

ANNUAL REPORT
JULY 2000 - JUNE 2001

**NURSING EFFECTIVENESS,
UTILIZATION AND OUTCOMES
RESEARCH UNIT**

A collaborative project of the University of Toronto, Faculty of Nursing
& McMaster University, School of Nursing

TABLE OF CONTENTS{TC "TABLE OF CONTENTS"}

Message from the Co-Principal Investigators.....	1
<u>Introduction</u>	<u>3</u>
<u>Our Mission</u>	<u>3</u>
<u>Our Purpose</u>	<u>3</u>
<u>Our Objectives</u>	<u>4</u>
<u>Research Unit Description</u>	<u>7</u>
<u>Areas of Expertise</u>	<u>7</u>
<u>NRU Organization</u>	<u>7</u>
<u>Members of the External Advisory Committee</u>	<u>8</u>
<u>Unit Partnerships</u>	<u>9</u>
<u>Organization at the University of Toronto Site</u>	<u>9</u>
<u>Organization at the McMaster University Site</u>	<u>10</u>
<u>Strategies to Enhance Research Transfer</u>	<u>11</u>
<u>Research Activities and Policy Implications</u>	<u>11</u>
<u>Commitment and care: The benefits of a healthy workplace for nurses, their patients, and the system. A policy synthesis</u>	<u>11</u>
<u>Dorothy M. Wylie Nursing Leadership Institute</u>	<u>12</u>
<u>Nursing and Health Outcomes Project</u>	<u>13</u>
<u>Nursing Vacancy Rates in Ontario</u>	<u>15</u>
<u>Conclusion</u>	<u>16</u>
<u>Appendix A - NRU Co-Investigators</u>	<u>17</u>
<u>Appendix B - Ongoing and Recently Completed Research</u>	<u>28</u>
<u>Appendix C - Publications</u>	<u>62</u>
<u>Fact Sheets</u>	<u>62</u>
<u>Working Papers and Monographs</u>	<u>64</u>
<u>Co-Principal and Co-Investigators' Publications</u>	<u>68</u>

As this report goes to press in the fall of 2001, extraordinary changes in world events in recent weeks highlight the potential vulnerability of Canadians to external threats to our usual way of life. While concerns about the fundamental rights and freedoms of people in all nations dominate the popular press, in the past year, proposed changes were made to the delivery of health services in this country such that health care issues remain a major public concern. Concurrently, the restructuring efforts of the past have compromised some of the fundamental material and human resources necessary for the delivery of basic health services to maintain and improve the health of Canadians. Research evidence and linkages with decision-makers have redefined the traditional ways in which research inquiries are conducted and have highlighted the need for timely evidence, in understandable formats to assist with complex health policy decisions.

The Nursing Effectiveness, Utilization and Outcomes Research Unit's (NRU) researchers have continued to meet this challenge. During the past year, NRU researchers and staff have provided substantial information on workplace environments; structural and process variables that influence client, provider, and system outcomes in the health system; practice standards; expanded roles for nurses and other health care workers; and estimates of future human resource needs, in particular, for nurses. Tremendous headway has been made in developing and validating theoretical underpinnings of health services research. Unit staff at both sites have responded to the immediate information needs of our Ontario Ministry of Health and Long-Term Care (MOHLTC) partner, thus supporting our provincial government in providing evidence-based leadership at provincial and federal meetings. While the NRU's focus is provincial, research findings have taken into account views from other provinces and nations.

The NRU has an 'open access' policy, providing information on demand to clinicians and health care decision-makers. Many of the NRU investigators and staff have led and/or participated in provincial, national, and international forums and working groups to ensure timely use of research evidence in management and policy decision-making. Researchers have continued to disseminate evidence in a variety of arenas, including conferences and public policy forums, where stakeholders are present. Researchers have also prepared invited submissions for community and government committees.

The teams of researchers fulfilling the NRU mandate are increasingly multi-disciplinary, which reflects the expanding complexity of the research questions being posed. Non-traditional training opportunities were granted to decision-making partners and individuals seeking career re-orientation.

Fact sheets and working papers continue to be an effective method of communication. Electronic media include a web site listing major information resources. Increasingly, research teams are developing project specific web pages to enhance dissemination activities.

NRU researchers and staff remain committed to ensuring that the health of Canadians and future health services are built from the best available evidence.

Linda O'Brien-Pallas, RN, PhD
University of Toronto Site

&

Andrea Baumann, RN, PhD
McMaster University Site

INTRODUCTION{TC "INTRODUCTION"}

This Annual Report outlines the research activities in which the NRU has been engaged from July 1, 2000 through June 30, 2001. The report describes the mission and objectives of the NRU and introduces the Co-Principal Investigators and administrative staff. Research activities by NRU Investigators are highlighted in terms of their policy implications. The appendices list our Co-Investigators, research studies conducted by our Co-Principal Investigators and Co-Investigators, and our publications.

OUR MISSION

To develop, conduct, and disseminate research that focuses on the:

- design
 - management
 - utilization
 - outcomes
 - provision
- of nursing.

OUR PURPOSE

Overall Purpose

The Nursing Effectiveness, Utilization and Outcomes Research Unit received initial funding from the MOHLTC from 1996-2001. The overall purpose of the unit is to study the planning¹, production², and management³ (Hall, 1993) of nursing human resources with the goal of developing strategies to meet current and future health needs. Unit researchers:

¹ Planning: The process of estimating the number of health personnel and the kind of knowledge, skills, and attitudes required to achieve predetermined health targets.

² Production: Assessing the quantity and quality of existing educational programs including curricula, physical facilities, faculty, and enrolment.

1. Investigate the appropriate supply, distribution, and deployment of nurses and how to enable nurses to meet their responsibilities following the restructuring of the health care system.
2. Determine methods of maintaining quality while realizing funding efficiencies in the health care system.

Expanded Role

In 1997, the MOHLTC approached the NRU with the suggestion of completing a health human resource (HHR) planning framework and program for Ontario. As a result of the Nursing Task Force (1999) recommendations in “Good Nursing, Good Health: An Investment for the 21st Century”, the MOHLTC awarded the NRU additional funding from 1999-2004 to assist in monitoring the impact of the Nursing Task Force recommendations. This led to an expanded role for the NRU and an additional purpose.

3. Provide the MOHLTC with the basic information needed to make necessary changes to HHR practices in Ontario.

OUR OBJECTIVES

The NRU’s original mandate is broad enough to allow unit researchers to investigate an extensive array of subjects including: nursing human resource planning and modeling, nursing skill requirements, need and preparation required for advanced nursing practice, strategies to reduce systemic barriers to evidence-based practice, the effect of technological advances on delivery of nursing care, access and barriers to nursing services in the community, health outcomes related to alternative providers and multi-disciplinary practice, the effects of nursing numbers and staff mix (RN, RPN) on patient care outcomes, the appropriate use and role of unregulated health care workers, factors which facilitate an efficient and cost-effective nursing service, and the effects of downsizing of medical schools and reduction in residents on nursing.

This year we have integrated the original 1996-2001 NRU objectives and 2001-2004 expanded role objectives. Specific NRU objectives are categorized and listed below:

1. **Monitoring of Nursing Resources and Health Human Resource Modeling**

³ Management: Mobilization, motivation, development, and fulfilment of human beings in and through work. Concerned with working environments, staffing patterns, and incentives.

Define the concept of vacancy as a prerequisite of estimating the vacancy rate for nurses in Ontario.

Explore standard and non-standard working arrangements for nurses.

Investigate issues surrounding the mobility of the nursing workforce.

Evaluate and develop HHR databases and nurse-sensitive data elements for use in situational and trend analyses and simulation modeling exercises to determine which factors influence nursing and HHR activities in Ontario.

Test and validate the strengths and limitations of current HHR modeling approaches, using provincial data that meets quality standards, and work to develop an integrated approach for nursing HHR.

Examine the relative effectiveness of supply, utilization, effective demand, and needs based models of nursing HHR and develop methodologies that examine the impact of HHR relative to system, caregiver, and client outcomes, based on a critical appraisal of the previous activities.

Define the current practice demands and resource utilizations of restructured settings in which nurses work.

Develop databases and methodologies that will allow examination of the utilization and outcomes of nursing service.

Continue to monitor the nursing situation in Ontario and the remainder of Canada to determine the factors which influence nursing and HHR activities in Ontario.

Build computer models of HHR, based on a critical appraisal of the previous activities, that examine the impact of HHR relative to system, caregiver, and client outcomes.

Conduct studies which examine production and management of nursing human resources.

Evaluate management interventions directed at improving the health of nurses and the quality of worklife in all settings where nurses are employed.

Support studies that address key issues for nursing personnel in both hospital and community settings.

Assist in monitoring the impact of the Nursing Task Force recommendations.

1. Nursing Education

Assess existing educational data sources and develop a database of Ontario educational nursing human resources to determine the supply of registrants for practice, trend the factors influencing the supply of registrants for practice, and analyze the cost of clinical education.

Examine both nursing skill requirements and the need and preparation required for advanced nursing practice.

2. Care Delivery Models

Develop and validate new approaches and management interventions for structuring nursing roles and work within the immediate work environments of nurses to improve the health of nurses and the quality of worklife across all settings.

Study the impact of evidence-based practice and strategies to reduce systemic barriers to evidence-based practice.

Study the effect of technological advances on delivery of nursing care.

Evaluate care delivery models and study factors which facilitate an efficient and cost-effective nursing service.

Study the effects of downsizing of medical schools and reduction in residents on nursing.

Examine the decision-making process.

Examine access and barriers to nursing services in the community.

1. Impact of Policy on Care

Evaluate the impact of RPN extended practice role policy on care.

Evaluate the impact of privatization policy on care in health care sectors.

Evaluate the impact of BScN entry to practice policy on care.

2. Restructuring and Organizational Design

Assess the impact of restructuring, organizational design, current practice demands, and resource utilization on patient, personnel, and organizational outcomes across sectors. This includes continuing trend analyses to identify key issues for workforce planning and supporting the development of a nursing report card for the province of Ontario.

RESEARCH UNIT DESCRIPTION

The NRU is a collaborative project of the University of Toronto, Faculty of Nursing and McMaster University, School of Nursing. The NRU is directed by two Principal Investigators (Drs. Linda O'Brien-Pallas and Andrea Baumann). Thirty-three Co-Investigators are involved in various research projects related to HHR and are contributing members of the NRU. This research team represents a multi-disciplinary group from nursing, business, labour studies, economics, health care policy, engineering, and anthropology. The NRU has been recognized provincially, nationally, and internationally for its comprehensive team approach to problem identification and resolution. The unit encompasses research from other Ontario universities - University of Western Ontario, University of Ottawa, University of Windsor - and includes the Executive Director of Nursing Policy with the Federal Government.

AREAS OF EXPERTISE

The NRU comprises a multi-disciplinary group of researchers with diverse areas of expertise, such as:

- HHR Development - planning, production, and management
- Decision-making and Problem Solving
- Health Care Teams
- Nursing Costing
- Nurse Practitioners
- Public Health, Community-Based Interventions
- Nursing Informatics
- Workload Redesign
- Policy Development and Analysis
- Research Methods
- Restructuring
- Redeployment
- Skill Mix
- Evidence-Based Practice
- Outcome Measurement
- Professional Delivery Models

NRU ORGANIZATION

The NRU operates with the assistance of an External Advisory Committee. The members examine the extent to which the NRU has been able to meet its mandate and monitor the overall

MEMBERS OF THE EXTERNAL ADVISORY COMMITTEE

Andrea Baumann (Co-Chair)
Professor & Associate Dean Health Sciences
(Nursing); Co-Principal Investigator, NRU
McMaster University

Lesley Bell
Chief Executive Officer, Ontario Nurses
Association

Linda Beyer
Nurse Practitioner, Hamilton Urban Care
Community Health Centre

Stephen Birch
Professor & Director, Centre for Health
Economics and Policy Analysis, McMaster
University

Anne Coghlan
Executive Director, College of Nurses of
Ontario

Joanne Young Evans
Executive Director, Registered Practical
Nurses Association of Ontario

Vivek Goel
Chair, Department of Health Administration,
Faculty of Medicine, University of Toronto

Doris Grinspun
Executive Director, Registered Nurses
Association of Ontario

Mary Ellen Jeans
Executive Director, Canadian Nurses
Association

Kelly Kay
Executive Director, Canadian Practical
Nurses Association

Linda LaHay
Past President, Registered Practical Nurses Association of Ontario; Co-Chair, Joint Provincial
Nursing Committee

Kathy McGilton
Lecturer and Doctoral Candidate, Faculty of Nursing, University of Toronto

Linda O'Brien-Pallas (Co-Chair)
Professor & CHSRF/CIHR National Chair,
Nursing Human Resources; Co-Principal
Investigator, NRU, University of Toronto

Susan Plewes
Executive Assistant/Health Policy Advisor,
Office of the President, Ontario Hospital
Association

Shirlee Sharkey

President & Chief Executive Officer, Saint Elizabeth Health Care; President, Registered Nurses Association of Ontario

Barbara Thornber

Executive Director, Registered Practical Nurses Association of Ontario

Jack Williams

President and Chief Executive Officer, Institute for Clinical Evaluative Sciences in Ontario

UNIT PARTNERSHIPS

Research collaboration exists between the NRU and such well known organizations as the Centre for Health Economics and Policy Analysis, Institute for Clinical Evaluative Sciences, Hospital Management Research Unit, and Health Information Research Unit. Partnerships have been expanded to include the Ontario Hospital Association, Canadian Institute for Health Information, Joint Policy and Planning Committee, Psychiatric Patient Advocate Office, Workplace Safety and Insurance Board, and the World Health Organization. Through these partnerships, NRU researchers are in a position to examine cost-effective outcomes through the use of the best knowledge, skills, and technologies available across and within professions and settings.

ORGANIZATION AT THE UNIVERSITY OF TORONTO SITE

The University of Toronto site is directed by Dr. Linda O'Brien-Pallas. Dr. O'Brien-Pallas is a Professor at the Faculty of Nursing, University of Toronto. She is cross-appointed to the Department of Health Administration, Faculty of Medicine and is a member of the Hospital Management Research Unit. Dr. O'Brien-Pallas is the Canadian Health Services Research Foundation and Canadian Institutes of Health Research National Chair in Nursing Human Resources. She is a board member of both the Registered Nurses Association of Ontario and Canadian Nurses Association and sits as a nominated member on the Canadian Nursing Advisory Committee. Recently, she was a member of the Expert Panel on Physician Human Resources in Ontario and Co-Chair of the modeling sub-committee. Dr. O'Brien-Pallas has served on local, provincial, national, and international committees to examine approaches to health human resources prediction and modeling; to develop standards for practice, next generation workload measurement approaches, and the development of clinical and educational databases for planning and evaluating nursing resources. Her research interests include nursing HHR, workload measurement and patient classification systems, factors influencing variability in nursing resource use and patient outcomes, and the quality of nursing worklife. Dr. O'Brien-Pallas has published widely in her areas of research.

In 2000-2001, the University of Toronto site comprised the following personnel:

Chris Alksnis - Senior Research Associate
Debra Barrath - Research Officer
Shirliana Bruce - Research Officer
Deanna Cape - Research Officer
Jana Lait - Research Officer
Marcia Luba - Research Officer
Raquel Meyer - Research Officer
Angela Pagniello - Research Officer
Sima Patel - Summer Studentship Intern
Elisabeth Peereboom - Research Projects Coordinator
Donna Thomson - Doctoral Fellow
Gail Tomblin Murphy - Doctoral Fellow
Lenore Wilson - Secretary

ORGANIZATION AT THE MCMASTER UNIVERSITY SITE

The McMaster University site is under the leadership of Dr. Andrea Baumann. Dr. Baumann is the Associate Dean of Health Sciences (Nursing) and Professor in the School of Nursing. She is the Director of a World Health Organization Collaborating Centre in Primary Health Care and Nursing Education, as well as Vice President Research, Canadian Association of University Schools of Nursing. Her leadership positions have included being Chair of a hospital Board of Trustees and a member of the Interim Governing Council of Canadian Institutes of Health Research. Dr. Baumann's research interests include HHR planning, production, and management; health systems; clinical decision-making; and quality of nursing worklife.

In 2000-2001, the McMaster University site comprised the following personnel:

Jennifer Blythe - Senior Scientist and Assistant Professor
Michelle Butt - Senior Research Associate
Jennifer Dziuba - Studentship Intern
Laurie Kennedy - Research Unit Coordinator
Joanne Leeming - Secretary
Georgeanne MacGregor - Studentship Intern

STRATEGIES TO ENHANCE RESEARCH TRANSFER

Key audiences for the NRU include hospital managers and administrators, front line staff, policy makers from professional associations and government, and other researchers. The diversity of stakeholders warrants a multi-faceted dissemination strategy. The NRU employs a variety of communication strategies to reach a wide range of audiences with differing needs, interests, and communication styles. Research findings are disseminated through peer reviewed journals, working papers published by the NRU, and presentations at scholarly conferences. As well, the NRU works directly with nursing leaders, health care organizations, and policy makers to influence policies that affect nursing and patient care. The NRU's External Advisory Committee includes health policy analysts, a nursing union representative, and members of professional associations who assist the NRU by disseminating information through their respective networks. The NRU communicates to a wider audience through radio, television, and the popular press. Fact sheets are circulated and summaries of research are published in professional and organizational newsletters. Our website (www.fhs.mcmaster.ca/nru) features NRU activities and publications by Co-Principal Investigators and Co-Investigators. Examples of these publications are presented in the appendices of this report.

RESEARCH ACTIVITIES AND POLICY IMPLICATIONS

1. COMMITMENT AND CARE: THE BENEFITS OF A HEALTHY WORKPLACE FOR NURSES, THEIR PATIENTS, AND THE SYSTEM. A POLICY SYNTHESIS.

In the aftermath of healthcare restructuring, the CHSRF and Change Foundation commissioned this study to respond to growing concerns about the health and well-being of nurses. Researchers explored the impact of the work environment on the health of the nursing workforce (and hence, potentially on patient outcomes) and looked for effective solutions to improve the quality of the work environment and the health of nurses.

Intended as a basis for decision-making, the study brought together research and experiential knowledge. Evidence came from reviews of published and grey literature, and from focus groups and interviews conducted in seven provinces with managers of health care organizations; nursing association, union, and government representatives; and practicing nurses. The major issues identified from the data included workplace pressures, job security, workplace safety, violence, support by managers and colleagues, education and development, professional identity, control over practice, control over scheduling, nursing leadership, remuneration, and recognition and rewards. In addition to defining stressors, the policy synthesis provided evidence of strategies that organizations had planned and/or implemented to improve the work

environment. These included flexible scheduling, permanent float pools, and initiatives to improve workplace safety.

The research team made recommendations about how governments, professional associations and councils, employers, and educators could collaborate to promote patient welfare by creating healthy nursing workplaces. Recommendations for system-wide changes included revised funding for nursing services. Mentoring programs, career laddering, and quality of worklife projects to improve the worklife interface were proposed as organizational initiatives. The policy synthesis was released in June 2001 and is available on the CHSRF website (www.chsrf.ca/english/document-library/psescmcare_e.html).

2. DOROTHY M. WYLIE NURSING LEADERSHIP INSTITUTE

In early 2001, the MOHLTC awarded funding to the NRU in partnership with organizational and leadership nurse consultants Beverley Simpson, Judith Skelton-Green, and Julia Ann Scott to develop an annual Nursing Leadership Institute (NLI). This initiative responds to the recommendation made by the Nursing Task Force (1999) “that the MOHLTC work with health care facilities and educational institutions to ensure nurses are prepared for their ongoing leadership roles” (Report of the Nursing Task Force, p.5).

Restructuring and mergers in health care organizations have created a situation in which the traditional career path for nurse leaders has disappeared. There is uncertainty regarding who is in the queue for leadership positions in Ontario. The significant restructuring and downsizing which occurred during the late '80s and '90s in Ontario had the effect of eliminating a large percentage of front-line and middle management nursing positions, with the result that: 1) there are fewer leadership aspirants in the queue than there would have been a decade or so ago, and 2) the number of leadership opportunities for these aspirants is appreciably diminished in comparison to what it would have been in the past. Moreover, it is likely that a significant portion of the current nursing leadership pool will retire over the next few years, along with the baby boomer cohort.

After a great deal of collaboration and partnership among stakeholders, the NLI is a reality and has been named after Dorothy M. Wylie in recognition of her innovative leadership skills and her pioneering role in rethinking the different facets of nursing leadership during her tenure as an Assistant Professor at the Faculty of Nursing, University of Toronto.

The objectives of the NLI are to:

- build nursing leadership capacity in Ontario;
- support succession planning in health care agencies;
- identify and cultivate leadership aspirants and the mentoring relationships that will ensure that they succeed;
- improve the quality of patient care and nurse-related outcomes; and,

- promote evidence-based organizational decision-making.

This intensive week long program followed by a weekend integration session will:

- promote the assessment, acquisition, and development of a set of core leadership competencies appropriate to the times and settings in which nurse leaders practice;
- support participants to apply concepts in real life situations through reflective learning;
- allow for individual and group assessment of skills and areas for development; and,
- identify ‘up and coming’ nurse leaders and leadership aspirants, and begin a concrete and deliberate process for nurturing their development.

The initial institute session will be held August 26-31, 2001. The NLI has the full support of nursing leaders across a variety of nursing organizations and is expected to attract participants from across all health care sectors, including community health, public health, long-term care, acute care, and rehabilitation. Dr. Linda O’Brien-Pallas will be a keynote speaker and is a member of the planning team. NRU Co-Investigator Dr. Judith Shamian and NRU EAC member Shirlee Sharkey will also be keynote speakers.

The institute’s intervention will be evaluated over time by a separate research team (Ann Tourangeau, Marcia Luba, Manon Lemonde, and Souraya Sidani) with funding from The Change Foundation. Their primary objective is to empirically determine the immediate through long-term effects of this intervention on leadership competence, feelings of personal accomplishment and depersonalization, career path decisions, and organizational commitment and readiness for nursing leadership.

Significant changes in health care systems and structures, the requirement for new models of care and new accountability mechanisms, and the need to recruit and retain a new and different cohort of nurses to replace an aging nursing workforce will require considerably different leadership skills and strategies than those of the past. The NLI is an investment in the present by helping the system adapt quickly to new requirements and challenges, and an investment in the future by providing for necessary leadership succession.

3. NURSING AND HEALTH OUTCOMES PROJECT

The Nursing and Health Outcomes Project (NHOP), directed by NRU Co-Investigator Dorothy Pringle, responds to the recommendation made by the Nursing Task Force (1999) to develop a funding method for nursing which is responsive to the needs of the health care consumer. The project’s purpose is to identify nurse-sensitive patient outcomes and their attendant nursing inputs and processes that could be entered on and abstracted from patients’ charts, or provided in other formats. This will allow administrators and researchers in the future to describe how different nursing interventions and different numbers and types of nurses (RNs, RPNs) affect patient outcomes. In the long term, it may be possible to develop a funding formula

that is nursing-specific. The project focuses on three sectors: acute, long-term, and community (home) care.

The first step in meeting the ultimate objective of a nursing-specific funding formula is to analyze current databases for their nursing-relevant content and identify nurse-sensitive patient outcomes along with the structures and processes (both health system and nursing specific) that are associated with them. To date, a literature review on outcomes with a specific focus on nurse-sensitive outcomes supports that nurses influence the following patient outcomes: morbidity, mortality, health status, self-care ability, symptom control, patient satisfaction with care, and adverse events such as infection rates, falls, skin breakdown, and nosocomial infections. As well, nurses' job satisfaction is reported in several studies to be indirectly linked to patient satisfaction. Dr. Linda O'Brien-Pallas and Ms. Donna Thomson developed an inventory of relevant databases such as the College of Nurses registry data and the National Population Health Survey data, and identified all the nurse-sensitive variables incorporated in these databases to determine whether information on nursing inputs and nurse-sensitive outcomes should be housed on existing databases rather than building new databases.

Drs. Diane Irvine Doran, Souraya Sidani, Linda McGillis Hall, Judy Watt-Watson, and Ms. Claire Mallette from the Faculty of Nursing at the University of Toronto and Dr. Heather Laschinger from the School of Nursing at the University of Western Ontario conducted an in-depth analysis of the literature on specific nurse-sensitive outcomes (functional status, symptom management, self-care, patient satisfaction with nursing care, and nurse job satisfaction) and reviewed where these outcomes might be captured on existing databases. This study also provided recommendations regarding the appropriateness and feasibility of incorporating these outcomes into administrative databases in the three health sectors and measured relevant structures and processes associated with these outcomes.

At the Invitational Symposium on Nursing and Health Outcomes in March 2001, experts from across North America provided consultation and feedback about the challenges that we may face as we move forward on embedding nurse-sensitive outcomes in databases.

At the end of Phase 1, during the fall 2001, the NHOP will provide an inventory of existing nursing inputs, nursing interventions, and nurse-sensitive outcomes in all three sectors, including:

- the recommended outcomes for each sector;
- the recommended measures to capture these outcomes;
- databases in which these outcomes could be located or can be found;
- recommendations about when the data should be recorded (e.g., annually in long-term care or on patient discharge in acute care); and,
- a framework for pilot projects.

Phase 2 in winter 2002 will involve conducting pilot studies in the acute, long-term, and community care sectors to assess the feasibility of capturing the data and cost the process of conducting additional assessments, and recording and abstracting these new data elements. These

pilots will assist in the testing of a template of key nurse-sensitive elements comparable among, or common to, all sectors.

The NHOP will begin to fill the gap in information about what nurses contribute to patient care. This project has the potential to serve as a model for subsequently including, on administrative databases, the contributions of other health care providers to patient outcomes. Report cards and health care atlases are part of the current health care scene. Nursing is absent from this scene. While individual patients can describe how nurses contributed to their care, the overall contribution that nurses make cannot be assessed. If we want to capture resources necessary to not only maintain, but enhance nursing's contribution, we have to be able to demonstrate what we do in today's language and methods.

4. NURSING VACANCY RATES IN ONTARIO

Historically, the Ontario MOHLTC has conducted bi-annual surveys to gather data on nursing vacancies. Although these surveys have provided valuable information, the Nursing Secretariat at the MOHLTC has identified inconsistencies in the use of the term "vacancy" and in the number of vacancies reported. As a consequence, it was difficult for the Ministry to calculate how many vacancies exist, in which specialties, and whether they are vacancies for full- or part-time jobs. To address this problem, the Nursing Secretariat asked the NRU to clarify and define the term vacancy as it applies to nursing and to develop and pilot test a template to quantify nursing vacancies in acute and long-term care settings in Ontario.

A mixed methodology was adopted. The study began with preliminary interviews and focus groups with administrators and human resource and finance specialists. These interviews led to a better understanding of the term "vacancy" and facilitated the construction of a draft template. This template was validated during further interviews with administrators and human resource managers.

In the fall 2001, the draft template will be evaluated by testing it on a sample of acute care hospitals and long-term care institutions across Ontario. Interviews will also be held with a sub-sample of administrators from these institutions. The template will be amended based on the results of the pilot test and interviews, and will be used as a data collection instrument in an Ontario-wide study in 2002 to quantify the number of nursing vacancies.

CONCLUSION

As evidenced in this report, the NRU is addressing the complex HHR, policy, and practice issues relevant to nurses and Ontarians. These issues extend beyond our provincial borders, and our national and international partnerships have enabled us to learn and share our expertise. In the appendices that follow, we invite you to meet our Co-Investigators and to examine our research activities and publications in further detail.

APPENDIX A

NRU CO-INVESTIGATORS

The NRU's 33 Co-Investigators are committed to developing and conducting targeted research within the NRU's mandate. The Co-Investigators are presented by site.

AT THE UNIVERSITY OF TORONTO:

MICHAEL CARTER, PhD is a Professor at the University of Toronto, Department of Mechanical and Industrial Engineering and is cross appointed to the Department of Computer Science. He received his PhD in Combinatorics and Optimization from the University of Waterloo. He is a member of the editorial board for the *Journal of Scheduling* and the *Journal of Health Care Management Science*.

Dr. Carter was winner of the Annual Practice Prize for Operational Research from the Canadian Operational Research Society in 1988, 1992, and 1996. The 1996 award was for his work with John Blake on reducing wait time at the Children's Hospital of Eastern Ontario, Ottawa. In May 2000, he received the CORS Award of Merit for lifetime contributions to Canadian Operational Research. He is also a recipient of an "Excellence in Teaching" Award from the University of Toronto Student Administrative Council.

Dr. Carter's research interests include scheduling and information systems application in health care, course and examination time tabling, and production scheduling and sequencing. Dr. Carter has published widely and presented papers both nationally and internationally on his areas of research.

Since 1990, his research has focused on healthcare productivity and effectiveness, with over 50 projects in hospitals, home care, and mental health institutions.

RAISA DEBER, PhD is a Professor of Health Policy, in the Department of Health Administration, Faculty of Medicine, University of Toronto.

Professor Deber received her PhD in political science from the Massachusetts Institute of Technology. She has lectured and published extensively on Canadian health policy; advised numerous local, provincial, national, and international bodies; and served on editorial boards and review panels. She is past president of the Canadian Health Economics Research Association.

Professor Deber's current research centres around Canadian health policy. Projects include definitions of "medical necessity", examination of specialized services under population-based models, public and private roles in the financing and delivery of health services (with a focus on long-term care), and the study of medical decision-making and issues surrounding patient empowerment.

GAIL DONNER, RN, PhD entered the nursing profession in 1962 after completing studies at the Winnipeg General Hospital School of Nursing. From there she went on to earn undergraduate and graduate nursing degrees at the University of Pennsylvania and New York University, respectively, and then a PhD in adult education from the University of Toronto.

Dr. Donner has held a variety of positions including Chair, Department of Nursing at Ryerson Polytechnic University, formerly Ryerson Polytechnical Institute (1976-82); Executive Director of the RNAO (1984-89); and Director of Nursing Education and Research at the Hospital for Sick Children (1989-92). In July 2002 she will retire from her roles as Professor and Dean in the Faculty of Nursing. Dr. Donner is a member of the Joint Centre for Bioethics at the University of Toronto.

Dr. Donner has held a number of government and community appointments and is a frequently sought after speaker on professional and health care issues. She is active on a number of boards and committees including the Board of ICES, Board of the University Health Network, Committee on Hospitals of the Ontario Medical Association, Quality of Care Committee of the Baycrest Centre for Geriatric Care, and Women's Heart Health initiative at the Heart and Stroke Foundation of Ontario.

Her research and consulting interests range from health policy, nursing administration, and professional issues to career planning and development. She has presented numerous papers, seminars, and workshops on a variety of nursing and health care

topics. With Mary Wheeler, Gail provides career planning and development workshops and consulting services to individuals and organizations.

Dr. Donner has been honoured by several organizations for her contributions to nursing and to the community. In 1989, she received the Award of Merit from the RNAO; in 1994, she was named a Woman of Distinction by the YWCA of Metropolitan Toronto; and, in 1997, she was awarded a Salute to the City award for her contribution to Metropolitan Toronto. She is listed in *Canadian Who's Who* and in *Who's Who of Canadian Women*.

RUTH GALLOP, RN, PhD is a Professor and Associate Dean (Research) in the Faculty of Nursing and a Professor in the Department of Psychiatry, Faculty of Medicine, University of Toronto. She is a senior researcher in the Division of Society, Women, and Health in the Department of Psychiatry and an Honorary Visiting Professor at the School of Health and Community Studies, De Montford University, Leicester, England.

Dr. Gallop's research, clinical, and consultation interests have focused on the nurse - patient relationship with a particular emphasis on patients perceived as difficult to manage and treat. These patients often have diagnoses of personality disorders and often have histories of severe early trauma. She has more than 50 peer-reviewed publications and is currently preparing a text on the link between early trauma and mental disorder. Dr. Gallop serves as a consultant and resource person for the CNO on professional

boundary issues and for the development of CNO's positions on nurse - patient relationships. She has served as an expert witness in many disciplinary and court cases involving alleged violations of professional boundaries.

DIANE IRVINE DORAN, RN, PhD is an Associate Professor in the Faculty of Nursing, University of Toronto and Director of the Joint MN/MBA Program between the Faculty of Nursing and Joseph Rotman School of Management. She currently holds a Research Scholar award from the Medical Research Council (MRC) and National Health Research Development Program (NHRDP). In 1999, Dr. Irvine Doran was a recipient of the Ontario Premiers Research Excellence Award.

The foci of her research are health care teams, the evaluation of methods for improving quality in nursing practice, and the design and measurement of nursing sensitive patient outcomes. One group of studies evaluates an intervention designed to teach members of multi-disciplinary teams methods for making improvements in clinical practice. A second group of studies measures process and outcome indicators for evaluating the quality of nursing care. A third group of studies evaluates alternative health care provider roles.

Dr. Irvine Doran teaches two graduate courses in the Faculty of Nursing: Management of Nursing Service and The Theoretical Basis and Methodology for Quality Improvement in Nursing Services. Dr. Irvine Doran has published papers on cross-functional teamwork, the outcomes of

effective teams, identifying and measuring nursing sensitive outcomes, the evaluation of measures for assessing psychosocial outcomes for women with breast cancer, and methods for improving the quality of nursing care. She has presented papers both nationally and internationally on these same topic areas.

MICKEY KERR, PhD received his Master and Doctorate degrees in Epidemiology from the University of Toronto. His thesis involved the design and analysis of a case control study of risk factors for low-back pain in workers at a large automobile assembly complex. He is currently a Scientist and Manager of Workplace Studies at the Institute for Work and Health. He also has an appointment in the Department of Public Health Sciences, Faculty of Medicine, and School of Graduate Studies, University of Toronto. His research interests include risk factors for musculoskeletal disorders, the workplace psychosocial environment, stress research, and biological mechanisms for injury.

HEATHER K. SPENCE LASCHINGER, RN, PhD is Professor, Associate Director Nursing Research, and Assistant Dean Interdisciplinary Studies at the University of Western Ontario, School of Nursing, Faculty of Health Sciences in London, Ontario. She teaches courses in the graduate program related to research methodology and organizational theory. Dr. Laschinger has published and presented papers in the areas of workplace empowerment, nursing and

medical education, and health education theory.

Her research interests include workplace empowerment in nursing work settings and more recently, the impact of work conditions on nurses' health. Since 1992 she has been Principal Investigator of a program of research at the University of Western Ontario's School of Nursing designed to investigate nursing work environments using Rosabeth Moss Kanter's organizational empowerment theory. Publications of this work have attracted considerable interest from researchers, managers, and graduate students from both nursing and other disciplines around the world.

Dr. Laschinger has been involved in the International Study of Hospital Outcomes led by Dr. Judith Shamian and Dr. Linda Aiken. This four country study is designed to link nursing work conditions to patient outcomes. She is Co-Principal Investigator with Dr. Michael Kerr of the Institute of Work and Health on their current project Monitoring the Health of Nurses in Canada, which studies the feasibility of establishing an ongoing system to monitor the health of nurses.

For the past two years, Dr. Laschinger has served on the MOHLTC Expert Panel on Nursing and Hospital Outcomes. As a result of her work on patient satisfaction as a nurse sensitive outcome for this project, she has joined a team led by Dr. Linda McGillis Hall to develop a Nursing Report Card for Ontario Hospitals. She is also a member of the Advisory Group for the OHA Nursing Strategy Project led by Dr. Margaret Commack.

LINDA MCGILLIS HALL, RN, PhD earned her Master and Doctorate degrees in Nursing Administrative Science from the University of Toronto. She is an Assistant Professor in the Faculty of Nursing, University of Toronto. Linda's research interests relate to determining nursing's effectiveness in the health care system, examining methods for costing nursing services, and the impact of differing staff mixes on outcomes. She has presented numerous papers on topics related to staff mix in nursing and nursing work design initiatives. She has several publications to her credit in peer-reviewed journals.

LYNN NAGLE, RN, PhD is Chief Information Officer for Mount Sinai Hospital, Toronto. Dr. Nagle completed her Bachelor of Nursing at the University of New Brunswick, Master of Science in Medical-Surgical Nursing at the University of Toronto, and PhD in Nursing at the University of Rochester. She received national recognition as a Canadian Nurses Foundation scholar in the completion of her doctoral work. Her nursing experience spans a variety of settings with many clinical populations including pediatrics, community gerontology, intensive care, and medical oncology as a staff nurse, educator, researcher, and administrator. In her current role at Mount Sinai Hospital she has corporate responsibility for information systems and information management to support daily operations, resource utilization management, and strategic planning.

An Assistant Professor in the Faculty of Nursing, University of Toronto, Dr. Nagle teaches a graduate course in Nursing Informatics. She has many publications and paper presentations to her credit and is internationally recognized for her expertise in informatics.

ELIZABETH PETER, RN, PhD is an Assistant Professor in the Faculty of Nursing, University of Toronto. She is a member of the Joint Centre for Bioethics. She is also a Collaborator with the Home Care Evaluation and Research Centre.

Her research explores the relevance of feminist ethics in examining ethical issues in home care, such as trust relationships among caregivers and care recipients, the health and well-being of nurses, and the influence of place on the moral agency of nurses.

PATRICIA PETRYSHEN, RN, PhD completed a Master in Nursing and a Doctorate degree in Epidemiology. Dr. Petryshen is Vice-President, Patient Care Programs and Chief Nursing Officer at St. Michael's Hospital, Toronto. As Vice-President, she is responsible for the Inner City Health Program. At the University of Toronto, Dr. Petryshen holds Assistant Professor appointments in the Faculty of Nursing and Department of Public Health Sciences, Faculty of Medicine.

In 1998, Dr. Petryshen was a Wharton Fellow and attended the Management Program for Nurse Executives at The

Wharton School, Institute of Health Economics, University of Pennsylvania. In that same year, she received the Award of Excellence in Nursing Administration from the Faculty of Nursing, University of Toronto, Sigma Theta Tau, Lambda Pi Chapter and was appointed to the Women's Health Council, Ontario MOHLTC. Her research interests include the clinical and economic outcomes of patient care. She has published and presented nationally and internationally.

GEORGE H. PINK, PhD is an Associate Professor in the Department of Health Administration at the University of Toronto and an Adjunct Senior Scientist at ICES. Prior to receiving a PhD in Corporate Finance, he spent ten years in health services management, planning, and consultation. He teaches courses in health services accounting and finance in the Master of Health Science (Health Administration) Program and is involved in several research projects including hospital scorecards and report cards, integrated delivery systems, and MIS reporting variations. George serves on numerous hospital and provincial committees, including the Hospital Funding Committee.

DOROTHY PRINGLE, RN, PhD is a Professor of Nursing. She has been at the University of Toronto since 1988, serving as Dean of Nursing from 1988-1999.

Her clinical and research interests are in the care of disabled and impaired older people, both in the community and in institutions, and in the assistance required by family

caregivers of older people. She is involved in a number of studies related to the quality of day to day living of older impaired individuals in institutional settings. She is Chair of the Advisory Board of the Institute of Healthy Aging of CIHR.

In the area of administration, she is developing a study on nurses' retirement and is a member of research teams studying human resource issues in nursing and nurse managers' span of control. She directs the Nursing and Health Outcomes Project for the Ontario MOHLTC which is developing a set of outcomes that will be systematically collected and abstracted onto administrative databases from all patients in acute, long-term, and community care systems. She has received funding from the Ontario MOHLTC, Ontario Mental Health Foundation, NHRDP, National Welfare Grants, and numerous foundations. She has published more than 20 articles and book chapters and presented at more than 100 scientific conferences. She has delivered many keynote addresses on topics related to the health care system and nursing's role, health services for the elderly and their family members, and nursing education and research.

JUDITH SHAMIAN, RN, PhD is Executive Director, Nursing Policy, Health Canada, Associate Professor in the Faculty of Nursing, University of Toronto, and Past President of the RNAO. Dr. Shamian obtained her PhD from Case Western Reserve, Cleveland, Ohio, her Master's in Public Health from New York University, and her Baccalaureate in Community

Nursing from Concordia University in Montreal.

She has published and spoken extensively in North America and internationally. Dr. Shamian is known for her commitment to professional excellence in practice, education, and research. Her continuous interest in health care politics and policy and international health is well-known. She is the 1995 recipient of the Ross Award for Nursing Leadership.

SOURAYA SIDANI, RN, PhD is an Associate Professor in the Faculty of Nursing, University of Toronto. She teaches courses related to research methods and instrument development and testing. She consults with researchers and clinicians about the design and implementation of research and program evaluation projects, and the analysis of data. Her research areas of interest focus on evaluating nursing interventions and refining research methods and measures for determining the clinical effectiveness of interventions. She developed and tested a framework for evaluating interventions and published a book on the theory-driven approach to intervention evaluation. She has been involved in various projects evaluating different interventions, nursing care delivery models, and educational programs, with the primary responsibility of designing the evaluation study, managing data collection and entry, and conducting the statistical analyses. The topics of her publications relate to methodological issues.

SUSANNE WILLIAMS, RN, MEd is the Immediate Past President of the RNAO, a professional association representing registered nurses in the province of Ontario. RNAO's mandate is to advocate for healthy public policy and for the role of registered nurses.

Currently, Ms. Williams is the Interim Dean for the Faculty of Community Services, Ryerson Polytechnic University. She has been a faculty member at the Ryerson School of Nursing since 1973 and from 1988 to 1998 she served as Director. She is a member of the St. Elizabeth Health Care Foundation Board, and Past President of the Registered Nurses Foundation of Ontario.

She received a Master of Education (MEd) and a Bachelor of Nursing Science (BNSc) from Queen's University in 1981 and 1971 respectively. Ms. Williams is also a graduate of the Wellesley Hospital School of Nursing.

Ms. Williams has been an active member of a number of professional organizations including the Council of University Programs in Nursing (Chair, 1994-1996), the Provincial Steering Committee on the Future of Nursing Education (Co-Chair, 1994-1996), and the JPNC (Co-Chair, 1994-1997 and 1999-2000).

Academic and professional interests include policy development and professionalization of nurses. Ms. Williams has been involved in the provincial debate over restructuring of nursing education for many years. Her research interests include the adequate supply of nursing human resources and overcoming the challenges of supply side database development.

AT MCMASTER UNIVERSITY:

MARJORIE ARMSTRONG-STASSEN, MLHR, PhD is a Professor in Management and Labour Studies, at the Odette School of Business, University of Windsor. Dr. Armstrong-Stassen's research interests are in the areas of organizational downsizing, layoff survivors, the aging workforce, work stress and coping, and human resource management. She has implemented numerous research studies in this area. Her present research funded by the Social Sciences and Humanities Research Council (SSHRC) examines the long-term impact of downsizing on individuals, work groups, and organizations. Dr. Armstrong-Stassen has published and presented nationally and internationally.

JENNIFER BLYTHE, MLS, PhD is an Assistant Professor at the School of Nursing, McMaster University. Born in England, she received a BA in English from the University of Hull then worked as a librarian in government, public, and university libraries. She completed a PhD in Anthropology at McMaster University and was employed in contractually limited positions in a number of Canadian universities. Later she received a Master in Library Science from the University of Toronto. Her current research interests include nursing HHR, restructuring, and nursing informatics.

SHERYL BOBLIN-CUMMINGS, RN, PhD is an Assistant Professor at the School of Nursing, McMaster University. The foci of her research include nursing competency, decision-making of patients and health care providers, and learning needs of patients and nurses. For example, Dr. Boblin-Cummings has been working with the CNO on their Quality Assurance Program, in the development of nursing competencies. She has been involved in initiatives such as: Entry Level Competencies - Umbrella Working Group, Competencies to Initiate Project, and Competence Assessment Project.

Dr. Boblin-Cummings is involved in the graduate and undergraduate nursing programs at McMaster. She takes an active role in the administration and implementation of the fourth year of the undergraduate program. She is the Level 4 Coordinator, as well as Course Planner, for two fourth year courses. She is a member of the Graduate Faculty and is on supervisory committees for graduate and doctoral students.

Dr. Boblin-Cummings serves as a member of the Review Panels for the Development of Women Health Professionals Program and for the *Journal of Nursing Education*. She is also a member of the Editorial Board for the Hamilton Health Sciences Corporation Nursing Network newsletter.

SHEILA CAMERON, RN, PhD is a Professor and Executive Dean of the College of Graduate Studies and Research at the University of Windsor. She is also a Professor at the School of Nursing. Dr.

Cameron has conducted a number of studies examining the impact of downsizing and mergers on hospital nursing staff since 1991. This work has been published in national and international journals and presented at a wide range of conferences in North America and other countries. Research funding for these studies has been received from the Ontario MOHLTC and SSHRC.

DONNA CILISKA, RN, PhD is an Associate Professor at the School of Nursing, McMaster University and has an appointment as a Nursing Consultant with the Hamilton-Wentworth Regional Department of Public Health Services. Dr. Ciliska is a Career Scientist, MOHLTC, Ontario. She is the Co-Editor of *Evidence-Based Nursing*, and is the Co-Director of the Canadian Centre for Evidence-Based Nursing. Her research interests include community health, obesity, eating disorders, and research dissemination.

MARGARET DENTON, PhD is an Associate Professor in Gerontology and Sociology, McMaster University. She teaches courses in research methods, aging, and health and society. Dr. Denton's research interests include: women's health, formal care giving, health and aging, community health and social services, long-term care, supportive housing, and retirement and income inequality. Dr. Denton is also experienced in social survey research and applied social research and is currently involved in three research projects. Dr. Denton is a Co-Investigator on "Social and Economic Dimensions of an Aging Population" and Principal Investigator on

“Planning for Later Life”, both research projects funded by SSHRC. As well, Dr. Denton has been awarded funding from the WSIB for a research project entitled “Organizational Change and the Health and Well-being of Home Care Workers”.

Health Research (CIHR) and a member of the Canadian Centre for Evidence-Based Nursing. Her research interests are research transfer and uptake, evidence-based decision-making, organizational culture, outcomes research, health economics, and health services delivery.

ALBA DICENSO, RN, PhD is a CHSRF/CIHR Nursing Chair and a Professor at the School of Nursing and in the Department of Clinical Epidemiology and Biostatistics, McMaster University. She is lead Editor of *Evidence-Based Nursing*, an international journal that summarizes methodologically sound published research of relevance to nurses, and Co-Director of the Canadian Centre for Evidence-Based Nursing. Dr. DiCenso’s primary research area is the introduction and evaluation of nurse practitioners in primary and tertiary care settings. Over 10 years, she led multi-disciplinary, multi-phase projects that introduced neonatal nurse practitioners into Ontario tertiary level neonatal intensive care units. She is currently the Principal Investigator of a multi-phase project to evaluate the primary care nurse practitioner initiative in Ontario. She has worked with decision-makers at local, regional, and provincial levels.

MAUREEN DOBBINS, RN, PhD is an Assistant Professor at the School of Nursing, McMaster University and has an appointment as a Public Health Associate with the Hamilton-Wentworth Department of Social and Public Health Services. Dr. Dobbins is currently a post-doctoral fellow sponsored by the Canadian Institute for

SUSAN FRENCH, RN, PhD is a Professor of Nursing at McMaster University. She received her PhD (Education) from the University of Toronto. She has held a variety of administrative positions in nursing, including Associate Dean of Health Sciences (Nursing) and Director of the School of Nursing at McMaster from 1980-90. She was a major player in the development of the Hamilton-Wentworth Department of Public Health Services as a teaching health unit characterized by an interdisciplinary approach and the integration of research with service and education. She continues as an associate member of the Department. She played a key role in the development of the program of accreditation of undergraduate nursing education in Canada. Dr. French's expertise in HHR development is reflected not only in her work in nursing in Canada but also in consultation to international donor agencies, including the Canadian International Development Agency (CIDA) and UK's Department for International Development, and non-government organizations such as the World Bank and African Medical and Research Foundation. Her extensive involvement with the development of nursing in Pakistan through a series of projects and programs funded through CIDA since 1983, provides her with an opportunity to compare and contrast dimensions of HHR development in Canada and a country in the south.

She is a member of an interdisciplinary team of researchers studying nursing as a career choice, the worklife of nurses, and the role of consumers in health care. In addition, she has been an active member of another interdisciplinary research team studying

independence of the well elderly. Her interdisciplinary research activities have been recognized through an associate membership in the Department of Sociology, McMaster University.

MARTHA HORSBURGH, RN, PhD is a Professor and Director of the University of Windsor, School of Nursing. Dr. Horsburgh's research interests include the quality of nursing worklife and the impact of hospital downsizing on nurses who remain in the system (the survivors). She is also heavily invested in the study of adult self-care, especially as it relates to individuals with chronic illness and their caregivers. Both lines of research feature quantitative and qualitative approaches to the generation of new knowledge. Results have been published widely and presented nationally and internationally.

MABEL HUNSBERGER, RN, PhD is an Associate Professor of Nursing at McMaster University. Mabel received her undergraduate and Master degrees in the United States and completed her PhD at the University of Waterloo in July, 2000 on "The Effect of Introducing Parents of Hospitalized Children to the Nursing Mutual Participation Model of Care: A Randomized Controlled Trial".

She practised and taught nursing in the U.S. until her return to Canada in 1982. Her clinical expertise in pediatric nursing developed in various pediatric settings including general pediatric wards, the emergency room, and neonatal intensive

care. She was also a practitioner in a pediatrician's office. In the early 1970's, Dr. Hunsberger worked for two years in a pediatric hospital ward in Taiwan. She taught in a Pediatric Nurse Practitioner program and in a variety of Schools of Nursing, the most recent being University of Michigan. She published *Family Centered Nursing Care of Children* for W.B. Saunders (1981; 1989; 1994).

She accepted a position at McMaster University, School of Nursing in 1982. She was instrumental in setting up the first Clinical Nurse Specialist/Neonatal Practitioner program at McMaster in the 1980's and participated in the research to evaluate this program. She continues her involvement in the curriculum development of the graduate program, and is on the Steering Committee and Curriculum Group involved in the McMaster-Mohawk-Conestoga collaborative initiative. Dr. Hunsberger is currently Chair of the Nursing Educational Research Unit in the School of Nursing. She has twice been the lead faculty member on the accreditation process for McMaster School of Nursing and is a member of the Review Team Pool for CAUSN. She supervises undergraduate students in Level III and Level IV Pediatrics and is on numerous thesis committees for graduate students studying pediatric issues.

CHARLOTTE NOESGAARD, RN, MScN is an Assistant Professor at McMaster University, Faculty of Health Sciences, School of Nursing. She has extensive expertise in the utilization of knowledge management in clinical practice of the health care sector. She is one of the

investigators of the Province Wide Nursing Project which examines the integration of health care services across the continuum of care (acute, long-term, and home care services). She is a Past President of the RNAO and has traveled throughout Canada discussing future recruitment of RNs in Canada. Professor Noesgaard is currently the Vice Chair of the Grand River Hospital Board and is involved in the Joint Executive Committee for the Region of Waterloo as it advances health care services into the 21st century.

JENNY PLOEG, RN, PhD is an Assistant Professor at the School of Nursing, McMaster University and has an appointment as Public Health Associate with the Social and Public Health Services Division, City of Hamilton. She is an Associate Editor of *Evidence-Based Nursing*. Her research interests include health and aging, health promotion and disease prevention, caregiver support, and evaluation of community health services.

JOAN ROYLE, RN, MScN is an Associate Professor at the School of Nursing, McMaster University. Her research interests include nursing informatics and evidence-based practice. She is Principal Investigator for the evaluation of the Province Wide Nursing Project and is currently involved in studies to assess the clinical information needs of caregivers in long-term care, the implementation of a long-term care resource centre, and an evaluation project to promote evidence-based long-term care. Her current research activities include reflective practice.

She is the author of a medical-surgical nursing text and has published widely and presented papers both nationally and internationally on nursing informatics and research utilization.

JANE UNDERWOOD, RN, MBA is the Director of Community Support and Research Branch of Hamilton-Wentworth Social and Public Health Services Division and Associate Clinical Professor at McMaster University, School of Nursing. Her research foci include the roles of health professionals in community health promotion and the use of evidence by public health and community practitioners. She has taken an active role on numerous committees such as the Public Health Provincial Advisory Committee and the Compliance Assessment Advisory Committee of the Ontario MOHLTC and has been involved in provincial initiatives such as the Healthy Babies, Healthy Children Program Steering Committee. Professor Underwood has presented and published extensively in the area of public health nursing and health promotion and currently is a Reviewer for the *Canadian Journal of Public Health*.

administrative positions in nursing such as Chair and Dean of Studies in the BScN program at McMaster (1979-85) and Assistant Director Educational Resources (1995-98). She has published and presented papers both nationally and internationally and has consulted with various community agencies on nursing issues such as quality assurance standards for practice.

ROBIN WEIR, RN, PhD is a Professor at the School of Nursing, McMaster University. Dr. Weir's research interests are in the areas of quality of nurses' worklife and psychosocial and behavioural research related to health. She has held numerous

ISIK ZEYTINO-OLU, PhD is a Professor in Human Resources and Management, School of Business, McMaster University. Dr. Zeytino-olu is known nationally and internationally for her research in the areas of non-standard and flexible work arrangements, women's work and occupational health, international and comparative industrial relations/human resource management, and women in business as managers/professionals. She holds a grant from SSHRC to examine nonstandard and flexible labour contract issues in workplaces. She is a key investigator in a WSIB funded project entitled "Organizational Change and the Health and Well-being of Home Care Workers".

APPENDIX B

ONGOING AND RECENTLY COMPLETED RESEARCH

The following research projects are a reflection of the activities to June 2001 and are listed in alphabetical order by first investigator. The projects have been categorized under the set of combined objectives which include the original 1996-2001 objectives and 2001-2004 expanded role objectives (see page 4). The five broad categories are: **1.** Monitoring of Nursing Resources and Health Human Resource Modeling, **2.** Nursing Education, **3.** Care Delivery Models, **4.** Impact of Policy on Care, and **5.** Restructuring and Organizational Design (relevant category(s) are noted after each project title).

AIKEN, SOCHALSKI, SILBER (CO-PRINCIPAL INVESTIGATORS), SHAMIAN, ANDERSON, TU, GIOVANNETTI, CLARKE, RAFFERTY, HUNT, & BUSSE

OUTCOMES OF HOSPITAL STAFFING.^{1,5}

Funded by: National Institute for Nursing Research & National Institutes for Health (1998 - 2001)

Stage: Analysis and report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Determine the relative effects of hospital staffing on severity adjusted inpatient mortality and selected nurse outcomes controlling for other likely variables.
 - Determine the extent to which organizational attributes that affect nursing practice mediate the effects of nurse staffing on patient outcomes.
 - Further develop the reliability and validity of failure to rescue as a measure of hospital performance and to examine the relationship between nurse staffing, organizational attributes, and several additional outcome measures.
 - Initial findings presented at the International Society for Quality in Health Care, Ireland and at ICN, London, England.
-

ARMSTRONG-STASSEN

**(PRINCIPAL INVESTIGATOR) &
TEMPLER**

**THE MANAGEMENT OF AN AGING WORKFORCE: AN
ASSESSMENT OF HOW WELL EMPLOYERS ARE MEETING
THE CHALLENGE.**¹

Funded by: University of Windsor Seed Grant (2000) & SSHRC (2001 - 2004)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To determine the preparedness of employers to deal with the aging workforce.
 - A questionnaire was developed to assess what HR strategies employers currently have in place to meet the needs and preferences of older employees and what special HR policies they expect to implement in the future.
 - Survey packets are being mailed out to over 2,000 HR managers in the fall of 2001.
 - The findings of the more extensive SSHRC-funded study will identify the readiness of companies to meet the challenge of the aging workforce. Some of the innovative strategies for recruiting and retaining older employees will require changes in current rules regarding pensions and mandatory retirement age.
-

ARMSTRONG-STASSEN (PI) & WAGAR **THE LONG-TERM IMPACT OF DOWNSIZING ON THE INDIVIDUAL, THE WORK GROUP, AND THE ORGANIZATION.**⁵

Funded by: SSHRC (1998 - 2001)

Stage: Final stages of data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To examine the long-term impact of organizational downsizing on individual functioning, work-group behaviour and organizational effectiveness within the manufacturing and government sectors.
 - We are completing the final phase of this research program. The final mail out of questionnaires will take place in the fall of 2001.
 - The findings provide HR and other managers, in both the private and public sectors, with information on the long-term effects of downsizing on individual functioning; work-group and organizational effectiveness; the factors that influence effectiveness over time; and the steps that need to be taken to minimize the harmful effects often associated with downsizing.
-

**BAKER (PI), BROWN,
ANDERSON, MCKILLOP,
MURRAY, & PINK**

EVALUATING THE USE OF HOSPITAL PERFORMANCE MEASURES BY TOP MANAGEMENT TEAMS.³

Funded by: HEALNet (1999 - 2000)

Stage: Analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To determine the use and barriers to more effective use of hospital performance measures by upper management through a case study of three hospitals.
 - Results to date indicate that a variety of factors are linked to use of performance measures.
 - This research will support improvements in the design of performance indicators and balanced scorecards and identify interventions, including training and system design to improve the use of such performance measurement systems.
-

**BAUMANN, O'BRIEN-PALLAS (CO-PIs), THE WORKING ENVIRONMENT AND HEALTH OF THE
ARMSTRONG-STASSEN, BLYTHE, NURSING WORKFORCE - A POLICY SYNTHESIS.¹
BOURBONNAIS, CAMERON, IRVINE
DORAN, KERR, MCGILLIS HALL,
VÉZINA, BUTT, & RYAN**

Funded by: CHSRF (2000 - 2001)

Stage: Completed

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To bring together research and experiential knowledge about nurses' health and well-being in the work environment.
 - Examined the impact of the working environment on the health of the nursing workforce (and hence, potentially, on patient outcomes).
 - More than four dozen recommendations to policy makers on how to improve the quality of the working environment and the health of the nursing workforce (and hence, potentially, improve patient outcomes).
-

**BAUMANN, ZEYTINO LU, THE NEW HEALTH-CARE WORKER: THE IMPLICATIONS OF
BLYTHE, DENTON, & CHANGING EMPLOYMENT PATTERNS.^{1, 2, 3, 5}
O'BRIEN-PALLAS**

Funded by: CIHR (2001 - 2003)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- The purpose of this project is to explore the impact of current employment arrangements on the recruitment and retention of nurses.
- The objectives are to:
 - ☐ examine the human resource policies on standard and non-standard work arrangements and how these policies are operationalized in three large teaching hospitals;
 - ☐ examine the effects of standard and non-standard employment arrangements on the nursing workplace, including the functioning of nursing and multi-disciplinary teams;
 - ☐ explore nurses preferences for standard and non-standard work and the reasons for their choice;
 - ☐ investigate whether nurses whose preferences for particular employment arrangements are met, experience better quality of work life than nurses whose preferences are not met; and
 - ☐ evaluate the implications of having preferred employment arrangements for retention and suggest policy recommendations for managers and decision makers.
- This exploratory study will result in a better understanding of the consequences of contemporary work arrangements. The findings will assist human resources

decision-makers in creating employment arrangements that will benefit managers, nurses and ultimately patients.

BROWNE (PI), ROBINSON, ROBERTS, GAFNI, BYRNE, WEIR, CROOK, MAJUMDAR, WILLMS, & GUENTER

Funded by: AIDS Bureau Ontario MOHLTC (1999 - 2004)

**COMMUNITY-BASED
HIV/AIDS SERVICES
EVALUATION UNIT: THE
EFFECTS AND EXPENSE OF
INTERSECTORAL MODELS OF
COMMUNITY BASED CARE
FOR PEOPLE INFECTED AND
AFFECTED WITH HIV/AIDS.³**

Stage: Ongoing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- The evaluation program will focus on the impact of programs and services on those infected by, affected by, and at-risk of acquiring HIV.
- A steering committee composed of stakeholders, providers, policy makers, and investigators will provide direction to the process of evaluation through the research process.
- Through this process, collaborative community services can be systematically developed and rigorously evaluated using comparative research designs.
- Results will have an impact on the ongoing development of services, and the application of new knowledge to practice and policy development.

CARTER (PI)

FORECASTING SHORT TERM BED AVAILABILITY IN AN ACUTE CARE HOSPITAL.⁵

Funded by: Sunnybrook and Women's College Health Sciences Centre (2000 - 2001)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To develop a practical, statistical method to predict the number of beds that should be available for emergencies and elective admissions 1 or 2 days in advance.
- To provide confidence intervals on availability.
- To develop a tool for the hospital to use for short-term planning (e.g., potentially rescheduling elective surgery in advance).
- To analyze the causes of ER critical care bypass and redirect with the objective of reducing cancelled surgery rates.

- To improve the hospitals resource utilization in terms of beds and reduce the cancelled surgery rate.
-

CARTER (PI), BUSBY, GENDREAU, LAKATS, & SORIANO

HOME CARE STRATEGIC PLANNING MODEL.^{1,3}

Funded by: Simcoe County CCAC (1999 - 2000); Ontario Graduate Scholarship (2001)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Develop a model that will estimate the total annual cost of providing a desired level and quality of home care service.
 - The model will:
 - ☐ include forecast estimates of future demand for home care.
 - ☐ enable agencies to determine how much service can be delivered given existing funding levels and/or how much money/resource is required for a specified level of care.
 - ☐ provide decision-makers with the quantitative analysis they require to make rational and equitable decisions concerning the allocation of home care resources.
 - Paper presented in Seattle, Washington; Halifax, Nova Scotia; and Windsor, Ontario.
-

CARTER (PI), O'BRIEN-PALLAS, & NEUMAN
DEVELOPING A MATHEMATICAL MODEL FOR FORECASTING NURSING HUMAN RESOURCES IN ONTARIO.¹

Funded by: NRU, University of Toronto site; National Science and Engineering Research Council Operating Grant; & Graduate Scholarship (1999 - 2000)

Stage: Report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To complement the extensive work being done by other NRU researchers who are looking at trends in nursing human resource supply and demand.
 - To develop a single model that incorporates all primary factors into one framework.
 - To produce a forecast of future nursing human resources, under a wide variety of potential assumptions.
 - Paper presented in Queensland, Australia and in Glasgow, Scotland.
-

CARTER (PI), SCHULL, ZARIC, & FERNANDES **Partners: SUNNYBROOK AND WOMEN'S HEALTH SCIENCE CENTRE, LONDON HEALTH SCIENCE CENTRE, AND UNIVERSITY HOSPITAL (EDMONTON, ALBERTA)** **UNDERSTANDING AND IMPROVING EMERGENCY DEPARTMENT PERFORMANCE USING SIMULATION.**³

Submitted to: CIHR (2001 - 2004)

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Employ management science and operation research techniques to analyze emergency departments (EDs) in Canada with the goal of improving their operating performance.
 - Use a discrete event Monte Carlo simulation model as the main tool in this analysis.
 - Understand current ED service quality and the impact of external factors on the ED and employ the model as a decision aid for future ED planning.
 - Utilize a systems perspective that accounts for the relationship between the ED and its environment, within the hospital and health care systems.
-

COHEN, DRUMMOND (CO-PIs), HEBERT, FERRIS, PRINGLE, & GLOBERMAN **THE MANAGEMENT, ETHICS, AND LEGALITY OF EXCHANGING PERSONAL HEALTH INFORMATION BETWEEN PROFESSIONALS AND AGENCIES FOR ALZHEIMER DISEASE.**³

Funded by: Alzheimer Society of Canada (2000 - 2001)

Stage: Ongoing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Descriptive study using mainly focus groups and interviews to understand the management, ethics, and legality of exchanging personal health information between professionals and agencies for Alzheimer Disease.
 - Will help better understand how to exchange information in light of the new Privacy Act.
-

DEBER (PI), BAUMANN, BOBLIN-CUMMINGS, & STEWART **PREFERENCES FOR PARTICIPATION IN MEDICAL TREATMENT DECISIONS.**³

Funded by: SSHRC (1997 - 2000)

Stage: Report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Look at people with Multiple Sclerosis and their views on autonomy and balancing roles of family, providers, and patients.
 - Ascertain the extent to which results previously obtained regarding problem-solving and decision-making involvement in angiogram patients hold for other groups.
 - Investigate policy and ethical implications of various patient roles.
 - Examine the impact of disease and respondent characteristics on preferences for involvement and information.
-

DEBER (PI), BAUMANN, BOBLIN-CUMMINGS, STEWART, MYERS, MILLSON, ROBINSON, & HALMAN
PREFERRED ROLES OF PEOPLE WITH HIV/AIDS IN TREATMENT DECISION-MAKING: CAUSES AND CONSEQUENCES.³

Funded by: Ontario HIV Treatment Network & HEALNet (1999 - 2001)

Stage: Analysis and report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Explore whether patients wish to be “autonomous” which in turn has implications for the organization and delivery of patient education.
 - Examine the information seeking behaviours and the roles that people living with HIV/AIDS wish to play in making treatment decisions.
 - Preliminary results suggest that patients reject a fully autonomous role, with a majority (81.6%) of participants preferring to share decision-making responsibilities with their providers.
-

DEBER (PI), COCKERILL, COHEN, & LEGGAT
Funded by: NHRDP (1998 - 2000)

THE IMPACT OF POPULATION-BASED FUNDING MODELS ON SPECIALIZED SERVICES.^{3,5}

Stage: Analysis and report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Ascertain the potential impact of population-based funding on specialized services.
- Develop a new typology based on three dimensions: location of service (inpatient vs. outpatient), fixed costs (high to low), and the extent to which quality requires highly specialized expertise and/or a critical mass of patients.
- This typology may be useful in developing funding formulas and in monitoring quality of care, particularly in regionalized models and stresses the importance of looking at

critical mass and at the influence of non-geographically based expertise, features often overlooked in current planning models.

- Our analysis would suggest that provincial governments are wise in moving slowly toward fully integrated budgeting, at least until the potential impact on the quality and economic viability of specialized services can be analyzed.
 - Their current focus on strengthening primary care and its links with community-based services promise to gain many of the likely advantages of regionalization - particularly the breaking down of funding silos - without “throwing out the baby with the bathwater.”
-

**DEBER (PI), WILLIAMS, FROM MEDICARE TO HOME AND COMMUNITY: OVERTAKING
BAUMANN, O’BRIEN-PALLAS, THE LIMITS OF PUBLICLY-FUNDED HEALTH CARE IN
ET AL. CANADA.^{3, 4, 5}**

Funded by: SSHRC (2001 - 2006)

Stage: Starting

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Integrate health services, population health, and clinical research for examination of the policy and service delivery implications of our increased reliance on a broad range of community-based services, for a broad range of clients.
 - Inform policy and service delivery by fostering timely, high-quality research that seeks to document and understand the implications of the shift to home and community, and its differential impact on diverse populations, in partnership between community-based and university-based researchers.
 - Create a structure for conversation, mutual learning, and collaboration among community organizations and researchers about the implications of home and community care.
 - Disseminate research findings and improve the transparency and accountability of decision-making.
 - Provide opportunities for training of health researchers in a broad variety of disciplines in an environment characterized by interaction with community partners.
 - Avoid duplication in the research agenda and arrange for joint dissemination of relevant research results, by extending and elaborating the NRU and Home Care Evaluation and Research Centre (HCERC) networks whose primary missions are neither policy analysis nor training, but which have strong links with key stakeholders interested in this research and training agenda.
-

DEBER (PI), WILLIAMS, KOURI, & CONRAD

DO REGIONALIZATION MODELS MATTER? HOME CARE RESOURCE ALLOCATION IN MARITIME PROVINCES.^{1,3}

Funded by: NHRDP & CIHR (2001 - 2003)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Compare how various health regions in the Maritime provinces allocate resources across health care sectors.
 - Examine whether resource allocation decision-making is affected by the varying configurations of services incorporated into regional budget envelopes.
 - Given the dynamic nature of health reform, it is crucial that informed policy development and decision-making be based on knowledge about the advantages and disadvantages of various approaches to deciding how regional funding envelopes are constructed and whether budgets for particular services are protected or integrated into funding envelopes.
-

DENTON (PI), ZEYTINO LU, & WEBB Funded by: Research Advisory Council, Ontario WSIB (2000 - 2002)

**ORGANIZATIONAL
CHANGE AND THE
HEALTH AND WELL-
BEING OF HOME CARE
WORKERS.⁴**

Stage: Ongoing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To provide new information to improve the prevention of work related injury and illnesses in home care work.
 - Previous research conducted has shown that home care workers are at risk for chronic stress problems, exhaustion, musculoskeletal disorders (soft tissue injuries), workplace injuries, and accidents; further, these health care problems have been linked to the social organization of their work.
 - To study the impact of health care restructuring and other organizational changes on the mental and physical health of home care workers.
 - Findings will make significant contributions to policy formation and professional practices in Canada and elsewhere.
 - Will also have an impact on health-related policy formation in home care at the local, provincial, and international levels.
-

DiCENSO (PI), SIDANI, IRVINE, LASCHINGER, ANDRUSYSZYN, GAFNI, HUTCHISON, GUYATT, WALTER, BHATIA, & CATY

EVALUATION OF THE PRIMARY CARE NURSE PRACTITIONER INITIATIVE.¹

Funded by: MOHLTC (1997-2001)

Stage: Data analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To evaluate Nurse Practitioners (NPs) in primary and tertiary settings.
 - The focus is on the evaluation of educational programs to prepare NPs; identification of employment settings; practice patterns; and evaluation of the impact of NPs on quality of care, patient outcomes, and the health care system.
 - Findings will expand the understanding of the Acute Care Nurse Practitioner role and provide empirical evidence to guide decision-making by policy makers at different levels.
-

DOBBINS (PI), BRUNTON, KOTHARI, & JACK

EXPLORING THE PROCESS OF EVIDENCE-BASED DECISION-MAKING AMONG DECISION-MAKERS IN PUBLIC HEALTH AND LOCAL BOARDS OF HEALTH IN ONTARIO.³

Funded by: Niemeier Award (July 2000 - July 2001)

Stage: Data analysis and report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To understand and describe the decision-making process related to program planning in public health units in Ontario and to clarify the role of research evidence in the decision process.
 - Report to funding agency. Summary and report to be disseminated to study participants.
 - These results will assist in the development of research transfer and uptake strategies in public health.
-

DOBBINS (PI), ROOTMAN, GREEN, & CAMERON

Funded by: CIHR (January 2001 - December 2002)

DEVELOPMENT AND EVALUATION OF DISSEMINATION STRATEGIES IN PUBLIC HEALTH AND HEALTH PROMOTION.³

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To develop a registry of all published reviews evaluating the impact of public health and health promotion interventions.

- To evaluate the impact of a dissemination strategy to various target users across Canada.
 - On-line registry of published reviews, dissemination of research results on Tobacco Control, and impact summary of the effectiveness of a dissemination strategy.
 - Results will assist in the development of effective research transfer and uptake strategies, and will facilitate decision-maker access to research which evaluates the effectiveness of interventions.
-

EDWARDS (PI), DAVIES, SKELLY, PLOEG, & DOBBINS Funded by: Ontario MOHLTC (2000 - 2003)

PLOEG, & DOBBINS

**RNAO BEST PRACTICE
GUIDELINES PROJECT.³**

Stage: Data collection, data analysis, and report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To evaluate the impact of the implementation of nursing practice guidelines into various clinical areas and settings.
 - Reports to MOHLTC and to the individual health care settings who participated.
 - Reports will outline the level of success in implementing the guidelines, barriers experienced, and impact on patient outcomes and quality of nursing worklife.
 - Assist in the development of more effective dissemination strategies for the implementation of practice guidelines.
-

ESTABROOKS (PI), LANDER, NORRIS, BOSCHMA, LAU, WATT-WATSON, **THE DETERMINANTS OF RESEARCH UTILIZATION IN
A PEDIATRIC ACUTE CLINICAL SETTING.³**

O'BRIEN-PALLAS, STEVENS, DONNER,

& WILLIAMS

Funded by: NHRDP (1999 - 2002)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- We will determine: 1) a description of factors that influence nurses' use of pain management research; 2) an explanation of how these factors function; 3) a blueprint that we can use to study these factors in more comprehensive case studies; and 4) findings that enable us to begin to plan appropriate interventions to improve pain management by increasing the use of pain research in pediatric contexts more widely.
- Address conclusion that there is a significant problem with research use among health professionals and health policy makers.

- Nurses make up the majority of health workers both in hospitals and in Canada. Therefore an increase in use of scientific research (evidence) will have a positive effect on patient and system outcomes.
-

ESTABROOKS (PI), LANDER,
NORRIS, BOSCHMA, LAU, WATT-
WATSON, **O'BRIEN-PALLAS**,
STEVENS, **DONNER**, & WILLIAMS

Funded by: Alberta Heritage Foundation for Medical
Research (1999-2001) & NHRDP (1999 - 2002)

**THE DETERMINANTS OF
RESEARCH UTILIZATION IN AN
ACUTE CLINICAL SETTING.**³

Stage: Third and final phase of data collection. Ongoing data analysis.

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- We will determine: 1) a set of factors that influence research utilization by nursing personnel concerning pain management; 2) an explanation of how these factors interact; 3) a blueprint that we can use to study these factors in a more comprehensive multiple case study; and 4) findings that enable us to begin to plan appropriate interventions to improve pain management by increasing the use of pain research.
 - Examining what guides research utilization and what barriers there may be to research utilization in the acute clinical setting.
 - Nurses make up the majority of health workers in hospitals. Therefore an increase in use of scientific research (evidence) will have a positive effect on patient and system outcomes..
 - *Critical Thinking Dispositions and Research Utilization.* Western Region CAUSN, Saskatoon, February 2001.
-

FISHER (PI), **BAUMANN**, & **BLYTHE**

NURSING VACANCY RATES IN ONTARIO.¹

Funded by: MOHLTC (March 2001 - July 2002)

Status: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- The Nursing Secretariat at the MOHLTC has identified inconsistencies in the use of the term vacancy and in the number of vacancies reported.
- The purpose of the study is to clarify and define the term "vacancy" as it applies to nursing.
- To quantify nursing vacancies in acute and long-term care settings in Ontario.

- A draft template has been developed and will be evaluated by testing it on a sample of acute care hospitals and long-term care institutions in the seven regions of Ontario.
 - The template will be amended based on the results of the pilot test and additional interviews.
 - It will be used as a data collection instrument in an Ontario-wide study to quantify the number of nursing vacancies.
-

LOVE (PI), HUNSBERGER, LANDEEN, Funded by: Niemeier Fund (2000 - 2001)
COSKEY, HUNTER, & LAPPAN

**HOPEFULNESS AND THE NURSE:
THE ROLE OF HOPE IN THE
CARE OF MEDICALLY FRAGILE
CHILDREN WITH CANCER.³**

Stage: Data collection and analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Three-part study to examine the role of hope for medically fragile children with cancer, his/her parents, and the care-giving nurse.
 - Fifteen nurses providing care on a tertiary level pediatric oncology unit are being interviewed.
 - The nurses perceptions regarding their understanding of hope, its meaning, how they sustained it, and how it affected their daily interactions with hospitalized children will be analysed.
 - Findings will provide a greater understanding of how the concept of hope affects the nursing care of medically fragile children in an oncology setting.
-

HUTCHISON (PI), ABLESON, BRAZIL, CHAMBERS, CILISKA, DENTON, EYLES, GIANCOMINI,
HURLEY, PLOEG, WOODWARD, & ZEYTIÑO LU

COMMUNITY CARE RESEARCH CENTRE.³

Funded by: Canadian Institutes of Health Research (May 2001 - 2006)

Stage: Ongoing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- A partnership of public and voluntary community care agencies in Hamilton, Ontario and an interdisciplinary group of McMaster University researchers from health, social, and management sciences.
- The research program will focus on the organization and delivery of community health and social support services. Research activities will span clinical, health and social services, health policy, health systems and determinants of health research.
- Objectives include:

- ☐ generating new knowledge in the field of community care,
 - ☐ building research and evaluation capacity in community care,
 - ☐ stimulating interagency and intersectoral collaboration and resource sharing in research,
 - ☐ providing opportunities for agency staff and managers to acquire and apply research skills, and
 - ☐ promoting the application of research evidence to clinical practice, management, and policy making.
 - Five research projects have been identified as priorities for the first year, including:
 - ☐ integration, coordination and continuity of care for socially disadvantaged seniors,
 - ☐ health promotion with immigrant and refugee clients,
 - ☐ telephone support services for family caregivers,
 - ☐ organizational and community values about community care, and
 - ☐ guidelines for the identification and management of elder abuse by staff and volunteers of community care agencies.
-

IRVINE (PI), O'BRIEN-PALLAS, SIDANI, MCGILLIS HALL, PETRYSHEN, HAWKINS, & WATT-WATSON

THE RELATIONSHIP BETWEEN PATIENT AND SYSTEM OUTCOMES AND THE QUALITY OF NURSING CARE IN ACUTE CARE HOSPITALS.^{3,5}

Funded by: NHRDP (1998 - 2001)

Stage: Completed

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Phase one examined content validity, internal consistency, and inter-rater reliability (where applicable) of the instruments.
- Phase two evaluated the relationships between the structure, process, and outcome variables identified in the conceptual framework; generated a parsimonious model for predicting nurse-sensitive patient outcomes; and evaluated the construct validity of the outcome measures.
- Baccalaureate preparation of nurses, nurse experience level, and team nursing were related to nursing interventions, coordination of care, and the perceived effectiveness of care.
- Patients' functional health outcomes, symptom status, perceived health benefit, and length of stay were related to one or more of the nursing process variables (i.e., nursing intervention, care coordination, effectiveness of care).
- Results suggest that it is possible to identify and measure nurse-sensitive patient outcomes for acute medical and surgical patients. Results also underscore the importance of educational preparation of unit staff and the importance of structuring the care delivery model in order to promote teamwork and collaboration among unit staff.

- Final report submitted to NHRDP in March 2001.
 - Two papers have been published based on the theoretical work that guided the development of this proposal.
-

**IRVINE (PI), SIDANI, MCGILLIS HALL, WATT-WATSON, MALLETT, & LASCHINGER
NURSING SENSITIVE OUTCOMES: A LITERATURE SYNTHESIS.³**

Funded by: Ontario MOHLTC (2001)

Stage: Completed

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Identified the essential characteristics or attributes defining each outcome concept.
 - Identified the instruments which have been used to measure each outcome concept in acute, community, and long-term care settings.
 - Reviewed the content of the instruments and assess their congruence with the essential attributes of each outcome concept.
 - Critically reviewed the instruments for reliability, validity, responsiveness to change, sensitivity to nursing care, and clinical utility.
 - Recommended that a nursing job satisfaction pilot study be conducted in Ontario, using multiple measures to determine the “best” ongoing measure for nursing job satisfaction. The instruments suggested for use in this pilot study included two nursing occupation-specific measures - the McCloskey/Mueller Satisfaction Scale (MMSS) and the Nursing Job Satisfaction Scale (NJS), and the work-related satisfaction measure - the Job Descriptive Index (JDI).
 - Final report submitted to the MOHLTC and a proposal to publish the final report as a book has been submitted to Sage Publications.
 - The findings were disseminated to researchers and policy makers at an invitational symposium in March, 2001.
-

**IRVINE DORAN (PI), PICKARD,
HARRIS, COYTE, MACRAE,
LASCHINGER, & DARLINGTON**

**MANAGEMENT AND DELIVERY OF COMMUNITY
SERVICES IN ONTARIO: IMPACT ON THE QUALITY OF
CARE AND QUALITY OF WORKLIFE OF COMMUNITY
BASED NURSES.**^{1, 3, 4}

Funded by: CHSRF (2000 - 2004)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Phase one objectives are to: 1) assess the extent of private sector involvement in the delivery of home care nursing services, 2) describe the method for contracting professional nursing services within the 43 Ontario Community Care Access Centres, 3) describe the method for monitoring service agreements, and 4) refine the variables and sampling strategy for phase two.
 - Phase two objectives examine the relationship between contract structural variables and variables for: 1) quality of care (process), 2) client outcome, 3) cost, 4) nurse outcome, and 5) process and client and nurse outcome.
-

**IRVINE DORAN (PI), SIDANI,
WATT-WATSON, O'BRIEN-
PALLAS, CAMERON, STEVENS,
GALLOP, & POMERLEAU**

**AN INVESTIGATION OF THE NURSE CASE MANAGER ROLE
AT THE ONTARIO WORKPLACE SAFETY AND INSURANCE
BOARD.**^{1, 3}

Funded by: WSIB (1999 - 2000)

Stage: Data collection and analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Examined the definition and implementation of the case manager role.
 - Investigated factors that influence the development and implementation of the case manager role.
 - Investigated structures that are developed, within the system, for the case manager to coordinate communications, client services, and workplace responses.
 - Identified outcomes associated with the case manager role.
 - Final report submitted to WSIB.
 - Seminars to disseminate the findings within the Board are planned for the fall of 2001.
 - Papers for publication to disseminate the findings to the practitioners within the field and to researchers are under development.
-

KERR, LASCHINGER (CO-PIs), THOMSON, O'BRIEN-PALLAS, SHAMIAN, MCPHERSON, KOEHOORN, LECLAIR, AIKEN, & SOCHALSKI

PARTNERS: CANADIAN COUNCIL ON HEALTH SERVICES ACCREDITATION, CANADIAN HEALTHCARE ASSOCIATION, ONTARIO NURSES ASSOCIATION, CANADIAN FEDERATION OF NURSES UNIONS, CANADIAN NURSES ASSOCIATION, ODRE DES INFIRMIÈRES ET INFIRMIER DU QUÈBEC, CIHI, COLLEGE OF NURSES OF ONTARIO, STATISTICS CANADA, CANADIAN PRACTICAL NURSES ASSOCIATION, & HEALTH CANADA

MONITORING THE HEALTH OF NURSES IN CANADA.¹

Funded by: CHSRF & Institute for Work and Health (2000 - 2002)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Profile the major health problems of nurses in Canada and to describe the factors that contribute to these conditions, particularly those relating to hospital restructuring and organizational change.
 - Make use of existing health information sources about nurses in Canada and highlight any significant gaps that exist in these data.
 - Identify the key individual, work, and organizational factors that should be collected on an ongoing basis in order to monitor the future health of Canadian nurses.
 - This information could ultimately contribute to the development of workplace best practices aimed at improving the health and well-being of nurses, as effective monitoring of nurse health will also create the potential for linking provider health with patient and institutional performance indicators.
-

KERR (PI), MUSTARD, FRANCHE, LASCHINGER, SHAMIAN, & SCHWARTZ Funded by: NRU (2001 - 2002)

EXPLORING STRESS

DIFFERENCES BETWEEN FULL-TIME AND PART-TIME NURSES.¹

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Explore the differences in physiological stress levels, measured by mean salivary cortisol levels, between full and part-time nurses.
- Determine if any relationships exist between the major questionnaire instruments for work and life stressors and salivary cortisol.
- A better understanding of the consequences of stress in the work environment could lead to the development of more effective intervention strategies to improve job satisfaction and reduce stress at work which will assist in the attraction and retention of nurses.

KERR (PI), SHAMIAN, THOMSON, O'BRIEN-PALLAS, SOCHALSKI, AIKENS, KOEHOORN, HOGG-JOHNSON, & SHANNON

THE RELATIONSHIP BETWEEN WORKPLACE EFFORT AND REWARDS AND VARIOUS OUTCOMES INCLUDING STRESS, IN A SURVEY OF ONTARIO ACUTE CARE HOSPITALS.^{1, 5}

Funded by: HEALNet (1999 - 2001)

Stage: Completed

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Determine if there is an association between perceived efforts and rewards associated with work and the measurement of the key sub-scales of a work-related burnout scale within the acute care hospital nursing survey population in Ontario.
 - Nurses reported high levels of absence due to burnout, musculoskeletal pain, and illness.
 - Nurses reporting an imbalance between the efforts and rewards associated with work were more likely to report all health problems examined.
 - The proportion of variance accounted for was much higher within rather than across hospitals.
 - One working paper completed for the Institute for Work & Health.
 - Refereed conference presentation at the Canadian Psychological Association Annual Convention (June 2000).
-

LASCHINGER (PI), FINEGAN, FALK RAFAEL, & HAVENS **WORKPLACE EMPOWERMENT OF HEALTH PROFESSIONALS IN RESTRUCTURED HOSPITAL WORK ENVIRONMENTS.⁵**

Funded by: SSHRC (1999 - 2002); funding is for a program of studies related to workplace empowerment

Stage: Various stages

- *Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:* Designed to investigate empowerment in nursing work environments using Rosabeth Moss Kanter's organizational empowerment theory.
- Current directions of this research involve pilot testing of a “workplace empowerment intervention” and determining the applicability of Kanter's theory in other health professions (social work, nursing, occupational therapy, and physical therapy).
- Staff nurses feel they have only moderate access to opportunity, information, resources, and support in nursing work environments (DeVries-Rizzo, M. & Tuer-Hodes, D.).
- Empowerment and Type A personality explain 11% of the variance in work effectiveness. Type A personality does not moderate the empowerment/effectiveness relationship (DeVries-Rizzo, M.).

- Empowerment and collective accountability explain 19% of the variance in patient care quality for registered nurses and 9% for registered practical nurses (Tuer-Hodes, D.).
-

**LASCHINGER (PI), FINEGAN, TESTING A WORK EMPOWERMENT MODEL IN NURSING
& SHAMIAN HOSPITAL SETTINGS.³**

Funded by: SSHRC (1997 - 2001); funding is for a program of studies related to empowerment in nursing environment

Stage: Report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Designed to investigate nursing work environments using Rosabeth Moss Kanter's organizational empowerment theory.
 - Staff nurses perceived work empowerment significantly related to trust in management and job satisfaction (Laschinger, H., Finegan, J., Shamian, J., & Casier, S.).
 - Nurse practitioners' perceptions of work empowerment were significantly related to collaborative behaviours with physicians, collaborative behaviours with managers, and job strain (Almost, J.).
 - Organizational-based self-esteem was a stronger predictor of job performance self-efficacy than empowerment (Williams, S.).
 - Staff nurses' perceptions of work empowerment significantly related to psychological empowerment and job strain (Laschinger, H., Finegan, J., Shamian, J., & Wilk, P.).
 - Staff nurses' perceptions of work empowerment and organizational trust significantly related to psychological empowerment, organizational commitment and job satisfaction (Laschinger, H., Finegan, J., & Shamian, J.).
 - Useful for nurse administrators concerned with the recruitment and retention of autonomous professional nurses.
 - Provides more insight into the nature of power in nursing organizations.
 - Assists in the understanding of the acquisition and use of power by nurses to better influence the health care system and control of nursing work.
-

LASCHINGER (PI) & KERR

PREDICTORS OF NURSES' MENTAL AND PHYSICAL HEALTH WITH A CLIMATE OF HOSPITAL RESTRUCTURING: PILOT TESTING A MODEL.³

Funded by: NRU (2001 - 2002)

Stage: Starting

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

To test a theoretical model derived from the literature to explore the determinants of nurses' health that can inform policy makers and health care administrators in the development of evidence-based strategies to preserve and improve the health of nurses.

LAVIS (PI), ABELSON, GOLD, ABERNATHY, BARTRUM, CLARK, COUTTS, & DOBBINS

Funded by: MOHLTC (April 2001 - April 2002)

TOWARD BEST PRACTICES IN RESEARCH TRANSFER.³

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To describe the extent to which research institutes in Canada facilitate the transfer and uptake of their research results to the target audience, and to determine the extent to which these strategies are evidence based.
 - Reports to the institute and the MOHLTC regarding the status of research transfer and uptake strategies that are being used.
 - Make recommendations on the strategies that should be used for various target audiences.
 - Individual research institutes will gain a better appreciation for how they are performing compared to others with respect to research transfer strategies, and will be motivated in becoming more evidence-based in their approach.
 - The MOHLTC will be able to provide clearer direction to their funded research institutes with respect to the types of transfer strategies that must be put into place.
-

LAW (PI), KING, DOBBINS, & PLEWS

STRATEGIC DECISION-MAKING IN CHILDREN'S REHABILITATION CENTRES.³

Funded: MaxBell Foundation (March 2002 - March 2004)

Status: Not yet started

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To describe the decision-making process in children's rehabilitation centres in Canada and to assess barriers to using research in program planning.
- The results of this study will assist in the development of more effective research transfer and uptake strategies.

LEE (PI), CILISKA, DOLOVICH, **EVALUATION OF THE CONTINUITY OF CARE AT THE GROUP HEALTH CENTRE.**³
GAFNI, BIRCH, & HUNT

Funded by: CHSRF (July 1999 - December 2000)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- The Group Health Centre (GHC) is a 44,000 patient multi-specialty, multi-disciplinary Health Service Organization located in the Algoma District health region.
 - This study is a collaborative effort between local researchers from the Algoma District health region and a multi-disciplinary panel of McMaster University experts.
 - Through the intensive evaluation of a subgroup of GHC's diabetic patients, the study will assess how the quality and cost of health care is affected by the determinant factors influencing the provision of continuity of care.
 - Specific objectives include: the identification of barriers and solutions; a comprehensive evaluation of the relative benefit of capitation vs. fee for service payment, from the health services and personal (patient and provider) perspectives.
 - Findings will provide researchers and policy makers valuable information regarding capitation and the resources involved.
-

LEFORT (PI), SIDANI, & **EVALUATING THE IMPACT OF NURSE PRACTITIONERS IN ACUTE CARE SETTINGS - ST. JOHN'S SITE.**^{1,3}
BURKE

Funded by: Health Care Corporation of St. John's, Newfoundland (1999 - 2000)

Stage: Data analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Examine the role of the nurse practitioner in an acute care setting in St. John's, NF as an extension of a previous project.
 - Begin to identify the implementation of the nurse practitioner role in this province and its effectiveness in achieving high-quality, cost-effective care.
 - Provide a database, based on the results of the two studies, that will delineate the contribution of the nurse practitioner role within the health care system at the national level.
-

MARKLE-REID (PI), WEIR,
BROWNE, SHADWICK, ROBERTS, &
GAFNI

Funded by: CHSRF (September 2000 - August 2003);
MOHLTC, Community Care Access Centre of Halton;
McMaster University, System Linked Research Unit on
Health and Social Services Utilization

**FRAIL ELDERLY
HOMECARE CLIENTS: THE
COST AND EFFECTS OF
ADDING NURSING HEALTH
PROMOTION SERVICES TO
HOMEMAKING.³**

Stage: Ongoing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Main goal is to lower the number of frail elderly people in acute-care hospitals or institutions.
 - Evaluate the cost and effects of adding nursing health promotion services to homemaking.
 - Gather scientific evidence assessing the impact on costs and health of current eligibility policies on nursing and homecare for the frail elderly.
 - Identify which frail elderly clients and caregivers will benefit from health-promotion interventions by registered nurses.
 - Help decision-makers set priorities on appropriate allocation of homecare services for frail elderly homecare clients.
 - The study will have implications for others with chronic conditions in the community by showing which interventions will help identify unrecognized problems and individuals at increased risk and get them appropriate care.
-

MCCUTCHEON, IRVINE DORAN **THE IMPACT OF THE MANAGERS' SPAN OF CONTROL ON
(CO-PIs), EVANS, NURSING MANAGEMENT LEADERSHIP AND PERFORMANCE.¹**
MACMILLAN, MCGILLIS

HALL, PRINGLE, & SMITH

Funded by: CHSRF (2001 - 2003)

Stage: Preliminary notification of funding awarded

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Investigate the impact of managers' span of control on leadership effectiveness, staff satisfaction, patient satisfaction, and nurse turnover.
-

McGILLIS HALL (PI), DORAN, & SIDANI DEVELOPMENT AND TESTING OF QUALITY WORK ENVIRONMENTS FOR NURSING.^{3,5}

Funded by: Ontario MOHLTC (2001 - 2003)

Stage: Preliminary site selection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- An intervention study designed to provide support and assistance to hospitals as they address worklife issues for nurses.
 - Assist nurse executives to develop interventions that enhance the quality of worklife for nurses in a sample of hospitals in Ontario.
 - Evaluate the impact of those initiatives on patient, system quality, and nurse outcomes.
 - Identify strategies for enhancing the quality of worklife for nurses in health care organizations in Ontario.
 - Design interventions for strategies to enhance nursing worklife.
 - Evaluate the impact of these interventions on patient, system quality, and nurse outcomes.
 - Results will provide useful information about the effectiveness of strategies for improving the quality of worklife of nurses working in acute care settings.
-

McGILLIS HALL (PI), IRVINE DORAN, LASCHINGER, MALLETT, & O'BRIEN-PALLAS NURSING REPORT 2001 (A COMPONENT OF HOSPITAL REPORT 2001).^{1,5}

Funded by: MOHLTC (2001)

Stage: Report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Introduce and structure a nursing perspective within the Hospital Report.
 - Identify and test a set of measurable indicators for nursing in Ontario.
 - Identify indicators for inclusion in a system-level nursing report within the framework for a balanced scorecard and propose definitions and potential data sources for these indicators.
-

McGILLIS HALL (PI), PINK, MCKILLOP, O'BRIEN-PALLAS, & THOMSON A COMPARATIVE ANALYSIS OF MODELS FOR COSTING NURSING SERVICES.^{1,3}

Funded by: CIHR (2001 - 2004)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Examine the costing methodology employed for nursing services in Ontario and evaluate its relationship to actual nursing services utilization in the health care sector.

- Phase one identifies types of nurse staffing models utilized in the Ontario hospitals, restructuring strategies used in reducing nursing costs, and mechanisms used to determine past and current nursing costs within these sites.
 - Phase two will examine the accuracy of data collected by CIHI, OHRS, and OCCP for each of the study sites, determine whether inconsistencies exist, and validate the core data elements for use in this study.
 - Phase three will evaluate the relationship between nurse staffing and actual nursing costs reported to the government for funding nursing services, and the sensitivity of available data for costing nursing services in Ontario hospitals.
-

**MCKILLOP (PI) & PINK HOSPITAL REPORTING, FUNDING AND PERFORMANCE
MONITORING PRACTICES ACROSS CANADA.¹**

Funded by: CIHI (2000 - 2001)

Stage: Completed

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Comprehensive inventory of practices related to the management of the financial resources dedicated primarily to hospital-delivered acute care in Canada as of December 2000.
 - Principal findings include:
 - ☐ Provinces are moving towards population-based methods to apportion the majority of operating funds.
 - ☐ Strong interest is being demonstrated in developing a capacity for retrospective monitoring across Canada.
 - Recommendations for the future include:
 - ☐ Health service organizations should be required to report using the MIS Guidelines.
 - ☐ Outcomes of different health service organization funding approaches should have more extensive evaluation.
 - Book published: "The Financial Management of Acute Care in Canada: A Review of Funding, Performance, and Monitoring Practices".
-

O'BRIEN-PALLAS

PHYSICIAN HUMAN RESOURCE PLANNING COMMITTEE.³

Funded by: MOHLTC (2000)

Stage: Completed

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Vice Chair, Subcommittee on Modelling, Physician Human Resource Planning Committee.

- Member, Expert Panel Physician Human Resource Planning Committee.
 - Answered questions related to downsizing medical schools and reduction in residents on nursing.
-

**O'BRIEN-PALLAS (PI) NURSING HEALTH HUMAN RESOURCES FOR THE NEW
MILLENNIUM - NATIONAL CHAIR FOR NURSING HUMAN
RESOURCES.¹**

Funded by: CHSRF, The University Health Network, & Ontario MOHLTC (2000 - 2010)
Stage: Ongoing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Work closely with provincial and federal policy decision-making bodies to ensure that evidence is used in making HHR decisions.
 - Expand HHR applied research capacity in the areas of education, mentorship, research, linkage and exchange, and communication.
 - Chair has met with New Brunswick and Ontario decision-makers to help them to understand the current HHR statistics and quality of worklife issues.
 - 2000 was spent building the infrastructure to support the work of the chair.
-

O'BRIEN-PALLAS & BAUMANN (CO-PIs)

DEVELOPMENT OF A HEALTH HUMAN RESOURCE DATA BASE FOR NURSING.¹

Funded by: MOHLTC (1999 - 2004)

Stage: Ongoing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Examine current databases and determine strengths and weaknesses.
 - Test and validate current HHR modeling.
 - Define the current practice demands and resource utilizations of restructured settings.
 - Conduct a situational analysis to determine the factors which influence nursing and HHR activities in Ontario.
 - Build computer models of HHR.
-

**O'BRIEN-PALLAS (PI), GERLACH, PEEREBOOM, DARLINGTON, MURPHY, & MCCARTHY
DEVELOPMENT OF A SERVICE MANAGEMENT INFORMATION SYSTEM.^{1,3}**

Funded by: Psychiatric Patients' Advocacy Office & Ontario MOHLTC (1998 - 2000)

Stage: Awaiting feedback from Psychiatric Patients' Advocacy Office

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Development of a client advocacy data collection tool/database.
 - System implemented and under validation by Psychiatric Patients' Advocacy Office.
-

**O'BRIEN-PALLAS (PI), THOMSON, MCGILLIS HALL, PINK, TU, KERR, DARLINGTON, AIKEN,
& SOCHALSKI**

PRINCIPAL DECISION MAKER: SHAMIAN

**EVIDENCE BASED STANDARDS FOR MEASURING NURSE STAFFING AND
PERFORMANCE.¹**

Funded by: CHSRF (2000 - 2003)

Stage: Preparing for data collection to begin fall 2001

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Develop and validate evidence based, quality adjusted ranges of staffing standards for cardiac and cardiovascular nursing services.
 - Develop a staffing methodology that can be adapted to other clinical settings.
 - Work with our decision-making partners, the Ontario and New Brunswick MOHLTC, to establish how the MIS databases and the research study findings can be used to monitor system performance and to determine what types of data should be routinely collected from the patient's discharge record.
-

**OH, EDELSON, YANG (CO-PIs), ACTIVE PULMONARY TUBERCULOSIS: AN INTEGRATED
PETRYSHEN, GAUDET, GOULD, DISEASE MANAGEMENT APPROACH.³**

POLLOK, AVENDANO, &

LABRETON

PARTNERS: WESTPARK HOSPITAL

AND TORONTO PUBLIC HEALTH

UNIT

Funded by: The Change Foundation (1997 - 2000)

Stage: Final report completed

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Developed and implemented a disease management approach to tuberculosis (TB), in the context of inter-sectoral collaboration with the public health department and other care providers, for improved clinical, organization, and ultimately population economic outcomes.

- New TB disease management program at St. Michael's Hospital (SMH) initiated July 1, 1999.
 - Various members of the research team involved with hospital and community partners to work with the MOHLTC, advisory committees, and task forces, to advocate for disease management TB programs.
 - The final report submitted to The Change Foundation: "Tuberculosis Disease Management Program, A story of Success in an Environment of Change", September 2000.
 - Disseminated study findings via media, conferences, and speaking engagements.
-

PEACHEY (PI) & WEIR IMPACT OF NURSE MANAGERS/LEADERS EMPOWERING BEHAVIOURS ON STAFF NURSE WORKPLACE EMPOWERMENT, ORGANIZATIONAL COMMITMENT, ABSENTEEISM AND PATIENT OUTCOMES.³

Funded by: NRU, McMaster University (2001 - 2002)

Status: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To investigate the link between specific behaviours of nurse leaders and empowerment of staff nurses.
 - Findings will add to the understanding of the relationship of nurse managers' leadership behaviours and their impact on nurse effectiveness and adverse impact on the organization in terms of financial costs and quality of patient care.
-

PETER (PI)

HOME CARE ETHICS: HISTORICAL PERSPECTIVES IN NURSING.^{1,3}

Funded by: Sigma Theta Tau (2000)

Stage: Data analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Uncover historical insights into ethical concerns in home care nursing.
 - Develop a conceptual foundation for home care ethics that will inform the development of an interdisciplinary code of home care ethics.
 - Presentation: Historiography & the Advancement of Nursing Ethics. Health Care in A Complex World: An International Research Conference, Toronto, May 2001.
-

PETER (PI)

THE WORK ENVIRONMENT & HEALTH OF HOME CARE NURSES: ETHICAL IMPLICATIONS.^{1,3}

Funded by: NRU (2001 - 2002)

Stage: Secondary analysis of existing focus group data

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Explore ethical concerns in home care nursing, specifically with respect to the work environment and health of home care nurses in a manner that is sensitive to historical dimensions and insights.
 - Make an original contribution to nursing because little ethical guidance is currently available to home care nurses.
 - Limited research has been conducted that has explored the relevance of historical nursing insights in examining current ethical issues.
-

PINK (PI)

THE OCOTH MANAGEMENT PRACTICE ATLAS.³

Funded by: Ontario Council of Teaching hospitals (1999 - 2000)

Stage: Completed

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Produced a compendium of financial and statistical performance indicators for all teaching hospitals in Ontario.
 - Data quality is an important issue in performance measurement and there were significant variations among Ontario teaching hospitals in the calculated measures.
 - OCOTH Management Practice Atlas published in August, 2000.
-

PLOEG (PI), RIDEOUT, OFOSU, & TOMPKINS

Funded by: Centre for Leadership in Learning, McMaster University (March 2000 - April 2001)

EVALUATING PROBLEM SOLVING IN THE BScN PROGRAM THROUGH THE USE OF SINGLE/DOUBLE JUMPS.²

Stage: Data analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Assess the perceptions of faculty and students regarding the utility of the single/double jump as a measure of problem solving in the BScN program.
- Use the evidence to support changes to the way the single/double jump is used as a method of learning and or evaluation in the BScN program.

- Focus groups completed include: one faculty, three student (Level II Basic, Level III Basic, Level IV post RN), and four key informant interviews. All data transcribed.
 - Research team has had preliminary discussion regarding themes in data and implications for change in the way single/double jumps are used in the program.
-

ROSENBAUM (PI), LAW, DOBBINS, & Funded by: MOHLTC (April 2001 - April 2002)

PLEWS

**INFORMATION TRANSFER:
WHAT DO DECISION-
MAKERS WANT AND NEED
FROM RESEARCHERS.³**

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To describe the information needs of decision-makers in childhood disability.
 - Report to MOHLTC and other childhood disability researchers outlining recommendations for presenting research results to decision-makers and summary of the needs of decision-makers.
 - Results will assist childhood disability researchers in Ontario and Canada in communicating key areas of interest to decision-makers so that future research can address these issues.
 - Researchers will better understand how to present research to decision-makers so as to promote its transfer and uptake.
-

**SHAMIAN, O'BRIEN-PALLAS EFFECTS OF JOB STRAIN, HOSPITAL ORGANIZATIONAL
(CO-PIs), KERR, KOEHOORN, FACTORS AND INDIVIDUAL CHARACTERISTICS ON WORK-
THOMSON, ALKSNIS, AIKEN, RELATED DISABILITY AMONG NURSES.^{1,3}**

HOGG-JOHNSON, SHANNON, &
SOCHALSKI

Funded by: Ontario WSIB (1999 - 2001)

Stage: Analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Develop recommendations for job strain and organizational interventions aimed at preventing or reducing work-related risk factors that can be shared with stakeholders in order to improve the worklife and health of Ontario RNs.
- Merged and analyzed administrative databases including WSIB hospital claim rates, the MIS trial balance record from the MOHLTC and data from a large cross-sectional survey of acute care hospital nurses in Ontario.

- Conducted focus groups with nurses and interviews with hospital administration at 10 acute care hospitals in Ontario. Discussed factors contributing to, and potential solutions for, high rates of musculoskeletal injuries, stress, and absenteeism among nurses.
 - Obtained nurses' perspectives on the presence and effectiveness of potential workplace interventions developed from earlier phases of the study aimed at enhancing health and safety in their work environment.
-

SHAMIAN QUALITATIVE ANALYSIS OF THE FREE TEXT COMMENTS FROM A NURSING SURVEY (PI) & OF OVER 8,000 ACUTE CARE HOSPITAL RNS CONDUCTED IN 98/99.^{1,5}

THOMSON

N

Funded by: NRU (2001)

Stage: Data analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Conducted survey in conjunction with an international research project to explore the impact of hospital staffing and organizational characteristics on patient outcomes.
 - Comments made by nurses completing the survey provided a wealth of untapped information about nurse's perceptions of the worklife environment, which adds to our understanding of their answers to the defined questions on the survey.
 - Data entered into NUDIST software to provide a comprehensive analysis of nurses' comments by categorizing the comments into logical grouping and identifying the frequency.
-

SIDANI (PI)

Funded by: NRU (2000 - 2001)

**EXAMINING THE UTILITY
OF RANDOM ASSIGNMENT.¹**

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Examine the extent to which random assignment of participants to study groups maintains initial group equivalence.
 - Findings will inform researchers of the utility of random assignment in effectiveness research.
-

**SIDANI (PI), IRVINE, PORTER,
LEFORT, O'BRIEN-PALLAS, &
ZAHN**

Funded by: NHRDP & CIHR (1999 - 2002)

**EVALUATING THE IMPACT
OF NURSE
PRACTITIONERS IN ACUTE
CARE SETTINGS.^{1,3}**

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Evaluate, for the first time, the effectiveness of the nurse practitioners' services in achieving expected quality of care and cost outcomes.
- Examine the practice pattern of nurse practitioners, including technical and interpersonal style, and the effects of their practice pattern on patients' functional and clinical outcomes, and on the system's outcomes of satisfaction with care and costs of care.
- Provide empirical evidence for a) identifying best practices for decision-making regarding the institution of the ACNP role in other acute care agencies in Ontario or other provinces; b) informing policy makers about the value of the role so that appropriate regulations (e.g. scope of practice and reimbursement) are developed; and, c) refining the nurse practitioner role functions, responsibilities, and utilization within the health care system.

**SPENCER (PI), GAFNI, MARTIN-
MATTHEWS, BIRCH, BURBIDGE,
ROSENTHAL, DENTON, MOORE,
BELAND, FRENCH, STODDART,
JOSHI, CHAMBERS, McDONALD,
MAGEE, ROSENBERG, MOUNTAIN,
RAINA, PLOEG, LIAW, ROBB,
ROBERTSON, MACPHERSON,
SCARTH, ABERNATHY, & VEALL**

Funded by: SSHRC, Major Collaborative Research Initiatives
(1998 - 2003)

**SOCIOECONOMIC
DIMENSIONS OF AN AGING
POPULATION.¹**

Stage: Data analysis

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Multiple research teams are investigating various dimensions of economic security and aging.
- One team is investigating preparation for later years.
- A qualitative study is in its final stages of data analysis.

THOMAS (PI) & DOBBINS, O'BRIEN Funded by: CHSRF (November 1999 - November 2001)

**IMPROVING COMMUNICATION
AMONG PUBLIC HEALTH
RESEARCHERS AND DECISION
AND POLICY MAKERS.³**

Stage: Data analysis and report writing

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To understand the information needs of decision and policy makers in public health, and to use this information to develop summary statements of systematic reviews.
 - Decision and policy makers want short, to the point summaries of the results of systematic reviews. They want possible solutions to be presented, scope of the problem and very little to no information on the methods of the research.
 - Summary statements for all the systematic reviews conducted by the Effective Public Health Practice Project to date will be re-written to conform to the preferences reported by decision and policy makers in public health in Ontario. They will also be translated into French.
 - The results of this study will assist other researchers in summarizing the results of research. In addition, the expectation is that writing summaries that conform to the preferences of the target users will promote increased transfer and uptake of research into public health policy and practice.
-

TOMBLIN MURPHY, O'BRIEN-PALLAS **HEALTH HUMAN RESOURCE PLANNING: AN
(CO-PIs), BIRCH, PRINGLE, ROOTMAN, EXAMINATION OF RELATIONSHIPS AMONG NURSING
DARLINGTON, KEPHART, & PENNOCK SERVICE UTILIZATION, AND ESTIMATE OF
PRINCIPAL DECISION MAKER: SHAMIAN POPULATION HEALTH AND OVERALL STATUS
OUTCOMES IN THE PROVINCE OF ONTARIO.¹**

Funded by: CHSRF (2000 - 2003)

Stage: Database development

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Will ask: "What are the effective mechanisms and policies for establishing, monitoring, and predicting the variety of needs for nursing services?"
- Explore the relationship among health status of Ontarians and self-reported use of nursing and hospital services and nursing service utilization as reported in the MIS data in community hospitals in Ontario.
- Explore the relationship between nursing service utilization and variations in mortality, unexplained readmission, length of stay, and patient satisfaction.
- Examine the concurrent validity of two health proxy measures (SF-36 and a subset of the National Population Health Survey (NPHS)).
- Develop a population needs indicator of nursing services.

- Determine the added value of including selected SF-36 health status indicators in the NPHS to enhance its use for nursing needs-based approaches to population health modeling.
 - Will develop a new needs-based approach for determining future HHR requirements.
 - Findings will assist decision-makers across Canada to determine methods for modeling and will provide specific direction for policy decision-makers at the Ontario MOHLTC.
-

WILLIAMS (PI) & DEBER

PRESCRIPTIONS FOR PEDIATRIC HOME CARE: ASSESSING THE IMPLICATIONS OF PROVINCIAL AND LOCAL VARIATIONS IN THE FUNDING, ALLOCATIONS AND DELIVERY OF HOME AND COMMUNITY CARE ON CHILDREN WITH COMPLEX CARE NEEDS.^{3, 4}

Funded by: Hospital for Sick Children Foundation (2001 - 2003)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- “Map” and examine patterns and implications of alternative approaches to the funding, allocation, and delivery of home and community care to complex care needs children on a province by province basis.
 - Evaluate, from the perspectives of families, providers, and local authorities, the benefits of alternative approaches now being employed.
 - Pilot a framework for systematically comparing the costs of different approaches.
 - Such variations have profound implications for families, who take most of the responsibility for the care, development, and protection of children; for providers, who are called upon to supply high quality, specialized services in diverse settings; and for governments responsible for such services.
-

WILLIAMS (PI), DEBER, COYTE, FLOOD, HOLLANDER, KUSHNER, LUM, RAPPOLT, & VERRIER **FROM HOSPITAL TO HOME AND COMMUNITY: ANALYZING LOCAL REALITIES AND GLOBAL LOGICS IN CANADIAN HEALTH CARE.**^{3, 4}

Funded by: SSHRC (2001 - 2004)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- “Map” the ongoing shift in health care from hospital to home and community on a province by province basis.
- Document and analyze the political dynamics of this shift among elite decision-makers and the general public.

- Examine, using Ontario as a case study, the extent to which this shift coincides with a reduction in the provincial state's role in the health field and greater reliance upon local agencies subject to the logic of globalized markets.
 - Assess the implications, not only for theoretical understandings of the role of the post-war state, but for public access to health care services, the social distribution of the costs of illness, and social cohesion.
 - Study the implications for government, local agencies, and individual consumers of the ongoing shift across Canada from hospital to home and community.
-

WILLIAMS (PI), DEBER, LUM, RAPPOLT, & VERRIER

RESETTING THE INSTITUTIONAL AND STRUCTURAL BALANCE IN CANADA'S HEALTH SYSTEM: PRIVATIZATION, GLOBALIZATION AND THE CASE OF REHABILITATION SERVICES IN ONTARIO.⁴

Funded by: SSHRC (2001 - 2004)

Stage: Starting

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- To obtain empirical data which will allow us to document and analyze the shift of rehabilitation services beyond the boundaries on public Medicare.
 - To elaborate the application of "neo-institutional" theory to the current and future role of the Canadian state in health policy fields characterized by commercialization and globalization.
 - Focusing on the specific case of rehabilitation services in Ontario, this program of research analyzes the theoretical and applied policy implications of ongoing shifts in the institutional and structural balance in Canadian health care.
-

WILLIAMS (PI), MURPHY, & MEYER **DEVELOPMENT OF A NURSING EDUCATION DATABASE FOR ONTARIO AND ANALYSIS OF 2000 DATA.**²

Funded by: NRU (2001 - 2002)

Stage: Database review and data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Expand and continue a previous project that analyzed the capacity of Ontario university and college nursing programs to support the new entry to practice requirement for RNs.
- Develop a valid and reliable nursing education database to report on past, current, and future supply of RNs and RPNs in Ontario.
- Collect data from all Ontario secondary schools, colleges, and universities for 2000 for analysis and reporting.
- Review, analyze, and report on existing nursing education databases.

- Address the multiple problems that confound Ontario data, including: poor validity and reliability of surveys, multiple data collectors, difficulty in comparisons across time and programs, data collection fatigue by programs with resulting compliance problems, changes in programs over time, and the lack of national or provincial RPN data collection.
 - Results will be utilized by key stakeholders in Ontario nursing human resource planning in managing the nursing shortage and will inform the supply side equation of the planning and modeling activities of the NRU.
-

**WILLIAMS (PI) & O'BRIEN- COMPARATIVE ANALYSIS OF UNIVERSITY AND COLLEGE
PALLAS PROGRAM CAPACITY ISSUES RELATED TO THE NEW ENTRY TO
PRACTICE REQUIREMENTS.^{2, 4}**

Supported by: The Council of Ontario University Programs in Nursing, the Heads of Nursing & the Heads of Health Sciences from the Colleges of Applied Arts and Technology (2000)

Stage: has been subsumed under the previous project, Development of a Nursing Education Database for Ontario and Analysis of 2000 Data.

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Second phase of a project designed to provide supply information about numbers of students and faculty and other capacity issues for the purpose of modeling HHR and to use the information obtained to explore capacity issues related to baccalaureate entry to practice.
 - To provide a similar analysis of capacity issues in the college sector for 1998 followed by a detailed comparative analysis of both sectors.
 - The first phase of the project was completed in 1999 in partnership with the Council of University Programs in Nursing.
 - The university portion of the project focused on four major areas: capacity issues (student, faculty, space, and research), curriculum issues, maintenance of nursing supply issues and funding issues, based on 1998 data.
-

**YOUNG (PI), DICK, IRVINE & DALY- INTEGRATION OF TELETRIAGE AND HOME CARE SERVICES
MCGUIGAN, BOOTH, IRVINE INTO A SUSTAINABLE SERVICE FOR TORONTO CHILDREN.³
DORAN, WILLIAMS, FILLER,
DAUB, & DALY**

Funded by: Ivy Foundation (2000 - 2001)

Stage: Data collection

Purpose/Outcomes/Deliverables and Implications for clinical practice, policy, and research:

- Evaluate the integration of four clinical services at the Hospital for Sick Children to share a common teletriage call centre.

PUBLICATIONS

FACT SHEETS

The NRU's fact sheets are intended to give a concise overview of important issues or research related to the federal and provincial healthcare system.⁴Hall, T. (1993). Human Resource for Health: Models for Projecting Workforce Supply and Requirements. Geneva: World Health Organization. New fact sheets are continually being developed and produced.

Planning: The process of estimating the number of health personnel and the kinds of knowledge, skills, and attitudes required to achieve predetermined health targets.

- Access to Health Care and Health Care Utilization
- The Aging Nursing Workforce: Some Figures and Implications for the Future
- A Review of "Health Human Resources: A Preliminary Analysis of Nursing Personnel in Ontario," a recent report by the Nursing Effectiveness, Utilization and Outcomes Research Unit
- Health Human Resources - An Analysis of Forecasting Models
- Health Human Resources - Application of Projection and Forecasting Models to Nursing
 - Health Human Resources Planning: An Overview of Canada's Health Care System
 - Health Human Resources Planning: Historical Overview of Healthcare in Ontario
 - Health Human Resource Development: Nursing in Ontario, 1997
 - Health Human Resource Planning - Literature Review: The Impact of Hospital Restructuring on Patients, Care Providers, and Health Care Costs
 - How Socio-Economic Status Influences Health Care Utilization
 - Nurse Supply in Ontario
 - Recruitment and Retention
 - Registered Practical Nurses in Ontario
 - Risk Behaviour and Health Care Utilization
 - The Effect of Aging on the Health Care System
 - The Hospital Sector 1992-2000: A Changing Workplace for Nurses in Ontario
 - The Influence of Physician Supply, Payment Schemes and Alternative Providers on Health Care Utilization
 - What Factors Can Influence Health Care Utilization?

Production: Assessing the quantity and quality of existing educational programs including curricula, physical facilities, faculty, and enrolment.

⁴The fact sheets have been organized following Hall's (1993) HHR framework of planning, production and management.

Appendix C

Nursing Effectiveness, Utilization and Outcomes Research Unit

- Baccalaureate Entry to Practice
- Collaborative Baccalaureate Nursing Programs in Ontario—A Key Strategy in Achieving Entry to Practice
- Post RN Programs
- The Impact of Health Care Reform on Nursing Student Clinical Placements

Management: Mobilization, motivation, development, and fulfilment of human beings in and through work. Concerned with working environments, staffing patterns, incentives.

- Acute Care Nurse Practitioners
- Assessing the Impact of Nursing Care in the Community Setting
- Assessing the Impact of Nursing Care in Acute Care Hospitals - The Nursing Role Effectiveness Model
- Continuing Education in Nursing
- Health Human Resource Planning - The Unregulated Care Provider
- Impact of Technology
- Labour Issues
- Primary Care Nurse Practitioners
- Quality Practice Settings
- Staff Mix Patterns in a Sample of Toronto Area Hospitals
- The Relationship Between Nurses' Job Design, Role Performance and Outcome Achievement in Acute Care Settings
- Using Information Technology to Enhance Nursing Practice

WORKING PAPERS AND MONOGRAPHS

The following working papers are available through the NRU.

Number	Title	Author(s)
01-01	A pilot study: Work of nursing personnel in a government hospital in the province of Sindh, Pakistan - Final report	Kanji, Virani, Pirani, Sumar, Rahemtulla & Sergeant
01-02	Survey of Registered Nurses in Pakistan with University degrees - Final report	Kanji & Stanley
01-03	Returning to the workplace: The post-educational experience of the DWHP Programme Fellows - Final report	Sergeant, Beaton & Sochael
01-04	Interest in higher education held by Lady Health Visitors (LHVs) in Pakistan - Final report	Gonsalves, Beaton & Badruddin
01-05	Evaluation of implementation of basic RN revised curriculum - Year one final report	Lee, Sumar, Beaton & Marshall
01-06	The initiation of a comprehensive nursing human resource database within the public health sector in Pakistan: A pilot study - Phase 1 final report	Fisher, Amarsi, Aziz, Moghul, Mansoor & Ishfaq
01-07	Perceptions of Development of Women Health Professionals (DWHP) fellows of factors associated with their academic progress in the Bachelor of Science in Nursing (BScN) programme at the AGA KHAN University School of Nursing (AKUSON) Final report	Stanley, Cassum, Husain, Khan, Rizvi & Sayani
98-1	Factors that influence variability in nursing workload and outcomes of care in community nursing.	O'Brien-Pallas, Murray, Irvine, Cockerill, Sidani, Laurie-Shaw & Gerlach
97-1	Nursing for the twenty-first century: Using information technology to enhance nursing practice.	Royle, Blythe, Boblin-Cummings, Deber, DiCenso, Hayward, Wright, Barnsley, Bayley, Gill-Morton & Smith

Number	Title	Author(s)
96-2	Effectiveness of public health nursing interventions in parent-child health: A systematic overview of literature reviews.	Hayward, Ciliska, Mitchell, Thomas, Underwood & Dobbins
96-1	The effectiveness of community-based heart health projects: A systematic overview.	Dobbins & Thomas
95-15	Nurse run centres - The comprehensive approach to health care delivery: An annotated bibliography.	McGillion, Mallette, Silverman & Goodine
95-14	Competency based performance management - A literature review.	Wilshaw, Brown & Baumann
95-13	Disciplinary action and restructuring of health care in Ontario: The impact on nurses.	Beardwood, Eyles, French & Walters
95-12	A systematic overview of the effectiveness of public health nursing interventions. An overview of adolescent suicide prevention programs.	Ploeg, Ciliska, Dobbins, Hayward, Thomas & Underwood
95-11	Worklife concerns of Ontario nurses.	Villeneuve, Semogas, Peereboom, Irvine, McGillis Hall, Walsh, O'Brien-Pallas & Baumann
95-10	Exploring the effects of change on nursing practice in acute ambulatory settings: A qualitative study.	Martinus, Royle, Boblin-Cummings, Baumann, Oolup, Smith & Blythe
95-9	The nursing and personal care provider study.	O'Brien-Pallas, Charles, Blake, Luba, McGilton, Peereboom, McGillis Hall, Carter, Baumann & Bajnok
95-8	Learning needs of nurses working in first nations' communities and hospitals. (across Canada study)	Silverman, Baumann & Boblin-Cummings
95-7	Assessment of the need for nurse practitioners in Ontario. (supported by the Ontario Ministry of Health)	Mitchell, Patterson, Pinelli & Baumann
95-6	Woman and technology in health care. An invitational workshop.	Blythe

Number	Title	Author(s)
95-5	A systematic overview of the effectiveness of public health nursing interventions. An overview of community development projects.	Ploeg, Dobbins, Hayward, Ciliska, Thomas & Underwood
95-4	The process of downsizing in selected Ontario acute care hospitals: Budget reduction strategies and planning process.	Baumann, O'Brien-Pallas, Deber, Donner, Semogas & Silverman
95-3	The impact of childhood sexual abuse on the practice of nursing.	Gallop, McKeever, Donner, Lancee & Lueck
95-2	Long-term care: A synopsis of the literature and annotated bibliography.	Beckingham
95-1	Case costing and nursing workload: Past, present and future.	O'Brien-Pallas, Giovannetti, Peereboom & Marton
94-7	The effectiveness of home visiting as a delivery strategy for public health nursing interventions - A systematic overview.	Ciliska, Hayward, Thomas, Mitchell, Dobbins, Underwood, Rafael & Martin
94-6	Effects of downsizing on RNs and RNAs in community hospitals.	Cameron, Horsburgh & Armstrong-Stassen
94-5	Issues of internal validity in research on interdisciplinary health care teams.	Patterson, Silverman, Guyatt, Charles, Molloy & Sanford
94-4	Blueprint for a data collection tool.	Organization of Research Coordinators and Assistants
94-3	Leadership and power: A gender and nursing issue.	Cohen
94-2	Factors that influence variability in nursing workload at the Hospital for Sick Children.	O'Brien-Pallas, Irvine, Peereboom, Murray, Ho, Beed & Young
94-1	Learning needs of registered nurses in Ontario.	Boblin-Cummings, Baumann & Rath
93-4	Utilization of nurse practitioners in Ontario. A discussion paper requested by the Ontario MOH.	Mitchell, Pinelli, Patterson & Southwell
93-3	Evaluation research in public health nursing.	Hayward, Ciliska, Mitchell, Thomas, Underwood & Rafael

Appendix C

Nursing Effectiveness, Utilization and Outcomes Research Unit

Number	Title	Author(s)
93-2	Public health nursing and health promotion. A background paper for the systematic overview of the effectiveness of public health nursing interventions.	Hayward, Ciliska, Mitchell, Thomas, Underwood & Rafael
93-1	Organizing the nursing workforce: A review of the literature.	Gillow

The following monographs are available through the NRU.

Monograph 1 1992	Job Satisfaction and Turnover Among Nurses: A Review and Meta-Analysis	Irvine & Evans
Monograph 2 1994	Towards an Understanding of Nurses' Lives: Gender, Power and Control	Donner, Semogas & Blythe

CO-PRINCIPAL AND CO-INVESTIGATORS' PUBLICATIONS

The following are 2000-2001 publications by NRU Co-Principal and Co-Investigators (highlighted in italics). The numbering system refers to the planning¹, production², and management³ categories of the HHR framework (Hall, 1993).

Aiken, L.H., Clarke, S.P., Sloane, D.M., Sochalski, J.A., Busse, R., Clarke, H., Giovannetti, P., Hunt, J., Rafferty, A.M., & *Shamian, J.* (2001). Nurses' reports of hospital quality of care and working conditions in five countries. Health Affairs, 20(3), 43-53.³

Al-Ma'Aitah, R., *Cameron, S., Armstrong-Stassen, M., & Horsburgh, M.* (in press). The effect of unit type and gender on Jordanian nurses' job satisfaction. A comparison of OR, medical surgical and critical care nurses. Seminars in Perspective Nursing.³

Alverado, K., *Boblin, S., & Goddard, P.* (2000). Experiencing nursing governance. Developing a post merger nursing committee structure. Canadian Journal of Nursing Leadership, 13(4), 30-35.³

Armstrong-Stassen, M. (in press). Job transfer during organizational downsizing: A comparison of promotion and lateral transfers. Group & Organization Management.³

Armstrong-Stassen, M. (in press). The reactions of older employees to organizational downsizing: The role of gender, job level, and time. Journal of Gerontology: Psychological Sciences.³

Armstrong-Stassen, M. (2000). Total quality management during downsizing. In R.J. Burke & C.L. Cooper (Eds.), The organization in crisis: Downsizing, restructuring and privatisation (pp. 151-163). Oxford, UK: Blackwell Publishers Limited.³

Armstrong-Stassen, M., Cameron, S., & Horsburgh, M.E. (in press). Downsizing-initiated job transfer of hospital nurses: How do the job transferees fare? Journal of Health and Human Services Administration.³

¹ Planning: The process of estimating the number of health personnel and the kind of knowledge, skills, and attitudes required to achieve predetermined health targets.

² Production: Assessing the quantity and quality of existing educational programs including curricula, physical facilities, faculty, and enrolment.

³ Management: Mobilization, motivation, development, and fulfilment of human beings in and through work. Concerned with working environments, staffing patterns, and incentives.

Baumann, A. (2001). Leadership, delegation and quality management. In P.A. Potter and A.G. Perry (Eds.), The Canadian fundamentals of nursing (2nd ed., 64-85). Barrie, Canada: Harcourt Publications.³

Baumann, A., Deber, R., O'Brien-Pallas, L., Donner, G., DiCenso, A., Boblin-Cummings, S., & Silverman, B. (under revision). Nursing decision making: Similarities and differences in hospital and community settings. Canadian Journal of Nursing Research.¹

Baumann, A., Giovannetti, P., O'Brien-Pallas, L., Mallette, C., Deber, R., Blythe, J., Hibberd, J., & DiCenso, A. (2001). Healthcare restructuring: The impact of job change. Canadian Journal of Nursing Leadership, 14(1), 14-20.³

Baumann, A., O'Brien-Pallas, L., Armstrong-Stassen, M., Blythe, J., Bourbonnais, R., Cameron, S., Irvine Doran, D., Kerr, M., McGillis Hall, L., Vézina, M., Butt, M., & Ryan, L. (2001, June). Commitment and care: The benefits of a healthy workplace for nurses, their patients and the system. Ottawa, Canada: Canadian Health Services Research Foundation and The Change Foundation.³

Baumann, A. & Rideout, L. (2000). Standardized patients as an educational resource. In L. Rideout (Ed.), Transforming nursing education through problem-based learning (pp. 281-291). Sudbury, MA: Jones and Bartlett.²

Blake, J.T. & Carter, M.W. (in press). A goal-programming approach to resource allocation in acute-care hospitals. European Journal of Operational Research.¹

Blake, J.T. & Carter, M.W. (in press). Physician and hospital funding models under decreasing resources. Socio-Economic Planning Sciences.¹

Blythe, J., Baumann, A., & Butt, M. (2000). Commentary on events leading to the Second Ministerial Conference on Nursing and Midwifery, Munich. (Working Paper prepared for the World Health Organization Regional Office for Europe). Hamilton, Canada: Nursing Effectiveness, Utilization and Outcomes Research Unit, McMaster University.³

Blythe, J., Baumann, A., & Giovannetti, P. (2001) Nurses experiences of restructuring in three Ontario hospitals. Journal of Nursing Scholarship, 33(1), 61-68.³

Brown, B., Mathew-Maich, N., & Royle, J. (2000). Fostering reflection and reflective practice. In E. Rideout (Ed.), Transforming education through problem-based learning (119-164). Sudbury, MA: Jones and Bartlett.²

Butt, M., Baumann, A., O'Brien-Pallas, L., Deber, R., Blythe, J., & DiCenso, A. (under revision). The learning needs of nurses experiencing job change. The Journal of Continuing Education in Nursing.¹

Carter, M.W. (in press). A comprehensive course timetabling and student scheduling system at the University of Waterloo. In E.K. Burke & W. Erben (Eds.), Practice and theory of automated timetabling PATAT '00. Springer Verlag Lecture Notes in Computer Science.³

Carter, M.W. (2000). Timetabling. In S. Gass & C. Harris (Eds.), Encyclopedia of operations research and management science (2nd ed., pp. 833-836). Boston: Kluwer Academic Publishers.³

Carter, M.W. & Johnson, D.G. (2001). Extended clique initialization in examination timetabling. Journal of the Operational Research Society, 52(5), 538-544.³

Carter, M.W. & Lapierre, S. (in press). Scheduling emergency room physicians. Health Care Management Science.³

Chambers, L.W., Everest, B., & Ploeg, J. (submitted). Building research capacity through long-term care and university faculty collaboration. Canadian Medical Association Journal.²

Ciliska, D., DiCenso, A., Pinelli, J., & Cullum, N. (submitted). Nurses in established practice: How to learn about evidence-based nursing. AACN Clinical Issues.¹

Ciliska, D., Mastrilli, P., Ploeg, J., Hayward, S., Brunton, G., & Underwood, J. (2001). The effectiveness of home visiting as a delivery strategy for public health nursing interventions to clients in prenatal and postnatal period: A systematic review. Primary Health Care Research and Development, 2(1), 41-54.³

Ciliska, D., Miles, E., O'Brien, M.A., Turl, C., Tomasik, H.H., Donovan, U., & Beyers, J. (in press). The effectiveness of community interventions to increase fruit and vegetable consumption: A review. Journal of Nutrition Education.¹

Cockerill, R., O'Brien-Pallas, L.L., Murray, M., Irvine, D., Sidani, S., Laurie-Shaw, B., & Gerlach, J. (submitted). Community nursing: Nurses' perception of adequacy of time per visit. Research and Theory for Nursing Practice: An International Journal.³

Deber, R.B. (2000). Getting what we pay for: Myths and realities about financing Canada's health care system. Health Law in Canada, 21(2) 9-56.³

Deber, R.B. (2000). The spin doctor is in. Hospital Quarterly, 3(4), 54-55.³

Deber, R.B. (2000). Thinking before rethinking: Some thoughts about babies and bathwater. Healthcare Papers, 1(3), 25-31.³

Deber, R.B. (2000). Who wants to pay for health care? Canadian Medical Association Journal, 163(1), 43-44.³

*Deber, R.B., Ramsden, M., Holmes, F., & Scully, H. (2000). Sustaining public health care: What's the real challenge? Health Policy Forum, 3(2), 12-17.*³

*Denton, M., Paraminder, R., Lian, J., Gafni, A., Joshi, A., French, S.E., Rosenthal, C., & Willison, D. (2000). Health, age, and financial preparations for later life. In F. Denton, D. Fretz, & B. Spencer (Eds.), Independence and economic security in old age (pp. 136-155). Vancouver: University of British Columbia Press.*³

*DiCenso, A., Borthwick, V.W., Busca, C.A., Creatura, C., Holmes, J.A., Kalagian, W.F., & Partington, B.M. (2001). Completing the picture: Adolescents talk about what's missing in sexual health services. Canadian Journal of Public Health, 92(1), 35-38.*¹

*DiCenso, A., Ciliska, D., Marks, S., McKibbin, A., Cullum, N., & Thompson, C. (2000). Evidence-based nursing (CD). In D.L. Sackett, S.E. Straus, W.S. Richardson, W. Rosenberg, & R.B. Haynes (Eds.), Evidence-based medicine: How to practice and teach EBM (2nd ed.). New York: Churchill Livingstone.*²

*Dobbins, M., Beyers, J., O'Brien, M.A., & Thomas, H. (in press). The effectiveness of community-based heart health projects: A systematic review. Canadian Journal of Public Health.*³

*Dobbins, M., Ciliska, D., Cockerill, R., & DiCenso, A. (submitted). A framework for dissemination and utilization of research evidence for health care policy and practice. Primary Health Care.*¹

*Dobbins, M., Ciliska, D., Cockerill, R., & DiCenso, A. (submitted). A framework for dissemination and utilization of research evidence for health care policy and practice. International Journal of Technology Assessment.*¹

*Dobbins, M., Ciliska, D., & DiCenso, A. (submitted). A systematic review of the nursing research utilization literature. Journal of Advanced Nursing.*¹

*Dobbins, M., Cockerill, R., Barnsley, J., & Ciliska, D. (submitted). Do innovation, organization, environment and individual factors influence policy decisions in public health in Ontario? A multiple linear regression analysis. Health Services Research.*¹

*Dobbins, M., Cockerill, R., Barnsley, J., & Ciliska, D. (in press). Factors of the innovation, organization, environment and individual associated with the utilization of five systematic reviews among senior public health decision-makers in Ontario: A logistic regression analysis. International Journal of Technology Assessment.*¹

*Dobbins, M., Lockett, D., Beyers, J., Michelle, I., Feldman, L., & Vohra, J. (2001). The effectiveness of school-based physical activity interventions in promoting physical activity and fitness in children and adolescents. The Effective Public Health Practice Project. Hamilton-Wentworth Social and Public Health Services Program.*³

Donner, G. & Wheeler, M. (under revision). Discovery path: A program for women in the troisieme age. Career Planning and Development Journal.¹

Donner, G. & Wheeler, M. (in press). Career planning and development for nurses: The time has come. International Nursing Review.¹

Donner, G.J. & Wheeler, M.M. (2001). Discovery path: A retention strategy for mid-career nurses. Canadian Journal of Nursing Leadership, 14(1), 27-30.¹

Estabrooks, C.A., Tourangeau, A., Humphrey, C.K., Hesketh, K., Giovannetti, P., Clarke, H., Acorn, S., Wong, J., Thomson, D., & Shamian, J. (in press). Measuring the hospital practice environment: A Canadian context. Medical Care Supplement.³

Figueredo, A.J., McKnight, P.E., McKnight, K.M., & Sidani, S. (2000). Multivariate modeling of missing data within and across assessment waves. Addiction, 95(Suppl 3), S361-380.³

French, S.E., Lenton, R., Walters, V., Eyles, J., Mayr, J., & Newbold, B. (2000). An empirical evaluation of an expanded nursing stress scale. Journal of Nursing Measurement, 8(2), 161-178.¹

Guruge, S., Donner, G., & Morrison, L. (2000). The impact of Canadian health care reform on recent women immigrants and refugees. In D. Gustafson (Ed.), Care and consequences: The impact of health care reform (pp. 222-242). Halifax, Canada: Fernwood Publishing.³

Hill, A., Levitt, C., Chambers, L., Cohen, M., & Underwood, J. (2001). Primary care and population-health promotion: Opportunities for collaboration between family physicians and public health units in Ontario. Canadian Family Physician, 47, 15-17, 22-25.¹

Horsburgh, M.E. (in press). The Salutogenesis model. In V.H. Rice (Ed.), Handbook of Stress, Coping, and Health. London: Sage.³

Hunsberger, M., Baumann, A., Lappan, J., Carter, N., Bowman, A., & Goddard, P. (2000). The synergism of expertise in clinical teaching: An integrative model for nursing education. Journal of Nursing Education, 39(6), 278-282.²

Irvine, D., Sidani, S., Porter, H., O'Brien-Pallas, L., Simpson, B., McGillis Hall, L., Graydon, J., DiCenso, A., Redelmeir, D., & Nagle, L. (2000). Organizational factors influencing nurse practitioners' role implementation in acute care settings. Canadian Journal of Nursing Leadership, 13(3), 28-35.³

Irvine, D.M., Baker, G.R., Murray, M., Bohnen, J., Zahn, C., Sidani, S., & Carryer, J. (submitted). Achieving clinical improvement: An interdisciplinary intervention. Health Care Management Review.³

Irvine, D.M., O'Brien-Pallas, L.L., Murray, M., Cockerill, R., Sidani, S., Laurie-Shaw, B., & Gerlach, J. (2000). An evaluation of two health status measures for assessing outcomes of home care nursing. Research in Nursing & Health, 23, 43-54.³

Irvine, D.M., Sidani, S., & Keatings, M. (under review). An empirical test of the Nursing Role Effectiveness Model. Research in Nursing & Health.³

Irvine, D.M., Sidani, S., Keatings, M., & Doidge, D. (submitted). An empirical test of the Nursing Role Effectiveness Model. Journal of Advanced Nursing.³

Kerr, M.S., Shamian, J., Manno, M., Thomson, D., O'Brien-Pallas, L.L., & Koehoorn, M.W. (2001, June). The work environment and nurse health: A multi-level analysis of burnout in acute care hospitals. (Working Paper No. 157). Toronto, Canada: Institute for Work & Health.³

Laschinger, H.K.S., Finegan, J., & Shamian, J. (2001). Promoting nurses' health: Effect of empowerment on job strain and work satisfaction. Nursing Economic\$, 19(2), 42-52.³

Laschinger, H.K.S., Finegan, J., & Shamian, J. (in press). The impact of workplace empowerment, organizational trust on staff nurses work satisfaction and organizational commitment. (Best Theory-to-Practice Award). Health Care Management Review.³

Laschinger, H.K.S., Finegan, J., & Shamian J. (in press). The impact of workplace empowerment, organizational trust on staff nurses' work satisfaction and organizational commitment. Reprint. Advances in Health Care Research.

Laschinger, H.K.S., Finegan, J., Shamian, J., & Almost, J. (2000). Testing Karasek's demands-control model in restructured health care settings: Effect of job strain on staff nurses' quality of work life. Journal of Nursing Administration, 31(5), 233-243.³

Laschinger, H.K.S., Finegan, J., Shamian, J., & Casier, S. (2000). Organizational trust and empowerment in restructured health care settings: Effects on staff nurse organizational commitment. Journal of Nursing Administration, 30(9), 413-425.³

Laschinger, H.K.S., Finegan, J., Shamian J., & Sabiston, J.A. (2000). Voices from the trenches: Nurses' experiences of hospital restructuring in Ontario. Canadian Journal of Nursing Leadership, 14(1), 6.³

Laschinger, H.K.S., Finegan, J., Shamian, J., & Wilk, P. (in press). Testing a model of organizational empowerment in restructured health care settings: Effects on organizational trust and commitment among staff nurses. Nursing Research.³

Laschinger, H.K.S., Finegan, J., Shamian, J., & Wilk, P. (2001). Impact of structural and psychological empowerment on job strain in nursing work settings: Expanding Kanter's Model. Journal of Nursing Administration, 31(5), 260-272.³

Laschinger, H.K.S., Shamian, J., & Thomson, D. (in press). Impact of nursing work environment characteristics on staff nurse organizational trust, burnout, nurse-assessed quality of care and work satisfaction. Nursing Economic\$.³

Leonard, K.J., Pink, G.H., Johnson, L., & Schraa, E.G. (2000). Information systems for healthcare: A conceptual framework for improving decision making through better information, not technology. International Journal of Healthcare Technology and Management, 2(5/6), 557-575.³

Lian, J., Joshi, A., Robb, R., Denton, M.A., Gafni, A., Rosenthal, C., & Willison, D. Unpaid time contributions by seniors. (2000). In F. Denton, D. Fretz, B.E. Spencer. (Eds.), Independence and economic security in old age. Vancouver: University of British Columbia Press.³

Mathew-Maich, N., Brown, B., & Royle, J. (2000). "Becoming" through reflection and professional portfolios: The voice of growth in nurses. Reflective Practice, 1(3), 309-324.¹

McGillis Hall, L., Johnson, L.M., Schraa, E.G., & Pink, G.H. (2000). Developing a nursing management practice atlas. Part one: Methodological approaches to ensure data consistency. Journal of Nursing Administration, 30(7/8), 364-372.¹

McGillis Hall, L., Pink, G.H., Johnson, L.M., & Schraa, E.G. (2000). Developing a nursing management practice atlas. Part two: Variation in use of nursing and financial resources. Journal of Nursing Administration, 30(9), 440-448.¹

McKillop, I., Pink, G.H., & Johnson, L.M. (2001). The financial management of acute care in Canada: A review of funding, performance monitoring and financial reporting practices. (ISBN# 1-896104-71-1). Ottawa, Canada: Canadian Institute for Health Information.³

McKillop, I., Pink, G.H., Porter, J., & Schraa, E.G. (2000). An examination of how hospitals use the reporting framework prescribed in the Ontario hospital reporting system. (Pub. No. 00-03-TR). Toronto, Canada: Institute for Clinical Evaluative Sciences.³

Morgan, M.W., Deber, R.B., Llewellyn-Thomas, H.A., Galdstone, P., Cusimano, R.J., O'Rourke, K., & Tomlinson, G. (2000). Randomized, controlled trial of an interactive videodisc decision aid for patients with ischemic heart disease. Journal of General Internal Medicine, 15(10), 685-693.³

Nelligan, P., Balfour, J., Connolly, L., Grinspun, D., Reid-Haughian, C., Jonas-Simpson, C., Lefebvre, N., Peter, E., Pilkington, B., & Sherry, K. (2000). Best practice guidelines project: Client-centered care. Toronto, Canada: Registered Nurses Association of Ontario.³

Neumann, W.P., Wells, R.P., Norman, R.W., Kerr, M.S., Frank, J., & Shannon, H.S. (in press). Reliability, accuracy, and risk relationship of a video based method for physical risk exposure assessment from trunk posture. International Journal of Industrial Ergonomics.³

Neumann, W.P., Wells, R.P., Norman, R.W., Kerr, M.S., Frank, J., & Shannon, H.S. (2001). A posture and load sampling approach to determining low back pain risk in occupational settings. International Journal of Industrial Ergonomics, 27(2), 65-77.³

Noesgaard, C. & Hoxby, H. (2000). The quest of the NP in Ontario: Looking back but moving forward. In C. Patterson (Ed.), Nurse practitioners: The catalyst of change (191-244). Troy, Canada: Newgrange Press.¹

O'Brien-Pallas, L. & Baumann, A. (2000). Toward evidence based policy decisions: A case study of nursing health human resources in Ontario, Canada. Nursing Inquiry, 7(4), 248-257.¹

O'Brien-Pallas, L., Baumann, A., Birch, S., & Tomblin Murphy, G. (2000). Health human resource planning in home care: How to approach it - That is the question. HealthcarePapers, 1(4), 53-59.¹

O'Brien-Pallas, L., Baumann, A., Donner, G., Tomblin Murphy, G., Lochhaas Gerlach, J., & Luba, M. (2001). Forecasting models for human resources in health care. Journal of Advanced Nursing, 33(1), 120-129.¹

O'Brien-Pallas, L., Birch, S., Baumann, A., & Tomblin Murphy, G. (2000, December). Integrating workforce planning, human resources, and service planning. World Health Organization. Workshop on Global Health Workforce Strategy Nancy, France, 9-12 December 2000.¹

O'Brien-Pallas, L., Birch, S., Baumann, A., & Tomblin Murphy, G. (in press). Integrating workforce planning, human resources, and service planning. Human Resources Development Journal.¹

O'Brien-Pallas, L., Charles, C., McGillis Hall, L., McGilton, K., Luba, M., Peereboom, E., & Blake, J. (under revision). The influence of environmental complexity on staff members' time allocation on long-term care nursing units. To be submitted to The Gerontologist.³

O'Brien-Pallas, L., Irvine Doran, D., Murray, M., Cockerill, R., Sidani, S., Laurie-Shaw, B., & Lochhass Gerlach, J. (in press). Evaluation of a client care delivery model part 1: Variability in nursing utilization in community home nursing. Nursing Economic\$.³

O'Brien-Pallas, L., Irvine Doran, D., Murray, M., Cockerill, R., Sidani, S., Laurie-Shaw, B., & Lochhass Gerlach, J. (in press). Evaluation of a client care delivery model part 2: Variability in client outcomes in community home nursing. Nursing Economic\$.³

O'Brien-Pallas, L., Thomson, D., Alksnis, C., & Bruce, S. (2001). The economic impact of nurse staffing decisions: Time to turn down another road? Hospital Quarterly, 4(3), 42-50.³

Paraminder, R., Chambers, L., Denton, M., French, S.E., Gafni, A., Joshi, A., & Rosenthal, C. (2000). Income, disability, and functional independence of the elderly. In F. Denton, D. Fretz, & B. Spencer (Eds.), Independence and economic security in old age (pp. 112-135). Vancouver, Canada: University of British Columbia Press.³

Patterson, C. & Noesgaard, C. (2000). Fanning the flame in the new millenium. In C. Patterson (Ed.), Nurse practitioners: The catalyst of change (pp. 277-289). Troy, Canada: Newgrange Press.¹

Peter, E. (in press). Evidence-based healthcare: Whose knowledge can we trust? In M. Eichler, J. Larkin, & S. Neysmith (Eds.), Feminist utopias. New York: Inana Press.³

Peter, E. (2001). Concepts of trust among patients with serious illness focused on physician interpersonal and technical competence...commentary on Mechanic D, & Meyer S. Concepts of trust among patients with serious illness. Social Science & Medicine, 51(5), 657-68. Evidence-Based Nursing, 4(3), 95.³

Peter, E. (2000). The politicization of ethical knowledge: Feminist ethics as a basis of home care nursing research. Canadian Journal of Nursing Research, 32(2), 103-118.³

Peter, E. & Morgan, K. (2001). Explorations of a trust approach for nursing ethics. Nursing Inquiry, 8(1), 3-10.³

Pink, G., Sholdice, M., Fucile, W., Petryshen, P., & Sherrard, H. (in press). Supply and demand for cardiac nurses in Ontario: Perceptions of CNOs. Canadian Journal of Nursing Leadership.³

Pink, G.H. & Leatt, P. (submitted). Incremental health system change in Ontario, Canada: Three case studies. Health Policy.³

Pink, G.H., McKillop, I., Schraa, E.G., Preyra, C., Montgomery, C.M., & Baker, G.R. (2001). Creating a balanced scorecard for a hospital system. Journal of Health Care Finance, 27(3), 1-20.¹

Pink, G.H., Montgomery, C., Aird, C., Vimr, M.A., & Morgan, C.D. (2000). Developing guidelines for allocating catheterization laboratory resources: Lessons from an Ontario consensus panel. Canadian Journal of Cardiology, 16(1), 49-57.¹

Ploeg, J. (2000). [Review of the book Elder abuse work: Best practice in Britain and Canada, J. Pritchard (Ed.)]. Journal of Elder Abuse & Neglect, 12(3/4), 161-163.³

Ploeg, J., Biehler, L., Willison, K., Hutchison, B., & Blythe, J. (2000). The support needs of family caregivers and implications for a telephone support service. Hamilton Community Foundation.³

Preyra, C. & Pink, G.H. (2001). Balancing incentives in the compensation contracts of nonprofit hospital CEOs. Journal of Health Economics, 20(4), 509-525.³

Pringle, D., Levitt, C., Horsburgh, M., Wilson, R., & Whittaker, M. (in press). Interdisciplinary collaboration and primary health care reform. Canadian Family Physician.³

Rajacich, D., Khasawneh, J., Cameron, S., & Al-Ma'aitah, R. (2001). Advancing the development of human resources in nursing: Collaborative initiative in CPR. The Journal of Continuing Education in Nursing, 32(1), 27-30.¹

Rosenthal, C., Denton, M., Martin-Matthews, A., & French, S.E. (2000). Changes in work and family: Implications for economic security of today's and tomorrow's seniors. In F. Denton, D. Fretz, & B. Spencer (Eds.), Independence and economic security in old age (pp. 85-111). Vancouver, Canada: University of British Columbia Press.³

Royle, J.A., Blythe, J., Brazil, K., Montemuro, M., Church, A., Cipryk, F., Johnson, T., & Anyinam, C. (in press). The information needs of staff in two organizations: Promoting evidence-based long term care. Educational Gerontology.¹

Royle, J.A., Blythe, J., DiCenso, A., Roche, B., & Button, L. (submitted). Standardized patient telephone interviews: Evaluation of clinical practice at a distance. Journal of Advanced Nursing.²

Royle, J.A., Dicenso, A., Baumann, A., Boblin-Cummings, S., Blythe, J., & Mallette, C. (2000). RN and RPN decision making across settings. Canadian Journal of Nursing Leadership, 13(4), 11-18.¹

Royle, J.A., Sword, W., Black, M., Carr, T., & Brown, B. (2000). Developing clinical opportunities and resources for problem-based learning. In E. Rideout (Ed.), Transforming education through problem-based learning (pp. 239-258). Sudbury, MA: Jones & Bartlett.²

Sale, J. & Kerr, M.S. (in press). An examination of the psychometric properties of the demand and control scales using data from a large teaching hospital. International Archives of Occupational and Environmental Health.³

Sarkissian, S., Politzer, N., Zahn, C., & Irvine, D.M. (2001). Implementation of a change process to improve outcomes of patients admitted to Epilepsy Monitoring Unit. Journal of Outcomes Management for Nursing Practice, 5(1), 11-17.¹

Shamian, J. & Hannah K.J. (2000). Management information systems for the nurse executive. In M.J. Ball, K.J. Hannah, S.K. Newbold, & J.V. Douglas (Eds.), Nursing informatics: Where caring & technology meet (3rd ed., pp. 284-298). New York: Springer-Verlag.³

Shamian, J. & Villeneuve, M. (2000). Building a national nursing agenda. Hospital Quarterly, 4(1), 16-18.³

Sidani, S. & Epstein, D. (submitted). Conceptual and methodological issues in applying research findings in clinical practice. Journal of Advanced Nursing.¹

Sidani, S., Irvine, D., & DiCenso, A. (2000). Implementation of the primary care nurse practitioner role in Ontario. Canadian Journal of Nursing Leadership, 13(3), 13-19.³

Sidani, S., Irvine, D., Porter, H., O'Brien-Pallas, L., Simpson, B., McGillis Hall, L., Nagle, L., Graydon, J., DiCenso, A., & Redelmeir, D. (2000). Practice patterns of acute care nurse practitioners. Canadian Journal of Nursing Leadership, 13(3), 6-12.³

Sidani, S. & Stevens, B. J. (2000). Alternative therapies and placebos: Conceptual clarification and methodological implications. Canadian Journal of Nursing Research, 31(4), 73-86.³

Thomas, B., Rajacich, D., Al-Ma'aitah, R., Cameron, S., Gharaibeh, M., & Delahunt, T. (2000). Developing a programme-review process for a baccalaureate nursing programme in Jordan. International Nursing Review, 47(4), 243-247.²

van Soeren, M.H., Andrusyszyn, M.A., Laschinger, H., Goldenberg, D., & DiCenso, A. (2000). Consortium approach for nurse practitioner education. Journal of Advanced Nursing, 32(4), 825-833.²

Williams, D. & Sidani, S. (under review). An analysis of the nurse practitioner role in palliative care. Canadian Journal of Nursing Leadership.³

Zeytinolu, I.U., Denton, M., Webb, S., & Lian, J. (2001). Musculoskeletal disorders among office and visiting home care workers: Associations with work factors and injuries. Women & Health, 31(2/3), 1-35.³

Zeytinolu, I.U., Ozmen, O.T., Katrinli, A., Kabasakal, H., & Arbak, Y. (in press). Factors affecting female managers' careers in Turkey. In M. Cinar (Ed.), Women and work in the Middle East. Greenwich, CT: JAI Press.³

