

ANNUAL REPORT 2009



Practice and Research in Nursing
A Centre for Nursing Health Services Research

Mission of the Practice and Research in Nursing Group:

. . . to produce and use evidence to plan, implement and evaluate nursing practice change to promote improved outcomes (individual, provider, and system).

Annual Report 2009
Practice and Research in Nursing Group,
School of Nursing
Faculty of Health Sciences, Queen's University

The Practice and Research in Nursing (PRN) group is pleased to report on activities in 2009, its sixth year of operation. In summary, PRN has been successful with new funding, capacity building in nursing research in the Kingston region, and acquiring support for graduate students.

PRN is housed in three locations: the School of Nursing at 92 Barrie Street, 78 Barrie Street on the second and third floors, and the Nursing Research Unit based at the Clinical Research Centre, Kingston General Hospital. Research is carried out in a number of clinical agencies and in the community, both urban and rural. The main PRN office is at 78 Barrie Street. The School of Nursing has provided funding for a full time administrative assistant who started work in September 2008, but with Queen's budgetary concerns this position was eliminated when the incumbent went on maternity leave. The Director of PRN, Dr Medves, is also the Director of the School of Nursing.

The governance structure includes an advisory board and four senior scholars Drs Margaret Harrison, Jennifer Medves, Joan Tranmer, and Elizabeth VanDenKerkhof. The PRN scholars are Drs Cynthia Baker, Marianne Lamb, Judy DeWolfe, Diane Buchanan, Dana Edge, Lisa Keeping- Burke and Ms Susan Laschinger, Ms Joanne Peterson, and Ms Laura Gedcke-Kerr. Lenora Duhn is a practice-based scholar. PRN fellows include Christina Godfrey, Amanda Digel, Elizabeth Dogherty, and Rosemary Wilson. All of the senior scholars have protected time for research through external career awards or funding to buy out teaching time, except the Director, Dr Medves. The QJBC supports St Elizabeth Health Care as an Evidence Utilization Group (EUG).

The involvement of graduate students and those in clinical practice has increased over the years in the PRN group. PRN members supervise nine of the ten Nursing PhD students and M Harrison is supervising a PhD student in Rehabilitation Sciences. As a group we will ensure that they receive the maximum number of opportunities to develop as researchers by involving them in nursing research projects, linking them with nurse scholars at different universities, and including them on new PRN projects. Two PhD students have federal funding (Dogherty, Hogan).

There has been one unifying theme. All the researchers have been involved in research evidence and transfer into practice. Our work is focused on the point of care i.e., whether that is institutional, community, transitional including hospital-to-home, rural or urban. Work and discussions with the Canadian Patient Safety Institute and Accreditation Canada has resulted in a 5 year grant from the Canadian Institutes for Health Research to support the work of the Queen's Joanna Briggs Collaboration. This will allow expansion of the QJBC academic-practice partnership within south eastern Ontario to a national level academic-policy partnership. The majority of the SON faculty are co-investigators on this initiative.

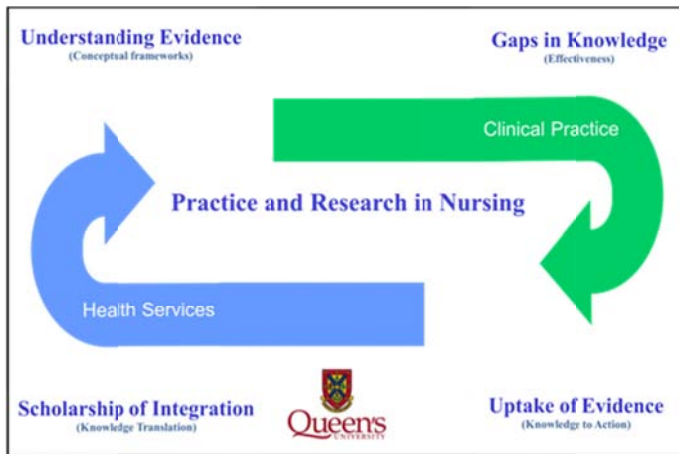
In 2009 PRN senior scholars obtained new PI grants with a total funding of \$1.6 million. The senior scholars produced 16 articles in peer-reviewed journals, and presented at numerous conferences nationally and internationally during 2009.

The systematic reviews undertaken in 2009 - *Guideline dissemination and implementation strategies for nursing and professions allied to medicine* (in review Cochrane Database of Systematic Reviews), *Practice Guideline Dissemination and Implementation Strategies for Healthcare Teams and Team-Based Practice: a systematic review* and *The impact of hospital visiting hour policies on pediatric and adult patients and their visitors* - were published in the Joanna Briggs Institute Library of Systematic Reviews.

In 2009 we recognized the synergies of the group and developed a thematic research framework that has four elements; Understanding evidence, Gaps in Knowledge, Uptake of Evidence, and Scholarship of Integration. No one component is more important than the others, but they are all interrelated. The framework was produced in a poster format and was discussed with the Executive Director of CIHR at a meeting in the fall of 2009.

The annual report is based on the four components of the framework. Much of the research projects undertaken by the PRN scholars can fit in more than one component but for ease they are presented in the section most appropriate. Conceptually the scholars have recognized that a research question can start anywhere on the cycle and that a whole program of research can evolve from developing the framework, identifying gaps, and then working with practitioners to integrate new knowledge into practice and finally evaluating if best practice is now implemented.

The PRN scholars encourage all graduate students to publish their findings in peer reviewed journals and engage in getting the results into practice based recommendations. The PRN scholars also write and publish together which creates a cohesive research program. In each of the sections, new grants and ongoing research are identified and publications relevant over the last few years are listed. An asterisk beside the first author identifies a graduate student thesis.



Examples of conceptual frameworks used extensively in School of Nursing research:

- Patient Safety in Nursing
- QUIPPED: Queen’s University Inter-Professional Patient-centred Education Direction
- Women’s Choice: Rural Maternal Services
- Continuity of Care

Understanding Evidence

Understanding evidence entails developing and creating conceptual frameworks that allow the researcher to ground their enquiry into a theoretical framework.

Continuing

Title	New International Research Collaborations
Investigators	VanDenKerkhof
Funding source	Principal's Development Fund, Queen's University \$7,100 Research Development Fund, Queen's University, School of Nursing \$1,500
Years of funding	2008-2009

Continuing

Title	Policy, Evidence and Practice with Chronic Wounds: A socio-historic study of leg ulcer care 1800-2000
Investigators	Harrison, Graham, Shortt, & Lamb
Funding source	Ottawa Health Research Institute (\$11,900 2000-2003)
Years of funding	2000-present

Title	What is the optimal level for full time nursing in Ontario – is 70% an appropriate full time employment goal?
Investigators	McCull (co- PI), Tranmer (co-PI), Johnson, Green, Hunter, Corbett, & Shaw.
Funding source	Ontario Ministry of Health and Long Term Care
Years of funding	August 2008 – November 2009 (\$40,000)

Title	Nurse Scheduling and Patient Safety Outcomes
Investigators	McGillis-Hall, Doran, Tranmer , Mallette, Petersen, & Monette.
Funding source	CIHR and Canadian Patient Safety Institute (\$92,295)
Years of funding	June 2007-2009

Publications

Broers, T., Poth, C., & **Medves, J. M.** (2009). Understanding interprofessional collaboration from the student's perspective. *Journal of Research and Interprofessional Care*, 1(1), 3-9.

Kulig, J.C., Hegney, D., & Edge, D.S. (2010). Community resiliency and rural nursing: Canadian and Australian perspectives (pp. 385-400). In, Winters, C.A. and H.J. Lee (Eds.). *Rural nursing: Concepts, theory and practice*, 3rd ed. New York: Springer.

Moffitt, P., Mordoch, E., Wells, C., Martin-Misener, R., McDonagh, M.K., & Edge, D.S. (2009). From sea to shining sea: Making collaborative rural research work. *Rural and Remote Health*, 9 (online): 1156. Available from: <http://www.rrh.org.au>

*Smith, L., & Harrison, M.B., Graham, I.D., & Lamb, M. (2009). Conceptualization and methods to plan a pilot study for a large scale leg ulcer trial. *Ostomy Wound Management*, 55(12), 34-48.

Verma, S., Broers, T., Paterson, M., Schroder, C., Medves, J M., & Morrison, C. (2009). Core Competencies: The Next Generation: Comparison of a Common Framework for Multiple Professions. *Journal of Allied Health*, 38, 47-53.



Examples of the Scholarship of Integration by faculty, clinicians, and students:

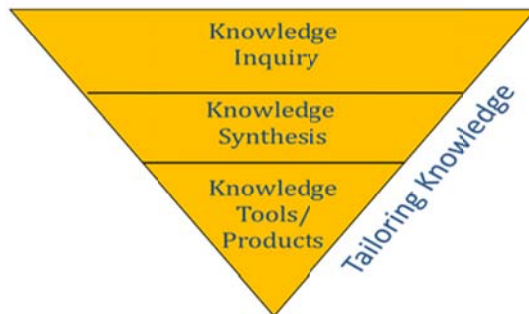
Queen's Joanna Briggs Collaboration

- 8 registered systematic reviews
- 37 Graduate student systematic reviews
- 4 other systematic reviews



MOHLTC Transitional Care Review

Education through Simulation



Scholarship of Integration

NEW

Title	Queen's Joanna Briggs Collaboration (QJBC) Evidence for Patient Safety Practices in Nursing and Health Care: A Pan-Canadian approach to patient safety/risk issues
Investigators	Harrison, Medves, VanDenKerkhof, Lamb, Baker, Buchanan, Maranda, Edge, Duhn, Keeping-Burke, Laschinger, Pulling, Peterson, DeWolfe, & Gedcke-Kerr
Funding Source	Canadian Institutes for Health Research. \$1,000,000
Years of Funding	2009-2014

Title	Cancer Guidelines Adaptation Project, Phase 2
Investigators	Harrison
Funding Source	Canadian Partnership against Cancer Corporation \$551,105
Years of Funding	2009-2010

Title	Cancer Guidelines Adaptation Project Years 2 & 3
Investigators	Harrison
Funding source	Canadian Partnership Against Cancer Corporation (CPACC) \$270,360
Years of funding	2008-2010

Title	Cancer Strategy Education Module Project, Cancer Guidelines Adaptation Project
Investigators	Harrison
Funding source	Canadian Partnership for Cancer Corporation (CPACC) \$221,345
Years of funding	2008-2009

Continuing

Title	The Bandaging Study: Next Steps
Investigators	Harrison
Funding source	Canadian Institutes of Health Research, Research Meetings, Planning and Dissemination end-of-Grant \$16,661
Years of funding	2008-2009

Title	NURS-898: Introduction to the theoretical foundations of knowledge translation and evidence-based practice
Investigators	Harrison & Godfrey
Funding source	Centre for Learning and Teaching, Queen's University \$1,300
Years of funding	2008-2009

Publications

Buchanan, D. (2009). Commentary to Review: psychological interventions prevent depression after stroke. *Evidence-Based Nursing*, 12(1), 23.

Buchanan, D. (2009). Commentary to Review: long-term annual conversion rate to dementia was 3.3% in elderly people with mild cognitive impairment. *Evidence-Based Nursing*, 12(3) 87.

Gupta, S., Bhattacharyya, O.K., Brouwers, M.C., Estey, E.A., **Harrison, M.B.**, Hernandez, P., Palda, V.A., Boulet, L-P. (2009). Canadian Thoracic Society: Presenting a New Process for Clinical Practice Guideline Production. *Canadian Respiratory Journal*, 16(6), 62-68.

Harrison, M.B. (2009). Continuity of Care through Evidence-Based Practice: Thinking Strategically. *Worldviews on Evidence-based Nursing*, 6(2), 51-53.

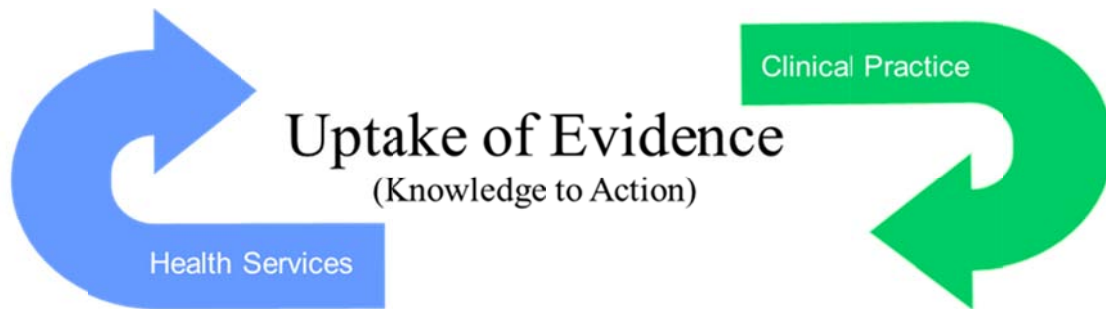
Harrison, M.B., Légaré, F., Graham, I.D., & Fervers, B. (2009). The Knowledge to Action Cycle: Adapting clinical practice guidelines to local context and assessing barriers to their use. *Canadian Medical Association Journal, Knowledge Translation Series*.

Medves, J.M., Godfrey, C., Turner, C., Paterson, M., **Harrison, M.B.**, MacKenzie, L., Durando, P. (2009). Practice Guideline Dissemination and Implementation Strategies for Healthcare Teams and Team-Based Practice: a systematic review. *International Journal of Evidence-based Healthcare*, 7(12), 450-491.

Singata, M., **Tranmer, J.**, Gyte, G.M.L. Restricting oral fluid and food intake during labour. *Cochrane Database of Systematic Reviews* 2010, Issue 1. Art. No.: CD003930. DOI: 10.1002/14651858.CD003930.pub2

*Smith, L., **Medves, J., Harrison, M. B., Tranmer, J.,** & Waytuck, B. (2009). The impact of hospital visiting hour policies on pediatric and adult patients and their visitors. *JBI Library of Systematic Reviews JBR000146* 7(2), 38-79.

Tranmer, J. (2009). Review: Anemia increases mortality risks in patients with chronic heart failure. *Evidence Based Nursing*. 12(2), 58.



BASIC KNOWLEDGE TRANSLATION RESEARCH

FOCUS: Understanding evidence; how it is used. Nature and different types of evidence. How implementation and continuity occur, related factors.
METHODS, PROCESSES: Phenomenological; Sociohistorical; Philosophical; Conceptualization Frameworks
THEORY/CONCEPT DEVELOPMENT: Continuum of Knowledge Translation

INTEGRATIVE STUDIES

FOCUS: Using science of synthesis to assess, collate and translate state of knowledge (external evidence) for practice use.
METHODS, PROCESSES: Systematic reviews, including meta-analysis & synthesis, synopsis; Quality assessment of guidelines; Development of evidence-based recommendations; Best Practice Guidelines
THEORY/CONCEPT DEVELOPMENT: Levels of Evidence; Quality Practice Guidelines (AGREE, ADAPTE)

PLANNING / PRELIMINARY RESEARCH

FOCUS: Action Research related to producing and using local evidence at the point of care (practice and health services) to plan appropriate changes.
METHODS, PROCESSES: Observational (prevalence, incidence, profiling studies); Environmental Scan; Knowledge, Attitudes, Practice; Surveys; Gap Analysis; Population Needs Assessment; Adaptation of Guidelines
THEORY/CONCEPT DEVELOPMENT: Transitions in Care; Adaptation Cycle; Strategic Alliances; Population Based Planning

IMPLEMENTATION/EFFECTIVENESS RESEARCH

FOCUS: Response to gaps in knowledge – uptake, implementation of evidence, and evaluation. Primary research studies related to implementation.
METHODS, PROCESSES: Implementation Studies; Multi-interventions; Randomized Control Trials
THEORY/CONCEPT DEVELOPMENT: Knowledge to Action Framework

Uptake of Evidence

NEW

Title	Timely Open Communication for Patient Safety
Investigators	Paterson, Goldstein, Medves , O'Riordan, Schroder, Tomalty, & van Melle
Funding Source	Ontario Ministry of Health and Long Term Care. \$445,000
Years of Funding	2009-2010

Title	Building and Sustaining the Nursing Workforce for Better Patient Outcomes.
Investigators	Doran, Baumann (Co-PIs), Alvarado, Baxter, Blythe, Clarje, Deber, Fisher, Freeman, Hunsberger, Idriss-Wheeler, Laporte, Laschinger, McGillis Hall, McGilton, Medves , Nagle, O'Brien-Pallas, Rheaume, Sidani, Tomblin Murphy, Tourangeau, Tranmer , Underwood, Valaitis, Wong.
Funding Source	Nursing Research Fund: Ontario Ministry of Health and Long Term Care, \$1,000,000.
Years of Funding	2009-2012

Continuing

Title	Turning knowledge into action at the point of care: Exploring the contribution of facilitation as an intervention
Investigators	Harrison & Kitson
Funding source	Canadian Institutes of Health Research, Meetings, Planning and Dissemination Grant, \$7,500
Years of funding	2008-2009

Publications

Hopman WM, **Harrison MB**, Coo H, Freidberg E, Buchanan M, **VanDenKerkhof EG**. (2009) The Impact of Chronic Disease and Increased Age on Physical and Mental Health Status. *Chronic Diseases in Canada*, 2009;29(2):108-116.

Gupta, S., Bhattacharyya, O.K., Brouwers, M.C., Estey, E.A., **Harrison, M.B.**, Hernandez, P., Palda, V.A., Boulet, L-P. (2009). Canadian Thoracic Society: Presenting a New Process for Clinical Practice Guideline Production. *Canadian Respiratory Journal*, 16(6), 62-68.

Kulig, J., **Edge, D.**, Reimer, B., Townshend, I., & Lightfoot, N. (2009). Levels of risk: Perspectives from the Lost Creek fire. *The Australian Journal of Emergency Management*, 24(2), 33-39.

Parry, M., Watt-Watson, J., Hodnett, E., **Tranmer, J.**, Dennis, C., Brooks, D. (2009). Cardiac home education and support trial (CHEST): A pilot study. *Canadian Journal of Cardiology*, 25 (12): e393-8.



Examples of the gaps in knowledge identified and addressed in practice

The Practice and Research in Nursing group recognizes and acknowledges the plans and activities of our partner institutions in the Southeastern Ontario health Sciences Centre (SEOHSC) and the research plans and activities of the Faculty of Health Sciences. Our key goal is to build upon and foster existing strengths and linkages to create a focus of nursing research excellence of relevance to both the nursing discipline and nursing clinical practice.

PRN Research Strategy:

. . . . to produce and evaluate practice and organizational changes to promote effectiveness and efficiency in nursing for the health benefit of Canadians

Gaps in Knowledge

Continuing

Title	Interprofessional education curricula models for Health Care Providers in Ontario
Investigators	Medves & Saxe-Braithwaite
Funding source	Ministry of Health and Long Term Care \$357,300
Years of funding	2008-2009

Title	Rural Nursing Retention (RNR) study
Investigators	Medves, Edge, Stansfield, & Bisonette
Funding source	Ontario Ministry of Health and Long Term Care \$421,247
Years of funding	2008-2010

Title	Occupational and other factors as determinants of melatonin levels among rotating shift
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	nurses
Investigators	Aronson, Richardson, Graham & Tranmer
Funding source	Ontario WSIB (\$447,769)
Years of funding	2007-2010

Title	Nurse Scheduling and Patient Safety Outcomes
Investigators	McGillis-Hall, Doran, Tranmer , Mallette, Peterson, & Monette
Funding source	CIHR and Canadian Patient Safety Institute (\$92,295)
Years of funding	2007-2009

Publications

*Szpiro, K.A., **Harrison, M. B., VanDenKerkhof, E. G.**, & Lougheed, M. D. (2009). Asthma education delivered in an emergency department and an asthma education centre: A feasibility study. *Advanced Emergency Nursing Journal*, 31(1), 73-84.

*Cheng, P.L., Pantel, M., Smith, J.T., Dumas, G.A., Leger, A.B., Plamondon, A., McGrath, M.J., & **Tranmer, J.E.** (2009) Back pain in working pregnant women: identification of occupational factors. *Applied Ergonomics*. 40(3):419-23. Epub 2008 Dec 12.

*Grundy, A., Sanchez, M., Richardson, H., **Tranmer, J.**, Borugian, M., Graham, C., Aronson, K. (2009) Light intensity exposure, sleep duration physical activity and biomarkers of melatonin among rotating shift nurses. *Chronobiology International*, 26(7): 1443-61

Heyland, D., Frank, C., **Tranmer, J.**, Paul, N., Pichora, D., Xuran, J., and Day, A. (2009) Satisfaction with end of life care: A longitudinal study of patients and their family caregivers in the last months of life. *Journal of Palliative Care*, 25(4), 245-256.

Luctkar-Flude, M., Groll, D., Woodend, K., & **Tranmer, J.** (2009). Fatigue and physical activity in older patients with cancer. *Oncology Nursing Forum*. 36(2), 194-202.

*Smith, L., & **Harrison, M.B.**, Graham, I.D., & **Lamb, M.** (2009). Conceptualization and methods to plan a pilot study for a large scale leg ulcer trial. *Ostomy Wound Management*, 55(12), 34-48.

VanDenKerkhof, E.G., Hall, S., **Wilson, R.**, Gay, A., & **Duhn, L.** (2009) Evaluation of an Innovative Communication Technology in an Acute Care Setting. *Computers Informatics in Nursing*, 21(4):254-262.

Graduate Students supervised by PRN Scholars in 2009

Master of Science

Supervisor

Robin Bilton		Dana Edge	
Kristen Farrell		Judy de Wolfe	
Sanja Visekruna		Dana Edge	
Oni Busola		Diane Buchanan	
Shannon Parry		Diane Buchanan	
Michelle Reitsma		Elizabeth VanDenKerkhof	
Sarah Xiao		Cynthia Baker	
Danielle Berard		Joan Tranmer	
Lauren Rivard		Jennifer Medves	
Denise Wilson		Marianne Lamb	
Ibo Barbacsy		Marianne Lamb	
Leia Deiters		Diane Buchanan	
Laura MacIsaac		Margaret Harrison	
Megan Manning		Marianne Lamb	
Melissa TeBrake	J	Joan Tranmer	
Rebecca Corrigan		Diane Buchanan	
Elizabeth Dogherty		Margaret Harrison	Graduated in 2009
Megan Kirk		Joan Tranmer	Graduated in 2009
Jane Tyerman		Diane Buchanan	Graduated in 2009
Sarah Walker		Elizabeth VanDenKerkhof	Graduated in 2009
Amanda Digel		Cynthia Baker	Graduated in 2009
Thomas Hart		Marianne Lamb	Graduated in 2009
Catherine Faria		Marianne Lamb	Graduated in 2009
Maureen Buchanan		Margaret Harrison	Graduated in 2009

PhD (Nursing)

Supervisor

Elizabeth Dogherty	Margaret Harrison
Kerry-Anne Hogan	Jennifer Medves
Judeline Innocent	Cynthia Baker and Diane Buchanan
Gail Macartney	Margaret Harrison
Elizabeth Mann	Elizabeth VanDenKerkhof
Jane Tyerman	Diane Buchanan
Amanda Digel	Margaret Harrison
Julie Langlois	Jennifer Medves
Jennifer Perry	Elizabeth VanDenKerkhof

PhD (Rehabilitation Sciences)

Christina Godfrey	Margaret Harrison
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