Practice & Research in Nursing Group
School of Nursing
Faculty of Health Sciences
Queen’s University

Annual Report 2007

Directors:
JM Medves, RN PhD
MB Harrison, RN PhD
JE Tranmer, RN PhD
The mission of the Practice and Research in Nursing Group (PRN) is to produce and use evidence to plan, implement and evaluate nursing practice change to promote improved outcomes (individual, provider, and system).

Founding Members:

The PRN concept was developed by Drs. Jennifer Medves, Margaret B. Harrison, and Joan Tranmer, and the organization was introduced to the greater Kingston community in August 2003 with the support of the School of Nursing and the Faculty of Health Sciences, Queen’s University. Its offices are centrally located at 78 Barrie Street, Kingston, Ontario. Dr. Jennifer Medves is currently Director of PRN and Drs. Harrison and Tranmer are Senior Scientists. To date, PRN has actively built its capacity to include over 9 PRN scientists and 10 PRN clinical affiliates.

Research Strategy:

The research strategy of the PRN Group is to produce and use evidence to plan, implement and evaluate, practice and organizational changes to promote effectiveness and efficiency in nursing for the health benefit of Canadians.

Preamble:

The strategic plan of the PRN 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 build upon the strengths and linkages at this academic Health Sciences Centre (HSC) to create a focus of nursing research excellence of relevance to the nursing discipline and practice.

Strategic Priorities of PRN include:

1. Establishing and maintaining an organizational structure to support the research, knowledge translation and training activities of the PRN group.
2. Leading and conducting programs of innovative research to address health service issues of relevance to the discipline and practice of Nursing.
3. Leading and conducting research and scholarly activities that contribute to the science of knowledge translation.
4. Developing, creating and supporting educational and training opportunities for undergraduate and graduate nursing students, and practicing nurses.
5. Communicating and marketing PRN activities locally, nationally and internationally
The Practice and Research in Nursing group (PRN) has now been in existence for four years. In 2007, steps were taken to formally establish PRN as a group within the University and the Faculty of Health Sciences. PRN is now an 'Established Group' at Queen's University, making it eligible for additional potential support. The Office of Advancement is actively undertaking fundraising to establish a Chair in Nursing Practice and to support PRN infrastructure, both critical steps if the group is to develop into a Centre within the University. Attracting a Chair to Queen's University School of Nursing becomes even more important as the PhD program enrols its first cohort of students in 2008, and as the nurse practitioner program is launched as a graduate level program (formerly an undergraduate diploma certificate). As PRN expands its role within the School of Nursing and Queen's University, infrastructure funding is essential to maintain and further develop PRN activities.

A number of changes have been made to the advisory board’s composition this year with the departure from the University committee members, Dr Sam Shortt, Dr Sam Ludwin, and Sandra Crocker. Dr Ellen Tsai and Dr Roger Deeley have been appointed to maintain a broad health sciences view. This year, the annual advisory board meeting of PRN was postponed to September 2007 until the steps to becoming an established group were completed. The Advisory members were thus able to more appropriately provide guidance for PRN's strategic direction for the next four to five years.

When the group was established in 2003, its three founding members were externally funded career scientists. By 2007, Dr Medves completed her five-year award and in 2008 Dr Harrison's award will also finish. With only one scientist having protected research time, and with CIHR mid-range awards no longer available and no internal potential for CRCs, the group is now vulnerable. In 2007, in consultation with the School of Nursing, the group has been exploring other opportunities that will allow the founding members to continue the level of research they have achieved over the last four years and, importantly, to expand the group with dynamic new nurse scientists.

Drs Medves, Harrison, and Tranmer are the Founding Directors and Senior Scholars. Dr Medves remains Director of the group. Since its conception, PRN’s membership has expanded to include Susan Laschinger, Cheryl Pulling, Dr Cynthia Baker, Dr Marianne Lamb, Dr Diane Buchanan, Dr Elizabeth VanDenKerkhof, Dr Dana Edge, Laura Kerr, JoAnne Peterson and Lisa Keeping-Burke as Nurse Scholars (PRN). Dr Judy de Wolfe, a registered dietician, is a Scholar (PRN). Lenora
Duhn, Director of Nursing Research at Kingston General Hospital, is a Clinical Nurse Researcher (PRN).

PRN Scholarship Activities

The group has continued to be successful in grant competitions. In total there were 11 new grants brought to the University by the Founding Directors as Principal Investigators and 4 as Co Investigators. New PI funding total is $1,991,602; Co-Investigator funding is $1,009,052. The group is actively working on 30 projects.

Dr. Tranmer was awarded the Ontario Women’s Health Council/Canadian Institutes of Health Research Mid Career Investigator Award in the amount of $400,000, which commenced in April 2007 and will end in 2012. This award will allow Dr. Tranmer to devote 75% of her time to research during this period.

A major commitment with PRN for the last three years has been to the Queen’s Joanna Briggs Collaboration (QJBC). This is unique infrastructure for research within schools of nursing and advances the Canadian Association of Schools of Nursing (CASN) focus on the “scholarship of integration’. As the only Canadian centre of the Joanna Briggs Institute (JBI), Queen’s is recognized internationally for its commitment to translating evidence into practice. Drs Harrison, Medves, and Lamb are contributing to an international initiative through JBI to develop a nursing network within the Cochrane Group. Lastly, we have partnered with St Elizabeth Health Care, a large home nursing agency, to establish the first Evidence Translation Group in North America. They are engaged in systematic reviews and implementing evidence focused on best practice in home and community nursing.

Four systematic reviews were completed in 2007. Three reviews were registered with JBI while the fourth was commissioned by the Ontario Ministry of Health and Long Term Care. Two additional systematic reviews are currently in progress, one for JBI and one for Cochrane. Systematic reviews are an extremely important area of research and knowledge translation for practice. The level of sophistication in completing rigorous syntheses is increasing as the methodologies develop internationally to synthesize all the range of quantitative and qualitative evidence. The role of library science in this process cannot be overstated; Bracken library scientists have played a critical role in our reviews, but they are already working to capacity. It is vital that future submissions for funding of reviews include budget lines to purchase both library scientist expertise and statistical consultation. Under a CFI proposal submitted under the leadership of Dr Deeley, Dr Tranmer proposed a section focused on maintaining and developing this field of nursing enquiry.

Six students were accepted for the QJBC Internship Opportunity in 2007 and currently have systematic reviews in progress. Four of these directly support Masters level research. Because funding from the MOHLTC for QJBC is finished in spring 2008, future funding for the internship program is uncertain.

As with other research groups at Queen’s University, space remains a critical issue. Dr. Tranmer participated as lead for the Knowledge and Synthesis node of a
multidisciplinary, large scale Canadian Foundation for Innovation (CFI) submission. If successful, the CFI grant will include funding for renovation and space for the evidence translation section, currently housed at 78 Barrie Street. As with any research group activity, having scholars co-located provides members with multiple opportunities to link, support graduate students, and develop a better understanding of individual research projects. It also means research staff members are more easily shared between projects without staff having to relocate to different sites for different projects. Dr Medves is actively seeking space for a newly funded interprofessional research initiative off-campus as no space is available at Queen’s. With further funding other activities may also relocate, further splitting the PRN group with all three founding directors in three different sites.

Scholars of the PRN group were invited to present at a number of institutions and countries in the past year. Internationally, Dr Harrison and Dr Lamb presented in Australia, and Dr Medves in the United States. Dr Lamb presented in Toronto.

Graduate students continue to be supported through the group. Presently the founding directors are supervising 14 graduate students.

In summary, 2007 was a year reflecting the “best of times, worst of times”. The group continues to excel in obtaining external funding for research and is now well established as a formal Research Group. However, in addition to continuing with active projects we clearly need to ensure engagement in activities to support our future sustainability and growth. Two members’ research personnel support is ending, and to date there appear to be few new career support opportunities available. There is a scarcity of research space on campus, spreading the small group out and this may adversely impact integration and growth at this critical developmental point.

Despite these challenges, the strategic direction of PRN is to actively align its activities closely with the new PhD program, to continue to build capacity both within the faculty and in the clinical settings for nursing scholarship, and to link with nursing and health science scholars around the world. The group’s research programs continue to be very well funded through operating grants externally. PRN is increasingly recognized nationally and internationally as a centre of nursing health services research. We will continue to build upon our strong foundation, to continue to support research capacity and growth for Nursing, and ultimately for improvement of health care for Canadians.

Respectfully submitted

Jennifer Medves, RN, PhD
Director, Practice and Research in Nursing Group
New PI Funding in 2007

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<tr>
<th>Title</th>
<th>Ontario Women's Health Council/IGH Mid-Career Award</th>
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<tr>
<td>Investigators</td>
<td>Tranmer, J.</td>
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<tr>
<td>Funding source</td>
<td>Canadian Institute of Health Research ($400,000 total)</td>
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<tr>
<td>Years of funding</td>
<td>2007-2012</td>
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Background: Chronic illnesses are increasingly diseases of older persons. As the population continues to age a greater number of older persons will receive and benefit from advanced medical and surgical care extending quality, but perhaps not quality of life years. The older person has a unique profile of physiological, psychological and social risk factors and characteristics that will influence treatment effectiveness and overall health related quality of life (HRQL). These profiles may be different for women and men. Current evidence shows that older women are more likely to have limited social supports, be living on their own, with less financial resources and are less likely to access formalized supports and programs; and report poorer HRQL. Our ability to objectively and easily assess these profiles, and to plan interventions to optimize HRQL within the context of common chronic illnesses is hampered by the lack of understanding about the types and effectiveness of supports accessed by older persons, and in particular older women.

Purpose: The proposed research program will build upon and extend my current research program that focused on (1) describing nursing sensitive, patient and system outcomes in older persons with chronic cardiovascular conditions and cancer and (2) development and testing of novel health care delivery systems for these populations. Gender differences have emerged from this initial program of research. Therefore, this proposed research program will focus on a gender-based analysis, of the health care supports available and accessed by older women to optimize functional status and HRQL within the context of cardiovascular conditions and cancer; and to develop and test, using randomized trial methodology, gender sensitive, nurse -led or –supported, health system strategies to optimize health.

Research plan: A five-year research plan is proposed (2007-2012). Two projects to support the proposed research program are underway, one project will be submitted in Fall (2005) and a final project will be developed during the course of the program. A gender analysis will also be applied to 2 previously funded projects, which enrolled older women with cancer and coronary artery disease.
An infrastructure grant was received to establish an Office of Interprofessional Education and Practice at Queen’s University. The mandate is to support faculty to develop interprofessional education opportunities at Queen’s University over three years in preparation for continued sustainable funding from the university. The goals are:

1. Create an environment that is supported by stakeholders at Queen’s University and in the Kingston community
2. Create innovative opportunities at Queen’s University and its outreach partners to ensure pre and post licensure learners across the health professions are able to engage in interprofessional learning opportunities in theoretical and clinical courses and placements
3. Develop continuing professional development for all faculty and adjunct faculty to ensure common interprofessional learning objectives are developed, provided to teachers and learners, and evaluated through courses and modules.
4. Establish a sustainable Office of Interprofessional Education and Practice
5. Promote and share at the local level information, resources, and expertise related to teaching interprofessional concepts across health care professions.

The overall vision is

At Queen’s University in the Faculty of Health Sciences, all health professional schools promote and support interprofessional education (IPE). Common IPE competencies have been identified for medicine, nursing, and rehabilitation therapy. IPE is integrated throughout the core curriculum and all students have opportunities each year to participate in IPE activities through simulations, the Clinical Education Centre, or in clinical settings.
Title | Community Randomised Control Trial of the Effectiveness of two compression bandaging technologies
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Investigators | Harrison, Graham, Nelson, Lorimer, Harris, VanDenKerkhof
Funding source | Canadian Institutes of Health Research ($364,015 – renewal) (original funding $622,318, 2003-2007)
Years of funding | 2007-2009

Although rarely recognized as a pressing health care problem, leg ulcers comprise a common, complex, and costly condition. Over 80% of the ongoing management of chronic wounds occurs in the community, and leg ulcers are one of the most frequently seen chronic wounds. The cost of leg ulcer care is considerable, being reported in both the UK and France to account for 2% of their total national health budgets. In Canada, the impact is only now being recognized due to the pressure on home care caseloads resulting from hospital downsizing, nursing shortages, and growing numbers of complex health populations. In one Ontario study, the care for fewer than 200 community leg ulcer cases cost in excess of $1.5 million for supplies and nursing visits, which translates to $100s of millions yearly Canada-wide. The impact on the individual is significant—chronic, painful, and often takes years to heal. Two-thirds of individuals with leg ulcers have at least one recurrence, and 45% have a history with the condition dating back 10 years.

State of Knowledge & Clinical Practice Guidelines: Over the past decade, evidence from RCT studies and a recent Cochrane systematic review in BMJ demonstrated that venous leg ulcers treated with compression therapy are more likely to heal. Multi-layer high compression systems are more effective than low compression. However, the small number of people in trials comparing different high compression systems meant the review was unable to draw conclusions about their relative merit. Four of these trials have compared 4-layer bandage with the short stretch technologies—the most commonly used technologies in Canada. In total, these trials involved only 220 patients, and were thus underpowered. Furthermore, they did not consider factors such as client preference and ease of use, or incorporate an economic evaluation.

Research objective: To compare the effectiveness of 2 compression technologies delivered in the community on ulcer healing, recurrence rates, quality of life, and expenditures

Interventions: Four-layer bandage vs. Short stretch bandage.
### Title
RoadMAP2: On the road again: Primary care management and action plans for persons with advanced chronic diseases

### Investigators
Tranmer, J., Birtwhistle, R., McCans, J., O'Donnell, D., Staples, P., Hill, E., Lam, M.

### Funding source
Ontario Ministry of Health and Long Term Care ($349,600)

### Years of funding
2007-2008

Patients living with advanced chronic diseases (ACD), such as congestive heart failure (CHF) and chronic obstructive lung disease (COPD) present substantial care and economic challenges for the health care system due to frequent emergency room visits and acute care hospitalizations. Morbidity and mortality is high in these complex populations, and patient quality of life is often compromised. Care of patients with ACD occurs across health care sectors, by providers in the acute, primary and community settings. Despite recent efforts to enhance the care of patients with ACD through multidisciplinary disease management programs, variations and gaps exist along the continuum of care. Primary health care providers raise particular concern about poor patient comprehension of treatment plans, access to supports to enhance self-management of care, knowledge and implementation of medical clinical practice guidelines, coordination of essential clinical information and care, and the inability to readily access health care providers.

The management of CHF and COPD is dependent on patient self-care, the informal supports provided by the patient’s own personal or social network, and the formal supports provided by the health care system. The research project will build conceptually upon two frameworks: 1) primary care oriented Chronic Care Model components of which address linkages with community resources, enhancement of self-management support, decision support for use of evidence-based clinical practice guidelines, and sound clinical information systems; 2) the intersectoral continuity of care framework developed by one of the investigators (Harrison), which emphasizes the intersectoral transition as a distinct phase of health service activity.

Objective: to demonstrate that a comprehensive, primary care based, multidisciplinary strategy will provide intersectoral links between settings, optimize the available health care resources, utilize the best available evidence, and lead to optimization of quality life for patients with ACD. As this project will build upon and extend our demonstration project, the RoadMAP Project, we have called this project RoadMAP2 - On the Road Again. We will extend this project in 3 important ways: 1) adapt, integrate and evaluate the intervention within the newly formed Family Health Team structures, 2) test the long term (1 year) effectiveness of the original program supplemented by a “tune up” and 3) collate process and economic data in order to inform a sustainability plan. Project goals - to optimize: 1) primary care of patients with ACD (CHF/COPD), 2) quality of life of patients with ACD (CHF/COPD), 3) access to and appropriate use of tertiary and acute care services for patients with ACD, 4) access to and appropriate use of tertiary and acute care services for patients with ACD
Title | Cancer Guidelines Adaptation Project
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Investigators | Harrison, M.B. & Graham, I.D. (Project Leads)
Funding source | Canadian Partnership Against Cancer Corporation (CPACC) ($246,042, Year 1)
Years of funding | 2007-2010

In November 2006, Prime Minister Stephen Harper announced the formation of the Canadian Partnership Against Cancer Corporation (CPACC). As part of the federal government’s commitment to the fight against cancer, $260 million will be provided over the next five years. The Cancer Control Guidelines Action Group (CCG-AG) is one of the priority areas receiving a portion of funding committed by the government. CCG-AG members have committed to six major projects, including guideline adaptation, dedicated to the principle of ‘capacity building’ through knowledge and skills transfer in order to facilitate the optimal use of evidence.

Aim: To purposefully follow CPACC cases engaged in adaptation of guidelines related to cancer care to describe and understand the variation in process and resources required in order to develop a sustainable Pan-Canadian methodology and infrastructure for guideline adaptation.

Objectives:
1. Participate and contribute to the international ADAPTE evaluation from a Canadian cancer care context.
2. Map and describe the process and steps undertaken by each CPACC case using mixed methods to describe their experience in guideline adaptation.
3. Elicit participant and key stakeholders’ perceptions of the adaptation process.
4. Determine the variation in resources, facilitation and support required to complete the adaptation process.
5. Evaluate the quality of the adapted guideline.
6. Determine the amount and type of implementation activity/strategies that occur during the adaptation process.

Design: A mixed methods case study with each of the various groups interested in participating with CPACC considered a single case; Involvement of the various groups until their adapted guideline is considered complete (or abandoned, prematurely finished); Longer term follow-up of dissemination and implementation activity related to the adapted guideline to be a Phase 2 project to be planned after first 18 months are complete.

Sampling: Convenience, purposeful
Elements for consideration include scope of implementation (regional, provincial, national), type of guideline, scope of practice (disciplines needed to develop as well as targeted users), geographic dispersion.
Title | The Southeastern Interprofessional Collaborative Learning Environment (SEIPCLE) project
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Funding source | Ontario Ministry of Health and Long Term Care ($223,545)
Years of funding | 2007-2009

The SEIPLCLE project aims to develop a collaborative learning environment that supports interprofessional education and care. This environment will form a foundation to enable and support current and future caregivers to work effectively within a collaborative patient/family supported care model. Through this project teams will benefit from learning about and adopting collaborative teamwork strategies, resulting in respectful and comprehensive health services to patients by multiple health caregivers who work collaboratively to deliver quality care within and across settings.

Key points

1. to understand the current working environments from the perspective of caregivers and clients/patients
2. to create Collaborative Learning Units (CLU) within clinical sites in Kingston where healthy work environments are a priority
3. to support the development and enhancement of clinical teams to improve team wellbeing, job satisfaction and stability
4. to support activities and philosophies that promote collaborative, patient-centred care
5. to work towards the establishment of interprofessional clinical placements for learners
6. to promote and welcome the participation of patients, families, volunteers and community agencies in collaborative care
7. to strengthen working relationships between clinical and educational institutions and the community.
Nurses with work and home environments characterized by multiple demands may be particularly challenged in meeting recommended guidelines for physical activity, nutrition, and managing health risk. Evidence suggests that work environments characterized by high acuity patients, high patient:nurse ratios, long 12-hour shifts, unpredictable work demands, low perceptions of control/autonomy are related to job strain and contribute to poor health. In response to this concern the 2005 National Survey of the Work and Health of Nurses was conducted. The results of this survey clearly indicate that the physical health of nurses is a concern and the need for healthcare organizations to address this growing work and health problem.

We are proposing a demonstration project that will develop and evaluate a multi-component work and health strategy on 3 inpatient units at an acute care hospital and within 3 outpatient areas at an ambulatory care hospital. 2 clinical nurse champions from each unit and project collaborators will lead this strategy. Program foci: 1) optimizing individual’s nutrition and activity balance, 2) optimizing health characteristics of unit work environments. For individuals, we will develop a program that will consist of, but not be limited to physical health assessment; nutrition and activity monitoring; regular coaching and education sessions; availability of on-going support and advice; access to group physical activity sessions and other activities suggested by participants. Two of the most significant barriers for front-line nurse involvement in workplace and community programs are accessibility and timing. We are proposing to establish this program at the unit level, with flexible coaching for individuals and scheduling of group activities around rotating shifts. For units, we will strategize with key stakeholders to develop unit based policy and practices that are supportive of nurses’ physical health. We will collaborate with the School of Kinesiology and Health, Queen’s University in the development and evaluation of this program.

Canadian reports show that nurses have a very high rate of absenteeism that adversely effects organizational efficiency and patient care. To our knowledge, workplace programs have not targeted specific public health care problems, nor have they integrated health promotional activities at both an individual and organizational level. This program has the potential to promote health and prevent illness within the important context and realities of nurses’ multiple roles within society, family, workplace and community.

If the program is feasible and successful, its components could be easily adapted as a template for other Ontario hospitals/health care settings. While some components of the program require professional expertise and consultation many could be supported through peer and organizational support. Furthermore, at one of the proposed sites for this project, the annual average number of sick days for full time staff nurses is greater than 20 days per year. Cost savings from potential sick time reduction could support aspects of the proposed program.
The OC has been funded to develop linkages across Ontario of interprofessional educators and practitioners to promote best practice in interprofessional care for patients and clients. The project is uniquely funded through a partnership with the Ontario Ministry of Health and Long Term Care and the Ontario Ministry of Training, Colleges and Universities to ensure continuity between education settings and practice settings.

The specific objectives are:

1. To develop a Community of Practice (CoP) of researchers, educators, policy makers, learners, and clinicians to ensure good practice of interprofessional education and practice that will help inform the establishment of a provincial interprofessional care implementation committee as recommended in the HealthForceOntario Blueprint.
2. To create a central provincial resource for knowledge transfer of best practices in IPE (interprofessional education) and IPP (interprofessional practice).

One of the approaches taken with this initiative is to become a chapter or a section of the Canadian Interprofessional Health Collaborative (CIHC) as it becomes a society registered in British Columbia.
Title | Cross over programmes for nursing and midwifery
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Investigators | Team Medves, J. & Rogers, J.
Funding source | Health Canada ($25,000)
Years of funding | 2007

Educators from a number of nursing and midwifery programs in Canada met for two days to discuss 1) the development of cross-over education programs for the two professions, and 2) the implications such programs may have on the delivery of primary maternity care in Canada for childbearing women and their families. Key findings of this meeting are:

1) Nurses and midwives need to collaborate to promote optimal care for childbearing women and their children. This collaboration can be facilitated through Canadian Nurses Association/Association of Women’s Health, Obstetric and Neonatal Nurses, Canada and the Canadian Association of Midwives.

2) Midwives and nurses can take the lead in bringing together legislators, regulators, funding agencies, and insurers to address the barriers that make collaborative maternity care practice difficult.

3) A pan-Canadian approach using the documents produced by the Multidisciplinary Collaborative Primary Maternity Care Project (MCP²) can help to eliminate barriers to improve maternity care.

4) Nurses and midwives support birth as close to home as possible.

5) Midwives and nurses acknowledge the uniqueness of each discipline and support their potential to complement and augment the care provided.

6) There is support for cross-over programs between nursing and midwifery.

7) There is support for developing new models of practice that promote interprofessional care.

8) Midwives and nurses recognize that alternative funding plans or block funding is more appropriate to encourage collaborative models of maternity care.

9) Midwives and nurses agree that interprofessional birth centres may be the best approach to educate future maternity care professionals in caring for women experiencing straightforward pregnancy and birth.
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<tr>
<th>Title</th>
<th>Transitions and Continuity with Pediatric Care: A Study of Family and Provider Perspectives</th>
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<tr>
<td>Investigators</td>
<td>PI Kerr, L, &amp; Harrison, M.B., Co I Medves J., &amp; Hogan, D.</td>
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<tr>
<td>Funding source</td>
<td>Practice and Research in Nursing Group ($20,000)</td>
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<tr>
<td>Years of funding</td>
<td>2007-2008</td>
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The intent of this qualitative study is to perform Phase 3 of the project:

Graham ID & Harrison MB. (Co-PIs) *Enhancing Continuity in Pediatrics, Phases 1 and 2*, Canadian Health Services Research Foundation, the Ontario Ministry of Health and Long Term Care, and the Children’s Hospital of Eastern Ontario $270,000 2004-2005.

Using data from Phases 1 and 2, an interpretative analysis on the construct of continuity from the family perspective i.e., the experiences with continuity in pediatric care, will be undertaken.
Seed funding was procured to develop a mechanism for sharing interprofessional education and practice best practice across the IECPCP projects (funded federally) in Ontario. The funding allowed all the IECPCP project leads to hold a one day meeting in Toronto with all those who are leading provincially funded interprofessional education and practice projects.

The seed funding provided a forum to discuss future funding opportunities and lead to the application and successful funding of The OC which was funded in December 2007.

Important linkages were made across the universities and colleges in Ontario and new working relationships are developing that enhance the ability of educators to place learners with learners from the other sector. These learning opportunities will enhance the opportunities of learners to understand other professions and health care workers scope of practice and appreciate the contribution of all team members.
The QUIPPED Peterborough Project was a separate funding opportunity offered by Health Canada to develop a specific aim not included in the initial grant that would enhance the ability of QUIPPED to provide outreach to other communities. The aim of the project was to:

1) To provide Interprofessional Teaching and Learning (IPTL) sessions to clinicians and clinical faculty in Peterborough and other communities and subsequently to develop interprofessional clinical placement settings.

Faculty and clinicians from Peterborough are completing the IPTL program in the winter of 2008 on site in Kingston. They are fully compensated for their time. After completing the program they will be in a position to develop IP education opportunities for Queen’s learners in Medicine and Rehabilitation Therapy, in addition to including nursing learners from the Trent/Fleming Nursing program at a number of clinical sites in Peterborough.
New Co-investigator Funding in 2007

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<th>Title</th>
<th>Occupational and other factors as determinants of melatonin levels among rotating shift nurses</th>
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<tr>
<td>Investigators</td>
<td>Aronson, K., Richardson, H., Graham, C., Tranmer, J.</td>
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<tr>
<td>Funding source</td>
<td>Ontario WSIB ($447,769)</td>
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<tr>
<td>Years of funding</td>
<td>2007-2010</td>
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Light at night (LAN) has recently become associated with several types of cancer such as colon and breast cancers. Exposure often occurs in workplaces: in Canada, about 26% of working women ages 18-54 have worked regularly at night, and this proportion is much higher among nurses. Recent studies of breast cancer risk, where at least 40% of new cases cannot be accounted for by established risk factors besides age, have pointed to two emerging risk factors, LAN and physical activity, where increased exposure to LAN may increase risk, and increased physical activity may decrease cancer risk. Further, these exposures may be united through a common hormonal pathway: melatonin produced by the pineal gland. If these factors are causal, they are modifiable risk factors for cancer that if altered could potentially reduce it’s incidence. We must endeavour to understand all of the various lifestyle factors such as smoking that could influence melatonin levels, so that we are clear on which factors could be modified to maintain the protective function of melatonin.

In Nursing, around-the-clock provision of medical care is mandatory. However, if the research evidence warrants, workplace health policy can be designed so that the health of nurses is optimized. Purpose: to analyze the relationships between light at night exposure, occupational and recreational physical activity, and several other potential determinants of measures of melatonin among working women, where melatonin is seen as a possible intermediate in the causal pathway to cancer. A cross-sectional pilot study has been conducted to test the feasibility of methods for a larger study that is being proposed here. In the pilot study, we have demonstrated that the methods are feasible, and we have learned how to improve the design and conduct of our study. Pilot study participants were 61 female rotating shift nurses who volunteered, aged 40-65, with 29 women working night shifts and 32 age-frequency-matched women working day shifts. Data were collected for 3 days through a self-completed diary recording light exposure, physical activity, and confounders, while a light meter recorded ambient light measurements, and measurements of melatonin metabolites were obtained from urine and saliva.

In the proposed study, we will expand on this pilot study and will extend data collection over different shifts and seasons. Our longitudinal approach will overcome many limitations of previous studies. Light, physical activity, and other potential determinants will be studied to determine their separate and potentially combined effect on urinary and salivary melatonin levels in healthy working women, and ultimately to improve the understanding of the relationship between melatonin and breast cancer risk. Although rotating shift workers may experience increased stress and sleep problems compared to day-only workers, by design these factors will be “held constant” in this study so that the focus can be on the factors within rotating shift workers that differ when they work day and night shifts. Determining which factors affect melatonin levels will provide evidence to refine occupational guidelines and policies for optimal protection of the health of rotating shift workers.
## Title
Enhancing patient welfare: Interprofessional health education through patient simulation

### Investigators

### Funding source
Ontario Ministry of Health and Long Term Care ($300,000)

### Years of funding
2007

The project goal is to enhance patient welfare and safety by creating and implementing an innovative approach to interprofessional education through simulation that will prepare learners for cohesive, collaborative, patient-centred practice. Thus, our ultimate aim is to improve the welfare and safety of our students’ future patients. The project will involve 1) designing an articulated, competency based simulation curriculum for pre-licensure students with modules that can also be used in continuing education by health care professionals in the region, 2) integrating this curriculum into the respective programs of the three Schools in the Faculty of Health Sciences, Medicine, Nursing, and Rehabilitation Therapy, 3) preparing a cohort of clinical educators with the expertise to teach clinical competencies in collaboration with educators of other health professions and to interprofessional groups of students, and 4) implementing, evaluating, and modifying the simulation curriculum in light of the evaluation findings.

The anticipated outcomes of our project are the following:

1) Cross professional awareness and knowledge among faculty educators in the simulated curriculum for interprofessional learning
2) Cross professional awareness and knowledge among learners who have completed the simulated curriculum
3) Health care professionals who have effectively integrated the competencies taught through interprofessional simulation
4) Health care professionals who can work collaboratively and effectively with other health care professions in cohesive systems of care.
A number of North American studies over the past decade have demonstrated that linkages exist between nurse staffing models and patient outcomes in hospital settings. Little of this knowledge has been translated into practice, and much less attention has been directed towards the work environment in health care settings, the impact of factors in the work environment on nurses’ health, work performance and patient outcomes. A recent report from the Institute of Medicine committee on the Work Environment for Nurses and Patient Safety identified a number of threats in the nursing work environment including nurses work hours. Little or no research has been conducted on nurses work hours and how these contribute to nurse and patient safety. It is widely recognized that nurses play a critical role in the healthcare system, yet evidence of the effectiveness of the work hours and the scheduling models utilized for nursing work does not exist. Research indicates that shiftwork has a detrimental effect on employees, including gastrointestinal problems, cardiovascular disorders, stress, sleep disturbances, and decreased work performance. This study addresses the need for an assessment of nursing shiftwork and scheduling models employed in Ontario, in relation to nurses’ health, work and patient outcomes, and the translation of evidence from this research to enact change in health care settings.

This research will be conducted in 3 phases over 36 months. Phase 1 will: 1) identify nursing work schedules and shiftwork patterns in different health care settings in Ontario, 2) determine if relationships exist between nursing work schedules, shift work patterns, nurses’ health and work outcomes in these settings, 3) examine the moderating effects of individual nursing characteristics on nurses’ health and work outcomes in these settings. Phase 2 will 1) determine if relationships exist between nursing work schedules, shift work patterns and patient outcomes in these settings, 2) examine the moderating effects of individual nursing characteristics on patient outcomes in these settings. Phase 3 will focus on translating the evidence obtained in the first 2 phases of the study to practice settings and to the broader policy arena. An exploratory research design will be used. In phase 1, all patient care providers employed in health care settings in two Local Health Integration Networks (LHINs) in Ontario who are involved in the Health Outcomes for Better Information & Care (HOBIC) program will be surveyed to determine the work scheduling models and shift work patterns employed in different settings across the province, their health concerns related to sleep disturbances and fatigue, and their perceptions of job satisfaction and job stress. Instruments and questionnaire methodology used in this survey have been used in previous research and have demonstrated reliability and validity. Phase 2 involves abstracting and linking data from the secondary data set that is collected in Ontario as part of the HOBIC initiative from the two LHINs participating in this study, each comprised of sites in the acute care, complex continuing care, long-term care and home care sectors, in 2 regions of the province. Outcomes: functional status, therapeutic self-care, symptoms, patient falls and pressure ulcers. Phase 3 involves focus groups with patient care providers, healthcare leaders, and policy makers to determine change strategies and processes to engage staff in the translation and uptake of the study findings into their immediate practice environments.
Title: Interprofessional approaches to shared decision making in primary care: Advancing theories, frameworks, methods and measurement

Investigators: Légaré, F., Stacey, D., Graham, I.D., Elwyn, G., Pluye, P., Gagnon, M-P., Frosch, D., & Harrison, M.B.

Funding source: Canadian Institutes of Health Research ($61,283)

Years of funding: 2007-2008

Shared decision-making (SDM) is defined as a process by which a healthcare choice is made by practitioners together with the patient. These processes of decision-making are changing with increasing emphasis on the patients' role and an interprofessional perspective. Interprofessionalism is a process by which professionals from different disciplines collaborate to provide an integrated and cohesive approach to addressing patients' decisional needs. However, there are still important unresolved issues related to appropriate conceptual frameworks, theories and measures for conducting applied healthcare research as well as for enhancing best educational practices in interprofessional approaches to SDM in primary care.

To date, most SDM has focused on the physician-patient dyad and evaluation of the use of patient decision aids. The focus of the proposed research will be a novel approach to exploring the relevance of the existing conceptual frameworks, theories, and measures for interprofessional approaches to SDM in primary care.

Objectives: To develop a conceptual framework and pilot-test, and propose a set of measures that could be used to enhance an interprofessional approach to SDM in primary care practice, education and applied health services research by: 1) Performing a theory analysis of the existing conceptual frameworks and theories in SDM to ascertain their characteristics, strengths, and limitations, including their acknowledgement of interprofessional roles in the process of SDM, and the extent to which they have been tested in applied health services research and educational activities; 2) Assessing the validity and reliability of identified measures that would be relevant to an interprofessional approach to SDM.

Deliverables: • Virtual library: The identified conceptual frameworks, theories and measures will be available on-line. • Workshop of key stakeholders • Capacity building: When and where possible, graduate students of the applicants will be invited to participate to the on-going discussion. • A conceptual framework and a set of measures that will be used for enhancing an interprofessional approach to SDM in primary care practice will be pilot-tested in real clinical settings. • A position paper will be presented in national/international conferences on SDM and/or interprofessionalism and published in a peer-reviewed journal targeting the research community in SDM and/or interprofessionalism.

Significance of the results: The conceptual framework and the set of measures that will be proposed and pilot-tested have the potential to enhance an interprofessional approach to SDM in primary care practice, applied health services research and education. Ultimately, it will provide a foundation for conducting future studies to improve how the healthcare system and its professionals understand and respond to public expectations in a more coordinated fashion. Importantly, this will be instrumental in realigning unrealistic expectations of healthcare treatment outcomes and how the system manages to ensure safe delivery of high-quality services to patients who most value them. This has been articulated as two important priority research themes of the CIHR-ISHPR.
Ongoing PI Funding in 2007

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<tr>
<th>Title</th>
<th>Cardiovascular health and work</th>
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<tr>
<td>Investigators</td>
<td>Tranmer, McGillis-Hall, Katzmarzyk, Parry, Rivoire, Day, O'Callaghan.</td>
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<tr>
<td>Funding source</td>
<td>CIHR ($92,682)</td>
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<td>Years of funding</td>
<td>2006-2008</td>
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An aging workforce, obesity, physical inactivity, and stressful work environments are major issues impacting the cardiovascular health of working Canadian women (and men). Previous studies have shown associations between family responsibilities, job strain and work characteristics (i.e. shift work) and poor cardiovascular health. No studies have examined the independent and combined effect of these factors on cardiovascular health risk and overall health related quality of life (HRQL) in working women. We are focusing this research on female hospital workers, as the work environments are varied and representative of different types of work. Moreover, the hospital setting is characterized by multiple work demands, which may present a particular challenge in regard to balancing work, physical activity and nutrition, and managing health risk. We will include a cohort of front-line, 24/7 workers (i.e. nurses, laboratory technicians) as work factors such as high patient acuity; workload, 12-hour rotating shifts, unpredictable work demands, low perception of control or autonomy may (or may not) contribute to poor cardiovascular health.

Objectives: 1) To determine if selected psychosocial job and home characteristics and job attributes are predictive of poor cardiovascular risk profiles, in particular metabolic syndrome, and poor HRQL; 2) To determine the feasibility and measurement issues associated with the conduct of a future national, multi-site, longitudinal study in a larger cohort of working women.

Hypotheses: Poor cardiovascular health profiles indicative of the metabolic syndrome and poor HRQL will be predicted by high family or caregiving responsibilities, high job strain, worked hours and night shift work duration.

We are conducting a 3 year prospective study with a cohort of female hospital workers (n = 800) who are employed on a full-time or regular part-time basis in one acute care hospital. Individual measures related to personal and work characteristics, cardiovascular risk (physical activity, obesity, hypertension, lipid profile, diabetes, alcohol consumption, smoking status, and diet) and perception of work and home environment will be collected through interview, administration of validated questionnaires and serum sampling. The number and nature (i.e. overtime, shift differential) of paid worked and unworked hours for the 12 months prior to study enrollment and throughout the study period will be abstracted from each participant’s work record. Our analysis plan is designed to 1) describe the cardiovascular, work and home profiles of participants; 2) determine the correlations between individual worker and work environment factors and 3) determine the impact of independent and combined effect of each factor on the selected outcome measures using multivariable modeling techniques.

Findings from this study will define the prevalence of cardiovascular risk in a cohort of working women, and will determine the impact of work and home factors on this risk and HRQL, and will contribute to the planning of workplace programs and policy to enhance cardiovascular health and work effectiveness.
Title | Development of an evaluation framework to ensure Continuity of Care and Best Practices in Early Stroke Care

Investigators | Bayley, Harrison, Graham, Kapral, Hurdowar, Sharpe.

Funding source | Ontario Stroke Strategy ($100,000)

Years of funding | 2006-2008

The objective of this project is to improve the continuity, quality and safety of hospital care for individuals who have suffered a stroke by piloting the use of an evaluation strategy.

Because of the strong evidence of efficacy of organized stroke care, it is important to ensure all Ontarians have coordinated care. There is no method currently for understanding the continuity and safety of the care provided by individual acute hospitals. The Ontario Stroke Audit and the Registry of the Canadian Stroke Network have picked key indicators of quality of care which provide benchmarks to identify variations in practice, however there is a need to have an assessment framework that helps organizations understand better the reasons for the performance they find from these indicators. The starting point in good care requires that the stroke patient receive appropriate assessments that are timely and linked to referrals to appropriate professionals who are coordinated and communicate regularly. Finally transitions of care must be smooth and well planned. This project will help the organizations improve care through helping them understand breaks in the continuity of the care they provide.

The research will be guided by a conceptual framework to assist in structuring observations, data collection, and interpreting and understanding the perceptions on continuity of stroke care. The Inter-sectoral Continuity of Care (CoC) framework (Harrison & Browne) is a health services planning and evaluation approach that focuses on the components of CoC: a) care activities, b) linkages, and c) the provider-family balance of care giving. This is the focus during transitions in care either within the setting (e.g. Emergency room to inpatient stroke medical unit), or between sectors of care such as hospital to home.

The care processes that will be studied in this framework will be those that occur as the person is admitted to the stroke inpatient unit. Specifically we will: Evaluate the consistency and timing of use of basic assessments for risk reduction as these focus on basic care aspects that are fundamental to quality of care; Identify how the team of providers are linked, i.e. communication processes within the team, what are the geographic locations of stroke care; Develop a “typical case” scenario to discuss with teams so as to decompose a care episode and evaluate where discontinuity may be occurring; Address areas where family can and should be actively involved particularly in planning for transitions of care.

In the first phase a panel of experts and stakeholders will convene to identify key care elements based on published best practice recommendations that are administered in all organizations that provide acute and sub acute stroke care. In the second phase following completion of the development, the assessment framework will be piloted at acute care centers in Toronto West region to determine sensitivity and reliability.
Title | QUIPPED (Queen’s University Interprofessional Patient centred Education Direction)
Investigators | Medves, Paterson, Verma, Krupa, Lamb, Schroder, Docherty, Spring, King-VanVlack, Munoz, Racz, Scott, Tomalty, Christmas, McKeen, Fisher-Goodchild, Hutchinson, Bailie, Jalovicic, Clarke, Delva, Flynn, Holland, Tan, Taylor, Baker, Buchanan, Perkin, Pulling, Jamieson, O’Riordan, McBride, Culham, Olney, Tata, Young, McKinven.
Funding source | Health Canada ($1,195, 000)
Years of funding | 2005-2008

The Queen’s University Inter-Professional Patient-Centred Education Direction project (QUIPPED) is a new health care initiative funded by Health Canada.

QUIPPED aims to create an educational environment at Queen’s University that enhances the ability of learners and educators to provide patient-centred care through inter-professional collaboration, while recognizing the contribution of the health care team within a respectful and collaborative framework.

The QUIPPED project is a partnership between three schools and one programme at the Queen's University Faculty of Health Sciences, namely, the School of Medicine, the School of Nursing, and the School of Rehabilitation Therapy (Occupational and Physical Therapy), as well as the X-Ray Technology Program, offered in conjunction with the Eastern Ontario School of X-Ray Technology, based at Kingston General Hospital.

QUIPPED seeks to facilitate and promote IPE initiatives systematically across the Queen’s health and social development community, to enhance clinical outcomes through inter-professional patient care. The systematic approach will build on the different initiatives already in place, while establishing new IPE activities at a variety of levels of professional integration.

The QUIPPED team is developing knowledge on best practices related to teaching and learning and is sponsoring 20 interdisciplinary learners on research projects, five new education initiatives and primary evaluation research.
The aim of this study is to understand how women make choices of maternity services by documenting: a) reasons given by women for decisions taken when choosing where to give birth, and b) health care provider beliefs about factors influencing rural women’s decisions about place of birth. The design will be institutional ethnography.

The proposed study is a two-province (Alberta and Ontario), multi-disciplinary (nurses, physicians, and administrators), rural initiative to understand the choices women make in deciding where to give birth. Four communities will be selected – two in each province. Two communities will have maternity units where there are higher percentages of women who choose not to give birth locally, and two where there is a low percentage of women who choose to birth non locally. The Maternity Practice in Rural Settings conceptual framework will guide the study. The framework has been developed from previous and ongoing research undertaken by the research team. The research study will utilize several research methods to answer the questions. A quantitative analysis of data sets will provide data to support the selection of the communities. Focus groups and interviews will be conducted with women and health care providers, administrators, and community leaders. A documentary analysis will be conducted with all written material related to maternity care in the community.

Ultimately it is women who should make place of birth decisions. There is evidence to support women giving birth close to home: when women are required to travel to receive care in pregnancy and for birth, perinatal morbidity increases. Yet, women’s views have not been sought or expressed in understanding where and why women choose one setting over another. This is a critical issue for rural women where travel in labour, especially in winter, may be hazardous. This investigation is unique as it will be woman centred as societal and cultural contexts of women’s decision making in rural settings are addressed.
<table>
<thead>
<tr>
<th>Title</th>
<th>Research Program for Implementing patient safety on pediatrics and adult health care</th>
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<tr>
<td>Investigators</td>
<td>Graham, <strong>Harrison</strong>, Richardson, Shojania, Lee, Angus, Logan, Cronin, Straus, King, Wrong, Nicklin, Orrbine, Moher, Greco</td>
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<tr>
<td>Funding source</td>
<td>Canadian Health Services Research Foundation ($795,000)</td>
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<td>Years of funding</td>
<td>2005-2008</td>
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The ultimate goal of the research program is to improve health outcomes and patient safety in Canadian paediatric and adult health facilities. In brief, our research focuses on: 1) how facilities monitor for adverse events and the processes they use to ensure that such information is acted upon; and 2) an in depth analysis of the level of use of, and factors related to, the implementation of 3 patient safety practices (handling and storage of KCl, CPOE and the third safety practice to be selected by study participants). The research program consists of 3 streams of research activities and uses mixed methods. The objectives of stream 1 (literature synthesis) are to: 1) learn from the literature and what is known about how to monitor for adverse events occurring external to one’s setting; and 2) identify the factors (barriers and facilitators) related to the adoption and implementation of the 3 safety practices. This will be achieved by conducting 4 literature syntheses. The objectives of stream 2 (environmental and horizon scanning) are to: 1) identify how health care facilities actually monitor the external environment for adverse events; 2) describe how they make decisions to act on safety recommendations and the approaches they use to implement them; and 3) to determine the extent and level of implementation of each of the 3 safety practices. This will be done by conducting qualitative interview studies and surveys. Stream 3 (case studies) objectives are two: 1) understand the system, organizational, and individual factors influencing the implementation in Canada of patient safety practices designed to prevent PAE; and 2) determine how implementation factors and experiences differ between paediatric centres that are free standing and incorporated into adult hospitals, tertiary and community facilities, and paediatric and adult facilities without paediatric units. This will be accomplished using case study methodology. The objective of cross-cutting stream 4 (knowledge translation and exchange) is to develop, disseminate and facilitate policy maker and management uptake of tools, methods and strategies to promote implementation of patient safety practices. The streams are linked sequentially and conceptually with the literature syntheses and surveys informing the case studies. The conceptual frameworks guiding the research program are the Ottawa Model of Research Use and the Intersectoral Continuity of Care framework. Table 1 provides a map of the research program. A sequential triangulation approach will therefore be used to achieve the programs objectives. A 4th cross-cutting stream, KTE is woven throughout the 3 research streams from the outset of the program. We will use our networks and co-sponsors to disseminate our findings and engage the appropriate decision makers and managers with the findings so that they may use them to facilitate organizational change in support of patient safety for children and adults.
Title | Identification, concept and bibliometric analyses of organizational change theories/frameworks
---|---
Funding source | Canadian Institutes of Health Research ($70,522)
Years of funding | 2005-2007 (Completed)

Objectives: 1) To conduct a focused search for conceptual models, frameworks, or grand theories of knowledge translation, 2) To undertake a theory analysis of the identified models to determine their strengths and limitations and to determine similarities and differences among them, and 3) To determine the extent to which each model has been used and/or tested.

Methods: *Objective 1*: We will conduct a focused literature search of the social science, education, and health literature and search the internet to identify KT models/theories. *Objective 2*: This will involve conducting a theory analysis of the identified theories. We will identify the major concepts/elements of each theory, the definition of KT related to each, and the nature and scope of the theory. We will compare the models/theories and their components for similarities, differences, and inclusiveness. *Objective 3*: We will perform a bibliometric analysis using the science and social science citation journals to identify additional literature which might report on the use and/or testing of the models/theories. This analysis will be used to identify who is citing/using the model/theory, the extent to which the models/theories are being used, and the areas of research to which the models/theories have been applied.

The results of this work will inform health researchers and others about conceptual models, frameworks and grand theories as opposed to individual level models of implementation and knowledge translation. In our experience, health researchers often tend to be unaware of these broad conceptual frameworks, perhaps because many have originated in disciplines other than medicine. The result of the proposed work will provide a valuable resource in terms of cataloguing knowledge translation models/theories as well as furthering our understanding of the critical elements of such frameworks. The proposed synthesis of models/theories of knowledge translation will have the potential to increase understanding of research utilization and may be useful to guide implementation studies and knowledge translation endeavours. The study will also provide foundational information upon which new theories or frameworks of knowledge translation may be derived.
The primary aim of this study is to develop and begin validation of a self-report risk profile, consisting of items from reliable and valid measures of evidence-based domains associated with functional well-being. The specific research objectives are: (1) Develop a multi-dimensional, self-reported risk profile (SRRP), relevant to functional status and well-being in older women with newly diagnosed breast cancer being treated with curative intent. Domains will include those with strong evidence of association with decline in functional status, such as: affect, cognition, comorbidity, symptom burden, disease burden, physical activity, nutrition, social support and lifestyle choices. (2) Validate the items in a second cohort of breast cancer patients through comparison with validated self-reported physical and emotional function measures and interviewer-administered Functional Autonomy Measurement System (SMAF).

This project will consist of two phases: (1) development of the self-report risk profile (SRRP) and (2) validation of the profile in a representative cohort of older women with newly diagnosed breast cancer. Items for the assessment tool will be developed from published conceptual frameworks and taxonomies for functional decline, a review of the literature of predictors for functional decline, established questionnaires, the patient, self-reported results of our current longitudinal study, and upon consultation with experts in the field of oncology, gerontology, and rehabilitation science. To determine validity of the SRRP, we will enrol and consent 100 or more women with newly diagnosed breast cancer who are greater than 65 years of age. We will administer the assessment profile, at baseline, every 6 months for 12 months beyond completion of chemotherapy or radiation treatment. To determine construct validity we will administer standardized health related quality of life measures (MOS SF12 and the EORTC QLQ – C30), and an interview-administered measure of functional autonomy (SMAF). Our analysis plan will be designed to determine if the SRAI is feasible to administer, and a reliable and valid measure of functional well-being.

Development of self-report, functional status assessment strategies that are easy to implement and accessible for the majority of older persons with cancer should assist in the planning of appropriate health care and support services. Until we are able to systematically assess the factors that contribute to poor functional health we are poorly positioned to plan health services to optimize outcome.
Title | Primary health care needs and preferences of Ontario women: analysis of existing data and recommendations for future data collection
---|---
Investigators | Tranmer, VanDenKerkhof, McColl
Funding source | Ontario Women’s Health Council ($50,000)
Years of funding | 2005-2007 (Completed)

This project will define primary health care needs and preferences of Ontario women by analyzing data previously collected in the Canadian Community Health Survey (CCHS) and the Health Services Access Survey (HSAS), identify determinants of unmet need, identify information gaps, and develop proposed methods to address information gaps.

The specific project objectives are to: 1) Provide detailed information based on available CCHS/HSAS data on the use of primary care/primary health care services by women in Ontario, including, where possible, analysis on the basis of geographic regions (as close as possible to Ontario LHINs) and high level demographic variables. 2) Identify gaps in available information from the CCHS/HSAS on the use, needs and preferences of Ontario women with respect to primary care/health care. 3) Develop proposed methods to fill these information gaps including: optional/subsample content of the next cycle of the CCHS (4.1) in order to fill some of the key information gaps about Ontario women’s health/health care use and barriers to primary care/primary health care, and identification of an appropriate sample size on the HSAS that will enable the OWHC to obtain detailed information on system barriers by gender and geographic area.

Project results will support the OWHC’s current strategic themes of ensuring access to care (identifying gaps in equitable and appropriate health services for both short- and long-term priorities and then identifying unique opportunities to fill these gaps) and of building research capacity in one of its key areas (population health research related to women’s health).
<table>
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<th>Title</th>
<th>Evidence for Practice: Nursing Implementation Study (Queen's University)</th>
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<tr>
<td>Investigators</td>
<td>Harrison, Medves, Tranmer, Lamb</td>
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<tr>
<td>Funding source</td>
<td>Ontario Ministry of Health and Long Term Care ($351,240)</td>
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<tr>
<td>Years of funding</td>
<td>2004-2008</td>
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The Practice and Research in Nursing Group will take practice-based issues and respond with the most up to date evidence in practical forms for practitioners and policy developers. The group will actively include clinicians and researchers from varied fields of nursing, including acute care, chronic and long-term care, and community and home care. The focus will be on the provision of nursing practice, based on the best available evidence with the field of home care. The populations of focus will be cross sectors of care with particular emphasis on topics related to chronic conditions, maternal child health and patient safety.

The grant is to support 1) initial infrastructure including personnel and equipment, 2) a demonstration project that will include participation in the international commitments required by membership in the JBI partnership, and 3) an evaluation of the effect of a Joanna Briggs Centre on nursing care delivered through the use of best practice. The priority directions will be a) to build research capacity in knowledge translation, b) conduct implementation research related to best practices and practice change, c) conduct research based on ‘gaps’ that focus on Canadian Health Care, d) participate fully in JBI collaborative activities, and e) promote evidence based nursing practice within the practice partners of the SEOHSC and the remote site of Moose Factory.

The project will utilize an action research methodology throughout the project so that practicing nurses can fully participate in identifying the priority areas, engage in systematic reviews of the evidence, and designing best practice protocols for use in practice.

Each year at least one systematic review will be completed and submitted to the JBI in Australia for worldwide dissemination.
Heart failure (HF) is a prevalent chronic cardiovascular condition of particular concern to the elderly and their caregivers. Despite substantial medical advances in the understanding and management of HF, the course of the illness remains unpredictable. Acute exacerbations of HF are associated with poor management of heart failure symptoms, frequent visits to hospitals, and create substantial burden for the patient, family and health care system. Because of the chronicity of the condition, much of the responsibility and burden of management and care rests with the HF patient and/or their caregiver. The older female population with HF represents a unique and highly vulnerable group as the underlying pathophysiology may be different, diagnosis may be delayed, and access to, and utilization of, informal and formal support systems may be less. For the older female (and male), there is limited information about the processes of care associated with optimal outcome. Therefore, the primary aim of this study is to gain a better understanding of the personal, social and system supportive resources that contribute to functional decline in older persons living with symptomatic HF, and the gender differences in this profile and the relative impact of these resources on functional decline. We hypothesize that women with HF, in comparison to their male counterparts, will have lower levels of functional well being and fewer available supportive resources, when age and disease severity are controlled for.

Prospective study objectives will involve a one year follow up of a representative sample of persons 65 years of age or older with HF in order to: (1) assess and quantify the potential relationships between (i) the primary outcome measure of functional well being, as assessed with health related quality of life measures, as well as with secondary outcome measures of (ii) use of emergent services and (iii) mortality with (a) personal and social characteristics and (b) use of supportive resources, including personal (self-care), informal and formal supports while simultaneously controlling for the potential confounding effects of age, disease severity and presence of comorbid conditions; and (2) to derive multiple variable models and explore causal pathways based on the relationships described above, with the intention of informing a risk profile of low functional well being and/or high use of emergent services for older men and women living with HF. The qualitative study objective is to describe the patients’ and families’ experiences with exacerbation of illness.
**Title** | Enhancing continuity in Pediatrics  
---|---  
**Investigators** | Harrison, Graham, Klassen  
**Funding source** | Canadian Institutes of Health Research ($270,000)  
**Years of funding** | 2004-2007 (Completed)

Improving continuity of care within and across health care sectors is receiving increasing attention. Patients and families experience numerous transitions across the continuum of health care related to shorter inpatient hospital stays, increased community-based care, and increased specialization of health care. To date, little attention has been given to identifying the barriers and facilitators to management continuity, specifically in pediatric populations. This issue has been identified as a serious concern by patients, families, providers, and decision makers.

This project, examining four patient population groups from three pediatric acute care hospitals across Canada, will not only identify and describe the major factors related to continuity and fragmentation of care in pediatric health services from the perspective of families and providers but also make suggestions for improving continuity. The project will deliver a report on barriers and facilitators to continuity of pediatric care, a list of suggestions for managers about how continuity might be improved, and an instrument to measure management continuity. The project, with a time frame of 15 months, will use a qualitative design to achieve the study objectives. The project is supported by a solid team of principal investigators and decision maker partners with strong linkages with each of the study sites. Decision makers and clinical consultants from each site are members of the investigative team. The research team will be supported by a project Steering Committee that will include parent representatives, clinical managers, and a representative from the Canadian Association of Pediatric Health Centres (CAPHC).

This project is of considerable interest to policy makers and managers in paediatric settings across the country for it will advance knowledge of what families and providers consider essential elements of continuity. The measurement tool that will be developed can provide a benchmark for facilities to evaluate their provision of the components of continuity of care and to propose solutions to improve health care delivery. This project is strongly supported by CAPHC, who will partner to share and disseminate research findings, as well as to facilitate the translation of these findings into practice and policy.
Principal Investigators, Drs. Margaret B. Harrison and Ian D. Graham, will conduct an overview of leg ulcer treatments in the 18th, 19th, and 20th centuries in Britain and how these treatments have been influenced by societal attitudes and medical myths. North American sources become available later in the 19th century. A systematic search will be conducted of original sources, in particular the British Medical Journal, the Lancet, and other early publications available through the Wellcome Institute in London, UK, and other library resources.
### Ongoing Co-Investigator Funding in 2007

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<th>Title</th>
<th>Funding Source</th>
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<tbody>
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<td>Understanding chronic pain in women following surgery</td>
<td>Canadian Health Research Institute ($262,000)</td>
<td>2006-2009</td>
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<tr>
<td>VanDenKerkhof, Goldstein, Murdoch, Towheed, Hopman, Johnston, Walker, Wilson, Harrison.</td>
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<td>Understanding and improving communication and decision making at the end of life</td>
<td>Canadian Institutes of Health Research ($662,841)</td>
<td>2004-2009</td>
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<td>Heyland, Tranmer, Gafni, Cook, Giacomini, Kuhl</td>
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<td>Training program for the development of cardiovascular nursing research capacity in Canada</td>
<td>Canadian Institute of Health Research ($1,446,500)</td>
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<td>Arthur, King, Purden, Tranmer, Robichaud-Ekstrand, Tapp, McFetridge, Watt-Watson, Rukholm</td>
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<td>Alternate level of care: Patient profiling and outcomes</td>
<td>Kingston General Hospital Research Development ($30,000)</td>
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<td>McColl, Knott, Tranmer, Frank, Brander, Kristjansson</td>
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<td>Davidson, McBride, Gibson, Medves, van Melle, Broers.</td>
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<td>Youth Transition to Adult Mental Health Services</td>
<td>Ontario Mental Health Foundation and MOHLTC ($60,000)</td>
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<td>Years of funding</td>
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<td><strong>Title</strong></td>
<td><strong>Effectiveness of Simulation on Health Profession Students' Knowledge, Skills, Confidence and Satisfaction</strong></td>
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<td>Investigators</td>
<td>Laschinger, Medves, Pulling, McGraw, Waytuck, Harrison, Gambeta</td>
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<tr>
<td>Funding source</td>
<td>ARC, Queen’s University ($3,250)</td>
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<td>Years of funding</td>
<td>2006-2007 (Completed)</td>
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<tr>
<td><strong>Title</strong></td>
<td><strong>Development and Implementation of an electronic nurse-sensitive documentation system</strong></td>
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<tr>
<td>Investigators</td>
<td>Hall, Wilson, VanDenKerkhof, Kent-Hillis, Rivoire, McAuley, Gay, Harrison</td>
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<tr>
<td>Funding source</td>
<td>The Change Foundation and Ministry of Health &amp; Long-Term Care Nursing Secretariat ($100,000)</td>
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<td>Years of funding</td>
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<td><strong>Title</strong></td>
<td><strong>Mapping interventions for care coordination</strong></td>
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<td>Investigators</td>
<td>Straus, Zwarenstein, Thorpe, Harrison</td>
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<tr>
<td>Funding source</td>
<td>Canadian Health Research Institute ($68,900)</td>
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<td>Years of funding</td>
<td>2005-2007 (Completed)</td>
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<td><strong>Title</strong></td>
<td><strong>Preceptorship: An investigation of issues from the perspective of three stakeholder groups</strong></td>
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<td>Investigators</td>
<td>DeWolfe, Perkin, Medves, Harrison, Woodhouse, Oakley</td>
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<tr>
<td>Funding source</td>
<td>School of Nursing, Queen’s University ($2,500)</td>
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<td>Years of funding</td>
<td>2004-2007 (Completed)</td>
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<td><strong>Title</strong></td>
<td><strong>Building capacity: Development of a transdisciplinary team for improving the quality of health care</strong></td>
<td></td>
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<tr>
<td>Investigators</td>
<td>Grimshaw, Graham, Harrison, Angus, Legare, Godin, Logan, Lemyre, Pomey, Eccles, Brouwers, Zwarenstein, Driedger, Cappeliez, Hanna (KT ICE Team)</td>
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<tr>
<td>Funding source</td>
<td>Canadian Institutes of Health Research ($750,000)</td>
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<td>Years of funding</td>
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Systematic Reviews


Publications in Peer Reviewed Journals 2007

Manuscripts Accepted or in Press


Peer Reviewed Publications


**Selected Presentations in 2007**


Harrison, M.B. Implementing evidence: Care can be more effective and less expensive. Research Symposium for Nursing Alumni and Friends. Queen’s University, Kingston, Ontario, October 12, 2007.


**Medves, J.** The development of a rural professionals course. Celebration of Teaching. Faculty of Health Sciences, Queens University. June 8, 2007.

Gulati, S., Paterson, M., & **Medves, J.** The voices of adolescents with disabilities in the urban slums of New Dehli: A critical ethnography study in the developing world. 10th Annual Meeting for Health Sciences Research Trainees. Faculty of Health Sciences, Queen’s University, May 29, 2007. (poster presentation)


**Invited Presentations**


**Harrison, M.B.** Knowledge Transfer: We have the evidence, are we using it? Indiana Center for Evidence Based Nursing Practice, “*Raising the Bar: Getting Evidence into Practice*”. Purdue University, Hammond Indiana, USA, November 2, 2007. (keynote address)

Graduate Student Supervision

The following students completed a Master of Science Degree and were supervised or co-supervised by one of the PRN Nurse Scientists in 2007:

Kim Szpiro (Harrison)
Impact of evidence-based asthma education on knowledge and perceived control: Observational cohort study in an Emergency Department and Asthma Education Centre

The following students are enrolled in a Master of Science Degree or Doctorate of Philosophy and are supervised or co-supervised by one of the PRN Nurse Scientists in 2007:

Ibo Barbascy (Tranmer)
Danielle Berard (Tranmer)
Maureen Buchanan (Harrison)
Elizabeth Dogherty (Harrison)
Kim English (Medves)
Christina Godfrey (Harrison)
Sonia Gulati (Medves)
Megan Kirk (Tranmer)
Laura MacIsaac (Harrison)
Joy Peacock (Tranmer)
Lauren Phelan (Medves)
Mary Seatter (Medves)
Melissa Tebrake (Tranmer)
Colleen White (Medves)

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