuring strong leadership to support role implementation.

How will this research help?
When this work was completed, a multidisciplinary roundtable formulated recommendations, some of which were the creation of a pan-Canadian multidisciplinary task force to facilitate role implementation, inclusion of the role in healthcare human resource planning, development of an APN communication strategy for healthcare providers and the public, and standardized APN regulatory and educational processes across the country.

What is next?
Policy and practice recommendations need to be formalized to fully realize the contribution of NPs and CNSs in meeting the healthcare needs of Canadians. Four priority areas for policy and practice recommendation identified in the study include: i) role development and introduction, ii) role clarity and awareness, iii) education and iv) role implementation.

This research was supported by the Canadian Health Services Research Foundation (CHSFRF) and the Office of Nursing Policy, Health Canada. McMaster University, University of Ottawa, Dalhousie University, Ryerson University, ‘Université du Québec en Outaouais, ‘University of Victoria, University of Toronto.

Information: Renee Charbonneau-Smith, Knowledge Exchange Specialist, CHSFRF/CIHR Chair Program in APN, McMaster University charbon@mcmaster.ca
The Issue
Patients with prostate cancer frequently report unmet needs related to information and treatment decision-making. Treatment decisions for locally recurrent prostate cancer are difficult due to the number of treatment options, varied evidence about their effectiveness and differences in side effects. It has been shown that decision aids improve information delivery and patient confidence in treatment decision-making. There is an absence of treatment decision-making aids for patients with locally recurrent prostate cancer.

The Purpose
To inform the development of a treatment decision aid for patients with locally recurrent prostate cancer.

What did we do?
A two-phase descriptive needs assessment study employing quantitative and qualitative methods was conducted. Through a Delphi process in Phase One, physician consensus on treatment options for the decision aid was established. Phase Two involved patient interviews to determine treatment decision-making needs. Four oncologists and five patients from two regional cancer centres participated in the study.

What did we find?
• There was consensus among radiation oncologists that Watch and Wait and clinical trial/drug trials should be included in a treatment decision aid. Seventy-five percent of the radiation oncologists supported the inclusion of prostatectomy and High-Intensity Focused Ultrasound (HIFU); 50% of radiation oncologists supported re-irradiation (brachytherapy) and Androgen Deprivation Therapy (ADT); while 25% agreed that cryotherapy should also be included. All radiation oncologists agreed that Light-Activated Tookad should not be included in the treatment decision aid.
• Radiation oncologists reported spending substantive time with patients to explain the standard treatment options.
• Oncologists and patients agreed that the treatment decision-making process took time, usually over a period of several months.
• Several factors influenced patient treatment decision-making including assessing personal preferences, family involvement, prior treatment and disease related factors such as PSA velocity.
• Barriers to treatment decision-making included information overload and lack of access to unbiased information sources. Several patients described feelings of regret and/or uncertainty about their treatment decision.
• Patients wanted more information about treatment options, prognosis, treatment effectiveness, side effects and post-treatment follow-up care. Establishing a centralized data source such as nurse-led information sessions was recommended by patients.

How will this research help?
Treatment decision-making is time-consuming for oncologists and patients. Despite these efforts, patients report unmet information needs and are not always confident in their treatment decision. Healthcare providers must recognize individualized patient needs for information and support. Systematic ways of delivering information such as a decision aid and/or the use of nurse-led information sessions may be more time efficient and effective for improving patient confidence in treatment decision-making.

What is next?
Further data is being collected from patients and radiation oncologists to develop and evaluate the effectiveness of a treatment decision aid.

Gladys Mokaya, RN, BScN, MScN (student), Denise Bryant-Lukosius, RN PhD CON(C), Carolyn Ingram, RN, DNSc, CON(C), Margaret Black, RN, PhD, Ian Dayes, MD, MSc, FRCP(C), Dilip D. Panjwani, MD, MRCP, FRCP(C)
Purpose: To evaluate the effect of an audit and feedback (A&F) intervention on hospitalized oncology patients’ perception of nurse practitioner (NP) care related to cancer pain management.

Design: Quasi-experimental.

Setting: Urban comprehensive cancer centre.

Patient Population: Data were collected from two separate oncology patient groups, each consisting of 96 patients: 1) patients admitted prior to the A&F intervention and 2) patients admitted during the A&F intervention.

Intervention: Eight NPs were given a 30 minute educational session on national cancer pain guidelines and pre-intervention patient pain data prior to the 16-week intervention. Patients were contacted via telephone within 1 week of hospital discharge to collect data on their perceptions of quality of nursing care. The NPs were given weekly individual feedback of patient pain scores and performance data. Aggregate patient pain scores and performance data of the other 7 NPs were also given to each NP.

Results: Over 80% of participants rated NP care as excellent. No significant change in pain severity or perceived quality of NP care was observed in both patient groups. However, the percentage of patients reporting satisfaction with pain relief was significantly higher in the intervention group than in the pre-intervention group (95.4% vs. 70%, p<.001, CI 95%).

COMMENTARY

Are the results valid? Yes. There were no baseline differences between the intervention and control group. Participants were also blinded to their group assignment.

Were valid measurement tools used? The data collection instruments used in the study (Brief Pain Intensity Short Form and Oncology Patient's Perception of Quality of Nursing Care Scale Short Form [OPPQNS-SF]) have been previously validated and shown to be reliable.

Were all important processes and outcomes considered? None of the 8 NPs in the study had oncology specialty certification. Data on NP performance in providing recommended pain practices were collected for the A&F intervention but not reported. NP perceptions of how the A&F intervention influenced their practice were not considered.

Limitations: The response rate was low [49% (pre-intervention phase) and 47% (intervention phase)]. Almost half of the possible subjects were also excluded because they could not remember their NP’s name. It is possible that these subjects were less satisfied with their care. Only one urban cancer center was included in this study, thus the results may not be generalisable to NPs in other settings. Participants may have been uncomfortable making negative comments during the phone interview.

What do study results mean for advanced practice nurses (APNs) and future research? A&F interventions have the potential to improve patient outcomes and the quality of care provided by APNs such as NPs. This intervention may be more effective in APN care for patient populations with poor health outcomes and for conditions in which provider uptake of best practices is low. Tools like the OPPQNS-SF may not be sensitive enough to detect changes with high baseline levels of patient satisfaction. Future research is needed to examine how A&F interventions influence APN care and subsequent patient and health system outcomes.

Lindsay Yuille, BScN
Atyub Ahmad, MMI
Recent Publications


Upcoming Conferences

CANO: September 11-15, 2011
http://www.cano-acio.org/

CAAPN: September 28-30, 2011
http://www.caapn.com/Page.asp?IdPage=6182&WebAddress=caapn


OAPN Staff

Saadia Israr, MMI Program Coordinator

James McKinlay, BPhEd-Hons APN Chair Program Research Coordinator

Jennifer Ranford, MA Program Coordinator II

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New OAPN Staff

Lindsay Yuille, BScN Research Coordinator II

Lindsay is a recent graduate of the fast-track BScN program at McMaster University. She also holds a combined honors BA degree in English and Political Science. She currently works as a full-time emergency department staff nurse at Oakville Trafalgar Memorial Hospital in Oakville, Ontario. Lindsay is interested in further developing her knowledge and skills in nursing research methodology and plans to pursue Master of Science in Nursing and Nurse Practitioner certificate in the future.

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OAPN Research Seminar Series

Purpose: The Research Seminar Series provides a platform to present and discuss APN related research in progress or completed research, explore new areas of research, develop and share research ideas and to foster collaboration and networking among oncology APN and interdisciplinary researchers.

Target Participants: The Research Seminar Series is open to national and international participants of all disciplines interested in research relevant to the delivery of nursing and advanced nursing services in cancer control.

Format: Online via webinar and teleconference.

Recent Seminar Success Stories

On February 16, 2011, Edith Pituskin (RN, MN), a Nurse Practitioner (NP) at the Cross Cancer Institute (Edmonton, Alberta), and a PhD candidate and Assistant Clinical Professor at the University of Alberta, conducted a presentation on issues related to cardio-oncology research. The seminar included a discussion on the development of an NP's program of research, and the issues and opportunities related to NP research.

On December 7, 2010, Lynne Jolicoeur (RN, MScN, CON(c)), an Advanced Practice Nurse at the Ottawa Hospital Research Institute, presented her ongoing research related to community follow-up care for patients with endometrial cancer.

Participants at the seminars were remarkably diverse including: graduate students, nursing faculty and researchers from over 11 universities and colleges across Canada, healthcare administrators, physicians, and oncology nurses working in a variety of cancer care settings.

Both seminars were well received with an active audience, rich discussion, and positive feedback from participants. The seminar presentations can be accessed at: http://oapn.mcmaster.ca/index.php/initiatives/research/resource-webinar/archive.

Discussion Forum: For an in-depth discussion related to the research topics presented at the seminars and/or other APN related research issues, please join the OAPN discussion forum at http://oapn1.pbworks.com/w/session/login.

Please email Saadia Israr at oapn@jcc.hhsc.ca for the username and password.

Next Seminar: The next seminar will be held in April, 2011, 12:00 - 13:15 EST.

For more information on the OAPN Research Seminar Series and to register for upcoming seminars please visit: http://oapn.mcmaster.ca/index.php/initiatives/research/resource-webinar.
Postdoctoral Fellowship

As part of OAPN’s mandate to increase research capacity in Canada on the effective use of nursing roles in cancer control, OAPN is offering a one-year postdoctoral fellowship from July 1, 2011 to June 30, 2012. The successful applicant will have the opportunity to tailor the fellowship experience to meet individualized learning needs, further develop research knowledge and skills, and establish their own program of research through:

- Mentorship and training by a research supervisor,
- Post graduate courses,
- Participation as a co-investigator on provincial/national/international research teams,
- Support for grant writing,
- Research infrastructure to conduct pilot projects,
- Development and submission of manuscripts for publication,
- Co-tutoring and/or teaching graduate research courses, and
- Supervising undergraduate and/or graduate research students.

The deadline for applications is April 1, 2011.

Terms of Fellowship: The fellowship is a one-year full-time position with a total award of $52,000 for salary plus benefits and $5,000 for education and/or travel expenses.

Information: For more information on the postdoctoral fellowship and the application process please visit: http://oapn.mcmaster.ca/index.php/component/content/article/95.

Nurse Practitioner’s Association of Ontario (NPAO) Grant Honourary Membership to Alba DiCenso

Alba DiCenso has been awarded the honourary NPAO membership in recognition of her outstanding commitment and support for the integration of the Nurse Practitioner role across Canada and in particular for her expert guidance to government, policy decision-makers and nursing organizations in Ontario.

Alba is a full time faculty member in the School of Nursing at McMaster University, and an OAPN National Advisory Committee member.

Congratulations Alba on being granted this prestigious award.

Juravinski Cancer Centre APN wins Award

Jan Park Dorsay, a Nurse Practitioner for the inpatient oncology rehabilitation program at the Juravinski Cancer Centre, won the 2010 CANO-Manitoba poster award for her work on “Evidence-based care of oncology patients with DVT: Standardized treatment order development and implementation by nurses in Oncology”.

Congratulations Jan on receiving this award!
Evidence-Informed Decision-Making Workshop

Canadian Centre for Evidence-Based Nursing at McMaster University
Sunday, May 1 - Friday, May 6, 2011

What is Evidence-Informed Decision-Making (EIDM)? EIDM is the purposeful and systematic use of the best available evidence to inform the assessment of various options and related decision-making in practice, program development, and policymaking.

Workshop Format: One-week intensive course. Learning methods will include small group and large group sessions, individual study time, and opportunities to work with a trained librarian. For those who teach EIDM, there will be opportunities to practice teaching skills.

Workshop Outcomes: Participants will gain skill and confidence in:

• Searching for, accessing, and critically appraising the relevance and quality of evidence;
• Interpreting and applying the evidence; and
• Identifying strategies to implement evidence-informed decisions.

Who Should Attend: The workshop is open to participants of all skill levels. Such individuals include clinicians, nurses, advanced practice nurses, administrators, managers and all health professionals as well as librarians and policymakers who wish to use EIDM in their various disciplines.

OAPN’s director, Denise Bryant-Lukosius, will lead a small group specifically for advanced practice nurses. Clinical educators and professional practice leaders in oncology and other specialties are also encouraged to apply for this small group.

Workshop Location: McMaster University, Hamilton, ON Canada.

Information: For more information, please visit http://cccebn.mcmaster.ca or contact Jennifer Yost: (905) 525-9140 ext. 21927; jyost@mcmaster.ca

Résumé Writing for Nurses Workshop

The Résumé Writing for Nurses Workshop is a one-day interactive event that helps nurses start their job search process. The workshop will provide an opportunity to:

• Review your current CV and résumé;
• Learn the purpose of each type of application document;
• Learn the “do’s” and “don’ts” of nursing applications; and
• Learn from panelists directly involved in the hiring process.

Career Directions Online Tutorials

March 21: Creating Your Career Vision
March 28: Developing Your Strategic Plan
April 4: Marketing Yourself

Mentorship for Leadership Workshop: June 22, 2011

The workshop objectives include:

• Engaging, inspiring, and motivating nursing staff to advance their professional practice;
• Examining the benefits of mentorship for mentees/mentors, patients, and employers;
• Increasing awareness of how mentorship and career development are effective healthcare human resource management strategies;
• Increasing the understanding and implementation of the 5-Phase mentorship model; and
• Addressing professional development issues and how the Mentorship Program and its resources can support you and your staff.

For more information on any of these events please contact: onment@mcmaster.ca
Incorporating high-quality evidence into practice is fundamental to improving patient, provider and health system outcomes. Several resources are available to assist advanced practice nurses (APNs) and other clinicians in evidence-informed decision-making, however, literature searching and critical appraisal skills often act as a barrier in identifying high-quality research. Using the 6S model (see figure) as the guiding framework, this newsletter column will feature information on high-quality pre-appraised resources that support evidence-informed decision-making.

**Feature Resource: MacPLUS Federated Search**

MacPLUS Federated Search (MacPLUS FS) is an electronic service that provides clinicians with access to the best available evidence for clinical decisions. Based on the 6S model, MacPLUS FS provides 1-stop searches of current best evidence resources, so that clinicians can find in 1 search what multiple resources have to offer. These resources include summaries and guidelines from evidence-based textbooks (e.g. Clinical Evidence, and Up to Date), synopses of systematic reviews from databases such as DARE, systematic reviews from the Cochrane Database of Systematic Reviews, and systematic reviews and studies from Nursing+ and PubMed Clinical Queries.

In addition to providing links to “how to” prescribing information, patient information, selected evidence-based guidelines, MacPLUS FS also provides clinicians with the best available evidence relevant to their area of practice through email alerts of newly published studies, rated by discipline for relevance and newsworthiness. Visit and register for MacPLUS FS today at [http://plus.mcmaster.ca/macplusfs/](http://plus.mcmaster.ca/macplusfs/).

Furthermore, one of the resources that MacPLUS FS searches is Nursing+ Best Evidence for Nursing Care. Nursing+ is a great resource to help APNs and RNs keep up to date on the best available evidence relevant to their area of practice through email alerts of new articles and the ability to search the Nursing+ database for high-quality evidence. Nursing+ also accepts volunteers to be Sentinel Readers.

As a Sentinel Reader you can enhance your critical appraisal skills by assessing the clinical relevance and newsworthiness of high-quality, hot-off-the-press studies within your area of practice. In return, you can build your professional practice portfolio by including the yearly summary of all of your Sentinel Reader ratings. Visit Nursing+ at [http://plus.mcmaster.ca/NP/Default.aspx](http://plus.mcmaster.ca/NP/Default.aspx).

Please contact the MacPLUS team at: macplus@mcmasterhkr.com if you have any comments, questions or concerns.

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Figure: The 6S model.  
The development of the Canadian Centre of Excellence in Oncology Advanced Practice Nursing (OAPN) is made possible through the generous financial support of Amgen Canada Inc.

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