TOWARD

VISIONS FOR NURSING

Michael Villeneuve and Jane MacDonald Principal Investigators



© Copyright 2006 Canadian Nurses Association

ISBN 1-55119-818-5

Canadian Nurses Association 50 Driveway Ottawa Ontario Canada K2P 1E2 Tel: (613) 237-2133 http://www.cna-aiic.ca

Michael Villeneuve and Jane MacDonald, Principal Investigators

Toward 2020: Visions for Nursing was funded as part of a larger group of studies that were conducted under the project title, Toward 2020: Strengthening Canada's Health Human Resources.

Funding was provided through the Office of Nursing Policy, Health Policy Branch, Health Canada, February 2005 – March 2006, Contribution Agreement #6804-15-2004/3000477, and by the Canadian Nurses Association.

To order additional copies of this report in *pdf* format, please contact the investigators by e-mail at: 2020@cna-aiic.ca.

Citation: Villeneuve, M. and MacDonald, J. (2006). *Toward 2020: Visions for Nursing.*Ottawa, ON: Canadian Nurses Association.

The cover of this report and the accompanying "Snapshot" were designed by Marida Waters, Strategic Communications Department, Canadian Nurses Association.

Contents

1	Acknowledgments
2	Terminology and Acronyms
3	Snapshot / Sommaire
11 11	CHAPTER ONE Background Introduction
13 14 15	Project Background Futures Studies Layout of this Report
16	CHAPTER TWO Historical Perspectives
16 18 19	Global and Canadian Social Trends Global and Canadian Health Trends Canada's Health Care System
20	Nursing
34 34 38 51 63	CHAPTER THREE The World in 2006 Canada and the World in 2006 Canadian Health Status and the Health Care System in 2006 Canadian Nursing in 2006 Summary
64 64 65 69 73	CHAPTER FOUR Toward 2020: The Road Ahead Introduction What will the Future be Like? Future Global Social Trends Future Canadian Trends Future Health Status and Health System Trends Future Nursing Trends
88 88 90 94	CHAPTER FIVE Nursing and the Health System in 2020: Scenarios and Options The Pressing Need for Change Building Scenarios Scenarios
116	CHAPTER SIX The Next Steps

i

RESOURCES

118	i) References					
128	ii) Bibliography					
149	iii) Contact Information for Selected Nursing and Other Organizations/Associations					
151	iv) Appendices					
	151	Appendix A	Informants Interviewed			
	154	Appendix B	Participants, Speakers and Staff - Merrickville Consultation			
	156	Appendix C	Project Methodology			
	158	Appendix D	Interview Questions			
	159	Appendix E	Discussion of Themes Identified in the Literature Search: The Futures Agenda for 2020			
	160	Appendix F	Futures Agenda for 2020: Annotated Bibliography			
	161	Appendix G	Conversations with Canadians: Summary of Key Themes Identified in Informant Interviews, February-August, 2005			
	162	Appendix H	Canada's Registered Nurses, Licensed Practical Nurses and Registered Psychiatric Nurses: Building Blocks for a Shared Vision of a Shared Future			
	v) Tables					
	28	Table 1	Canada's Federal Nurse Leaders, 1953-2006			
	51	Table 2	Canada's Nursing Workforce: Quick Facts			
	52	Table 3	The Employment Status of Selected Professions in Ontario			
	vi) Fig	jures				
	44	Figure 1	Public Portion of Health Care Spending, Canada, 2005			
	53	Figure 2	Number of RN Graduates in Canada, 1963-2003			
	54	Figure 3	Comparison of Graduates from Nursing, Medicine, Physical Therapy, Occupational Therapy, Pharmacy and Elementary/Secondary School Education in Canada, Varying Years 1963-2003.			
	76	Figure 4	The Pyramid of Spending Priorities			
	95	Figure 5	Primary Health Care in Canada, 2020			
	107	Figure 6	Nursing Education Model, 2020, Option 1			
	108	Figure 7	Nursing Roles and Education, 2020, Option 1			

Acknowledgments

We are deeply grateful for the high level of interest and support of colleagues from nursing and other disciplines, all across Canada, during the past year. We especially want to thank:

- Health Canada and the Office of Nursing Policy, for their generous financial support of the entire *Toward 2020* project. Many thanks to Sandra MacDonald-Rencz, executive director, Susan Hicks, senior nursing consultant and project manager for the 2020 group of studies, and Brenda Lalonde-Warner and Nicole Lemieux for their administrative support.
- The Canadian leaders in every part of the country (see Appendix A) who gave so generously of their time and expertise during the interview process – and never had their eyes on the clock.
- All the nurse leaders (see Appendix B) who came to Merrickville in October 2005 to participate as consultants. A huge thank-you to Dianne Parker-Taillon, who facilitated the meeting and to Marc Zwelling and Abby Hoffman for taking time from their busy schedules to share their expertise with our consultants. Sincere thanks to Sister Elizabeth Davis and the *Canadian Health* Services Research Foundation for providing the audio and visual versions of her comments on leadership.
- The faculty and participants in the *Dorothy Wylie Nursing Leadership Institutes* held in November 2005 and January 2006, for their reflections on actions to move the futures agenda forward in nursing.
- The Board, Chief Executive Officer and staff of the Canadian Nurses
 Association, with special thanks to Lucille Auffrey, Janet Davies and the Public
 Policy team, Micheline Jaworski and Rebecca Overall for their invaluable
 reference and information services, and Brenda Beauchamp, Nancy Hebert
 and the team in financial administration for keeping us on track.
- Arlene Wortsman and Associates, including Adam Newlands, who did so much of the background work and support.
- Salma Debs-Ivall, Glenn Dudman, Nancy Field, Michael Garreau, Ken Hoffman, Nancy McNinch Shosenberg, and Marlene Smadu for reviewing the final version of the paper.
- Louise Hanvey, for her insightful and comprehensive work on the initial futures document and the annotated futures bibliography.
- And finally, Jane Coutts, for her remarkable editorial work on the final draft, the gathering of key messages for our executive summary, and for her humour just when we needed it.

For us personally, it has been an incredibly positive and energizing privilege to speak to nurses and other leaders across Canada throughout 2005 and 2006. We are encouraged and enthused by the respect Canadians have for nurses, and the new and exciting contributions that nurses can make in the future.

Michael Villeneuve, RN MSc Senior Nurse Consultant Canadian Nurses Association

and

Jane MacDonald, RN MHSc Primary Health Care Consultant Canadian Nurses Association

Terminology & Acronyms

We have endeavoured to keep acronyms and jargon to a minimum.

Where we use the word *nurse* or *nursing*, we refer to any member of a *regulated* nursing category – i.e. a registered nurse (RN), licensed/registered practical nurse (LPN), or registered psychiatric nurse (RPN).

Acronyms used in this document

These acronyms are used in the paper:

Roles/Titles

Nurses

LPN Licensed practical nurse (also called registered practical nurse)

NP Nurse practitioner
RN Registered nurse

RPN Registered psychiatric nurse

Physicians

GP General practitioner (a physician in general practice)

MD Medical doctor

Organizations*

OECD Organization for Economic Cooperation and Development

WHO World Health Organization

Other

GDP Gross domestic product

^{*}A list of selected organizations and associations relevant to nurses and healthsystem decision makers is included in the resources section of this report.

Snapshot

This is a critical time in the evolution of Canadian society and specifically the Canadian health care system. Many Canadians are living longer, healthier lives than ever before. Our corner of the world is relatively safe, stable and prosperous. Advances in health care – from high-tech procedures to genomics to research on delivering services – have revolutionized patient care. However, these advances in health care have frequently been at the expense of other social programs. While the health care system has performed reasonably well in the past, there is evidence that it is not working well enough now either for those it serves or for those who work in it. The pace of change is relentless. Today's system has undeniable strengths, but it is not designed for the health needs of Canadians in 2020. We need to open the doors to new thinking and new solutions if we are to meet the health needs of Canadians in 2020.

Canadians will certainly still need health care in 2020 – indeed, demand for it will be greater – but it will be a very different kind of care, with a different role for nurses, than there is today. 2020 will be a fundamentally different world from the one we live in. (Don't believe it? Think back to 1990, when the Communist Party ruled Russia, there was no internet or e-mail, and health regions didn't exist). The aging of the baby boomers will have a huge impact on all facets of society; in health care, that will range from a significant increase in the number of people suffering chronic diseases to the wholesale retirements of health care providers. Given those realities lying before us, how can we transform health care to make it viable, responsive and sustainable for this new century? What role will nursing and nurses play in the transformation?

Nurses can be at the forefront of the coming changes, setting the agenda to create a health care system that truly serves and reflects the priorities of Canadians. But no one will appoint them to the task. This project, *Toward 2020: Visions for Nursing*, endeavours to lay the groundwork for nursing's part in planning health care for the 21st century, especially the role nurses will play in it. Funded by Health Canada through the Office of Nursing Policy and prepared by the Canadian Nurses Association's Public Policy Department, *Toward 2020* is a futures study. The World Futures Society notes that "no one knows exactly what will happen in the future. But by considering what might happen, people can more rationally decide on the sort of future that would be most desirable and then work to achieve it." The "Toward 2020" study is an important step to move nursing in that direction.

Futures forecasting begins with a review of historical factors in the world – and in this case in health care and nursing – which influenced the system as it was developing. Then it looks at the global and national trends that will dominate and shape life over the next few years. The next step is to picture what health-service demands and needs for nursing will be in 2020, and look at the challenges to meeting those needs. The information and evidence that underpin this futures project came from a wide-ranging literature review and consultations with groups representing registered nurses, licensed practical nurses and registered psychiatric nurses. Leaders in nursing (educators, practitioners, administrators and policy and planning experts) and opinion leaders in other fields across the country were also consulted. And mid-way through the project we held a day-long meeting with nurses to discuss an early draft of this report. From all of

We're in a new place; we're not on the edge of the old place. We're not pushing the envelope; we're in a totally new envelope. So the rules have changed. Every fundamental premise of the old way of thinking no longer applies.

Sister Elizabeth Davis Chair, Canadian Health Services Research Foundation, 2005 these sources, six scenarios for maximizing nursing's contribution to the health of Canadians in 2020 were developed.

Nurses are always first or second in the list of most trusted professionals and rank highly in the minds and hearts of Canadians. Nursing education is accessible across the country, nurses practice in every province and territory, and the profession offers broad and rewarding career opportunities. For all those reasons, Canadians still want to become nurses: applications to many Canadian schools of nursing still far outnumber the available spaces for students.

Nurses are the largest group of health care providers, but their services are nevertheless in short supply in some parts of today's health care system. If we maintain current delivery models and levels of demand, then the shortages of nurses, physicians and other professionals being experienced in 2006 are unresolvable. For that reason, much of this report focuses on human-resources issues, from how nurses are educated and licensed to whether good use is being made of their training. Education, job design and responsibilities must change as the country moves from a traditional acute-care, illness-treatment model of health care, to one that will focus on keeping people well, with both care and support for maintaining health delivered in the community. Making that happen will mean breaking down divisions within nursing, and barriers between it and other professions. Finally, we consider how to make nursing a more rewarding profession that will attract and keep a diverse, healthy and happy workforce.

If nursing and health care are to be ready for the health and social challenges of 2020, bold steps toward that future need to be taken. None of us can predict the future with precision, but we can look at patterns and trends, and take actions to shape some of them in our favour.

As senior consultant and nurse leader Tim Porter-O'Grady once said pointedly to nurses, "If you're not constructing your future, your future is still being constructed." We have constructed six scenarios and at the end of each scenario we list what's needed to get to the "preferred future."

A sense of the scenarios...

1. The system: health and illness care in 2020

- Self-care and patient-led care are the norm. Health care professionals are partners and consultants with patients and families in a "shared-care" model of responsibility and accountability for health and illness care.
- Every Canadian has a primary caregiver who may be a nurse, physician, social worker or other health professional in a community health centre or affiliated satellite.
- A range of health professionals provide gateways to primary care, and access to specialists and the broader primary health care system.
- More financial and human resources are directed to health and communities, less focus is placed on illness and hospitals.
- Every Canadian has a secure, portable and accessible electronic health record.

2. The roles, scopes and practice settings of nurses in 2020

- Nurses act as health "shepherds", coordinating care, delivering direct services, and helping patients to understand options and navigate the health system.
- The role of registered nurses and registered psychiatric nurses in primary care and primary mental health care respectively is greatly enhanced; licensed practical nurses have increased responsibility in long-term and transitional care.
- Health professionals do not carry out any tasks that can be accomplished safely by patients themselves (e.g. medication administration), by nonhuman care partners (e.g. robots) or by other human supports (e.g. personal support workers).

3. Nursing human resources: the number and mix of nurses in 2020

- The majority of nurses in all categories work in interdisciplinary teams.
- The majority of registered nurses and registered psychiatric nurses now work in settings outside acute hospital care.
- Absenteeism and overtime rates are the same as the rates for all other Canadian workers.
- 70 per cent of nurses in all categories have access to full-time positions or the equivalent.
- More nurses in all categories practice as certified specialists in institutional and community settings.

4. Nursing education in 2020

- Revolutionary changes in nursing education, curriculum, teaching and clinical placements have been implemented.
- A new national application centre tracks all nursing school applications, admissions, attrition and graduates for Canada.
- Interdisciplinary nursing education programs are in place with all nurses sharing common education for the first two years.
- Professional and academic master's degrees and doctoral education streams are offered to meet the changing leadership expectations of nurses.

5. Ensuring responsiveness, quality and patient safety: regulating nurses in 2020

- Nurses in all categories hold pan-Canadian licences granted after graduation from accredited schools of nursing.
- No additional licensing examination is required after graduation with a diploma in practical nursing or degree in nursing or psychiatric nursing.
- A central licensing body regulates all nurses in the country in conjunction with satellite offices in each province and territory.

6. Diversifying nursing: careers in nursing for all Canadians

- At least 20 per cent of nursing leaders come from Canada's Aboriginal and visible minority populations; at least 10 per cent of the nursing workforce is male.
- Outreach programs, purposeful recruitment and proactive hiring programs are in place to attract Aboriginal peoples, men and visible-minority Canadians.
- Undergraduate, graduate and continuing education curricula all have been adapted to reflect the diversity of Canada.
- All nursing regulatory bodies ask at licence renewal that members voluntarily state any ethno-cultural and language affiliation/status with which they wish to be identified.

These ideas are just a starting point, a first step. We urge nurses across the country, and all those who teach them, work with them, employ them, plan for them and depend on them, to start preparing for 2020 now. It will be here very soon, ready or not. It would be so much better to be ready.

Sommaire

Nous vivons un moment critique de l'évolution de la société canadienne et particulièrement du système de santé du Canada. Plus que jamais, bon nombre de Canadiens et Canadiennes vivent plus longtemps et en meilleure santé. Notre région du monde est relativement sécuritaire, stable et prospère. Les progrès des soins de santé – des interventions de haute technologie à la recherche sur la prestation des services en passant par la génomique – ont révolutionné les soins aux patients. Cependant, ces progrès se sont souvent réalisés aux dépens d'autres programmes sociaux. Bien que le système de santé se soit assez bien tiré d'affaire par le passé, tout semble indiquer qu'il ne fonctionne désormais pas assez bien, ni pour ses clients, ni pour ses travailleurs. Le rythme du changement est inexorable. Le système d'aujourd'hui a des forces indéniables, mais il n'est pas conçu pour répondre aux besoins sanitaires de la population canadienne en 2020. Nous devons ouvrir de nouvelles avenues de pensée et découvrir de nouvelles solutions afin de satisfaire aux besoins en santé de la population canadienne de l'an 2020.

Les Canadiens et Canadiennes auront toujours besoin de soins de santé en 2020, c'est certain – la demande sera en fait plus forte – mais ils auront besoin de soins très différents où les infirmières joueront un rôle différent. En 2020, le monde sera fondamentalement différent de celui où nous vivons. (Vous n'y croyez pas? Pensez à 1990, lorsque le Parti communiste était au pouvoir en Russie, qu'il n'y avait pas d'Internet ni de courrier électronique, et qu'il n'existait pas de régions sanitaires.) Le vieillissement des baby-boomers aura un impact énorme sur toutes les facettes de la société. Dans le domaine des soins de santé, ces retombées varieront d'une augmentation importante du nombre de personnes souffrant de maladies chroniques jusqu'aux départs massifs à la retraite des prestateurs de soins de santé. Compte tenu de ces réalités qui nous attendent, comment transformer les soins de santé pour les rendre viables, souples et durables pour le nouveau siècle? Quel rôle les infirmières et les soins infirmiers joueront-ils dans la transformation?

Les infirmières peuvent être au premier rang des changements qui s'annoncent et établir le programme de manière à créer un système de santé qui desserve vraiment la population canadienne et reflète ses priorités. Personne ne leur confiera toutefois cette tâche. Ce projet, *Vers 2020 : Visions pour les soins infirmiers*, essaie de jeter les bases du rôle que les soins infirmiers joueront dans la planification des soins de santé au XXIe siècle, et en particulier du rôle que les infirmières y joueront. Financé par le Bureau de la politique des soins infirmiers de Santé Canada et produit par le service des Politiques publiques de l'Association des infirmières et infirmiers du Canada, *Vers 2020* est une étude prospective. La World Futures Society signale que « personne ne sait exactement ce qui se passera à l'avenir. En réfléchissant aux possibilités, on peut toutefois prendre une décision plus rationnelle sur le genre d'avenir qui est le plus souhaitable et chercher ensuite à le réaliser » (traduction libre). L'étude *Vers 2020* est une étape importante à franchir pour orienter la profession infirmière dans cette direction.

La prévision de l'avenir commence par une revue des facteurs historiques du monde – et, en l'occurrence, des soins de santé et des soins infirmiers – qui ont influencé le système pendant qu'il prenait forme. On analyse ensuite les tendances mondiales et nationales qui domineront et orienteront la vie au cours des prochaines années. Il faut ensuite brosser le tableau des exigences en services de santé et des besoins en soins infirmiers en 2020 et analyser les défis à relever

Les temps ont changé. De l'eau a coulé sous les ponts. Il faut jouer avec une nouvelle donne. Les règles du jeu ont donc changé. Aucune prémisse fondamentale du passé ne tient plus.

Sœur Elizabeth Davis Présidente, Fondation canadienne de la recherche sur les services de santé, 2005 pour répondre à ces besoins. L'information et les données qui sous-tendent ce projet de prospective proviennent d'une vaste recherche documentaire et de consultations de groupes représentant les infirmières et les infirmières auxiliaires ou psychiatriques. On a également consulté des chefs de file de la profession infirmière (formatrices, praticiennes, administratrices et spécialistes des politiques et de la planification) et des guides d'opinions d'autres domaines au pays. À mi-parcours, nous avons organisé une réunion d'une journée avec des infirmières pour discuter d'une première version préliminaire du rapport. À partir de toutes ces sources, nous avons créé six scénarios pour maximiser la contribution de la profession infirmière à la santé de la population canadienne en 2020.

Les infirmières arrivent toujours au premier ou au deuxième rang dans la liste des professionnels auxquels on fait le plus confiance et la population canadienne les tient en haute estime. La formation infirmière est accessible partout au Canada. Les infirmières pratiquent dans chaque province et territoire et la profession offre une variété de possibilités de carrière enrichissantes. Pour toutes ces raisons, la profession infirmière demeure populaire au Canada: beaucoup d'écoles d'infirmières du Canada reçoivent toujours beaucoup plus de demandes qu'elles ont de places disponibles.

Les infirmières constituent le groupe le plus nombreux de prestateurs de soins de santé, mais il y a néanmoins pénurie de leurs services dans certains secteurs du système de santé d'aujourd'hui. Si les modèles actuels de prestation et les niveaux actuels de la demande se maintiennent, les pénuries d'infirmières, de médecins et d'autres professionnels que l'on connaît en 2006 seront alors impossibles à régler. C'est pourquoi ce rapport porte en grande partie sur des questions de ressources humaines variant des méthodes de formation et d'autorisation des infirmières jusqu'à la question de savoir si l'on utilise leur formation à bon escient. La formation, la conception des emplois et des responsabilités qui s'y rattachent doivent suivre le cours du changement au pays. Or celui-ci a amorcé la transition à partir du modèle de soins de santé traditionnel, fondé sur les soins de courte durée et le traitement de la maladie, vers un autre, qui visera avant tout à garder les gens en bonne santé, et où les services de soins et de soutien nécessaires au maintien de la santé seront fournis dans la communauté. Pour ce faire, il faudra abattre des barrières qui divisent la profession infirmière et aplanir des obstacles entre celle-ci et d'autres professions. Enfin, nous analysons des façons de faire de la profession infirmière une profession plus enrichissante qui attirera et gardera des effectifs diversifiés, heureux et en bonne santé.

Pour que la profession infirmière et les soins de santé soient prêts à relever les défis sanitaires et sociaux de 2020, il faut prendre des mesures audacieuses afin de préparer cet avenir. Personne d'entre nous ne peut prédire l'avenir avec précision, mais nous pouvons analyser des tendances et prendre des mesures pour que certaines agissent en notre faveur.

Comme Tim Porter-O'Grady, conseiller principal et chef de file de la profession infirmière, l'a si bien dit aux infirmières, « Si vous ne construisez pas votre avenir, il ne cesse pas de se construire pour autant ». Nous avons élaboré six scénarios et à la fin de chacun, nous dressons la liste de ce qu'il faut pour réaliser « l'avenir privilégié ».

Coup d'œil sur les scénarios...

1. Le système : les soins de santé et le traitement de la maladie en 2020

- Les soins autodirigés et dirigés par les patients sont la norme. Les professionnels de la santé sont des partenaires et des conseillers des patients et des membres de leur famille dans un modèle de responsabilité en soins de santé et en traitement de la maladie fondé sur les « soins partagés ».
- Chaque Canadien ou Canadienne a un soignant principal qui peut être une infirmière, un médecin, une travailleuse sociale ou un autre professionnel de la santé dans un centre de santé communautaire ou une entité satellite affiliée.
- De nombreux professionnels de la santé servent de point d'accès aux soins primaires, à des spécialistes et au système de soins de santé primaires en général.
- On consacre davantage de ressources financières et humaines à la santé et aux communautés, et moins d'importance à la maladie et aux soins hospitaliers.
- Chaque Canadien ou Canadienne a un dossier de santé électronique protégé, portable et accessible.

2. Les rôles, champs d'exercice et milieux de travail des infirmières en 2020

- Les infirmières sont les « guides » du système de santé : elles coordonnent les soins, fournissent des services directs et aident les patients à comprendre les choix qui s'offrent à eux et à s'y retrouver dans le système de santé.
- Les infirmières et les infirmières psychiatriques jouent un rôle très élargi dans les soins primaires; les infirmières auxiliaires ont des responsabilités accrues en soins de longue durée et de transition.
- Les professionnels de la santé n'exécutent pas de tâches dont peuvent se charger en toute sécurité les patients eux-mêmes (p. ex., administration de médicaments), des partenaires non humains (p. ex., robots) ou d'autres aidants humains (p. ex., préposés aux services de soutien à la personne).

Ressources humaines en soins infirmiers : le nombre et la composition du personnel infirmier en 2020

- La majorité des infirmières de toutes les catégories travaillent dans des équipes interdisciplinaires.
- La majorité des infirmières et des infirmières psychiatriques travaillent maintenant hors du milieu des soins hospitaliers de courte durée.
- Les taux d'absentéisme et de temps supplémentaire sont les mêmes que ceux de tous les autres travailleurs canadiens.
- Soixante-dix pour cent des infirmières de toutes les catégories ont accès à des postes à temps plein ou équivalents.
- Un plus grand nombre d'infirmières de toutes les catégories pratiquent comme spécialistes certifiées dans des contextes institutionnels et communautaires.

4. Formation en soins infirmiers en 2020

- Des changements révolutionnaires dans la formation en sciences infirmières, les programmes d'études, d'enseignement et les stages cliniques ont été mis en œuvre.
- Un nouveau centre national de traitement des demandes suit toutes les demandes présentées aux écoles de sciences infirmières, les admissions, l'attrition et les diplômées au Canada.
- Des programmes de formation en soins infirmiers interdisciplinaires sont en place et toutes les infirmières suivent une formation commune au cours des deux premières années.
- On offre des options de formation en études supérieures théoriques et professionnelles afin de satisfaire à l'évolution des attentes des infirmières sur le plan du leadership.

5. Assurer souplesse, qualité et sécurité des patients : la réglementation du personnel infirmier en 2020

- Les infirmières de toutes les catégories ont des permis d'exercice pancadiens qu'elles ont obtenus après avoir terminé leurs études dans des écoles de sciences infirmières agréées.
- Aucun examen d'autorisation supplémentaire n'est obligatoire après qu'on a obtenu un diplôme en soins infirmiers pratiques ou un grade en sciences infirmières ou en soins infirmiers psychiatriques.
- Un organisme central d'autorisation réglemente toutes les infirmières du Canada, en collaboration avec des bureaux satellites situés dans chaque province et territoire.

6. Diversification de la profession infirmière : carrières en soins infirmiers pour tous les Canadiens et Canadiennes

- Au moins 20 % des chefs de file de la profession infirmière proviennent des populations autochtones ou des minorités visibles du Canada et les hommes constituent au moins 10 % des effectifs infirmiers.
- Les programmes de communication, de recrutement spécifique et d'embauche proactive sont en place pour attirer des Autochtones, des hommes et des membres des minorités visibles du Canada.
- Les programmes d'études du premier cycle, du deuxième cycle et d'éducation permanente ont tous été adaptés de façon à refléter la diversité du Canada.
- Tous les organismes de réglementation de la profession infirmière demandent au moment du renouvellement du permis que les membres indiquent volontairement toute affiliation ethnoculturelle et linguistique à laquelle ils souhaitent qu'on les associe et tout statut à cet égard.

Ces idées sont simplement un point de départ, un premier pas. Nous exhortons les infirmières du Canada et tous ceux qui les forment, travaillent avec elles, les emploient, planifient pour elles et comptent sur elles de commencer à préparer l'an 2020 dès maintenant. Nous y arriverons très rapidement, que nous soyons prêts ou non. Il serait tellement préférable de l'être.

CHAPTER ONE

Background

Introduction

"The health services of this country are good, but obviously, there is much yet to be done."

Those words were spoken by Paul Martin in the throes of a national debate on public vs. private health care funding – a debate characterized by concern that doctors would leave Canada for American private payment, that there would be shortages of health care providers, that we could not meet the challenge of providing care to rural Canadians – the talk we hear on the news and by the water cooler nearly every day. The words could have been spoken by former prime minister Paul Martin, word for word, in the long campaign that lead up to the election of January 2006. But they were not. The quote is from Paul Martin *Senior*, Canada's minister of Health and Welfare, spoken more than 50 years ago on December 15, 1955.

Just a few months later in 1956, the First Canadian Conference on Nursing was held for nurse leaders to discuss the future of nursing in Canada. Like the words of the senior Mr. Martin, there is a familiar ring to the concerns of the Canadian Nurses Association (CNA) leaders and the federal chief nursing consultant at the time (Dorothy Percy), particularly their concern over shortages of nurses and nurse leaders. In fact, talk of shortages and a lack of leadership in nursing are two of the most consistent themes expressed in Canadian nursing literature over the past five decades.

Fifty years on, there are many recurrent debates in health care. Governments and politicians fight over funding and control; many nurses and other health professionals feel demoralized and disunited; and physicians still stand apart from the other health professions, wielding enormous influence over health care, health policy, and access to health care services. Patients are caught somewhere in the middle of it all.

Nevertheless, for nursing, the supply and shortage issue remains dominant. Concerns about nursing in the first years of this new century focus on it. When health care leaders and system experts talk of the nursing shortage today, they say "this one is different," meaning it's not going away. There is an explosion of reports, research, data and pilot projects on the issue. And yet the profession has been held back by a relative failure to redress the basic issues that seem to drive up dissatisfaction, turnover and intent to leave the job or profession – issues such as workload, overtime, scheduling, abuse and violence, and a lack of professional autonomy. Nurses are not alone; there is a worrying picture of shortages and morale problems in medicine and other leading health professions within and beyond Canada. Gordon goes so far as to say "I think there is despair among

everybody in health care" (Maggi, 2000), an illustration of the paradox of having so much activity in research and policy but comparatively little change where health services are delivered.

Why is it taking so long to see action? We have built an immense body of evidence over 20 years on recruitment, retention and turnover in nursing – hard evidence to back a century of experience that says nurse staffing is connected to patient outcomes. We know what conditions make for satisfied employees and improve productivity, while also optimizing outcomes for patients, organizations and systems. So why are Canadian health care leaders still debating working conditions, including workload and staffing? What has to happen to resolve those issues and create care environments that meet the needs of Canadians while attracting and retaining excited, healthy nurses? The CNA is tremendously concerned by the collective failure, within and beyond nursing, to move the body of evidence from talk to action and resolve the fundamental issues of attracting people to the nursing profession and keeping them practising once they're there.

The only group that can possibly save the health system are nurses because of the numbers. Nurses have more power in this society than any other single group — but you need to learn how to use this power in society for health issues.

Sister Elizabeth Davis 2005 Also troubling is what seems like an unwillingness, or an inability across health care professions to be open about issues of power and other dynamics that keep us from creating new structures and changing behaviours. Despite a generation of talk about reforming primary health care, and a growing body of evidence on the benefits of advanced nursing care for patients and the health system, we have not fundamentally changed our 1960s-style system. People still say they can't get health care because they "don't have a doctor," as if that is the only route to health. Health care is still focused on hospitals and physicians delivering acute care, and that model of health care, really "illness" care, will have to be dismantled before we can move on.

Some say nurses are the natural choice to take the lead in this redesigned health system – the only ones who can make it survive and evolve to meet the needs of Canadians. Others would strongly disagree. This dichotomy of views – and every opinion in between – places nursing in a position that is both precarious and tremendously exciting. The high expectations of nurses held by some Canadians may reflect the high levels of trust generally accorded to nurses. In nearly every survey done, nurses rank first or second in the list of most trusted professionals, typically sharing those positions with fire-fighters; that pattern continues in 2006 (CTV News, 2006).

So how many more times do we go around the health care wheel? How many more reports, commissions, task forces and studies must we grind out before we break through with real and revolutionary change? Is it even possible? If we really have learned, discovered and innovated over the last 50 years, what is holding us back from taking that knowledge and transforming the structures and services needed to take care of our most basic, most important, shared need – our health?

2020 will be a fundamentally different world. Canadians will still need care and, in fact, indications are that demand for it will grow – but it is likely be to a very different kind of care, with a different role for nurses than the world of 2006. So how should we transform the system to make it viable, responsive and sustainable for this new century? What role will nursing and nurses play in this transformation? Nurses have an opportunity to be at the forefront of change, setting the agenda to create a health care system that truly serves and reflects the priorities of Canadians.

Project Background

Toward 2020: Visions for Nursing is a project led by the CNA and funded by Health Canada through the Office of Nursing Policy. The goals of the project were to:

- Better understand factors that have influenced and are presently influencing health human resources including nursing;
- Build and transfer knowledge that would strengthen human resources in health care:
- Describe global and national trends that will influence nursing and nursing human resources by 2020;
- Develop a preliminary forecast of health-service demands and nursing supply challenges in 2020;
- Talk with RN, LPN and RPN groups to assess the viability, sustainability and logistics of implementing a national licence and a common, national regulatory approach; and
- Propose scenarios for the nursing profession in 2020 that will maximize nursing's contribution to the health of Canadians.

Purpose of this document

Toward 2020: Visions for Nursing presents scenarios to stimulate dialogue and action on the future of nursing and health care, for nurses and other leaders in health care and policy across Canada. It combines a synthesis of interviews with Canadians within and beyond nursing with an extensive literature review and input from nursing colleagues. It presents ideas meant to stimulate discussion among LPNs, RPNs and RNs – the three regulated nursing groups in Canada – about relationships with each other, the public and other providers. It is meant to be thoughtfully provocative.

We developed the future scenarios through:

- Face-to-face and telephone interviews with 48 Canadian leaders (nursing and non-nursing);
- Face-to-face interviews with RN, LPN and RPN leaders;
- A review focusing on literature in the areas of futures thinking, demographics, labour force, health/illness and technology; and
- A consultation, held in Merrickville, Ontario, in October 2005, with 25 nursing leaders from across Canada.

Details of the methodology are included in Appendix C.

The Merrickville Consultation

Our meeting in Merrickville was the first face-to-face discussion of futures issues with representatives from all three regulated nursing groups; we wanted to test interest in futures work and get feedback on the first draft of this paper. Although nurse leaders had been interviewed as part of the development of the paper, it was still unclear how nurses from a variety of roles across the country would react individually, and as a group, to its ideas. We also asked for input and commentary from nurses working at the Canadian Nurses Association and briefed Office of Nursing Policy staff to update them on the paper and process prior to the meeting. All the comments on the paper and process were collated, and shared with the participants in Merrickville. More extensive feedback and clarification were solicited from the participants during the meeting, and there were exercises and group work to help fine-tune the paper and think through priorities.

We told participants their advice on the paper would be taken into consideration as the final draft was prepared, but not necessarily incorporated in the paper. We discussed whether the original draft should be submitted, unedited, to Health Canada, with a chapter of feedback from the consultation added. However, because everyone involved wanted a strong product, it was decided not to do that. This final version therefore incorporates much of the feedback and perspectives of the 25 nurses who participated in the Merrickville consultation.

Futures Studies

Just as the past and present can be studied, so too can the future. Sturtevant (2003) described futures forecasting very simply as "the study of the future for the purpose of making decisions and taking action today that will influence the creation of tomorrow." The task, she said, "acknowledges that human choice and intentions *can* shape the future" and that vision provides the strategic link between now and then.

It is difficult to engage in futures thinking without experiencing a variety of emotions. Sometimes, considering the possible futures will be exhilarating and energizing. Sometimes, futures thinking can be accompanied by feelings of despair and grief. We may grieve for actual or potential losses. Perhaps it is the loss of an idealized vision of nursing. Perhaps it is the loss of nursing as we have known it.

Rogers, 1997, p. 38

Why should organizations like the CNA or Health Canada's Office of Nursing Policy look at futures? The simplest answer is that not doing futures thinking won't stop the future from unfolding. And if nurses aren't building their future, someone else surely will. As Porter-O'Grady said pointedly to nurses, "If you're not constructing your future, your future is still being constructed" (1998, p. 56).

Several leaders interviewed for this project cautioned about the danger of trying to predict the future and warned that a quickly changing society and environment cannot be locked into immovable ideas. The Fraser Institute's executive director Michael Walker said in an interview nurses should not spend a lot of energy trying to predict the future but rather focus on putting in place

structures and processes (education, administration, licensing and so on) to let nursing adapt nimbly to whatever lies ahead. The World Futures Society offers a different perspective, saying "no one knows exactly what will happen in the future. But by considering what might happen, people can more rationally decide on the sort of future that would be most desirable and then work to achieve it" (2005, see http://www.wfs.org).

Nurses were seen by everyone we interviewed as highly trustworthy and essential to Canadians and the health care system. Many of them emphasized the need for the nursing profession to take control of its future, not react to it. We need, they said, to resolve questions such as how many nurses will be needed, what their roles will be, what health issues will be prevalent, what professional and personal relationships will look like and how all those things will fit together. Addressing these issues will be hard work for nurses – but informants stressed the critical importance of asking the hard questions to move debate and dialogue forward.

Layout of this Report

This study was organized, according to the futures frameworks consulted, to include:

- An historical perspective on factors that have contributed to today's reality;
- A summary of Canada and the world in 2006;
- An analysis of trends that are likely to influence nursing and the health system by 2020; and
- A series of scenarios about nursing in 2020.

The report flows from past to present to future, addressing in each section global trends and issues, Canadian trends and issues, the Canadian health system and nursing. It describes a preferred future for nursing in general through six scenarios, along with ideas about the health system. Actions needed to move toward that desired future are highlighted with each scenario.

CHAPTER TWO

Historical Perspectives

Fundamental to both futures work and real change is understanding what we're choosing or being forced to leave behind, and how we got to that point. As Sister Elizabeth Davis, chair of the Canadian Health Services Research Foundation, has said "When you row a Newfoundland dory to move forward, you actually sit looking backward, with your eyes on the safe harbour you are leaving behind" (2005).

Day and Shoemaker (2005) tell organizations to do "periphery scanning." To them, that means asking the right questions to learn from the past, examine the present, and envision new futures. They talk about the need to listen to *mavericks*, to customers, and to those seemingly "out there" on the boundaries. At the Merrickville consultation, futurist Marc Zwelling told participants our chore is to "look long" (look back at historical data and trends and extrapolate them forward), "look wide" (at what is going on all around us) and "look deep," (drilling down into the details of any given problem or issue). In other words, before we look to the future of nursing and health care, we must acknowledge the present is rooted in centuries of history, and understand that history. What are the most influential historical dynamics that brought nursing to where it finds itself in Canada in 2006? And what is happening today that needs to change, be left behind, or taken forward into the future?

Global and Canadian Social Trends

The 20th century was characterized by unprecedented progress and prosperity on one hand and terrible human atrocities on the other. That 100-year period saw communication grow from carrier-pigeon to video cell phone and travel go from horseback to space shuttle. But it also was 100 years of relentless regional and global conflict. As the century went by, the technology that was moving humanity forward also made billions of us eye-witnesses to some of the most disturbing events in history.

The First World War came early in the century and in less than five years took more than 10 million lives. The worst economic depression in history quickly followed, with the Second World War coming less than a decade later; another 50 million people died. This cascade of events left the world emotionally drained and economically exhausted by mid-century. Paradoxically, perhaps, the end of WW II brought hope and renewed economic prosperity that gave rise to the largest and most affluent generation of humans ever – the baby boomers, born between about 1947 and 1966.1

¹ Opinions vary on what years constitute the baby boom generation; some authorities place the timing earlier, for example 1943-1960.

The economies of most nations – especially those that became the core members of the Organization for Economic Cooperation and Development (OECD) and the *G7*² group of industrialized nations – generally grew through the 1960s. By the late 1970s, the technological age was well underway and, as industrial might began to spread to historically poorer nations, globalization was launched. As a worldwide community, we witnessed together the first step on the moon in 1969 and the end of apartheid in South Africa in 1990.

At the same time, other, more ominous, forces were brewing around the world. Frosty relationships between the East and West chilled into the Cold War, triggering the Cuban Missile Crisis in 1962. For the world, much of the latter half of the 20th century would be shaped by the relentless battle between the West and the East - between America and "communism." International spending was focused on military priorities such as nuclear defence, at the expense of social advances in areas such as health, education and human rights. There were many ongoing hostilities, including the Vietnam War and sectarian violence in Ireland and the Middle East. Genocides in Africa and Eastern Europe defined the last decade of the century. The era also saw growing economic, social, and technological gaps between the richest and poorest countries - and similarly growing gaps between the richest and poorest citizens in wealthier countries like Canada and the U.S.

The OECD

The OECD brings together 30 member countries sharing a commitment to democratic government and the market economy. With active relationships with some 70 other countries, non-governmental organizations and civil society, it has a global reach. Best known for its publications and its statistics, its work covers economic and social issues from macroeconomics, to trade, education, development and science and innovation. The OECD member nations are Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the U.K. and the U.S.

OECD, 2005

The new Millennium vaulted us all, suddenly and collectively, into a different and more threatening global village when the simmering rage of militant Islamists exploded before the world's eyes on September 11, 2001. Several of those interviewed for this study wondered how the beliefs of conservative Muslims will be reconciled with those of secular liberal democracies like Canada. They expressed concern about how Canadians will strike a balance between welcoming Muslims and embracing that diversity, while preserving the free expression and human rights achievements that some believe conflict with the tenets of Islam.

Geography protected Canadians from many 20th century wars, but the changing nature of conflict and proximity to the United States has focused attention on our role in global and regional security. Deciding not to back the Iraq war in 2003 increased tension between ourselves and the U.S. over defence, border security and interference in another country's governance. Trade disputes have exacerbated those tensions. The North American Free Trade Agreement of 1994 was supposed to free up trade and markets but chilly relations remain in the wake of disagreements over softwood lumber and fishing. Health issues – such as avian flu and mad-cow disease – have also had an impact on cross-border business, complicating a complex situation.

Canada's weak performance in the "society" category may surprise those who take pride in Canada's reputation as a fair, just and cohesive society. Our public record does not live up to our international brand.

Conference Board of Canada 2005, p. 59

² The G7 countries include Canada, France, Germany, Italy, Japan, the U.K. and the U.S. The group is sometimes called the "G7 plus one", or the G8 since the Russian Federation began to participate in some aspects of the economics meetings with the G7 after the fall of the U.S.S.R. in 1991.

As the sun was setting on the 20th century, countries around the world, including Canada, were told by the World Bank to reduce debt or be sanctioned. Beginning in 1994, Canada reduced its debt and deficit spending. However, that success came at the expense of support for programs such as infrastructure (leading to loss of rail transportation and poorer highway maintenance for example), the environment, social supports, public education and health care. Our social safety net is at best frayed at the edges; some say it is in tatters. Individual Canadians have felt the cost in cuts to provincial, territorial and municipal governments – and nowhere have the impacts played out in a more heated and public way than in the arena of the nation's health care system.

Global and Canadian Health Trends

Health profoundly influenced the human journey though the 20th century. Communicable diseases – tuberculosis, dysentery, and diphtheria – were the major causes of death in Canada in 1900, when the average life expectancy was less than 50 years (Mirolla, 2004, p. 2). (Today, deaths in Canada from those illnesses are nearly unheard of, thanks to the discovery of antibiotics in the mid-1940s, better sanitary facilities, and better living conditions.) The Spanish Flu killed 20-50 million people around the world in 1918 – 50,000 in Canada alone.

Agriculture, health, education, the private sector, the military, the police, the security apparatus, country after country sees its sectoral infrastructure being terminally damaged by the force of the [AIDS] pandemic, and indeed, there are numbers of political leaders who, when speaking to their populations, use words like "extinction" and "annihilation," words I have never heard from the mouths of political leaders anywhere before, as they struggle to convey what it is they are fighting against, within their societies.

Stephen Lewis, 2003

Despite generations of research, we have not overcome infectious disease, which is particularly devastating less-economically developed countries. Polio resurfaced in Africa in recent years and diseases of poverty, such as tuberculosis and malnutrition, which decreased during the 1970s and 1980s, reappeared in the 1990s. AIDS, the great plague of modern times, has devastated families and communities worldwide. In some African countries an entire generation of young adults has been virtually wiped out. Child-led families have become commonplace in many of those nations. New diseases continue to challenge us. In 2003, it was Sudden Acute Respiratory Syndrome (SARS); in 2006, scientists and public health experts are anxiously watching for a flu pandemic.

The impact of the environment on health was felt repeatedly across the latter half of the 20th century. Drought-related famine ravaged Ethiopia in 1984 and played out on prime time TV in the West; in Canada, *e-coli* in the drinking water in Walkerton, Ontario claimed six lives and sent over 2,000 people to hospital in May, 2000.

In the late 1970s the World Health Organization (WHO) and its member nations began to view health and the factors that affect it from a broader, holistic perspective that looked beyond biological factors to promote healthiness. This new vision was presented in 1978 through the *Alma Ata Declaration*, which set the goal of *Health for All* by 2000 (WHO, 1978). The means to achieve this ambitious goal was through primary health care.³ Canada was a leader in recognizing the

³ Primary Care deals mainly with the prevention and treatment of sickness – it is what Canadians think of as frontline care. It focuses on individuals and families, not the community. Primary Health Care is a comprehensive and egalitarian idea. It blends primary care with a broader, more holistic, community-focused approach to the causes of health problems, connecting health and health care to social, political, environmental and economic forces and

importance of factors other than biomedical and physical influences on health. In 1974, Canada's Department of Health and Welfare published *A New Perspective on the Health of Canadians*, commonly referred-to as the Lalonde Report, after the minister of Health and Welfare at the time, the Honourable Marc Lalonde. A valued reference worldwide, the Lalonde report began the health-promotion movement. In 1986, Canada hosted an international meeting that developed and adopted the *First International Charter on Health Promotion* – a seminal document that is still used (WHO, 1986). The Lalonde report, the WHO declaration and the Ottawa Charter for Health Promotion broadened our understanding of health and illness to include social, environmental, political and spiritual factors. During the 1990s it broadened again to include the social determinants that affect health. During this 30-year period Canada was considered to be a global leader in health promotion.

In the 1980s many countries created community-based health systems and addressed health conditions, but, in part due to economic pressures from international agencies, much of this progress stalled and even regressed during the 1990s.

Canada's Health care System

The evolution of Canada's health care system reflects the values and priorities of Canadians, and the advances, conflicts and politics that played out around the world and at home during the 20th century. When the world and Canada were prosperous, there was more money for social programs, including health care. Bad times tightened the purse strings for all social programs, so they were constrained or downsized. But the population kept growing and so did its relentless demands for all services, not just health care.

Canadian identity from early on has been structured around principles of equity, fairness and collective rights, responsibilities and privileges. Closing the CNA Biennial Meeting in St. John's in 2004, journalist Rex Murphy argued that the idea of Canadian-ness finds life in the word "neighbour," and the idea of looking out for one another, of not seeing any one of us fall down without the rest of us, even from a distance, stepping in to help. He made a compelling argument that nowhere are those values more clearly seen than in the way Canadians built and defended the public medicare system – designed to ensure no Canadian would face economic catastrophe because of a health crisis.

The first provincial hospital-insurance plan was launched in 1947 in Saskatchewan by Premier Tommy Douglas. Canadian families were starting to grow after the war and wanted public health insurance plans available to all, regardless of income or other variables. The first national plan was proposed in 1955 by Paul Martin Sr. In 1962, when Douglas proposed to extend provincial health insurance to include physician services, the doctors went on strike, and physician payment was left out of the plan, becoming a third-party billing system. That system is still largely in place today: most physicians are self-employed unlike the other major professional groups in the public health care system (e.g. nurses, pharmacists, speech pathologists, social workers), all of which are salaried.

striking a balance between promoting good health and health care. The principles of primary health care include affordable and equitable access to services based on need. It is sustainable, based on collaborations and builds skills in individuals and communities to develop their capacity for self-determination (adapted from: *National Primary Health Care Conference, 2004*).

We won't get a handle on health issues without getting a handle on social issues.

> John Anderson 2005

Government spending relative to GDP has been slashed by 35 per cent in 20 years.

Michael Rachlis 2005

Hospitals are nurse institutions.

Michael Walker 2005 The national, public medicare system we know today was created in 1966, in response to the Hall Commission of 1964-1965. In theory, between 1966 and 1977, the federal government "cost-shared 50 per cent of specific hospital and physician expenditures" (Department of Finance, 2000). However, the Department of Finance has argued that "because these expenditures represented only a portion of total provincial health spending, the federal share, at its peak, amounted to 41 per cent – it never was 50 per cent of total provincial health spending" (2000). Whatever the precise numbers are, arguments over funding escalated in 1977 after the federal government moved to block funding and continued after the Canada Health Act (see Madore, 2003) was introduced in 1984.

In 1996 the Canada Health and Social Transfer replaced block funding with transfer funds to the provinces and territories for health, post-secondary education and social assistance and services, which left the provinces free to decide how much they wanted to spend on health care. Later, the transfer was split with some 70 per cent of the funds going into health care. Social advocates have argued that if Canada spent 70 per cent of the total transfer on the social side instead, health would improve and health care would cost much less.

Health care has been the leading public policy issue in the minds of Canadians for the last decade. Decisions in the mid- and late-1990s to restructure health services across Canada, slash the number of hospital beds, and reduce the quantity and availability of community services exacerbated problems with access to care, cut jobs, changed the roles of thousands of health care providers and worsened working conditions across the system. The cuts were a response to the pressure to reduce debts and deficits. Health care and public education were not the only services cut, but their size and importance made them major targets for reduced funding. The pressures to constrain health care system costs in particular, continue today (OECD, 2006).

Nursing

Modern nursing is said to have begun in the Victorian age with the work of Florence Nightingale, but people have been providing nursing care for centuries (Gordon, 2005). Canada's nursing history dates to the mid-1600s, when Jeanne Mance set up, in her own home, the first hospital in the country, and is credited by many historians with becoming the first secular nurse in North America. She co-founded the city of Montreal and established the Hotel Dieu Hospital, staffed then by nuns, and still in operation, albeit a much different organization than the one she ran for nearly 20 years.

These two traditions, the Anglo-Protestant Nightingale model and the French-Catholic model, have become Canadian nursing today and they still influence contemporary practice, dynamics, power relationships and communication styles. Other nursing patterns, both good and bad, reflect nursing's own history, professional dynamics and pressures from society. Some problems of nursing – including lack of work-life balance, low morale and other issues – can be traced to recent policy decisions, but others are much more deeply embedded in the dynamics of the discipline itself. We need to understand those dynamics and how they will influence the future.

The roots of nursing in Canada: An overview

In the early 20th century nursing was mainly private duty, where nurses took care of patients at home, or through public health work. That historical tie to home care and community work gave rise to strong nursing-focused and nurse-run organizations like the Victorian Order of Nurses. Whether in hospitals or in the streets, the history of nursing was shaped by nurses committed to working for social justice. Falk-Rafael says "Nurses, who practice at the intersection of public policy and personal lives, are therefore ideally situated and morally obligated to include political advocacy and efforts to influence health public policy in their practice" (2005, p. 212). They have always done so. Nightingale introduced political action and advocacy to nursing, focusing on the health results of social and economic inequities in much of her thinking and action. American nurse activist Lillian Wald established the Henry Street Settlement in New York in 1883 to work with poor communities to improve their social conditions. "Wald devoted herself to the community full-time, and within a decade, the Settlement included a team of twenty nurses and was offering an astonishing array of innovative and effective social, recreational and educational services" (Henry Street Settlement, 2004). Margaret Sanger led a campaign to legalize birth control and in many ways started the movement for women's liberation while working as a nurse and midwife in the poorest neighbourhoods of New York in the early 1900s.

Still, it is in institutional practice – in acute-care hospitals, rehabilitation centres, long-term care and nursing homes – that the growth of roles and specialties in nursing exploded. Because large institutions provide 24-hour services, there was a need for managers, other leaders, teachers, consultants and support services of all types. Meteoric advances in health sciences and technology drove the demand for doctors, nurses and other health professionals who were able to provide specialized care based in the growing number of clinical categories, from renal care to intensive care to maternal child care. By the end of the century, specialty practices were being overtaken by the need for care in sub-sub-disease and treatment categories such as pediatric nephrology, adult critical burn care and high-risk birth.

By the 1970s, the increasingly specialized nature of nursing created a discipline practiced in four broad domains – clinical, education, research and administration. A very small cadre of nurses also worked in formal policy roles, but only in the last decade has that fifth pillar of nursing practice expanded significantly. As nurses moved into the four domains, they created an extensive network of professional, union and regulatory associations based on their regulated categories, work areas (such as management or education), service setting (operating rooms or community health) disease categories (such as spinal cord injury or diabetes) and other interests (e.g. nursing history and cultural affiliation).

Regulated nursing in Canada: RNs, LPNs and RPNs

During the 20th century, three different groups were established as regulated "nurses" in Canada – RNs, RPNs and LPNs. All three categories use the word nurse to describe themselves and some health providers who are not among the regulated groups also call themselves, or are called by the public, "nurse" or some variation on the term. The three regulated groups make up about a third of all health professionals. Other care providers, generally called "nurse assisting occupations" (including orderlies, nurse's aides, personal support workers, and service associates), provide a significant amount

of care that often falls under the umbrella of nursing services, but they are not regulated professions in Canada.

A helpful overview of the evolution of the three regulated nursing groups in Canada is available in a report on education prepared for the National Occupational/Sector Study of Nursing by Pringle, Green and Johnson (2004), so we will not go into the histories of the three groups in detail here.

In Canada, a nurse who has graduated from an approved nursing program holds a degree, for example a bachelor of science in psychiatric nursing, or a diploma, for example a diploma in practical nursing. The graduate will always have the degree or diploma as granted by the school of nursing, however in Canada the academic credentials alone do not allow the graduate to practice or to use titles such as "RN." To do so, the graduate must first apply for licensing or registration from the regulatory body in the province or territory where he or she will practice. After writing and passing a second set of examinations (administered by the regulator, not by the school of nursing), the licence or registration normally is granted. Then the nurse may use the title "RN" and practice as a nurse in that province or territory. Nurses who move from one jurisdiction to another must apply to the new jurisdiction to transfer the registration to practice; it is not granted automatically.

RNs. Registered nurses make up Canada's largest single group of health professionals and practice in all clinical areas in every province and territory. RNs have the broadest scope of practice of the three regulated groups, and work in a variety of generalist, specialist and advanced-practice roles. Registration of nurses, and hence the use of the "RN" designation evolved during the 1940s. Before that nursing-school graduates were called graduate or trained nurses, or simply nurses.

Much of the push for standards of practice, ethical standards and other elements that ground nursing practice today came from the CNA and its members, the provincial and territorial regulators and professional associations. The CNA, originally the Canadian National Association of Trained Nurses, was established in Ottawa in 1908 by 16 nursing organizations. The only national nursing organization in the country, it grew rapidly. The name was changed to CNA in 1924, by which time nine provincial nursing organizations belonged.

LPNs. Variously called LPNs, registered practical nurses and registered nursing assistants, the role was established in Canada as early as the First World War because of shortages of RNs. Originally intended to be in place only for a few years, the effectiveness of the role quickly became apparent and RNs working with practical nurses (whether licensed or not) became a staffing model that persists in many nations today. Some countries have RNs working in fairly autonomous roles, and LPNs (or their equivalent) working under the direction of RNs. Other countries now have only one regulated group, the equivalent of the RN, supported by non-regulated caregivers and other workers.

By 1970, most Canadian provinces/territories required practical nurses to be regulated (Pringle, Green & Johnson, 2004). As the roles of RNs and RPNs have advanced, so have the education and roles of LPNs, evolving over the last 20 years to the point that its original "assistant" status is mostly disappearing in favour of a more autonomous practice. LPNs can work in all jurisdictions in Canada. The Canadian Practical Nurses Association is a national, professional association for practical nurses that includes five provinces as members. The Canadian Council for Practical Nurse Regulators includes the ten provinces as its members and its primary function is to support the regulation and related activities of LPNs.

RPNs. Only Canada's four Western provinces have RPNs, a role that grew out of the care of mentally ill, often violent, persons who were essentially imprisoned in asylums before there was hospital care for mental illness. There were some 1,500 patients at the original Brandon Asylum as early as 1914, with only one nurse to provide and organize care (Pringle, Green and Johnson, 2004). The asylum decided to train what were then called "mental nurses," to distinguish them from the generalist nurses being educated in general hospitals. The practice of RPNs is focused on mental and developmental health and illness in a variety of institutional and community settings. In the rest of Canada, the nursing care for mental and developmental health and illness that is provided by RPNs in those western provinces is provided by RNs. There also are RNs working alongside RPNs, providing these nursing services in the four Western provinces.

The first Psychiatric Nurses Association was formed in B.C. in 1947 and became self-governing in 1974, the year the RPN Association of B.C. was born. The other three Western provinces followed, and the four provincial colleges of nursing form a coalition called the Registered Psychiatric Nurses of Canada.

Advanced nursing practice

A number of "advanced practice" roles have evolved from basic nursing over the past 50 years. Use of the term varies widely in the literature; CNA uses the phrase "advanced nursing practice" to describe:

...an advanced level of nursing practice that maximizes the use of in-depth nursing knowledge and skill in meeting the health needs of clients (individuals, families, groups, populations or entire communities)... the application of advanced nursing knowledge determines whether nursing practice is advanced, not the addition of functions from other professions.

CNA, 2002

See: http://cna-aiic.ca/CNA/practice/advanced/default_e.aspx

Advanced practice is sometimes meant to include all nurses working in "extended" roles of any type, and depending on the context might be meant to include nurse clinicians, nurse anesthetists, or even nurses working as physician's assistants. But in

Canada, advanced nursing practice usually is meant to refer to clinical nurse specialists and nurse practitioners (NPs). Clinical nurse specialists are RNs with master's or doctoral degrees that specialize in an area of nursing practice either by area, such as emergency, population, such as pediatrics, or disease, such as breast cancer. They can work in a wide variety of settings. Clinical nurse specialists may provide direct care, especially in complex cases and expert consultation to nurses and other care providers, and implement changes to improve health care delivery (National Association of Clinical Nurse Specialists, 2005). The clinical nurse specialist "integrates nursing practice, which focuses on assisting patients in the prevention or resolution of illness, with medical diagnosis and treatment of disease, injury and disability" (National Association of Clinical Nurse Specialists, 2005). There are about 2,750 clinical nurse specialists in Canada.

Why, if there is support for role expansion, does this not happen? Part of the puzzle may lie in the ambiguous images the public and other professions hold about nursing. This ambiguity can be traced back to the beginning of professional nursing and I believe it is something which continues to thwart our ability to deliver on a number of broader health policy issues.

Kitson, 1996

An NP is an RN with advanced education (e.g. master's degree) and clinical training, who can diagnose and treat health problems, including by prescribing drugs. The NP role has come and gone several times in Canada, beginning with a program at McMaster University in Hamilton during the 1970s. It takes special legislation to create the NP in each jurisdiction but the concept is spreading and there are 900 licensed NPs across the country. Many NPs work in clinics and community health centres where they provide direct, primary care to patients and families. There also are NPs working in specialized roles such as in critical-care settings.

How advanced practitioners have been used and integrated with nursing in general bears careful attention as the push continues to graduate and employ more NPs. Whether Canada will need more NPs in 2020, or whether for example, all RNs will need some of the advanced practice skills of the NP of 2006 has not been discussed. A decade ago, Kitson, who was then executive director of the Royal College of Nurses in the U.K., argued "in most of the world most nurses are not trained at the graduate level nor do they have advanced-practice skills. The old schism between graduate, educated nurses and 'vocational' nurses is not going to be put to rest until nursing itself tackles the problem" (1996). And Kitson cautioned further that "the intelligentsia of the profession does not seem to have fully grasped the extent of this problem."

Specialists or generalists?

Canadian RNs and LPNs graduate from nursing schools as "generalists." Only RPNs graduate with a specialty from their undergraduate programs. But the steady shift toward more specialized practices in nursing could change that. The generalist model, combining theoretical teaching and hands-on clinical training, evolved before the explosion of narrow clinical specialties and sub-specialties in health care. For RNs and LPNs, any "specialty" training still comes after graduation in the form of graduate education, continuing education, task-focused certificates or specialty certification.

The CNA has developed the Specialty Competency Certification Program to create national standards of professional competence for RNs who demonstrate broad knowledge within a clinical specialty area. The program evolved following a June 1980 resolution directed to the CNA at its biennial meeting. Interest in specialization and certification was growing among nurses at the time, many of whom were seeking credentials in the U.S. The CNA certification program eventually was approved in 1986, and Canadian neuroscience nurses became, in 1991, the first group of nurses to be certified. The program has grown steadily since 1991, and the three immediate past presidents of the Canadian Practical Nurses Association – Verna Holgate, Pat Fredrickson, and Gabrielle Bridle – have all joined current president, Sue O'Hare in expressing a desire for LPNs to be able to write certification exams as well.

Nursing education

As health care evolved through the 20th century, so did nursing education. Originally taught by physicians and senior nurses in an apprenticeship model tailored to the needs of the institution where the training took place, nursing education gradually moved to a more generic hospital training model; eventually

university programs of nursing developed, at first parallel to inhouse training, then integrated with it. Pringle and colleagues noted "the need for the service students provided to the hospital dominated the agenda" of the hospital schools of nursing, and that the boards of directors in turn dominated the schools and their funding. Most hospitals of any size housed schools of nursing – leading to 70 schools across Canada by 1909 (Mussallem, 1965).

University nursing education in Canada and the British Empire began in 1919 at the University of British Columbia, where a School of Nursing was established within the Faculty of Applied Science. Even so, the vast bulk of nurse training remained in hospitals until the 1970s. Early university programs were largely theoretical in focus, and left hands-on clinical training to affiliated hospitals. Students would take a year of courses at the university, then a year of hospital training, and so on, for five years.

In 1954, Jean Goodwill became the first Aboriginal person to complete nurses' training in Saskatchewan. She spent much of her life "helping to bring positive change for northern people." In 1974, Jean founded the Registered Nurses of Canadian Indian Ancestry, now called the Aboriginal Nurses Association of Canada, and later served as president. She believed that health care was best served "by combining Aboriginal traditions with modern nursing techniques, but only when Aboriginal people themselves were ready and involved in the process."

McBain cited in McKay 2005, p. 116

The Canadian Red Cross Society funded one-year university certificate programs in public health for graduate nurses at Dalhousie, McGill, Toronto, Western Ontario, Alberta and UBC in 1920. At the University of Toronto the program focused on community health, "both in prevention and in the delivery of nursing services to people with all types of illnesses who required care at home. These nurses required preparation beyond what was available through hospital-based schools of nursing" (Faculty of Nursing University of Toronto 2003). In 1933 the Toronto faculty became the first in Canada "to be completely under the aegis of an educational institution, where education took precedence over service" (Faculty of Nursing, University of Toronto, 2003). It was the University of Toronto that developed the integrated theory/practice education model on which most nursing education in Canada is based today.

By the early 1970s, non-university RN education moved from hospitals to community colleges, but as the need for more and better education increased, so did the length and academic rigour of nursing programs. By the 1990s, nurses were increasingly expected to hold baccalaureate degrees in nursing to enter the profession. Diploma programs still exist in some places, but soon all diploma nursing programs in the country will fold into four-year university baccalaureate programs.

The Registered Psychiatric Nurses of Canada supports baccalaureate education as the entry-to-practice requirement for RPNs. RPN education shares some features with the evolution of RN education, but also has roots unique to psychiatric nursing in the West. Since the 1880s in Britain, male and female attendants had been able to access training by physicians and be awarded a certificate in "Nursing the Insane." Pringle and colleagues assert that the British model may have influenced the development of psychiatric nursing in the West because many of the mental health workers of the time had come from the U.K. (2004).

The first graduates of a school for psychiatric nursing in Canada were from Brandon MB in 1921. That program had been established in 1920 after years of discussion and lobbying. In the general model of RN education since 1913, psychiatric nursing was a part of the curriculum in all general schools of nursing – it still is. The Brandon model was followed by schools established in the other western provinces by the early 1930s. Programs for RPNs are still confined to those jurisdictions, albeit at the Diploma and Baccalaureate level, mirroring the development of RN education.

Education for LPNs started similarly in an apprenticeship model, but was taught in high schools, vocational schools and hospitals. Today, LPN education models vary across Canada, but the push in LPN training clearly is away from the "nursing assistant" or "nurse's aide" of the 1950s-1970s to community college programs, closer to two years in length, which offer a Diploma in Practical Nursing and prepare a more independent kind of practitioner.

"The Nursing Research Fund was created to answer several concerns raised by nursing organizations and others representing nursing interests. The Canadian Nurses Association and other major nursing voices lobbied the federal government extensively for funding to develop nursing researchers and to support research on nursing recruitment, retention, management and the issues emerging from health-system restructuring.

The foundation provides an average of \$2.5 million for nursing research funding each year. Combined with cosponsor contributions, these funds are an extra source of money for the nursing research projects that are submitted to the foundation's ongoing research competitions and other initiatives (like the CHSRF/CIHR Chair Awards).

The fund supports the foundation's mandate by assisting the production of research with health-system decision makers in mind, not clinicians, thereby excluding nursing care research (although some of the funds are used to form partnerships with other organizations which fund nursing care research.) Clinical nursing research is funded through the *Nursing Care Partnership Fund*, and administered by the Canadian Nurses Foundation. The foundation contributes \$500,000 annually to this fund.

Training and personnel support are also major activities supported by the fund through our CHSRF/CIHR Chair Awards, Regional Training Centres, Career Reorientation Awards, Postdoctoral Awards, Partnerships and Joint Training Awards."

CIHR/CHSRF, 2005 See: www.chsrf.ca

Nursing research

Because she was the first nurse and hospital administrator known to have kept careful statistical records and to use her findings to argue for policy changes, Florence Nightingale's name comes into discussions of research as well as care. Her thoughtful and scientific analyses of patterns of diseases and deaths vaulted health care, hygiene and certainly hospital care from the dark ages into the 20th century.

Research and evaluation have always been important aspects of nursing practice. But nursing research in Canada did not evolve with the same profile or speed as clinical practice in Canada. Indeed the two have in some ways always been quite separate even if the subject of the research was a clinical one. Research for many years was seen as an academic activity focused on universities and their graduate programs, and led by people with doctoral degrees, more than it was an integral part of the practice of all nurses. Some of that sense of separation still exists, but clearly research is a fundamental concept that now underpins all undergraduate RN and RPN degree programs, and it is an essential component of all modern clinical environments.

The first master's program (master of science in nursing, University of Western Ontario) was established in 1959, some 40 years after the first university nursing programs were started. Despite the explosion of knowledge in medical science during the 1960s and later, it would be another thirty years before doctoral nursing education was established in Canada. During

that time, a small cadre of nurses held doctoral degrees from other disciplines, or from doctoral programs in nursing outside Canada. Much more commonly, nurse leaders in Canada through the 20th century, including many deans, held master's

degrees as their highest level of education. It must be remembered that as recently as the 1980s, even baccalaureate degrees held by nurses were comparatively rare.

Nursing research in Canada truly began to come of age with creation of the first doctoral program, established at the University of Alberta in 1991. There are now some 350 students studying in 13 nursing PhD programs across the country. Nurses, of course, also study in many doctoral programs other than nursing.

Support for nursing research has increased significantly over the past five years. The Canadian Institutes for Health Research (CIHR) is the country's "premier health research funding agency" and funds more than 8,500 researchers (see http://www.cihr.ca). The Canadian Health Services Research Foundation (CHSRF) "funds management and policy research in health services and nursing" and supports a wide range of activities related to synthesis, dissemination and use of research (see http://www.chsrf.ca). Together they support five 10-year nursing chair awards for "mid-career leaders in applied health services and nursing research to train graduate students, act as mentors for new researchers, build national networks and conduct research" (see http://www.chsrf.ca). In addition, CHSRF administers the Nursing Research Fund to strengthen nursing services research in the country and the Nursing Care Partnership Fund provides funds for clinical nursing research.

Nursing administration

Nursing administration has been through much change and upheaval over the past century. As hospitals grew, the need for nurses as administrative clinical leaders and ultimately corporate leaders evolved. In the early days nurses controlled how care was organized and head nurses especially wielded significant power over patient care, nurses and even physicians, depending on the setting.

The strongly hierarchal model of clinical nursing and its administration reflected its military and religious roots. The model was restrictive but it maintained a degree of power and order that benefited nursing. Moving from head nurses to generic management of large multi-professional teams during the 1990s coincided with the loss of some 5,500 nurse managers across the country. It also meant an end to the best features of the old head nurse role: the coaching, mentoring, teaching and support that many head nurses had offered to nurses, families and organizations. Directors of nursing became program managers or in some cases professional nurse leaders who were not part of the senior decision-making team.

These changes, mainly fiscally driven, conflicted directly with most of the research findings over 20 years on how to develop and sustain healthy nursing workforces and optimal patient outcomes. Nurses place great importance on their relationship with their immediate supervisor. Changing that relationship can reduce job satisfaction, drive down commitment to the organization, increase turnover and decrease productivity. Beyond that, O'Brien-Pallas warns that "organizational characteristics such as structural arrangements, degree of formalization and centralization, environmental complexity, and culture influence the way work gets done and impact on outcomes" (2005). She and her team found multiple studies to show that management decisions on allocating resources can have a negative impact on patient outcomes and satisfaction with their care, as well as on nurses' job satisfaction, productivity levels, and even the number of home visits clients receive in the community.

Management, organization, and delivery of health services are key variables influencing the delivery of care across the health care continuum. "Management and organizational characteristics influence the amount and quality of care provided, provider health and satisfaction, and costs associated with the delivery of services."

O'Brien-Pallas, 2005

Interestingly, the leadership demonstrated by the best of the traditional head nurses is echoed in the presence of a powerful executive nurse in the most successful "magnet hospital" facilities – those judged to be excellent corporate and professional practice settings for nurses. (Magnet designation is a voluntary process for U.S. hospitals, but some Canadian organizations have explored the idea of a similar process in Canada. For further information on the *Magnet Recognition Program*, readers may wish to refer to the *American Nurses Credentialling Center* at http://nursingworld.org/ancc).

Policy

Canadian nurses have been leaders in policy work in professional associations, unions, academic settings and governments throughout the 20th century. But labeling their contributions as policy work and identifying roles as such are relatively recent developments in nursing.

Table 1. Canada's Federal Nurse Leaders, 1953-2006

Dates	Name	Title
1953-1967	Dorothy Percy	Chief Nursing Consultant
1968-1972	Dr. Verna Huffman Splane	Principal Nursing Officer
1972-1973	Rose Imai	Acting Principal Nursing Officer
1973-1977	Dr. Hugette Labelle	Principal Nursing Officer
1977-1994	Dr. M. Josephine Flaherty	Principal Nursing Officer
1999-2004	Dr. Judith Shamian	Executive Director Office of Nursing Policy
2004-present	Sandra MacDonald-Rencz	Executive Director Office of Nursing Policy

For most of the past 50 years, there has been a senior or chief nurse in Canada's federal government (see Table 1). Many provincial governments employ nurses in a similar position. Nurses in these senior policy positions bring the perspectives of nurses to health-policy decisions, and may in turn present government perspectives to nurses and patients. They can play a vital role in helping politicians and bureaucrats to think through scenarios and outcomes that could result from policy decisions. They may bring a view to the policy table specifically about nurses and nursing systems, or they may participate as health system experts in discussions of much broader public policy issues. Nurses across the country also participate in workplace committees, community and regional boards, provincial and national associations and task forces to contribute to healthy public policy.

Nurses will have to decide in the next decade if the existing hierarchies and structures – in employment settings, schools, professional and union bodies, and governments – are the right way for them to be leaders in creation of the health system for 2020 and beyond. A new system may demand new players, new alliances and new structures just to imagine it; nurses can take the reins and start that process now.

Professional image, gender, race and power in nursing

As with any cultural group, nursing has its own norms, behaviour and culture, rooted in years of tradition and practice and shaped by external societal factors. Florence Nightingale and Jeanne Mance for example, embodied the activist, moral side of nursing that is concerned with social justice, taking positions and using evidence to speak up for health and for those who, for whatever reason, cannot give sufficient voice to their own needs and concerns.

The sense of adventure, independence, courage and humanitarianism led Canadian public health nurses to serve in Canada's poorest urban districts and most isolated rural communities. These qualities also placed them at the forefront of efforts to make health care accessible in Canada.

Canadians know some of that history, however, during the course of this study, concerns were revealed in both the literature and interviews about another view of nursing, which sees the profession as risk averse, concerned with image and titles and too inward-focused. How can these seemingly contradictory images and competing forces be explained?

McKay, 2005, p.110

Nursing's equivocal image arises in part from its educational heritage. The apprenticeship, rather than academic, approach immediately gave nursing the appearance of being inferior to medicine. In the early 20th century, sociologist Eliot Freidson questioned whether nursing was a profession because of its lack of an independent body of knowledge (Gordon, 2005). For a long time, nursing resisted becoming a university discipline and even today, when health care is becoming steadily more complex and many nurses work with high levels of clinical autonomy, some people, both within and outside of nursing, still don't think RNs and RPNs should be university-educated. Others believe educational requirements should be lowered to graduate nurses more quickly in times of shortages.

Another factor leading to conflicting images of nurses as leaders but also as subservient is nursing's status as "women's work," akin to mothering. Through much of the last century, nursing, teaching and secretarial work really were the only "respectable" options open to most women. As well being seen as women's work, nursing was framed simply as caring, or "being nice." Famously the motto of the first nursing school in Canada was "I see and am silent." That kind of thinking has contributed to a troubling legacy of nurses feeling they can't speak up, believing their opinions will not be listened to or acted on. If they come up against those kinds of walls often enough, people can indeed be conditioned not to respond.

With regard to men in nursing, Nightingale believed there was no place for them except where physical strength might be required. Later decisions, like that of the American military to exclude males from nursing services, combined with nursing's overall image as women's work to devalue the profession and effectively killed any interest most men might have had in it. Nursing workforces in Canada and the U.S. are still dominated by women (in the range of 95 percent, with only slight growth in the number of men over the past 20 years).

Add one final factor, the cost of education, which meant nursing was accessible mainly to middle and upper-class women. And for most of the last century that implied Caucasian. The result, Curran observed, was that nursing became the territory of "nice white women from the suburbs" (1992). The fact is Blacks and other people of colour were refused entry to schools of nursing until mid-century, although many visible minority women and men provided wide ranging "non professional" support services in hospitals and other care settings. Where Black nurses, for example, were admitted to schools of nursing, finding work after graduation was difficult for many. As McPherson notes, even attending the graduation ceremony itself could be prohibited if the hotel involved would not serve Blacks or other minorities (2005).

None of this is ancient history for nursing or for Canada – it was just 50 years ago. Canada may have a more racially tolerant history than many other nations, but it was not without racist laws and practices. Nursing, like society, is still playing catchup to correct the inequities that underpin the profession as it exists today. By the end of the 20th century, nurses providing direct clinical services in institutions, homes and communities seemed to be very diverse in their ethnic and cultural make-up, especially in large urban areas. But the administrators, educators and other leaders of nurses do not look the same. Even now, Aboriginal people and other visible minorities are nearly absent from the power structures and decision making structures of Canadian nursing. In that "glass ceiling" pattern, nursing mirrors much of the society around it.

What are the consequences of all that history for nurses today? Kirby, who is an Australian judge and not a nurse, framed the problem this way in 2002:

The formidable Miss Nightingale imposed on her nurses a regime similar to that of nuns in holy orders. They had to be devout, chaste, good women. Thus was born the "tyranny of niceness" that made nursing, like motherhood, a universal source of admiration. But like motherhood, it did not always involve a lot of economic support. With chastity came poverty and obedience. Nightingale's legacy lives on in the form of economic disadvantage and often poor conditions for nurses throughout the world.

Reflecting the conflict inherent in that line of thinking, a nurse spoke out during the CNA convention in Toronto in June 2002 to say "the public may trust nurses, but they don't respect us. There is an important difference there."

Kirby (2002) noted that "in the journey of nurses from domestic servants and ministering angels to modern hospitals, it has been hard for them to throw off the lingering attributes of subordination." The public may subconsciously still see nurses in that way, or hold those expectations, making it doubly difficult to shed those images. Even the language used to describe nurses is very different from that used for physicians, pharmacists and other providers. Some of the words clearly are meant to be complimentary, but they can play a role in pushing nurses into a position that does not give credence to their scientific knowledge and expertise.

The union movement in nursing

Despite its tradition of caring and subservience, nursing is not without some deep divisions within its ranks. "Division, discontent and frustration described nursing in Canada throughout the seventies and eighties," according to Mansell (2004, p. 192). She describes divisions between unions and professional associations, and between baccalaureate RNs and diploma RNs. These long-standing tensions are felt in many aspects of nursing life.

It was dissatisfaction with working conditions that fuelled the union movement in nursing – and still does. Mansell says while nurse leaders over the past generation busied themselves with the professionalization of nursing, including advanced education, "regular nurses directed their attention to conditions of work" (2004, p. 192). Those divergent agendas, she suggests, are at the heart of divisions within nursing, and help explain the stronger allegiance of many nurses to their unions than to their professional associations.

Frustration mounted when nurses felt their voices were not heard (or responded to) in workplaces, when they felt they were not accorded respect, or recognized as professionals. Unions gave a voice and a sense of unity to some, although many wondered whether professional status was compatible with being unionized. Historically, the CNA was strongly opposed to nurses joining unions, arguing outright that professional nursing was incompatible with unionized status. At one point, the CNA even approved a resolution opposing any nurse who went on strike and that policy was not withdrawn until 1972 (Richardson, 2006).

But increasingly professionals, such as teachers and public servants, were talking about collective bargaining and joining unions. There were strikes among public sector workers in Quebec, doctors in Saskatchewan, and postal workers nationally in 1965. The Registered Nurses Association of British Columbia (RNABC) agreed in 1959 to province-wide collective bargaining and by 1967 was the certified bargaining agent for the majority of nurses in that province. Also in 1967, the federal government extended collective bargaining rights to its workers, including the right to strike. RNABC's success in doubling nurses' salaries and improving other benefits, and failure of employers to honour voluntary collective bargaining, helped to tumble any significant remaining resistance among nurses to the idea of joining unions by the late 1960s (Richardson 2005).

By the mid 1970s, nearly all public-sector workers in the country belonged to unions. Important to nurses, unions became key forces in the push for the right of women to equal pay for work of equal value. The Canadian Union of Public Employees, the country's largest union by the mid-1980s, was a force for nursing not because it represented some nurses, but because its membership was 50 per cent female.

There were 32 nurses' strikes by the early 1980s (Mansell 2004) and how they affected the public's image of nursing remains uncertain. The choice of nurses to look out for themselves was new, in many ways, to the public, and very difficult for most nurses. Some Canadians cheered on nurses for defending health care but there were voices that were not supportive of nurses on picket lines.

"Strikes are always the absolute last resort" according to Linda Silas, current president of the Canadian Federation of Nurses Unions. "The counter-effect," she noted during her interview for this study, "is that a strike can bring light or understanding to harsh working conditions or other issues" that have not been resolved by other means. Nurses have undertaken job actions to successfully resolve many basic issues related to the

The nurses' union is becoming stronger but the professional voice is not.

Richard and Verna Splane,

terms and conditions of work (pay, schedules and so on). However, pay increases do not satisfy for long when other conditions of work, such as lack of respect or relentlessly high workloads, are unacceptable. Respect and working conditions can be difficult to bundle into a package to negotiate with employers; consequently nurses have gone on strike for changes in pay or other benefits that are familiar territory in union-employer negotiations. So, while nurses have indeed gained important wage and benefit improvements over the past 25 years, many core concerns about professional practice and working conditions remain unresolved.

Some professional associations did not support unions around the strike issue; in turn, some unions did not support professional agendas, such as the baccalaureate degree as entry to practice being pushed by the professional associations. The separation of bargaining from professional associations took place during the mid-1970s. Ultimately, six of the provincial unions joined forces in 1981 to create what would become the Canadian Federation of Nurses Unions, the largest nursing organization in the country, representing more than 133,000 RNs, LPNs, and RPNs. It is one of the largest member organizations of the Canadian Labour Congress. More than 75 per cent of Canada's RNs are unionized (Richardson, 2006).

The last five years

In 2000, after several years of mounting worry about shortages, absenteeism, rising workload and the impact of five years of restructuring, the new Millennium brought a renewed sense of hope and excitement in nursing as it was perceived that the voices of Canada's nurses were being heard. The federal government's principal nursing advisor role had been eliminated in 1995, leaving no formal nursing voice at pan-Canadian government policy tables during all the restructuring and downsizing of the system. After significant pressure from the CNA and other groups, the creation of the Office of Nursing Policy was announced by the federal Minister of Health in 1998. The office opened in 1999.

The decision to establish the Office of Nursing Policy was loudly cheered, then followed by the appointments of provincial chief nurses in several jurisdictions. Similarly, the federal/provincial/territorial *Nursing Strategy for Canada* (Advisory Committee on Health Human Resources, 2000) was reflected in similar provincial and territorial nursing strategies designed to strengthen the country's nursing workforce for the coming century. There was a sense then of a growing cohesion and collaboration among governments and nursing organizations.

By 2001, the level of interest and activity in human resources for all of health but particularly nursing was growing to an unprecedented level. The National Occupational/ Sector Study of Nursing (O'Brien-Pallas et al., 2005a) was unfolding at the same time that the Nursing Strategy for Canada gave rise to the Canadian Nursing Advisory Committee (2002). In addition, a major policy synthesis on nursing, titled Commitment and Care was published and two pan-Canadian health system reviews began, one led by Senator Michael Kirby (Standing Senate Committee on Social Affairs Science and Technology, 2002) and the other by former Saskatchewan premier Roy Romanow (2002). Commissions to review the health systems of Quebec (Quebec, 2001, chaired by Clair), Saskatchewan (Saskatchewan Commission on Medicare, 2001, chaired by Fyke) and Alberta (Alberta Government, 2001, chaired by Mazankowski) were completed and their reports tabled.

Nursing is the lynchpin in the delivery of health care.

> Jean Yan 2005

At all government levels, significant reform of primary health care had begun by 2002. More than \$50 billion in additional federal funding was allocated to health-sector reform through the Health Accords of 2003 and 2004. The latter accord alone committed more than \$40 billion in new funding over ten years. That staggering amount could pay the salaries and benefits of at least 40,000 RNs every year for 10 years.

By 2004, the CNA collaborating with various partners attracted more than \$20 million in funding for projects such as development of a national nursing portal, the Canadian Nurse Practitioner Initiative, and this project, Toward 2020: Strengthening Canada's Health Human Resources. Significant funding was also secured from the Canadian International Development Agency for international work led by the CNA.

The first phase of the nursing sector study was completed in 2005, providing in-depth evidence about the profession, with recommendations to strengthen the workforce for the future (O'Brien-Pallas et al., 2005a). Similar sector studies have been completed or are underway in several other areas of health, including medicine, oral health, and home care.

Taken together, just the handful of studies and commissions mentioned here, all reported since 2000, have generated hundreds of recommendations (many based in sound evidence and national consultations) that could be used as the basis of redesigning every aspect of working conditions, recruitment efforts, and the health system itself.

CHAPTER THREE

The World in 2006

Canada and the World in 2006

The enormous excitement of advancing technology was accompanied throughout 2005 by progress in human rights, philanthropy and social justice. As war continued to rage in Iraq, the only Pope known to a global generation died in Rome, the long-grounded space shuttle program was back in flight in the U.S., the economies of China and India were booming, and Canada welcomed a Black, female, francophone as Governor General.

By January 2006, global population was 6.5 billion.

In 2006, more than one half of all humans live in

- China
- India
- USA
- Indonesia
- Brazil
- Pakistan
- Russia

More than a third of us live in China and India alone (2.4 billion persons).

In stark contrast to the conservative political atmosphere permeating American public policy, Canada led the world in 2005 in its bold move to legalize marriage regardless of sexual orientation. Doing so thrust Canada onto the world stage on a human-rights issue that exploded centuries of custom and legislation, and forced the discussion of rights in countries around the globe. During 2005, Canada also hosted the United Nations conference on climate change, which ended with the adoption of more than 40 resolutions to implement and strengthen the Kyoto protocol, moving along global efforts to fight climate change.

Where it was perceived that governments would not, or could not act, citizens continued to take action to effect change. For example, in the U.S., Bill Gates has a foundation endowed with about US\$29 billion, which has awarded more than US\$9 billion in grants since inception. The foundation donated well in excess of US\$100 million during 2005 to combat AIDS, tuberculosis, malaria and other global-level health problems and to improve reproductive options and infant health.

In a twist on the fundraising "aid" concert phenomenon, Bob Geldof organized *Live 8* in 2005 to coincide with the G8 meeting and said to the world, "it is your voice we are after, not your money" (2005, see

www.live8live.com). The concert events in eight nations were described as "a day of action across the world which kick-starts the Long Walk to Justice that calls on the leaders of the world's richest countries... to [endorse] complete debt cancellation, more and better aid and trade justice for the world's poorest people."

The Make Poverty History campaign went global in 2005, driven by citizens and organizations, not their governments. The organizers describe the movement as a "unique alliance of charities, trade unions, campaigning groups, faith communities, and celebrities who are mobilizing around key opportunities in 2005 to drive forward the struggle against poverty and injustice" (see http://makepovertyhistory.ca/).

Those examples of attention to determinants of health, poverty and peace are paying off. In November 2005, the Magen David Adom (Israel's emergency medical, health, blood and disaster services) and the Palestine Red Crescent Society signed a

memorandum of understanding that should help end a decades-old dispute and ease Israel's entry into the Red Cross and Red Crescent movement. In Africa, as a result of a mass campaign, public health experts confirmed the end of a polio epidemic in ten countries in west and central Africa that left nearly 200 children paralyzed. \$25 million of the funding for that international effort came from the Bill and Melinda Gates Foundation.

Elsewhere in Africa, the Protocol on the Rights of Women to the African Charter on Human and Peoples' Rights, adopted in 2003, was ratified by the 15th African country (Togo) in 2005, allowing it to come into force – a milestone in the protection and promotion of women's rights in Africa. And even though the effect of AIDS in Africa continues to be staggering, officials with the Joint United Nations Program on HIV/AIDS (UNAIDS) noted with cautious optimism that the proportion of citizens living with HIV in Zimbabwe, and the number of new cases over the past five years, both seem to have declined. However, the HIV rate in Zimbabwe still is among the highest in the world.

During October, representatives from 11 nations (including Canada and the U.S.) launched the People's International Initiative for Departments of Peace, which lays out visions for establishing departments of peace in their governments. The Romanian Peace Institute was asked to establish an international secretariat to coordinate the project and Canada will host the next meeting, to be held in 2006 in Victoria BC.

Contrasting these achievements, a look back at 2005 reveals a stormy picture across the world, both figuratively and literally. Officials in global aid agencies have been quoted as saying it was the most difficult year for international charities and emergency agencies since the end of the Second World War. At no time in memory has the U.S.A. experienced the climatic devastation it did during 2005. With 27 named storms and 11 federal declarations of disaster, damage caused by hurricanes *Wilma*, *Rita* and *Katrina* alone will cost the global insurance industry at least US\$60 billion (consumeraffairs.com, 2005) and some say closer to \$100 billion. Three quarters of a million homes were lost in just three southern states, much of the city of New Orleans is gone forever, and Hurricane Katrina alone took more than 1,400 lives.

There were even greater climatic disasters in other parts of the world. Hurricane Stan took some 2,000 lives in Central America in September, and an earthquake in northern Pakistan in October killed an estimated 80,000 people. All of these events followed the loss of some 275,000 lives in the tsunami triggered by the Sumatra-Andaman earthquake of December 26, 2004 an event so cataclysmic it caused our planet to vibrate several centimetres and gave rise to the massive tsunami wave that buried portions of entire nations around the Indian Ocean. Whole communities and even islands disappeared in seconds.

So the beginning of 2006 finds the world reeling from a staggering loss of human lives, and nearly incalculable economic losses during 2005, all the result of environmental events. The relentless calls for money and goods around the world have exhausted even the most energetic donors, and have forced governments and aid agencies to re-direct funds away from existing programs dedicated to health, poverty and global equity. A mounting body of evidence about planetary warming suggests such climatic events will continue and even grow in number.

Regional and civil wars continued to be waged across the world. The most visible conflict was the war that raged in Iraq, with human losses on both the American and

One of the good news stories of the past century has been the eradication of poverty in much of the world. India and China, where people once starved by the millions, have become economic powerhouses. The billion people who live in Africa, however, have for the most part been left out of this happy story.

Michael Enright introducing Stephen Lewis and Martin Merideth, The Sunday Edition, CBC Radio One,

December 18, 2005

90 per cent of global investments in health research and development are being devoted to the health problems of 10 per cent of the world's population — 10 per cent of investments in health research and development are going to the health problems of 90 per cent of the world's population, in the developing world.

Armine Yalnizyan 2005 Iraqi sides climbing steadily. It is estimated that by the end of 2005, some 2,300 members of coalition forces (including 2,100 Americans) and 27,000 to 30,000 Iraqi civilians had been killed in the war.

Five years after the events of September 11, 2001, there is evidence that despite the military response, the world is more unpredictable and dangerous than ever before. The U.K. and Indonesia both fell victim in 2005 to the same terrorist groups responsible for 9/11, and Canada is being drawn inexorably into the fray through new and morestringent border security measures that will be implemented over the next few years. Coupled with worrying enviro-health issues (avian flu, mad cow disease, water contamination, West Nile virus, SARS), these terrorist and security concerns have led to what Maclean's magazine calls a "culture of fear" permeating all aspects of health and public policy (George, 2005).

Canada in 2006: Who are we?

Canada had the second highest rate of population growth among the G8 countries between 1994 and 2004 (Statistics Canada 2005), pushing the population to 32.3 million by mid-2005. Only the U.S. rate of growth was higher.

The diversity of Canadians is a product of policy as well as history. Governments have worked to fashion Canada — in law and in practice — as a pluralist democracy that respects diversity, values linguistic duality, and recognizes the culture and rights of Aboriginal people.

CPRN 2005 See http://www.cprn.com At 0.61 per cent, "Canadian net international migration rate was the highest of any G8 country from 1994 to 2004," according to Statistics Canada (2005). Growth in the U.S. comes primarily from its higher birth rate while Canada's population by 2005 grew "largely and increasingly due to its net international migration" (Statistics Canada 2005). More than half of Canada's growth now comes from immigration. If trends continue Canada will have more deaths than births by 2025 (Statistics Canada 2005) and immigration's contribution to Canada's growth will be even more important. This trend is not unique to Canada – it is shared by other OECD counterparts. For example, there are several European countries that already have proportions of foreign-born citizens similar to the levels in places like the U.S. (OECD, 2005e).

In 2002 nearly half of Canadians reported their ancestry was British, French and/or Canadian. Another 10 per cent of the population reported only

French origins. After British, the next largest block of Canada's population is made up of other Europeans. With a population surpassing one million for the first time, Chinese citizens now make up Canada's largest visible minority group, followed by South Asians and Blacks. These three groups accounted for two-thirds of the visible minority population in 2001 (Canadian Policy Research Networks, 2005).

About one in eight Canadians was a member of a visible minority in 2001. That proportion grew by 25 per cent between 1996 and 2001 while the overall population growth was just 4 per cent. This racial diversity is not evenly distributed; British Columbia and Ontario were home to three quarters of visible minority Canadians in 2001 (Canadian Policy Research Networks, 2005). Toronto and Vancouver are Canada's two most visibly diverse cities, in each about 37 per cent of the populations comes from visible minorities.

Between 1996 and 2001, the proportion of the population reporting Aboriginal identity increased 22.2 per cent (Canadian Policy Research Networks, 2005). One million of us now identify as being Aboriginal; that population is younger on average than the Canadian population overall and growing quickly.

Although no nation lives without the challenges of racism and other forms of discrimination, there is evidence from Canadians themselves that this is a more tolerant place than some other countries. In a 2002 federal survey of Canadians over the age of fifteen, 93 per cent responded they had never, or only rarely, "experienced discrimination or unfair treatment because of their ethno-cultural characteristics" (Statistics Canada 2002). Among those who identified as being part of a visible minority, 20 per cent said they had been treated unfairly or discriminated against sometimes or often in the previous five years because of their ethno-cultural characteristics. Only 5 per cent of Canadians who did *not* identify as being part of a visible minority said they had been discriminated against or treated unfairly sometimes or often.

But disparities in Canada are real and play out more forcefully for Aboriginal people, women, children and Canadians who come from visible and/or language minorities. In the U.S., white privilege and disparities among the poor or visible minority groups in areas like health, income, housing, career advancement and the criminal justice system are well documented even when variables such as education, insurance status and income are controlled. Evidence of the same impacts on Canadians is beginning to emerge, with statistics about racial profiling and treatment in the criminal justice system being a particular flashpoint. We know that although Canada is one of the world's wealthiest nations, one in six Canadian children is raised in poverty - twice as many as in 1989 (Pascal, 2005). And the rate is double or more for Aboriginal children and the children of new immigrants. In 2006, health and other social outcomes for Aboriginals are among the worst in Canada. On or off reserve, almost one in two lives in poverty and in cities, the living conditions of many Aboriginal families are deteriorating. Aboriginal people are four times more likely to report having experienced hunger than the non-

The gap in incomes among Canadians has been growing throughout the 1990s, and notably so since 1994. Market incomes in particular have become more polarized. In 1989, the top 20 per cent of families received 41.9 per cent of market income; by 1999, their share was 44.4 per cent. In contrast, the income shares of families in the lowest, second and middle quintiles fell over this period: by 0.7, 1.5 and 0.9 percentage points, respectively.

Income is not destiny, but the link from family household income to poorer social and health outcomes is well-documented. The relationship between socio-economic status and health outcomes is one of the most persistent themes in the epidemiological literature. The strong and growing evidence that higher social and economic status is associated with better health has led most researchers to conclude that these factors are fundamentally important determinants of health.

Therefore, growing income inequality poses a significant threat to the health of Canadians today.

Canadian Council on Social Development, Submission to the Commission on the Future of Health Care in Canada, November 15, 2001.

See http://www.ccsd.ca

Aboriginal population. Studies of basic infrastructure in First Nations communities conclude that 20-25 per cent of community water and sanitation services pose a danger to health and safety, or are in need of repairs to meet basic government standards (Campaign 2000, 2002).

Those statistics stand in stark contrast with Canada's economic performance, which has outpaced the economic growth of the U.S. and other G7 countries for seven years. Surpluses in the range of \$30 to \$50 billion are forecast for the coming five years. However, while Canada has moved to first place (from sixth) among G7 nations in its debt-to-gross-domestic-product ratio, it has dropped to eighth place on the United Nations' Human Development Index – from first. The poorest Canadians are growing poorer. Yalnizyan argues that "we are trading off human security for debt reduction" (2004, p. 7).

Critically for the health system, it is well-documented that poverty is directly and significantly related to poor health. We cannot build nor sustain a healthy nation if

Right now Canada is seeing a racialization of poverty.

John Anderson 2005 In countries where the gap between rich and poor is narrow and the GDP low, health outcomes are often better than in countries with high GDP but with large gaps between rich and poor.

Charles Pascal 2005

Governments are suffering from "short-termism," preferring simple solutions for complex problems.

Charles Pascal

immigrants and the Aboriginal population are living in poverty or otherwise disadvantaged. Quite apart from the moral imperative, they will live shorter, less-healthy lives, be less productive for the nation, and use more (and more expensive) health services.

As this report is released, Canadians have a new minority federal government. The election campaign focused on a desire for change, trust in public officials and accountability. Confidence in democratic institutions across Canada and the U.S. is low; interest and confidence in the system among Canada's youth is declining and Canadians in general seem fed up with inter-jurisdictional wrangling and blaming among federal, provincial/territorial and municipal governments. Some of those sentiments are reflected in the consistently low trust ratings given by Canadians to politicians and even senior civil servants (CTV News, 2006).

At the same time, it must be said that interest and debate about democracy are alive in some quarters, from the direct democracy movements to the activities taking place within think tanks such as the McGill Institute for the Study of Canada (http://www.misc-iecm.mcgill.ca/), the Institute on Governance (http://www.iog.ca/), and the Canadian Unitarian Council (http://www.cuc.ca/). And if the interest in the recent "Next Great Prime Minister" contest is any indicator, there is a growing cadre of young Canadians involved in policy thinking and who are well informed on leading public policy issues (see http://www.asprimeminister.com/).

Canadian Health Status and the Health Care System in 2006

Health status

Most Canadians live much longer, healthier lives than they did 50 or even 25 years ago (Canadian Institute for Health Information, 2004b). Canadians are especially fortunate when compared to most other nations, and on average, are ahead of any other country in the Americas in most health measures. And Canadians perceive that they are healthier than any other country studied in the Conference Board of Canada's last report on the world and Canada: 88.2 per cent of Canadians aged 15 and over said they were in good health (2005, p. 52).

But there are disparities in health for Aboriginal peoples, for many visible minorities, for those with less money, and for women compared to men. What those groups all of have in common is income, which is likely to be lower than the income of men, whites, and Canadians who are not recent immigrants.

Women live longer than men but, by some measures, report poorer health during their lives (Canadian Institute for Health Information, 2004b). Other investigators have concluded that women use more physician services, but are not actually sicker than men (Currie, 2005).

Average life expectancy for Canadians at birth is now 79.7 years. Canadians continue to die in large numbers from cancers and diseases of the heart, together responsible for more than 50 per cent of all deaths. The Conference Board of Canada notes however that Canada's death rates from these diseases "are low compared with those of other countries" (2005, p. 52). The next three leading causes

of death are cerebrovascular diseases, chronic obstructive pulmonary diseases and unintentional trauma.

Aboriginal people remain at higher risk for more illness, and earlier deaths than the Canadian population as a whole. They suffer from more chronic diseases, such as diabetes and heart disease than the general population, and there has been evidence for some time to suggest that these conditions are increasing among Aboriginal groups (MacDonald, 1999).

In Canada and the U.S., the poorest citizens report worse health, higher rates of severe mobility limitations, and higher levels of smoking and obesity compared to those in higher income groups (Statistics Canada, 2004). Perhaps reflecting Canada's better social safety net and narrower gap between the wealthiest and poorest citizens, low-income Americans are more likely to be in fair or poor health, and to have severe mobility limitations than were low-income Canadians. More Americans in the lowest income group are obese than their

Canadian counterparts. There are no differences in fair or poor health among higher income groups between the two countries (Statistics Canada 2004).

Environmental problems are beginning to be recognized as major health influencers. Water quality is a major problem in some places in Canada – in October 2005 hundreds of citizens were evacuated form Kashechewan, an isolated Aboriginal community in northern Ontario, because the water system was contaminated. Air quality is also a major health problem, particularly around large urban centres. Toronto, for example, had 48 smog days in 2005, nearly 10 times the number recorded in 1994, and the incidence of smog and other environment-related illnesses continues to climb (Toronto Environmental Alliance, 2005).

Because of the SARS outbreak in 2003 and predictions of a coming pandemic of respiratory illness, there is a renewed focus by health care providers on infectious diseases. Canada's new Public Health Agency is organizing a co-ordinated response to possible pandemic scenarios. And Canadians, along with people all over the globe, are stocking up on Tamiflu – just in case a global pandemic arises. The focus of many inter-governmental and inter-professional discussions is on preparing for terrorism, pandemics and environmental disasters like Hurricane Katrina.

Canadians are among the healthiest people in the world.

Life expectancy is one of the highest internationally – over 79 years in 2001, up from 59 years in the early 1920s and 69 years in the 1950s

Most Canadians rate their health as very good or excellent. And, compared with 20 years ago, older adults can, on average, look forward to better-quality and longer lives.

But not all Canadians enjoy good health. There are significant differences in health between men and women; between regions and neighbourhoods; and between people with different levels of education, with different jobs and with different incomes. Some groups of people in Canada – like Aboriginal Peoples – are also generally in poorer health than the population as a whole.

Among the major health problems facing Canadians over the next 10 to 20 years will continue to be heart disease, cancer, mental health problems, AIDS, asthma, obesity and diabetes. These problems are related to our diet, exercise, substance-use patterns and other health behaviours. To a large extent, social, economic and cultural factors (including education, employment, income, housing, environmental factors, genetics, gender, early childhood development and community and social supports) influence these behaviours.

Canadian Institute for Health Information 2004, p.6

Many of the health problems being faced by Canadians today are firmly rooted in the social determinants affecting health. For example, a lack of attention to, and support for, appropriate, accessible and community-based physical activities and healthy food has altered health patterns significantly – and has increased health care costs in Canada (Public Health Agency of Canada, 2004). Obesity, diabetes,

and smoking, like social factors including poverty, housing and literacy, are all drivers of illness, mortality and health care costs. Canadians are, on average, 10 per cent heavier than in 1980, but only slightly taller. According to Statistics Canada (2004) 23 per cent of Canadians are obese and 36 per cent more are overweight, which can affect everything from health care costs to the designs of cars and caskets. Ironically perhaps, some of the technical advances designed to make life easier (such as the TV remote control) have given rise to modern health problems that we are just beginning to tackle.

The number of people living with chronic diseases has skyrocketed, partly because medical advances are keeping many more people alive, but also due to social factors and lifestyle choices. Mirolla (2004) presents evidence from a range of studies suggesting that 40 per cent of chronic illness is potentially preventable, with a quarter of all direct medical costs in Canada attributable to a narrow range of avoidable risk factors, including physical inactivity, smoking and poor nutrition. Further, the study concludes that "escalating health care costs can be significantly lowered by improving the health of the population and thereby reducing the need and demand for medical care" (Mirolla, 2004, p. iv). While attention to life-style factors is important in dealing with chronic diseases, genetics and traditional risk factors such as activity, diet and tobacco use are not the best predictors of whether we stay healthy or become ill. Dr. Dennis Raphael presents a compelling case that links the social determinants of health (socio-economic conditions) to the health of individuals, communities and jurisdictions as a whole. "The strong link between income and disease is one of the most well-established findings in the health sciences but the least publicized by health care and public health workers and the media. The link occurs across a wide range of diseases, but the strongest association is with cardiovascular disease" (Raphael, 2002).

The costs associated with chronic disease management are staggering. The Mirolla study for the Chronic Disease Prevention Alliance of Canada (2004), presents evidence suggesting that for the seven leading chronic diagnostic categories, total direct medical costs are estimated to be \$38.9 billion. Indirect costs "estimated according to the value of time lost due to disability and the discounted present value of future productivity lost due to premature death" come to about \$54.4 billion per year – both figures in 2002 Canadian dollars (MIrolla, 2004). The WHO has called on governments to mount a serious response to the looming "invisible" global epidemic of chronic disease, and to reduce the rate of deaths due to chronic disease by 2 per cent each year until 2015. It is estimated that the strategy would prevent 36 million deaths – mostly in poor and middle income countries – from chronic diseases such as heart disease, stroke, cancer, respiratory diseases, and diabetes (Zaracostas, 2005, p. 798).

Stress and mental health issues have vaulted to the top of the list for health-related concerns; 20 per cent of Canadians will suffer mental illness at some time (Health Canada 2002). Levy (2005) cites statistics from the American Psychiatric Association suggesting that each year, up to 50 million Americans (more than 22 per cent of the population) suffer from a "clearly diagnosable mental disorder involving a degree of incapacity that interferes with employment, attendance at school or daily life." The economic burden of mental illness in Canada was estimated at more than \$7 billion in 1993, and in 1999, 3.8 per cent of all admissions to general hospitals (1.5 million hospital days) were due to anxiety disorders, bipolar disorders, schizophrenia, major depression, personality disorders, eating disorders and suicidal behaviour (Health Canada, 2002).

The creation of the Public Health Agency of Canada in 2004, the appointment of a Chief Public Health Officer, the launch of the Healthy Living and Chronic Disease Strategy for Canada and the creation of health goals for public health in Canada are positive signs of increasing interest in public health and particularly public health emergencies.

The health care system

In 2006, Canadian health care is characterized by an explosion of technology and a push for "bigger, stronger, faster and cheaper" health care. Dramatic improvements in technology, surgical techniques and anaesthesia mean that many surgeries previously requiring three- or four-day hospital stays are outpatient procedures, while short-stay transplants and virtually drive-through procedures are on the horizon. There are fewer hospital beds across most OECD countries including Canada, the patients in them are sicker and they are in them for less time (OECD, 2003).

But juxtaposed with those pressures are patients, the human beings who want to be treated as individuals, with respect and caring in the health care system. How patients experience the journey through those extremes is critical, and in the interviews for this study, several informants said it will fall to nurses to bring the science/technology and human caring together.

An important and basic truth is often overlooked: today, the primary reason individuals are admitted to the hospital is to receive professional nursing care. Yet, nursing's role in driving decision-making around health care remains limited.

American Nurses Association 2002, p. 5

Drugs are the fastest-growing cost in the health care system (Canadian Institute for Health Information, 2005a). According to University of Victoria researcher Dr. Malcolm Maclure," drug costs in Canada are rising more than \$3 million each day. That's enough to hire 20 new physicians or 40 new nurses every day. Such cost growth threatens the quality of our health care system" (Canadian Institutes for Health Research, 2005). Some drugs have devastating side effects and the

day. Such cost growth threatens the quality of our health care system" (Canadian Institutes for Health Research, 2005). Some drugs have devastating side effects and the way they're approved, prescribed and marketed has become a major issue for governments and health professionals alike; yet there is no sign of that pattern changing.

Key for Canada now and in the future will be a resolution of how to use scarce resources, who will pay for what and how the cost of expensive drugs and other emerging treatments will be compared to their safety and efficacy.

Shortages of workers, shortages of services

Policy decisions and health care system restructuring of the 1990s drastically reduced the number of nursing- and medical-school graduates while the population grew steadily. We are confronted now with real shortages of nurses in some areas. As economist Robert Evans noted in a 2004 speech, "there's no mystery there. It tells us policy is possible." Demographic evidence suggests even worse shortages of workers lie ahead in all categories, regardless of how we deliver health care in the future.

As a result, health human resource planning has become an area of intense interest in Canada and worldwide. Nursing and medicine in particular have been communicating similar messages about shortages and the need for more seats in schools of nursing and medicine.

The College of Family Physicians of Canada said in its 2004 report, "Canada is facing a crisis. Timely access to health care services is getting progressively worse for Canadians. "The biggest reason for this is a severe shortage of health professionals"

(College of Family Physicians of Canada, 2004, p. 4). In 2002, the College estimated that Canada was short 3,000 family physicians and that number would double by 2010 unless new recruitment and retention strategies were implemented. The Ontario Medical Association claims some 1.2 million Ontario residents do not have a family doctor (2005).

Between 1992 and 2005, "the percentage of medical undergraduates across Canada selecting family medicine as their first choice specialty dropped from 44 per cent to 28 per cent" (Canadian Federation of Medical Students, 2005). In addition, a trend towards focused practices as compared to comprehensive practices has been noted, which could reduce access to general family physicians.

The first baby boomers turned 60 in 2005, and many professionals are boomers. Some 3,800 physicians are predicted to retire in Canada in the next two years double the current national rate (Ontario Medical Association, 2005). The picture is no different for nurses. O'Brien-Pallas and colleagues (2003) estimated that even if RNs keep working to age 65 - and most do not - Canada will lose 13 per cent of its RN workforce by the end of 2006. Both professions have aging workforces, as do other care professions; all struggle to attract enough new recruits to replace them. Many other OECD nations are grappling with the same issues (Simoens, Villeneuve & Hurst, 2005). The academic and professional career choices for women and men already are vast, and will be even more varied by 2020. Whether there will be enough interest to fill more seats remains to be seen. But even if enough candidates can be recruited, are there sufficient teachers and facilities to teach them all? In her study for the CNA, Planning for the Future: Nursing Human Resource Projections (2002), Ryten suggested that Canada probably needs to graduate about 18,000 RNs annually; in 2006 we are 10,000 short of that target at 8,000 RN graduates per year. Even though the number of seats in schools of nursing has increased since 2000, the discrepancy between the number leaving and number entering the profession could be disastrous without strong corrective action.

One way to replace aging professionals is to encourage immigration of educated health professionals. Canada has put in place policies that have resulted in a significant proportion of immigrants having high levels of education and job skills. As a result, along with the U.S., Australia, France and Germany, Canada gains significantly from highly skilled migration according to the OECD (2005e). In 2006, internationally educated nurses and other health professionals are an important component of the health care system. Canada does not support recruitment drives in nations already struggling with professional shortages, but does support migration of individuals and some families. Federal, provincial and territorial governments support various initiatives to make the transition to Canada more successful for them. However, integration into the Canadian system has not been easy for many who complain, for example, about arbitrary and insurmountable barriers in the transfer of licences from other nations.

Canada also faces the problem of health care graduates leaving the country, often for the U.S. Although there have been efforts especially within regions or at the employer level to retain health professionals, there is little evidence to suggest that Canada has made a concerted pan-Canadian policy effort to keep those workers to stay in Canada. The nursing report (Simoens, Villeneuve & Hurst, 2005) prepared for the OECD's health-systems performance study (2004b) noted similarly that most of its member nations were involved in some activities related to recruiting nurses from other countries, but none had developed formal policies to keep their own graduates in the country.

In most communities across Canada, access to the health care system is bottlenecked by wait lists for procedures, insufficient and inadequate infrastructure, a lack of surge capacity, and reliance on access to a dwindling supply of general-practice (GP) and family-practice physicians. In 2006, a large proportion of physicians working in private practice have family-medicine credentials. However, there are still many GPs who have worked for years without the family-physician specialty certification.

To address some of these access issues, primary health care reform is taking place in all jurisdictions. Different models of practice are being proposed and implemented; health professionals are being challenged to learn and to work together; and patients, families and communities are becoming more active in their own care. The \$800 million Primary Health Care Transition Fund, sponsored by Health Canada and coming to an end in 2006, has funded the search for innovative ways to deliver effective and appropriate health care. Interdisciplinary care and education are currently being experimented with in various jurisdictions. The basis of primary health care reform is interdisciplinary team work. To do that, professionals need to be educated in an interdisciplinary environment. The pan-Canadian "Interprofessional Education for Collaborative Patient-Centred Practice" initiative (funded under the 2003 Health Accord as part of a proposed pan-Canadian health human resources strategy) has created many opportunities for health professionals to learn together. Various universities are implementing interdisciplinary curricula and preparing their students for collaborative practice.

Primary health care reform is slowed by the disputes over who should do what. All health professions have a recognized and accepted scope of practice but many of their responsibilities overlap, which can cause tension on health care teams. This could be solved by focusing instead on patients and deciding who is the right professional to best meet patient needs.

New ways of working together in 2006. Recent graduates of various health disciplines are demonstrating different and innovative ways of collaborating and working together. The New Health Professionals Network represents over 20,000 Canadians in seven professions: nursing, medicine, pharmacy, social work, occupational therapy, physical therapy and chiropractic. They advocate for sustainability of medicare and the need for interdisciplinary, team-based health care, and are developing new ways of working together to improve access to the health care system. They also want to change the way physicians are paid, and terms and conditions of work in health care. This new generation of health professionals expects to work in teams where responsibility and accountability are shared, dismantling traditional hierarchies and giving patients leadership in care. They are not shy to express intolerance for the hours of work, working conditions, and work/life imbalance that exist now.

It is unfortunate that the current inadequate access to health care is routinely said to be due to a shortage of physicians. If emphasis is placed on lack of access to care rather than on the inadequate physicians then other solutions come to mind.

Ralph Sutherland MD 2005

New health professionals and health science students already are working together in new ways. We want to keep practising like this because it works. It's better for patients, communities and health professionals. But the way the system and education are structured really don't facilitate that kind of practice.

Michael Garreau 2006

Where are we spending health care dollars and how much are we paying?

The Canadian Institute for Health Information (2005b) reports that Canadians spent about \$142 billion on health care in 2005, a 7.7 per cent increase over 2004 (5 per cent after inflation adjustments). That amounts to about \$4,400 per capita, on average, and is higher in Yukon and Nunavut where costs are higher.

What else does the CIHI data tell us? Canada's health care system spending has increased from 7 per cent of GDP in 1975 to about 10.4 per cent in 2005. Canada ranks fourth among OECD countries in its health expenditures per capita, after the US, Norway and Switzerland. By comparison, Mexico and Turkey spend the least.

The public share of spending on health care (\$98.8 billion) remains steady at about 70 per cent of total spending, with private-sector spending having risen 8.7 per cent over 2004 levels.

The largest portion of public spending (see Figure 1) goes to hospitals (30 per cent of total spending). And at about 17 per cent of total spending, prescribed drugs make up the second largest category of public health dollar spending overall, up 11 per cent from 2004. Prescribed drugs account for 83 per cent of these costs and are the fastest growing item. More than half of all private spending goes to drugs and dentistry.⁴

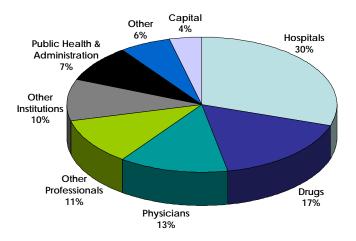


Figure 1. Public Portion of Health Care Spending, Canada, 2005

Physicians are the third-largest cost in the public basket, at \$18.2 billion, and the category of "other professionals" (e.g. oral health care, vision care, physical therapy, private-duty nursing) makes up the fourth-largest expenditure. At \$13.3 billion, nursing homes and other non-hospital institutions make up the fifth-largest cost in Canada's health care system.

.

⁴ Dentistry and oral health are curiously isolated from Canada's other major health professions and the public medicare system. Most Canadians still grow up paying out-of-pocket or purchasing private insurance for their oral health care. A small minority of dental services, which have to be performed in hospitals, do fall under the public medicare system. However, why the majority of oral health care and dental diagnostics/treatment should be considered any less important than other publicly-insured health services is unclear.

Spending on public health activities should total \$7.8 billion in 2005 (about 5 per cent of total public spending), compared to approximately \$407 million in 1975 and \$3.3 billion in 1995. That figure places Canada ahead of the OECD average of just 3 per cent of health spending targeted to public health despite evidence that attention to public health and illness-prevention activities (e.g. smoking cessation programs) significantly reduce illness burden including health care system costs (OECD, 2005b).

We know the costs of providers that bill privately, and we know the costs of equipment and pharmaceuticals. Given the careful paper trail on those expenses, it is troubling that the way spending is reported does not break down the costs and benefits of more than 300,000 nurses or their multi-professional team mates to the country's health care system. Nurses are often treated as cost drivers for the system and they remain easy targets when downsizing and restructuring activities take place. Spetz (2005) argues that nurses, researchers and system leaders have done a poor job measuring and explaining the cost-effectiveness of nursing services. Furthermore she notes the need for the studies that do exist to be published in non-nursing journals and other sources.

Health care system reform and financing: the public/private dance. Canadians have rallied for more than 50 years in support of a system that protects them from financial catastrophes in the wake of health crises. There is little evidence that Canadians would choose to pay for care if the public system could provide it in a timely way. However, the mantra in support of the public health care system, unaccompanied by critical debate and analysis, is not going fix the system or make the problems go away.

Physicians and other caregivers are divided about private versus public care. Physician representatives in the New Health Professionals Network, along with their nursing, pharmacy and social work colleagues, speak strongly in favour of the publicly-funded and publicly-delivered health care system. Nurses are generally loud in support of the public system and their opinions tend to strongly mirror those of the public (Pollara, 2005).

For a growing number of experts, the status quo is unacceptable. They say the Canada Health Act must be amended. Some suggest clarifying what is meant by "comprehensiveness" or "medically necessary services." Those who believe the criterion of comprehensiveness in the Act is vague and imprecise point out that clarification in this area would produce many benefits. First, the services for which the public sector must be responsible would be clearly set out; second, greater uniformity in the range of services throughout the country could be achieved, thus ending the balkanization of provincial health care insurance plans. Clarification could also help define medical necessity, taking into account important factors such as clinical, economic and ethical considerations.

Madore, Economics Division, Library of Parliament, 2003

Restructuring that began in the mid-1990s created a situation where myths about the failings of the health system often overshadow its many legitimate successes. That paradox can be seen in the contrast between the anxiety among Canadians about the accessibility of health services and the satisfaction of those actually using the system. In 2004, the *Joint Canada/U.S. Survey of Health* concluded that 39 per cent of Canadians still rate health services as excellent (Statistics Canada 2004). The Canadian Institute for Health Information (2004a) has reported that 91 per cent of Canadians were very or somewhat satisfied with the care they received from their family doctor or other physician, and among those who were hospitalized in 2001, 85 per cent said they received good or excellent care. However, more recent surveys show Canadians are worried about wait times, perceiving them to be too long and increasing (Pollara, 2005).

Perhaps because of medicare's focus on doctors and hospitals, the health care system has largely come to mean acute illness care. Even though significant funding has been allocated at both the provincial/territorial and federal levels to reforming primary health care, the policy focus remains on acute illness management

The biggest obstacle for doing something about health care in Canada is the mythology around health care.

Michael Walker 2005 delivered in hospital settings. Proponents of the importance of self-care, community care, home care, long-term care and above all, of health promotion and disease prevention, have not been able to attract sufficient funding to transform the system or to convince policy makers and the public that prevention will save money in the long run. The significance of community health, health promotion, prevention, social determinants and family-patient partnerships for improving health and reducing costs simply have not seized the policy agenda in ways that vault theory into action in the arena of health system reform.

Waiting lists have been the focus of much attention over the past couple of years, and have been a catalyst for debate about public versus private funding and delivery of care. Five specific areas have been targeted for action – joint replacement, cataracts, cancer care, cardiovascular care and diagnostic imaging. Some wait times are the result of insufficient primary care services and a lack of preventive community based programs. Other causes include a lack of health professionals, constraints on operating-room hours allotted to surgeons, and poor management and coordination of wait lists.

Various practitioners have offered perspectives on how services could be better organized, on interdisciplinary team work, on common education models and so on (see for example, Montague, 2004). We heard plenty of opinion to suggest that there is ample funding and even enough human resources in Canada's health system to meet demands; but the way the system is organized needs to be significantly restructured. Consider just the example of wait times in emergency rooms, where more than 50 per cent of visits are taken up with non-urgent cases and less than 1 per cent represent actual emergencies (Canadian Institute for Health Information, 2005f). This is not news to anyone who has worked in an emergency department. Health professionals have been asking for decades why non-urgent patients are having their colds, back-aches and minor injuries treated in emergency departments. Even more frustrating is the assertion that at least half of emergency room patients could be admitted, assessed, treated and discharged by nurses and other providers without ever seeing a physician (Sutherland, 2005) – freeing doctors to focus on the most complex patients, and reducing waits for all.

But the problems of the health system cannot be solved by looking in isolation at wait lists or emergency rooms. As in most things, problems must be seen in the context of the larger system. Researchers for the Commonwealth Fund, for example, found that emergency room use was lower in countries where patients had faster access to physicians in the community in general (2005). Wait lists also were less problematic in those countries. So directing people away from emergency rooms to more appropriate primary care is the first step.

In addition to the problem caused by lack of access to appropriate primary care in the community, emergency rooms are confronted by another access problem, but in this case at the other end of the continuum. Acute care hospital beds are often occupied by patients who would be more appropriately cared for in a different type of facility, e.g. long-term care or rehabilitation care. Sometimes called "bed-blockers," these patients do not need to be in acute care spaces. Because those beds are filled, there is no room for acutely ill patients to be admitted; as a result, they have to be cared for as in-patients in the emergency room. In turn, other emergency cases have to be turned away, or they wait for care while the staff are attending to those other patients.

These chains of events make clear that "fixing" just one or two parts of the system won't resolve complex, inter-related problems. Emergency room waits are warning

There is no appetite for a private system — we want a better public system and can't understand why it doesn't get better and cheaper.

Marc Zwelling 2005

The peer-reviewed literature demonstrates that for-profit care tends to cost more while, if anything, providing inferior quality services.

Rachlis, 2005, p. 6

signs of access pressures across the continuum of care, from primary to acute through to long-term care. Because of long wait times and growing demand for long-term, Ontario for example, has added 20,000 new long-term care beds to the system since 2002. But reports are that supply has out-paced demand; in the Toronto area alone it was reported in 2004 that as many as 1,200 long-term care beds were sitting empty (Keung, 2004). According to Carolyn Acton, Manager of Client Services in the Toronto Community Care Access Centre (personal communication, March 24, 2006), there are now approximately 720 long-term care beds empty in the Greater Toronto Area (including Toronto, Scarborough, Etobicoke/York, North York and East York).

We asked therefore, why any non-acute patients would be occupying (and "blocking") acute care beds in the same city. In past years, the most complex "alternate level of care" patients would have moved from acute to complex continuing care (or "chronic care") settings. Today, many more of them move from acute care to long-term care. But as Acton notes, those facilities do not all have the fiscal resources to provide care for a patient with a major wound for example, one needing intravenous therapy, or one who has challenging behaviours that require more intensive staff attention. In cases where a facility does have the resources and staff to accommodate a mix of complex patients, once those beds have become filled, it can take some time for them to become available again.

All of those challenges are overlaid with the issue of personal choice. It is natural that people going into long-term care settings want to make choices about where they will live. In a city like Toronto, for example, there is enormous pressure for beds in certain facilities based on the ethnicity of the client. And smoking is still an issue – some facilities do not accept any patients who smoke; others accept a limited number. Again those beds can fill quickly and turn over slowly.

As a result of this mix of variables, the situation of 720 empty beds can exist at the same time that some long-term care facilities have long wait lists – and this example is just for one city. The exercise of matching patients to beds may seem simple on paper, but the reality is much less so when juggling the complexity of human lives with the all the rules of the various institutions involved. What does seem certain is that complex care needs are becoming increasingly common in long-term care. So while policy-makers may have decided that patient acuity needs to be pushed out from hospitals to long-term care, communities and homes, the funding formulae and supply of appropriately-skilled health human resources have not yet made the same leap. The result is a mismatch between a supply of services designed years ago for one kind of care, and the reality that the demands are for something quite different today.

Some economists (and others) have argued that these kinds of examples signal that the public system is not responding as it should, and that increasing the amount of private, for-profit care is one solution. Walker, for example, cites the experience of Sweden, saying "the clear lesson for Canada is that patient choice and private for-profit hospitals can be a source of increased efficiency within a publicly financed health care system" (2003). He goes on to say that "competition between public and private providers produces lower costs and more responsive care delivery."

Often included in the public vs. private debate is the issue of user fees. Some have argued that the time has come for such fees to be put in place in Canada. The proponents of this approach cite evidence that fees put money into the system, cause consumers to reduce demand on the system by modifying their behaviours, and do not negatively impact health outcomes (see for example, Irvine & Gratzer, 2002). However,

Self-interested disinformation is a major barrier to genuine reform.

> Robert Evans, cited in University of British Columbia, 2002

Nowhere in the discussion do we hear talk about wait lists for public health services, for example potable water, clean air, adequate housing, and safe transportation. Why does this matter? Because "the public health wait lists of today are the acute care wait lists of tomorrow."

Edwards & Riley 2006

the evidence is inconsistent and merits further investigation. Hjertqvist for example, stated that user fees in Sweden do not cause Swedes to avoid seeking care because of costs, and noted that those who cannot afford the relatively low user fees (capped at about CA\$140 per person per year) are exempt from paying them. On the other hand, Hjertqvist also cited other studies concluding that user fees do impact behaviour (i.e. where there are fees, utilization is lower). Other investigators have reached similar conclusions. For example, Burström (2002) found a possible increase in inequalities in the use of health services in Sweden during the 1990s that disadvantaged those in lower income groups who needed, but did not seek, medical care.

The issue of wait times is often said to be symptomatic of deeper organizational problems in the public system. It is portrayed that wait times are not an issue, or less pressing an issue, in systems having more privately funded and/or delivered care. In 2003, Hurst and Siciliani (2003) conducted a background study on wait times for the OECD health systems performance project. They found that there are widely differing ways of defining and measuring wait times, and few international comparisons. Some countries do not even report or measure wait times. Hurst and Siciliani stated that "waiting times are not recorded administratively in... Austria, Belgium, France, Germany, Japan, Luxembourg, Switzerland, and the United States but are anecdotally (informally) reported to be low" in those countries (2003, p. 4). Notably, all the countries⁵ that were found to have wait-times problems have components of the public/private mix that some economists argue is the answer for Canada. Hurst and Siciliani found, and OECD (2004b) subsequently concluded, that wait times were a serious health policy issue in 12 of its member nations. The myth persists however, that the wait-times problem has been resolved even in many of these OECD countries that have a public-private mix system.

Canadians have declared since the 1940s that they do not want Canada to operate a health system that is based on income versus need, or one driven by making profit from illness. Given our geographic proximity, language and cultural similarities, comparisons between Canada and the U.S. are frequent and inevitable. Statistics are sometimes cited to suggest that the U.S. has no problematic surgical wait times for example, tempting some to suggest Canada should offer more private, for-profit care options. Normally left out of the dialogue is that in the U.S., while there may be few long wait times overall on the hospital service supply side, patients may have to wait months or years to save the money to purchase the surgery. Also left out is the fact that citizens with complex health problems are not eligible for insurance or cannot afford it.

Researchers for the Commonwealth Fund found that among those surveyed, half of the American adults having health problems "said they did not see a doctor when sick, did not get recommended treatment, or did not fill a prescription," because of cost.

Schoen, Osborn, Huynh, Doty, Zapert, Peugh, & Davis, 2005 Furthermore, the vastly disparate health care experiences and health outcomes in the U.S. based on race and income alone make plain that timely, quality care is not available to a large portion of the American population. It is available to those who can afford to purchase it. In a modern city like Baltimore for example, the life expectancy of a black child born today is seven years less than that of a white child. Clearly that outcome is not a product solely of the formal health system, but ample evidence across multiple studies shows that care and treatment are different based on race, gender and socioeconomic status (Institute for Health care Improvement, 2005). None of these people are reflected in wait list statistics because few of them ever make it to such lists.

⁵ Australia, Canada, Denmark, Finland, Ireland, Italy, the Netherlands, New Zealand, Norway, Spain, Sweden, and the U.K.

Researchers for the Commonwealth Fund found in 2005 that among those surveyed, half of the American adults with health problems "said they did not see a doctor when sick, did not get recommended treatment, or did not fill a prescription" because of cost (Schoen, Osborn, Huynh, Doty, Zapert, Peugh, & Davis, 2005). Wait times to see physicians were longer in Canada and the U.S. than in the other four nations studied (Australia, Germany, New Zealand, and the U.K.).

We heard clear and consistent support for a universal publicly-funded system from *every* person interviewed for the *Toward 2020* study. However we also heard some mixed messages and conditions attached to that support. For example, several of those interviewed, including nurses, said that if it came to their child or their partner, if the publicly-funded system was not responding the way they thought it should, they wanted an "out," a sort of safety valve to be able to buy faster access. How much they would actually be willing to pay, and under what circumstances (e.g. an emergency MRI versus an elective surgery) is unclear.

Sharon Sholzberg-Gray, who heads the Canadian Health care Association, believes that Canadians may be willing to pay relatively small amounts for diagnostics and treatment but not larger amounts when they are confronted with the reality of "the bill." She asserts they "might be willing to spend a thousand dollars for an MRI or a few thousand dollars for a surgical procedure" but they will not be willing to pay out of pocket "when they realize the hospital bill for the procedure they require might cost \$50,000" (2005). Furthermore, she agrees with others who point out that some of those arguing in support of private insurance would themselves be considered uninsurable in a private system because of their health status.

Canadians are talking a lot about the financing of health services and particularly about access and wait times. It is obvious that they find stories about the experiences of some other countries compelling, especially if they have the personal finances to purchase care. But in discussions about privately-owned and/or privately-delivered services, user fees or public-private partnerships, the reaction of many Canadians, their politicians, and certainly of many nursing organizations is ideologically based. What we risk losing in the emotion that surrounds these debates are the lessons in the experiences of other countries. Sweden for example, is considered by nearly any measure to be one of the best places in the world to live. In most studies, places like Sweden, Norway, Iceland, Ireland and Denmark come out on top in terms of quality-of-life measures. What lessons can we learn from the way they finance, organize and deliver health and social services, and how their societies are structured?

Some of those interviewed for this study expect nurses to exert a leadership role in this dialogue by looking at options, costing them out, and talking about them. At the least, nurses must be equipped with evidence to participate in discussions of whether the core issue is insufficient funding in the system, inefficient allocation, lack of coordination of health services delivery, or some combination of the three. And nurses must continue to come to policy tables with options grounded in the best available evidence.

The Supreme Court decision. The need to act with purpose is urgent, and efforts to improve access to timely and appropriate care must be accelerated. In 2005, the Supreme Court of Canada ruled in the Chaoulli and Zeliotis *v.* Quebec and Canada case that, in essence, banning private insurance is unconstitutional although the court noted an important series of underlying arguments that bear review in any system redesign. The ruling was about private insurance, not a ruling favouring a

Why can't we run public health care services as well as private ones? Well the reality is that we can and we do. There are many examples of superb health services in hospital and community settings across Canada. Perhaps the question we should be asking is why we don't replicate that success in every health setting. Is this a money issue? Is it about leadership? Political will? Talent? Why does the alternative to a poor outcome in the public health care system mean a jump to private care and not to setting a rigorous expectation that the public system provide better and timelier care?

privately-funded or managed health care system. Indeed, the Court noted key pieces of evidence that seem to shatter popular myths about private care, saying:

- Those who seek private health insurance are those who can afford it and can qualify for it. They will be the more advantaged members of society.
 They are differentiated from the general population, not by their health problems, which are found in every group in society, but by their income.
- While acknowledging the problem of shortages of providers, experience in all jurisdictions with two-tier health care systems (e.g., the U.K., Australia, New Zealand and Israel) demonstrates a diversion of energy and commitment by physicians and surgeons from the public system to the more lucrative private option (Wright Report, at pp. 15 and 22). This evidence is supported by the Romanow Report (at pp. 92), the Kirby Report (vol. 1, at p. 105) and a 2003 Quebec report (Le financement privé des services médicaux et hospitaliers, at p. 6).
- Experts testified that there are no firm data whatsoever showing that a parallel private system would enhance potential for recruiting highly trained specialists (see Wright Report, at p. 19).
- Experience in other OECD countries shows that an increase in private funding typically leads to a decrease in government funding (*Le financement privé des services médicaux et hospitaliers*, at p. 7; Marmor Report, at p. 6).
- A service designed purely for members of society with less socio-economic power would probably lead to a decline in quality of services, a loss of political support and a decline in the quality of management (Bergman Report, at pp. 6-7; see also Marmor Report, at pp. 6 and 8; Denis Report, at p. 5).
- Evidence suggests that parallel private insurers prefer to siphon off high
 income patients while shying away from patient populations that
 constitute a higher financial risk, a phenomenon known as "cream
 skimming" (Wright Report, at p. 17; Kirby Report, vol. 6, at p. 301). The
 public system would therefore carry a disproportionate burden of patients
 who are considered "bad risks" by the private market by reason of age,
 socio-economic conditions, or geographic location.
- Similarly, private insurers may choose to avoid "high-risk" surgery. The
 public system is likely to wind up carrying the more complex high acuity
 end of the health care spectrum and, as a consequence, increase rather
 than reduce demand (proportionately) in the public system for certain
 services (Wright Report, at p. 18).
- The existence of a private system in the United States has not eliminated waiting times. The availability, extent and timeliness of health care is rationed by private insurers, who may determine according to cost, not need, what is "medically necessary" health care and where and when it is to occur (Kirby Report, vol. 3, at p. 48; Denis Report, pp. 12 and 16).

Supreme Court of Canada, 20056

Canada is the only country in the OECD that doesn't permit citizens to have a private alternative to the public system.

Michael Walker 2005

Faith in the curative power of private insurance is not borne out by the evidence put before the Court.

Supreme Court of Canada 2005

⁶ To read the full Supreme Court of Canada decision and references cited here by the Court, see: http://www.lexum.umontreal.ca/csc-scc/en/pub/2005/vol1/html/2005scr1_0791.html

Canadian Nursing in 2006

Although there are more than 300,000 RNs, LPNs and RPNs practicing in Canada (see Table 2), "shortage" has become the watchword of the early 21st century. But a shortage of what? The apparent supply-demand mismatch in Canada is a highly complex story. There seem to be shortages of nursing services in some places, and certainly ample evidence that soaring workloads and high rates of overtime have not decreased. That sounds like a situation of not enough workers, and nurses in most settings would probably report that more are needed. Furthermore, consistent with economic indicators of shortages, participation rates⁷ are high and unemployment in nursing generally is low.

Overall, we have enough system capacity to meet our demand for care.

Michael Rachlis 2005

Table 2. Canada's Nursing Workforce: Quick Facts

Category	RN	LPN	RPN
# working in nursing	246,575	63,443	5,107
Average age	44.6	44.4	46.2
per cent female	94.6	93.1	77.6
per cent full-time	51.0	44.4	68.4
per cent part-time	32.1	35.1	16.2
per cent casual	10.1	14.5	2.3
per cent working in hospitals per cent working in community health per cent working in nursing homes/long-term care	62.5	45.3	39.6
	13.4	6.1	15.4
	10.5	37.4	21.8
per cent educated in Canada	91.7	72.5	89.8
per cent internationally educated	7.4	1.9	7.1
per cent diploma educated per cent baccalaureate educated	67.9	100	95.2
	29.8	n/a	4.4
per cent reporting single employer per cent reporting multiple employers	87.2	85.9	80.0
	12.5	13.4	20.0

Absenteesim among RNs remains very high – in fact nearly 10,000 full-time-equivalent positions were taken up with absenteeism in 2005 – a rate 58 per cent higher than the average Canadian full time worker.

Canadian Nurses Association, 2006

- 2,750 RNs self-identify as being in the clinical nurse specialist role
- There are about 900 NPs registered in Canada
- 14,500 RNs are certified (by CNA) in 17 clinical specialties*
- 35 organizations are affiliated or associated with the CNA*

Canadian Institute for Health Information, 2005c, 2005d, 2005e

*Data provided by the Canadian Nurses Association, Nursing Policy and Regulatory Policy Divisions

Note that due to absent or incorrectly-reported data, figures do not total 100 per cent in each category.

⁷ The participation rate of Canadian RNs (the proportion of RNs who actually practice in nursing compared to the total number of all qualified RNs who *could* practice) is among the highest in the OECD countries, usually exceeding 91 per cent. By comparison, for example, approximately 20 per cent of American RNs – about 500,000 in number – were registered to practice nursing in 2001 but were not practicing in nursing.

However, all the various pieces of evidence about shortages and workloads are counterbalanced by other findings that on the surface don't seem to make sense if there is a shortage of nurses. For example:

- Within Canada's nursing workforce, only about half of RNs, and even fewer LPNs (44 per cent) hold full-time jobs. Some who hold part time or "casual" positions do work full-time hours or more, without the benefits of full-time positions. Some choose those positions, but others state they want full-time jobs and cannot secure them. Many new graduates coming into the system say they want, but cannot find, full-time, or even scheduled part-time work. This proportion of full-time positions in nursing is significantly below that of many other professionals (see examples in Table 3).
- RN absenteeism took nearly 10,000 full-time equivalent positions out of the system in 2005 an absenteeism rate 58 per cent higher than the average for 47 other occupational groups in Canada. That rate climbed steadily for 15 years and only in 2005 is it down for the first time (compared to 2002). If it could be reduced just to the average for Canadian workers, the equivalent of thousands of full-time RN positions would be available in the system.
- The removal of so many supports from the settings where nurses practice
 mean that highly paid professional staff still spend a significant amount of
 their time carrying out tasks that easily could be done by less highly trained,
 less expensive support staff, volunteers or machines.

Table 3. The Employment Status of Selected Professions in Ontario and Canada

Profession	# of Workers	Full time
A 1. Translate	5.405	00
Architects*	5,135	92 per cent
Civil engineers*	14,510	94 per cent
Financial auditors & accountants*	63,345	89 per cent
GPs & family practice physicians*	15,965	89 per cent
Mechanical engineers*	15,950	96 per cent
Specialist physicians*	8,880	91 per cent
Teachers*(secondary school)	61,380	85 per cent
RNs**	246,575	51 per cent
LPNs**	64,443	44 per cent
RPNs**	5,107	68 per cent

^{*}Ontario data, Ministry of Education and Ministry of Training, Colleges & Universities, Government of Ontario, 2006

^{**}Pan-Canadian data, Canadian Institute for Health Information, RN/LPN/RPN databases, 2005

How does that picture fit with the alarming messages about shortages across the country? There is no question that the pace and intensity of the work being carried out by individual nurses has increased – that phenomenon has been well documented as a growing problem for 10 years. And clearly there is concern that the number of retirees will outweigh new registrants in the coming years. However, whether there is an insufficient number of nurses is much less certain than it may appear on the surface or in supply/demand predictions.

The story of nursing supply in Canada is one of peaks and valleys over the past 40 years. As shown in Figure 2, the greatest number of RN graduates in Canadian history was in 1970, with another peak 20 years later. Similarly there are valleys with many fewer graduates in the early 1980s and even fewer in 2000. Those ups and downs contrast to the steady growth of the Canadian population over the same period - an increase from less than 20 million to more than 30 million. All things being equal, one would have expected steadily growing demand to be mirrored in a similarly upward-sloping supply curve. Instead, the downward slope of the RN supply trend curve is striking (see Figure 3). Trend curves for graduates in medicine, physical therapy and occupational therapy (see figure 3) are markedly different than for RNs and LPNs. With the exception of male physicians, who declined in number, they all show steady upward growth. The growth curve for female medical graduates is particularly noteworthy in its upward slope. Although the number of RPN graduates was small overall, they did begin to increase again after falling during the 1990s. There was a small loss of pharmacy graduates overall. Only teaching has had ups and downs similar to nursing, but even then the trend is one of growth.

Number of RN graduates in Canada, 1963-2003

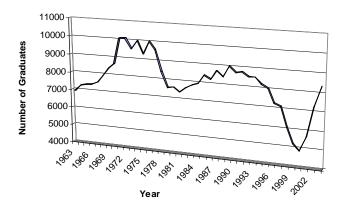
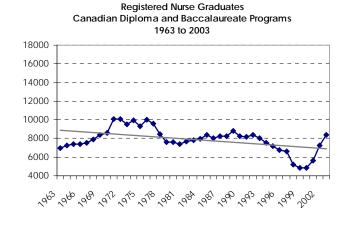
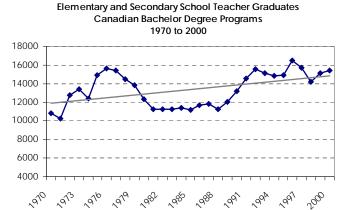
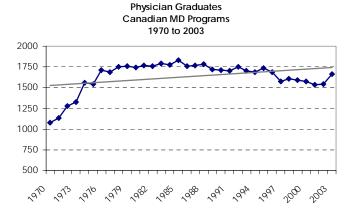


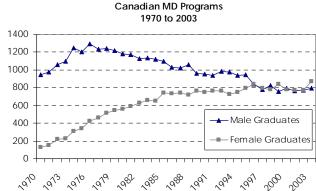
Figure 2. Number of RN Graduates in Canada, 1963-2003

Figure 3. Comparison of Graduates from Nursing, Teaching, Medicine, Physical Therapy, Occupational Therapy and Pharmacy Programs in Canada, Varying Years, 1963-2005⁷









Physician Graduates by Gender

7. Notes:

Please note that graphs in Figure 2 have varying time scales based on the data available:

 1963-2005
 RN

 1970-2001
 Teacher

 1970-2003
 MD

 1991-2000
 LPN

 1998-2005
 RPN

 1988-2002
 Pharmacy

 1988-2002
 Physical Therapy

 1988-2002
 Occupational Therapy

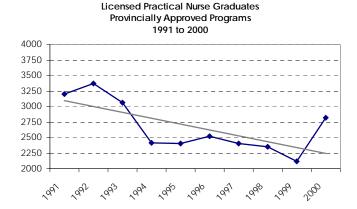
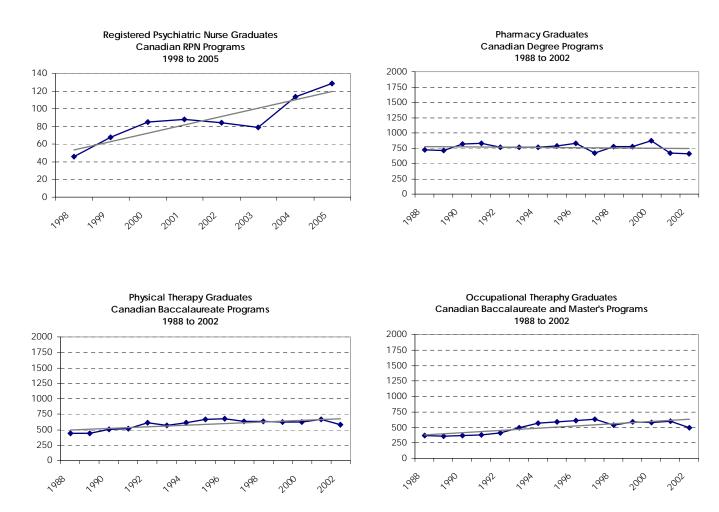


Figure 3, continued



Source Information for: Comparative data graduates, in support of 2020. Prepared by N.Field, March 2, 2006. Elementary-Secondary Teachers: Canadian Teachers' Federation, CTF EMSR March 2004-1, University bachelor degrees in elementary-secondary teacher training, both genders, by province and for Canada, 1970 to 2000. LPNs: CIHI, Health [ersonnel in Canada, 1991 to 2000, page 44.

Occupational Therapy: CIHI, Health personnel in Canada, 1998 to 1997, page 52, and CIHI, Health personnel trends in Canada, 1993 to 2002, page 131. Physical Therapy: CIHI, health personnel In Canada, 1998 to 1997, page 77, and CIHI, Health personnel trends in Canada, 1993 to 2002, page 177. Physicians: Canadian Medical Association, Number of MDs awarded by Canadian universities by sex, 1968-2005, http://www.cma.ca/index.cfm/ci_id/16959/la_id/1.htm#2, retrieved Feb. 23, 2006. Pharmacy: CIHI, Health personnel in Canada, 1998 to 1997, page 63, and CIHI, Health personnel trends in Canada, 1993 to 2002, page 148. RNs: Planning for the future, Canadian Nurses Association, June 2002; Canadian Nurses Association and Canadian Association for Schools of Nursing student and faculty survey 2003-2004; OIIQ data update from registrar, Line Lacroix, July 15, 2005. RPNs: College of Registered Psychiatric Nurses of British Columbia, March 1, 2006; College of Registered Psychiatric Nurses of British Columbia, March 1, 2006; College of Registered Psychiatric Nurses of Manitoba, March 15, 2006.

The nursing supply curve is on the upswing again; where it will peak is uncertain. It is clear the boom-and-bust cycles of nursing supply have not served patients well and have contributed to the sense nurses have that they are more expendable than other professionals, based on the economy of the moment.

"How many nurses is the right number?" is a tough question to answer. Canada has just under 10,000 nurses per million citizens – ahead of Sweden, the U.S., Denmark, New Zealand and Germany and just less than Switzerland, Australia and Ireland. Norway and the Netherlands stand out from fellow OECD nations with their high number of nurses – each has 2.5 times the number per capita as Canada. But it is unclear what factors really contribute to health for a nation. What matters most? Is it the number of nurses or doctors? Wealth? Education? Nutrition? We assume it is some combination of many factors, but which make the most difference is very hard to delineate. If you are a patient in an operating room, then one surgeon makes all the difference to you at that moment. The same holds true for a woman giving birth in an isolated nursing station; one nurse at that moment can mean life or death. But how we extrapolate that to understand the impact on whole nations is a much more complex question.

We need to accelerate our efforts and redesign nursing workforce planning to stave off the 800pound gorilla of the US by 2020.

Lisa Little 2005

We know health expenditures correlate with rising GDP, and subsequently that the number of nurses per capita is correlated with rising health expenditures. Simply put, wealthier nations tend to spend more of their GDP on health, and in turn, more of their health dollars on nurses. But how those factors all tie to actual health outcomes is a much muddier picture to sort out. The U.S. spends more than 14 per cent of its GDP on health care; France spends 10 per cent and Norway 8 per cent of their respective GDPs. But, while the U.S. spends far more on medical care, its people are not healthier: the U. S. population has the lowest expected lifespan and highest infant mortality rate of those three countries. Evans & Roos (1998) and other economists have noted repeatedly over many years that Americans pay a great deal more for health care than Canadians but they don't get more individual hospital or physician services. The Commonwealth Fund found that among the six nations it studied (Australia, Canada, Germany, New Zealand, the U.K. and the U.S.), "the United States stood out for high error rates, inefficient coordination of care, and high out-of-pocket costs resulting in forgone care" (Schoen et al., 2005). So what are the messages about the amount paid for care and health outcomes - and what roles do nurses play in that chain of variables? The U.S. employs about a third as many nurses per capita as Norway. Is there a link there? Are nurses making a difference to the costs and better outcomes in Norway, and if so, what are they contributing to make that so?

Despite ebbs and flows in the number of graduates, the evidence of the past five years suggests Canada must learn to deploy the supply of nurses and other health workers much more effectively before we can be certain we are short of providers. Rapidly changing technology and a different health care delivery system may mean the dire shortages predicted, which are based on current delivery models, could be less problematic in 2020 than they seem now. Still, given the high retirement rates predicted and the comparatively low number of new registrants, getting through the coming decade is likely to pose major challenges if the health care system does not change course very quickly.

Global nursing concerns in 2006

Nursing leadership. "What has happened to the legacy of early nursing leaders?" Falk-Rafael asked in 2005 (p 214). What many early nursing leaders had in common was political activism that grew out of the experience of providing care for poor, immigrant and other vulnerable populations in an era that predated many of the social policies and programs we now take for granted. They bore witness to the health implications of poverty. Is this legacy still relevant in the 21st century?

Nurse leadership today usually refers to people at the head of the profession but there are also leaders who emerge to carry on the social justice and activist traditions of nursing. Nurses have always been at the front line in wars, epidemics and disasters; they routinely work in remote areas and with marginalized populations. Falk-Rafael says nurses are now "only minimally involved in socio-political activities" (2005, p. 215) but Canada is not without social-activist nurses. We see that tradition in the work of grass roots activists like Cathy Crowe who has brought so much attention to health care on the streets through her work in Toronto. Dr. Ginette Lemire Rodger was pivotal in her role on the task force for changes to the Canada Health Act in the 1980s. Dr. Verna Huffman Splane – Canada's principal nursing advisor starting in 1968 – had a profound influence on the evolution of health care in less-developed nations through her international work with the WHO. Dr. Splane brought that same passion to nursing in her work as first vice president of the International Council of Nurses and still serves as professor and mentor to countless nurse leaders.

Nurses are the patient's safety net. They watch. They listen. They act. When necessary — and it is increasingly necessary — they advocate on the patient's behalf, both inside and outside the care environment.

Lucille Auffrey 2005, p. vi

Activism has also been focused on leadership within the profession and health care system. Rob Calnan broke a century of tradition by becoming the first male president of the CNA. Joan Lesmond tumbled a different barrier when she became the first black Canadian to lead the Registered Nurses Association of Ontario. We see leadership in innovative administrators like Dorothy Wylie, researchers like Dr. Linda O'Brien-Pallas and activist union leaders like Kathleen Connors and Linda Silas. There are countless more nurses across the country who advocate for patients and for health in their personal and professional lives. However, Falk-Rafael's underlying concern is a valid one. Does the advocacy carried out by individual nurses translate to more nursing leadership? How does the apparent lack of leadership fit with so much strength at the individual level across nursing practice? Is it a visibility issue? Or does nursing need more charismatic formal leaders? The constant angst in nursing about lack of leaders and leadership seems to highlight a disconnect between what nurses do and the way they are viewed.

Work/life balance. Nurses express all the same concerns about balancing work and home lives we hear from all other workers across society – with reason. For at least 15 years nurses have had the highest or second-highest rate of absenteeism of all workers in Canada. This alarms the nursing community and has prompted numerous studies on working conditions. It is encouraging to see that the absenteeism rate in 2005 dropped compared to when it was last measured in 2002 – reversing a trend of nearly 20 years. The absenteeism rate bears close

Human resource planning needs to be placed within the broader system in which health care services are provided.

The effect of social, political, geographical, technological and economic factors and their influence on the efficient and effective mix of human and non-human resources must be considered in planning for and managing the health care workforce. In addition, the issue of political will is an important one. Today's human resource challenges have evolved slowly over the past 50 years. Past mistakes cannot be overcome within the timeframe of a single or even a second political mandate. Although critical, sustained HHR planning efforts by policymakers and key stakeholders are very difficult given changing governments and political agendas. Policymakers and researchers must work in concert to keep the health policy issues relevant, easily understood, and practical.

O'Brien-Pallas et al. 2005b

attention in the coming few years to see if it continues to decline or at least to not increase. What has not changed is the high rate of overtime worked by nurses, for the first time exceeding 10,000 full-time equivalent positions in 2005. That rate is up from about 8,600 in 2002, and is 144 per cent higher than the amount worked in 1987. How long the health system can sustain itself with nurses working in that way that should be a major concern.

Canada is not alone in confronting these complex problems. During a meeting of the world's chief government nurses in Atlanta in 2001, Dr. Verna Huffman Splane noted the "remarkable consistency" of issues across nations, regardless of size and health system. Even setting aside practice setting, nurses from very different countries have similar concerns about quality of care, access to care, and problems with basic working conditions including workload, overtime, scheduling, part-time versus full-time work, control over practice decisions, broken or missing equipment, respect in the workplace, job security and workplace violence. More recently, the WHO noted a similar pattern across countries, including "shortages, inadequate working conditions, and poor distribution and inappropriate utilization of nursing personnel" (2002, vi).

These are not idle concerns. There are important and direct consequences beyond tired or injured nurses: Evidence gathered by the Nursing Research Unit at the University of Toronto suggests that the high intensity and pace of nursing work is affecting patients. O'Brien-Pallas, Thomson, McGillis-Hall and colleagues have found that "nursing productivity/utilization should be kept at 85 per cent, plus or minus five per cent" because rates above 80 per cent are associated with lower care quality, lower nurse satisfaction and rising costs (2004) Furthermore, they have found that patient outcomes improve when nurses work less overtime, and overtime is highly predictive of absenteeism among RNs (Shamian et al, 2001). Most of these conditions continue in nursing workplaces.

Informants interviewed for *Toward 2020* were clear in their assertions that they want better access to high quality care. They are not "hung up" (their words) on who – MD, RN, LPN, RPN – delivers what service, as long as they have access to good health and illness care. A common response in the interviews was typified by this comment about roles and titles:

"That is your stuff, your hang-up. I just want good care and I don't care who I get it from."

Specialists, generalists, certification and advancedpractice nursing

Is nursing a generalist role, a specialty, an advanced practice, or some combination of all of these? Perhaps all three are needed to meet the complex needs of patients across the system; indeed, maybe elements of all three are needed in every nurse. Some complain the "generalist" role is being whittled away as traditional medical-surgical units in hospitals give way to specialized care, especially in larger urban centres. That's consistent with the way medicine is evolving away from the family doctor role. Some say being a generalist is itself a specialty. All of this is confusing to nurses, let alone the public who need nursing services.

There are some 35 member organizations associated or affiliated with the CNA. A quick scan just of the names of the groups reveals specialty identifications that encompass clinical care and disease categories, as well as students, history, culture, geography, research and administration (see membership, http://www.cna-aiic.ca).

There are now RN certification exams for 17 specialty groups⁸ and 14,500 RNs are certified. It's apparent that the specialty label has significant appeal for nurses which is also consistent with the way care settings tend to be organized. It's not clear how the trend toward highly specialized knowledge, status and titles will fit with a future where more nurses will need to have broad general knowledge of health and communities or how it will affect the Canadian Nurse Practitioner Initiative. With so many nurses already viewing themselves as specialists, the potential resistance to nurse practitioners by other nurses, or possible failure to maximize the role because of nursing's internal politics, should not be underestimated. During the course of this project, informants expressed an acceptance, even expectation that the practice of all nurses will advance. In some interviews, informants were clear that they were talking about receiving more primary care from all nurses, not just NPs. If that finding can be generalized, it would fit with Kitson's assertion that nursing runs a risk of alienating the majority of nurses "who are not, never will be, and don't need to be advanced practitioners" (1996) in the interest of whatever political leverage might be gained by pushing advanced practice roles. Nursing still has that issue to resolve.

Gender and diversity dynamics in the workplace

Most nursing workplaces are still organized in hierarchal structures, and many nurses, physicians and other health professionals still play out traditional roles. The impact of the historic gender differences between nursing and medicine cannot be ignored in this analysis. Ways of behaving in nursing are inextricably linked to the female make-up of the nursing workforce, like the ways people react to nurses (and treat them). The power and respect accorded to physicians and administrators (often one in the same) as opposed to nurses, for example, cannot be unbundled from the dominance of men in medicine and senior administration. In much of the world, the male physician and/or male administrator still is in charge of many women who do the bulk of the "work."

That gender gap underpins much of the politics within health workplace, between governments and health professionals and between the public and caregivers. It is the root of differences in the perceived value of nursing, in the working conditions for physicians and nurses, the significant differences in their salaries, and their control and autonomy in the workplace. It affects education and career experiences.

Some of this may explain nursing's failure to attract more men, but before Nightingale men were highly involved in nursing, and they still are in many places outside North America. Furthermore male nurses tend to enjoy their careers and be quite satisfied with the tasks of nursing. So the argument that men cannot or would not want to identify themselves with the caring dimension of nursing doesn't stand up to scrutiny. Something else is at play.

Gender imbalances have been overlaid with broader societal realities of white privilege such that in 2006, Canadian nursing's decision-making and authority

⁸ Bilingual certification examinations are offered in 14 specialty areas including neuroscience, occupational health, nephrology, emergency, adult and pediatric critical care, psychiatric/mental health, perioperative, oncology, gerontology, perinatal, cardiovascular, palliative hospice care and gastroenterology nursing. Three new specialties – rehabilitation, community health and orthopaedic nursing are in the process of developing examinations.

Nurses have been living oppressed group behaviours. If we ever use the power of sheer numbers we could actually create change as opposed to waiting for it.

Marlene Smadu 2005 structures are still the territory of English-speaking, white women. Despite the ethno-cultural and racial diversity that characterizes many parts of Canada, and much of nursing at the service-delivery level, the formal leadership of nursing is not representative of Canada's cultural mosaic. With nearly all of the diversity in nursing locked at the entry level, nursing plays out what Patrick Case (among others) in his interview for this study described as "cappuccino equity" – white on the top and brown on the bottom. Significant work lies ahead if nurses and other health care providers will be able by 2020 to develop a culture that seeks and embraces diverse opinions, ideas and people.

The nursing "family" in 2006

The focus of nursing in the past decade, or at least the language of nurse leaders, has shifted to valuing knowledge, leadership and related skills such as advocacy. To be more relevant, the focus and tone of nursing's public messages and voices also must shift. Nurses collectively must be more unified and more strategic in their messaging and advocacy work. Just as important, the messages spoken by leaders about nurses and nursing must reflect what nurses actually do in their daily practice and what the recipients of their services – patients, not nurse leaders – think they should be doing.

Nursing leaders recognize that time is limited, resources are scarce and issues are critical. The nursing community is maximizing its ability to chart its future course by rallying together without delay.

American Nurses Association 2002, p. 7

Apart from the three regulated groups there are many stakeholder groups in education, administration, policy, unions and the specialty clinical groups, all communicating messages about nursing priorities to governments, employers and beyond. Many of these groups do their own lobbying, advocacy and messaging with little or no co-ordination. Governments and the public don't know who they are hearing from or talking to. It's difficult enough for nurses to understand these various groups – it's nearly impossible for governments and the public to determine who represents nursing and why it has so many voices.

There are 28 regulatory and professional nursing associations in Canada, several unions, and professional associations for groups including administrators, researchers and educators. On top of those, there are dozens of specialty and affiliate groups within the RN category alone. Even a cursory count adds up to more than 100 nursing groups in Canada.

Why some of them exist is unclear; in that regard, this patchwork of nursing organizations seems like a remnant of the past. Do all these organizations increase safety, quality or public confidence more than a streamlined, integrated, redesigned model of nursing organizations might do? Are they serving nurses well? Courageous minds must debate whether Canada needs all these organizations, and if not, what more effective structures should be put in their place.

Another question is whether the way we regulate the profession serves the country well now or will meet patient needs in 20 years. Arguably, nursing in 2006 is not in a position to meet the challenges ahead with its infrastructure and relations across the regulated groups. They may have been useful 50 years ago but may be limited in their ability to adapt to rapid change and unstable conditions now and into the future.

Scope of practice. Significantly overlapping scopes of practice, from the level of health care aides, orderlies and nurses aides through to NPs and even to physicians, make it difficult for governments, employers and the public to distinguish the roles of nurses and their purposes in the system. The collective,

relative failure of nurses themselves to articulate the differences, costs and benefits of the various nursing roles adds to the confusion. Are all three roles needed? What special skills do each of the groups have that best serve patients, and how can they be accessed in every part of the country?

Scope-of-practice and skill-mix discussions are complicated by employers and administrators dictating their own scopes of practice, even down to individual unit differences. LPNs, RPNs and RNs all report barriers that keep them from using the broadest possible range of their skills and knowledge despite shortages of other workers (Besner et al., 2005). LPNs for example, report "wide inconsistencies in expectations for LPNs across practice settings" and RPNs and RNs find the same thing. This must change to maximize efficiency.

Nursing education and research. The range of educational entry points for nursing and the vastly different programs and curricula within and across categories are confusing even to nurses. They make it difficult to determine a base knowledge of nursing, blur the boundaries of scope of practice and muddy the impression of what the profession can and should be. Knowing how one type of nurse is educated in Eastern Canada for example doesn't guarantee understanding the education in the West. In addition, a lack of consistent recognition of prior learning and experience often means that when nurses go back to school they have to "start over" or repeat course work that was taken at different educational institutions.

The establishment in 2005 of the interdisciplinary Canadian Academy of Health Sciences, of which nursing was a founding discipline, reflects an increasing orientation toward multi-disciplinary approaches to education, research and practice (Pringle, 2005). Ironically, while nurse leaders talk more and more about multidisciplinary team work, there is little evidence of an effort to harmonize education for nursing's own three regulated groups. In their review of nursing education, Pringle and colleagues concluded that there was a "remarkable lack of collaboration and communication" among the groups, and "little evidence of planning for students to work together to learn the scopes of practice of each and appropriate ways of working together" (2004, p. 108). That condition weakens nursing's credibility in its efforts to lead interdisciplinary education and practice.

Lifelong learning has become a mantra in nursing, and most employers offer and expect nurses to be engaged in a variety of ongoing education opportunities. However, clinical pressures and inconsistent support from organizations can mean that nurses may have educational opportunities they can't take advantage of. Nurses often take on continuing education related to needs of the specific employment setting (e.g. new equipment or procedures), specialty education within a disease or delivery area (e.g. cardiology, SARS), or college or university-based education that could move them to a different nursing category (e.g. LPN wishing to become an RPN, or a master's-prepared clinical nurse specialist taking doctoral education to become a professor). As a result, a complex mix of education opportunities are offered to nurses in all categories, with multiple entry points and programs offered by most colleges and universities.

Regulation. Regulatory and licensing structures also need to be rethought. For example, all RNs and LPNs in the country (with the exception of Québec) write the same examination to enter practice, whether they came through a diploma or university program. But they are registered to practice in only one province and can't go elsewhere without re-licensing in the new jurisdiction. Mobility for Canadian and international graduates is therefore limited, as are rapid responses to emergencies. Based on the SARS precedent alone, "expedited cross-jurisdictional

licensure of health care personnel should be feasible to facilitate health emergency response teams activity" (Health Canada, 2003, p. 103)

Canada's Agreement on Internal Trade includes important language about labour mobility intended to reduce barriers and increase work opportunities. Labour mobility "refers to the freedom of workers to practice their occupation wherever opportunities exist in Canada" (Alberta Government, 2005). The need for legislation around mobility arose in response to Canadians, "particularly those in regulated occupations and trades," sometimes being confronted with barriers to "having their qualifications recognized when they move across provincial or territorial boundaries" (Alberta Government, 2005). In Europe, nurses can work in countries throughout the European Union, and there is even talk about some types of global licence that would allow nurses to travel and work in different countries.

Modernizing regulation is about more than convenience for nurses or governments. It is an important part of a larger way of thinking about a successful nation and economy. As noted in the OECD study on globalization, "trade cannot do it all. Trade liberalization needs to be accompanied by flexible labour markets, efficient but not over-burdensome regulation and macroeconomic policies that promote stability and growth" (OECD, 2005d). However, in the case of Canada, OECD notes that "removal of obstacles to inter-provincial trade in professional services and full implementation of the *Agreement on Internal Trade* have been slow" and recommends that barriers and restrictions on inter-provincial trade, especially professional services, need to be dismantled (OECD, 2004a; OECD, 2006).

Relationships among RNs, LPNs and RPNs. There is excellent collaboration among nurses at some levels of service delivery such as those working together on a team in an institution, and we know that formal leaders work together on some national projects. But there is a vast grey territory between those examples and the existence of comfortable and productive inter-dependent relationships. In the language of some of those interviewed, meaningful, routine, informal and ongoing collaboration across the RN, LPN and RPN groups at the national level is at best inconsistent. Words such as "adversarial" and "sceptical" typify comments about the relationships among the groups. At the provincial/territorial level, some jurisdictions report "superb" relationships among professional and regulatory groups (for example Nova Scotia, as related by Ann Mann, Chair, Canadian Council for Practical Nurse Regulators in a personal communication, February 2005). However the RN, LPN and RPN groups across the country have few pan-Canadian structures in place to meet regularly and they largely communicate separately with governments, the public and professional stakeholders.

The groups seem to be uncomfortable with each other for a number of reasons. Their disparate numbers (246,000 RNs, 63,138 LPNs and 5,107 RPNs) mean unequal power because RNs can overrule the needs and concerns of LPNs and RPNs, and can be seen as wanting to control the practice of the other groups. As RPN leaders like Manitoba's Annette Osted and Marg Synyshyn have noted, the context of any dialogue about numbers of nurses is important. RPNs can feel particularly vulnerable when confronted with the big block of the nation's RNs and LPNs. Furthermore, Osted has noted that while the raw numbers of RPNs are small in comparison to RNs for example, RPNs are the largest group of mental-health professionals in the four western provinces.

Registered nurses face a different kind of vulnerability, being confronted with the claims of some LPNs and RPNs that their scopes of practice mean they can basically replace RNs, or can practice with the same patients and across all the

domains of nursing. This frustrates RNs who have amassed a growing body of evidence showing they have a positive impact on health and illness outcomes different from the other regulated nursing groups. Some research concludes for example, that more RNs and more hours of RN care correlate to better patient outcomes on a number of measures. Those kinds of findings should underpin decisions on who are the safest, most appropriate providers in any given setting. It should be noted that some physicians have made some of the same assertions about RNs that RNs have made about LPNs and RPNs.

Summary

Dr. Ivy Oandasan is a practicing family physician, director of inter-professional education at the University of Toronto, and a champion who is promoting interprofessional education and collaborative patient-centered approaches to health care. She made a pointed comment about nursing during a recent workshop on inter-professional practice held in Ottawa: "If you [nursing] can't articulate clearly to one another within nursing what it is that each of you does, then how can you expect your learners to understand?" This is not new, but it is useful to hear that even those who value nursing and are familiar with nurses can be confused by the various roles in the profession and by what each of them brings to health care. Along similar lines, a non-nurse member of the CNA staff reflecting on Dr. Oandasan's perspectives, commented that, "As long as all the groups are using the title 'nurse,' the scope of practice of the three categories will be confusing to people. Have you thought about changing the titles for all three groups?"

Messages are mixed about who does what, and which factors are most important to advance the nursing profession. Some nurses want to position nurses as "knowledge workers." However, non-nurse informants in this study told us that, in addition to the knowledge that nurses have, what they value most in their interactions with nurses are the hands-on, touching, caring, comforting, most human sides of what nursing has always brought to patient care.

In the broad church that makes up nursing we have not united on the central image we want to communicate to the public and our professional colleagues.

Gordon argues that "the caring, nurturing side of nursing with its ability to deliver efficient care and make order out of chaos – so connected to femininity – seems to be the only uncontested space for nursing, yet it is simultaneously being devalued" (2005, p.74). And while the public wants nurses to have those skills, arguably there is a lack of understanding of the knowledge base underlying the care that makes nursing different. Gordon calls nurses "knowledgeable caregivers." How nurses bring those two streams together will determine the success of nursing for the generations ahead but must be done if nurses are to move collectively into the more advanced diagnostic and treatment roles the public seems to be demanding.

Kitson, 1996

CHAPTER FOUR

Toward 2020: The Road Ahead

Introduction

Predicting the future accurately is an impossible task. But for nursing and health care to be prepared to face the health and social challenges of 2020, bold steps toward that future need to be taken. And if we can't predict the future with precision, we can look at patterns and trends, and take actions to shape some of them in our favour.

Anais Nin

We don't see things

as they are, we see

things as we are.

The themes in this section were distilled from:

- interviews with 48 Canadian leaders;
- an extensive literature review; and
- a consultative retreat with 25 Canadian nurse leaders

Our informants shared innumerable insightful and provocative opinions about where they see the world, health care and nursing heading by 2020. We were particularly struck by their high expectations of the nursing profession, along with their challenge to nurses to take control of the health care agenda – and make it health-, rather than illness-focused. The scenarios in the final section of this paper are based on these discussions and ideas.

What will the Future be Like?

Although we cannot predict specifics, we can imagine the world in 2020 will be about as different from 2006 as our lives are from 1990. That may not sound like a long time ago, but remember a world without e-mail or the internet, a world in which cell phones and lap-top computers were luxuries for wealthy executives. Even a desk-top PC was still a luxury purchase used by academics and businesses, and seeing a concert meant lining up in person for tickets. Automated banking machines were a novelty for most Canadians and Friday afternoon still meant a trip to the bank. People took road trips without first making hotel reservations, used paper maps for directions, lined up for airline tickets, and carried cash or "traveler's cheques."

And what of the young people born in 1990 who will start to enter the workforce as students over the next year? Consider that they...

- have never purchased a "record" to play music
- have no memory of the USSR or the Cold War
- think that fax and VHS videotape machines are antiquated technologies

- choose instant-messaging and cell-phone video/text-messaging over e-mail that they find outdated and too slow
- access sophisticated information in seconds, on a global level, and in any language, having never set foot in a library
- can monitor their own blood pressure, cholesterol and pregnancy status in the local drugstore without ever seeing a physician or nurse
- do not have to line up to cash a pay-cheque, order flowers or purchase a train ticket
- know Pierre Trudeau only from history books, and were born 27 years after the assassination of President Kennedy
- cannot imagine a world where a blackberry was just a fruit.

The parents of some of these children were born after Canada's Centennial in 1967, after the deaths of Martin Luther King and Robert Kennedy and after the first walk on the moon. These "Millennium kids" are, in fact, the grandchildren of the fabled "Age of Aquarius."

Why does it matter that we get to know these young Canadians and think seriously about their collective future? Because these grandchildren of the baby boom are the nurses of 2020; they will be society's caregivers. By 2020, these most diverse and technologically advanced humans in history will be 30 years of age, and some of them will have been in the nursing workforce for nearly a decade.

Exaggeration? In fact, this is not even the tip of the iceberg in terms of comparing the differences between 1990 and 2006. We have no evidence before us to suggest that 2020 will be any less dramatic in its differences from 2006 than 1990 was from today. If we accept the world is leaping toward the future in ways we cannot imagine today, it would be folly to assume health and health care will be unchanged. How much of that future can we influence? And what is the place of nurses and nursing in the world of 2020?

It is more than idle curiosity that prompts these questions. It is not an exercise in science fiction. Imagining what might lie ahead, and understanding our strengths and weaknesses today might allow us some small measure of control in shaping the future rather than forever reacting to it. What follows is a summary and distillation of the predominant trends emphasized most forcefully by informants interviewed and in the extensive literature search. Appendices E, F and G contain links to the full documentation for the interviews and the literature review.

Future Global Social Trends

How Canada appears and acts in 2020 will be influenced largely by its position in the global village. The world population is growing by a quarter of a million people per day. By 2025 the world population will increase to 7.5 to 8 billion, with 1.6 to 1.8 billion people in the North and 5.6 to 6.1 billion in the South. The future of human population growth will be determined, and is now largely being decided, in the world's less developed nations. Ninety-six per cent of world population increase now occurs in the developing regions of Africa, Asia and Latin America, and this percentage will rise over the course of the next quarter century (U.S. Census Bureau, 1999).

Inequalities between the South and North and uneven progress within countries will affect us all. The impact of health and development in Africa alone will have a global impact. These inequities will create a strain on food, water and energy supplies. Whether fresh water supplies will meet needs is uncertain. Sustainable development will be necessary and will demand many changes in how we manage and use our natural resources (Nebbia, 2001).

China could overtake the US and Germany to become the largest exporter in the world in the next five years. By then, Chinese goods and services could represent as much as 10 per cent of global trade compared with 6 per cent at present.

OECD, 2005 From its first Economic Survey of China

See http://www.oecd.org

But it's not all doom and gloom in the Southern hemisphere. The demographic patterns emerging are giving rise to increasingly confident talk that the young, growing and vibrant South will steal the spotlight from the "old, dirty, shrinking North," as the OECD countries are starting to be described by some.

The rise of China and India as global economic superpowers will diminish American influence and thereby significantly alter global fiscal, cultural and military dynamics. But the economic gains forecast for China and India will not come without regional and global consequences. Already, seven of the world's 10 most polluted cities are in China, and by 2025 it is thought that China will surpass pollution levels of the U.S. In India, the economic gap between the richest and poorest citizens is vast and growing.

Health human resources could end up being treated as a trade not a service.

Judith Shamian 2005

Globalization

Globalization will influence humanity in every realm from health care to social security to food, water and energy resources. Canada's rate of foreign investment and ownership is lower than many OECD counterparts, but already, many companies in Canada are not controlled or managed locally or even nationally. By 2020, global companies will be the norm. And the power of some corporations may exceed the power of governments. Some people believe that multinational corporations will become the new world order. Others believe that we will become more regional as a result of these constant influences from outside of our borders. Either way globalization will affect how we live in 2020. The emergence of global trading blocks will influence health and development and employees will move easily around the globe.

Most developing countries – and not just a handful of the largest such as China, India and Brazil – stand to gain from trade liberalisation. Global market openness is a key to successful adjustment because of the contribution of trade to growth, innovation and competitiveness. Particular benefits arise from the removal of barriers to trade in services given their critical role as inputs to economic activity.

OECD, 2005d

Globalization has the long-term potential to raise living standards and reduce the costs of goods and services, but the short-term consequences of free trade threaten many people and enterprises in both developed and developing nations (Pearce Snyder, 2004).

The pace and degree of this movement could be altered if the U.S. reins in its enthusiasm for globalization as some commentators are suggesting it has already begun to do. Sceptical observers have suggested that the wealthy West will be in favour of globalization up to the point that the economic advantage shifts toward the South and East, which is just beginning to happen as China, for example, starts to manufacture its own cars from scratch rather than assembling raw materials from the West for export.

It is important to note that while other poorer regions of the world have developed and begun to rise out of poverty Africa has not. Stephen Lewis says the great promise and excitement that characterized early post-colonial Africa in the 1950s and 1960s has gone "to hell" (Enright, 2005). In terms of the benchmarks of progress used in Europe or North America, oil-rich Nigeria has not changed in a generation, and in fact has regressed. Other nations lie virtually in ruins. This growing disparity between most of Africa and the West and even between Asia and Africa will do little to discourage poaching of health workers or exploitation of the continent and its people.

Global migration

The ability to travel and relocate around the world is increasing. Shortages in many professions, including nursing, are leading to increased professional mobility and are creating increasing disparities between countries that are less developed and those that are more developed. The drain of health workers from any country, especially the least economically developed, increases the magnitude of disparities and health-system deficiencies those countries confront. The expansion of global and regional trade agreements is also a concern because of their potential effects on the supply of health workers.

Instant communication

Advances in technology will make instant communication the norm, and by 2020 we will have many more sophisticated communication tools at our disposal. A new generation that has grown up with it will be comfortable with the technology and used to communicating with people across traditional borders, relating

in ways baby boomers are just getting used to. We all will be expected to multitask in the normal course of daily life. Informants told us that some of their students work on a laptop plugged into the internet, while using instant messaging and listening to music on an iPOD – all simultaneously, and all during lectures or even at work. That way of being and of communicating is the new normal; it is not some theoretical future, generations from now. What is more, as leaders in companies like Nortel have noted, the babies born in 2006 will live in a world surrounded by the internet – with information and knowledge accessible to everyone, 24 hours a day. What they will bring to the world is not manual skill, but their ability to translate, manage and disseminate the vast amount of information available.

Work will change and evolve as a result of instant communication; growth areas will be driven by the global economy, demographics and technology. How many and what resources are spent globally will encourage or discourage equitable reform.

What does it mean when we say, "people are more mobile"?

- Canadians made nearly 15 million visits to the US in 2000.
- Every night, 125,000 people on 500 flights cross the Atlantic between the West and Europe.
- Every year, 42 million travelers arrive in Europe... at Frankfurt Airport alone.

It is expected that in 2020, 717 million tourists will visit Europe – more than double the number who will visit in 2006.

For many people, technology is not a compromise — it's better than the faceto-face.

Marc Zwelling 2005

Health tourism

A trend noticed in the past few years, and one bound to increase, is that of patients who are having difficulty getting certain treatments or surgeries in their home countries paying to travel to other countries for them. Wealthy Canadians may now travel to resorts on the Indian Ocean for joint replacements at a fraction

Nanotechnology refers to the design of technology on a microscopic level. For some, "nanotechnology means something far more ambitious, miniature submarines in the bloodstream, little cogs and gears made out of atoms, space elevators made of nanotubes, and the colonization of space. It is no wonder people often muddle up nanotechnology with science fiction."

Harper, 2003

of the cost they would pay in a private U.S. setting. How this trend affects the availability of health services in the countries that offer these programs and the impact on the system in the patient's home country (if there are complications after the fact) are ethical issues we have barely begun to discuss.

Technology

Technology will envelop all of us in 2020, from science to culture to lifestyle changes. It will force the creation of new kinds of workplaces, jobs and work patterns, where workers acquire new skills or are left behind. Mundane commercial and service jobs, as well as environmentally dangerous jobs will be done by robots; personal robots will appear in the home by 2010 (Cetron & Davies, 2003). Education will be conducted at virtual campuses through the internet. But while

most countries will have access to new technology, there may be national and global inequities in access to it.

Environmental change

Environmental change will permanently alter the planet by 2020. Global warming will be felt around the world and will affect health, social systems, health systems and economic activity such as tourism. We see the effects of it already in increasingly warm summers and winters, flooding, increasing numbers of smog days and shrinking glaciers. Nunavut is seeing the effects of air and water contamination from the south. Sea ice scientists like Dr. David Barber have been quoted as stating that "the sea ice cover in the Arctic is now melting at a rate of 74,000 square km a year" – an area almost as large as Lake Superior (Canadian Broadcasting Corporation News, 2006). At that rate, by 2020 the Arctic could be free of summer ice for the first time in a million years. Disease patterns will change because of those kinds of environmental influences (Hancock, 1999), for example bringing diseases of warmer climates to formerly colder ones. Mosquitoes already are spreading to areas of Canada's southern Arctic where animals have never encountered them or the diseases they may carry.

China and India depend on the world's third largest ice pack, sitting atop the Himalayas, for fresh water – and that ice pack is melting as the planet warms. Some scientists think that most of the Himalayan glaciers will be gone by mid-century, forcing Chinese, Indians and others in the region to move to where there is fresh water. Canada and China each have about 7 per cent of the world's renewable fresh water supply, but with its high population, even now China can only provide about 2.2 per cent of the water per citizen that Canada does. So as ice fields melt globally, Canada, with its small population, could become a popular choice for migration based solely on fresh-water supply. Canada's water – "blue gold" as the Conference Board has called it (2005) – is set to be a pivotal and increasingly important commodity.

Social disparities and the fear society

If present trends continue, by 2020 we will see the entrenchment of a society of terror and increased fear. This culture of fear is already influencing everything from airport security to parenting styles. Various experts believe that an increase in social disparity will hasten its spread. In a recent United Nations report, *The Inequality Predicament* (2005), the United Nations Department of Economic and Social Affairs warned of growing violence associated with national and international acts of terrorism, which are the result of economic and social inequalities and competition over scarce resources. Increasing poverty and a growing schism between the "haves" and the "have-nots" continue to pose a major threat.

People are expecting to be supported and empowered.

Ken & Dawn Fyke

Informed consumers

Informed and participating consumers in all sectors represent another growing global trend. Consumers and patients in most countries have access to all kinds of technology and information; by 2020, information about everything will be at our fingertips. The challenge will be in sifting through it, understanding it, evaluating it, dealing with the volume and making decisions based on so many different options. However, access to technology, literacy and better socio-economic status will all come with challenges. The flip side of the technology boom is the potential inequity that will be faced by those without access to it or the ability to navigate and understand the volume of information available. Others have suggested technology will rapidly become so sophisticated it will help to eliminate inequities by translating automatically into any language, for example, by being voice-activated and hands-free so physical disabilities are not a barrier to use, and by responding to verbal commands and questions that do not require a high level of cognitive ability.

Future Canadian Trends

Demographics

Diversity and Immigration. Immigration and a racially diverse population will change the face of Canada significantly by 2020. Already, more than half of population growth comes from immigration and more than 80 per cent of those people

are non-European. For the majority, English is their second language. By 2017, one in five of us will be immigrants to Canada (CRPN 2005) and one in four Canadians will be a member of a visible minority (including Aboriginal peoples). The visible minority population will be younger on average (Statistics Canada, 2005). One in 25 Canadians will be Aboriginal.

Diversity Trends

The population of visible minority persons in Canada is expected to increase from about 4 million in 2001 to a level estimated between 6.3 million and 8.5 million in 2017, increases of 56 per cent and 111 per cent respectively. In contrast, the remaining population (non-visible minority) is estimated to increase between 1 per cent and 7 per cent over the same period. This would mean that about 1 in 5 Canadians would be a visible minority in 2017 compared to 1 in 8 in 2001. And approximately 1 in 4 (between 21 per cent and 26 per cent) Canadians in 2017 will be foreign-born (immigrants). In 2017 about half of all visible minority persons will be South Asian or Chinese, an increase in population between 2001 and 2107 of about 2 million for each group. Blacks will remain the third largest group (about 1 million in 2017). The fastest growing visible minorities are the West Asian, Korean and Arab groups, more than doubling over that time period and ranging in size from about 200,000 to 425,000 in 2017.

> Canadian Heritage, 2005 http://www.canadianheritage.gc.ca

The potential for "soft ghettoization" of new immigrants may occur if they are not able to secure adequate employment.

Mark Kingwell 2005

We have known the baby boomers are coming for more than 40 years and governments are completely unprepared to deal with the reality of that aging demographic.

Deborah Grey 2005

Work/family balance is important for the generation after us.

Linda Silas 2005

We're not prepared for the baby boomers, relating to health, illness or attitude.

Armine Yalnizyan 2005 The face of Canada's large urban centres, particularly Montreal, Toronto and Vancouver will reflect this diversity: By 2020, three-quarters of the visible minority population of Canada will be living in one of these three urban centres, and 97 per cent of Canada's racially visible population will live in Ontario, British Columbia, Quebec, and Alberta (CPRN 2005). This increased cultural, religious and linguistic diversity is likely to give rise to conflict in some communities and community leaders need to prepare for these changes. Although Canada has a history of tolerant multiculturalism, 2020 will mean "multicultural" to a degree never before seen in Canada.

Aging. The aging population of Canada will be exerting its full impact on the country in 2020. By then, half of the Canadian population will be over the age of 44 (up from 37 per cent in 2000) and the number of people aged 65 and over will double from nearly 4 million in 2000 to 8 million by 2026 (Statistics Canada, 2001). By 2020, there will be as many seniors in the population as children, a balance of age groups we have never seen in Canadian society. Its impact is unclear, but will mean competition for health dollars. We already are older in the Atlantic provinces, Quebec and British Columbia than in the other provinces and territories, and that pattern is likely to persist.

Given the energy and innovation that young people with new ideas bring to the workplace and community, it is unclear how their smaller numbers will affect society. Small communities could become quite stagnant. From a public policy perspective, young people will become, in essence, a "visible minority." Those responsible for developing public policy will need to ensure the needs and the power of baby boomers don't simply overwhelm everyone else in society, or worse, hold everyone back.

The baby boomers will influence every aspect of society from investment to transportation to health care to business. Communities will have to change their planning to accommodate an elderly and diverse population that will be much more demanding and engaged than elderly people are today. They will challenge professional attitudes and systems that do not meet their needs. There is disagreement over whether they'll be healthier than seniors now, because of their interest in sports, nutrition and their own health. If they are a generation of healthier older people, different kinds of health services will be needed. Alternatively, they may use the same health services seniors use now but there will be a lot more of them.

The echo boom generation (also called Millennium kids or Gen-Y) – born between 1979 and 1994 – are the children of the baby boomers. They make up the biggest population bulge since the baby boomers. They will provide challenges to the workforce and create new working environments. Communities and organizations will have changed to accommodate both the older baby boomer priorities and the younger echo boom priorities. Managers and organizations will need to be able to harness the echo boom's ability to generate "just-in-time" knowledge and their technological prowess. They are capable of multitasking but can become bored quickly (Carroll, 2004).

The impact that retiring baby boomers will have on human resources capacity and on the economy in general is a point of debate. The OECD warns that Canada needs to give more attention to "preparing the economy to cope with the rising long-term spending pressures coming from the aging population" (2005c). Among the strategies strongly encouraged by OECD is to increase spending on public employment programs that would do everything possible to encourage older workers to stay in the labour market longer – or those outside of it

to enter. The work rates of older Canadians are lower than those of several other OECD countries. OECD notes that "current spending on active labour market programmes as a share of GDP in Canada is among the lowest in OECD" (2005a) and recommends policy changes around pensions and retirement that would facilitate workers remaining longer in the labour market. The Conference Board of Canada suggests similar policy and legislative changes to reduce incentives for early retirement (2005). Furthermore the Board recommends that at the organizational level, employers "should adapt their human resources policies to the needs of an older workforce and focus on diversity programs targeting older talent, work redesign, work flexibility and training" (2005, p. 3).

Dr. David Foot, Professor of Economics at the University of Toronto and author of Boom, Bust and Echo, notes:

...the echo boom children are now starting to enter the labour force but their boomer parents are not about to retire en masse to make room for them. The peak of the baby boom, born around 1960, is currently aged 45 and will not be retiring for at least another 15 to 20 years. Some boomers have been able to retire early but these people are primarily in occupations where physical demands have required early retirement (firefighters) or where union contracts have provided full pension coverage after long service (public servants, teachers, auto workers). But most boomers are not in these categories. Many are working to actively save for their retirement.

Today, the boomers' children currently in their teens and early 20s have been flooding into post-secondary education. Colleges and universities are having difficulty accommodating and finding the funding for the increasing demand in many regions of the country. These echo boomers are now just starting to graduate and enter the labour market. Over the next decade Canada must focus on attracting its energetic young people into occupations most needed in the future (e.g. health care, skilled trades) and on generating jobs for this young talent already living here. Labour market shortages may develop after the echo boom finishes entering the labour market about a decade from now. Planning to increase immigration levels a decade from now when the boomers are retiring and their children are integrated into the work force makes demographic sense.

Foot, Globe and Mail, Oct. 1, 2005

Aboriginal Peoples. In 2020, the Aboriginal population in Canada will be larger and more influential than at any point in history. Provinces like Manitoba and Saskatchewan are predicted to have an ever-increasing number of Indian and Métis people. 1n 1996, 11 per cent of Saskatchewan's population was Aboriginal; by 2020, the First Nations population is expected to rise to 20 per cent (Kouri, 2000). Approximately 25 per cent of youth (15-24 years) in Saskatchewan are Aboriginal. This is forecast to increase to 1 in 3 by 2010. Aboriginal governments are forming their own health, education and social service systems; and even 10 years ago, more and more Aboriginal people were already living in urban areas (Regional Colleges Review Committee, Government of Saskatchewan, 1999).

Winnipeg is home to Canada's largest Urban Aboriginal population. Over the coming years, this segment of the population is expected to grow at a rate about four times that of the non-Aboriginal population. Emerging from this will be a fundamental shift in the type of services required to meet the needs of the new Winnipeg.

Economic Research Associates 2004

Rural communities are dying and becoming more stressed.

Rosemarie Goodyear 2005

Where will people be living in Canada? The urban versus rural split will be critical for Canada in 2020. Urbanization is a dominant force globally, with reports that more than 160,000 people now move from rural to urban areas every day – close to 60 million annually. The United Nations estimates that by 2030, 83 per cent of the developed world will live in urban settings. In 2005, approximately 22 per cent of Canadians lived in rural areas, but more than 50 per cent of Canadians lived in four major areas (Montreal, Toronto, Calgary-Edmonton, and Vancouver). Eighty per cent of us live within about 160 km of the U.S. border. Approximately one in five Canadians lives within 160 km of the CN Tower, and the Greater Toronto Area will for the foreseeable future continue to be the leading choice for immigrants coming to Canada.

Many informants and futurists believe that the trend to urbanization will continue – although it will be interesting to see where the baby boomers live when their children leave home. Will they go back to the urban core, to small towns close to urban centres' services and diversions, or to small rural communities? One thing is clear: rural communities today are having difficulties retaining and attracting health workers and other professionals and young people are leaving them. How those patterns play out will have huge implications for Canada's nurses and how they will deliver services.

Social fabric

The social fabric of society will have changed by 2020. Various informants focused on the widening gap between social classes. The majority of Canadians have seen no significant increase in their income levels for over 10 years. The middle class has become increasingly stretched. Those dynamics, combined with other social pressures, could create a large underclass of society. Already the gap is increasing in Canada between the rich and poor with one in five Canadians considered to be low income. In addition, government decisions to pour money into acute illness care have left social programs behind. There is a critical need to rebuild balance for social care.

In his keynote address to the *Alberta Association of Registered Nurses'* Annual meeting in June 2005, Ken Fyke talked about four major shifts in societal values – openness is replacing secrecy; trust is replacing power as the foundation for relationships; confidence in oneself, for clients and for professionals, is replacing deference and status; and empowerment is replacing control by others. Fyke argues that the new values require us to involve clients, operate with greater transparency, demonstrate and accept accountability and evaluate performance in achieving better health for the individual and society.

By 2020 the definition of family will be more inclusive than today. Because technology will let people connect with each other globally in new and different ways, the idea of family will be greatly extended and will include virtual families and communities. Already we see virtual "nations" arising not around ethnic affiliations or political borders but around shared interests and issues (e.g. health issues, the environment, human relations). These changes will drive new ways of accessing goods and services, and will force changes to public policy ranging from trans-border purchasing of drugs to how societies will reconcile differing marriage and family laws as more people migrate across borders.

Public institutions

Canada is unique in the way responsibilities are accorded to various levels of government. By 2020 there will be increased blurring of roles and responsibilities among different jurisdictions, the public and private sectors. Some aspects of federal, provincial/territorial and municipal wrangling will have been dealt with but problems will persist. Public expectations will increase for accountability and openness by professionals and politicians, with accountability reforms in place. Silo thinking and behaviour will not be tolerated, particularly among the economic, environmental, health, social and educational sectors. Key priorities for Canadians will continue to be health, education and social issues and reforms.

Future Health Status and Health System Trends

Health status trends

The health system of 2020 will not look like it does now. Technology, diversity, interdisciplinary care and community and consumer involvement will shape it and health priorities will change significantly. Between now and 2020 the health technology movement and the holistic health movement will progress simultaneously.

Changing disease patterns. As the population ages we will see an increase in chronic diseases like arthritis and diabetes, diseases of aging, and potentially an increase in more virulent infectious diseases – some not seen previously in Canada and others, like tuberculosis, re-emerging. The disease trends related to obesity, inadequate exercise and poor nutrition will improve by 2020 because of the concerted health promotion efforts already underway. However, the after-effects of obesity on the older population will still be with us in 2020 – an increased need for joint replacements, for example.

Many public health experts predict a global flu pandemic as avian flu moves around Asia. If the SARS experience is any guide, a global pandemic will severely strain health systems and could cause many deaths. Workplace absenteeism due to illness will soar. Given the prevalence of just-in-time delivery of food and supplies and the likelihood borders would close, business and normal functioning could quickly grind to a halt. How will hospitals function if they have no back-up materials? How will milk get from farms to kitchens, or gas from refineries to cars? How will thousands of dead people be handled if there are not enough caskets, and if survivors are too ill to bury them?

We will also see an increase in the influence of cultural and social issues on health and illness – including those related to poverty and immigration. Unless major policy reform is undertaken "the current inequalities, concerns and challenges that exist within our health and social services system can be expected to be intensified under the scenario of increased diversity by 2017" (Oxman-Martinez & Hanley, 2005).

Zwelling says we have entered "the decade of depression" (2005). If trends continue, mental health will be a prominent problem for Canadians over the coming two decades. Setting aside human suffering, the fiscal implications of that forecast are daunting. As early as 1990, organizations such as the WHO and World

We need to rebuild the balance on the social care side.

Judith Maxwell 2005

Any way you look at it, in 2020 people will not put up with professionals, in any field, telling them what to do — they want to, and expect to, be part of the decision making process.

Michael Decter 2005 Bank estimated that among persons aged 15 to 44 years, depression alone could account for 10 per cent of the total fiscal burden of all illnesses globally. The WHO estimated in 2001 that mental illnesses account for 12.3 per cent of the global burden of disease; others predict that rate will rise to 15 per cent by 2020 (Murray and Lopez, 1996). Even more worrying for Canada, Thornicroft and Maingay (2002) argue that global averages bury significant regional variations, and suggest that such conditions already make up some 43 per cent of the total burden of disability in Europe and the Americas. If those figures are even vaguely correct, significantly different roles, practices and resources are going to be needed to manage that burden of illness in homes, communities and institutions. Clearly there is a major role here for prevention and detection.

Wellness trend. The wellness trend – a shift in focus from illness to health – will grow. More educated and engaged people who expect to participate in their health and demand support, information and resources for self-care are already emerging. Patients and families will expect not only to be involved in their own and their family's care, but to be the ones in the driver's seat. Workplace health programs and community-supported and accessible physical activity will be the norm.

Included in the wellness trend is recognition and support for self-care. The National Health Service in Britain includes self-care as one of its key building blocks for a patient-centred health service, saying "Society is changing. People want more information, choice and control over their lives and this is no different for health... there is a shift towards independence and there is a range of personalised choices for patients" (National Health Service, 2005). Enhancing self-care involves providing supports like shared decision-making tools, which assist people to participate with their practitioners in making deliberative and personalised choices among health care options (O'Connor, 2001).

Holistic health movement. Complementary and alternative health care is growing in Canada and use of those practitioners will increase. Millar (2001) estimated that 19 per cent of Canadians used complementary and alternative health care practitioners, often in addition to mainstream medicine. By 2020, these health systems will be more integrated. Integrative care is essential and consumers have the ability to make informed choices about all their health care options (Smith & Simpson, 2003).

The environment. The impact of the environment on health is already being felt; by 2020 we will see major health changes including more allergies, asthma, waterborne diseases, environmental sensitivities and infectious diseases like flu. We do not know the long-term effects of the persistent organic pollutants to which Canadians have been exposed for over 50 years, such as dichloro-diphenyl-trichloroethane (DDT) and polychlorinated biphenyls (PCBs), but "ecotoxicity" could alter predictions for life span and probable diseases (Hancock, 1999). The constant movement of people across borders creates an international health laboratory – what happens in Africa this morning can be here by evening. Obviously, that reality is especially relevant for contagious diseases.

Our global interconnectedness will also affect food, water and energy supplies. "If everyone in the planet were to consume at the same level as Americans do today, we would require four more planets to meet the demand" (Hancock, 1999).

We need to look at other cultural approaches to health – not just a western approach.

Suzanne Jackson 2005

Health system trends

Changing health issues will drive changes in the way we organize and fund health systems and services. Mirroring the simultaneous trends of holistic health and health technology there is some debate over how high-touch and high-tech approaches to care will play out. Clearly some balance of the two will influence health care services and both will be very important in 2020. The World Future Society predicts that in the future even more emphasis will be placed on skills that cannot be automated (2004).

The Conference Board of Canada estimated in 2001 that provincial/
territorial spending on health care would rise to at least 10.2 per cent of
GDP in 2020 (Brimacombe, Antunes & McIntyre, 2001). The Board has
released numerous studies documenting cost drivers and escalators, impacts of
health determinants on costs, and factors that could reduce system costs by 2020.
PriceWaterhouseCoopers estimated in 2005 that health spending will reach an
average of 16 per cent of GDP across OECD countries by 2020.

By 2020, much more health care will take place in the home and community, away from acute-care institutions, which will focus on high-technology medical and surgical care, including emergency, intensive care and transplant services. Everything else will be done on an outpatient basis or in the home. The focus of home care will be more than post-acute care, and will incorporate long-term care and end-of-life care. The co-ordination between institution and home will be much more seamless than it is today. Families will be heavily involved (as many are now) but better supported in keeping loved ones at home. Interdisciplinary care, collaboration and co-ordination among practitioners and institutions will be the norm. This model of "shared care" (National Health Service, 2005) captures the range of activities needed to maintain and promote health, from self-care at the one end (e.g. brushing teeth) to fully professional care at the other (e.g. surgery). In the middle, which is where most health care takes place, there are varying degrees of shared care among patients, families and professionals.

To sustain and support this shift to community care, the funding ratio will need to change significantly from how it stands in 2006. Adequate support and services will need to be in place so that families will not be overstretched. The informal caregiver will become a valued member of the team. As suggested in the American Nurses Association's pyramid of spending priorities (see Figure 4), in 2020 priorities will be directed away from our present focus on acute and intensive care – jokingly called "expensive care" by many working in the area – toward a greater emphasis on primary services and preventive programs. Tertiary care will, of course, still be required, but as generations move along and technology improves, it will be less an emphasis for spending because it will be needed less. Currently, intensive care makes up some 16 per cent of hospital costs, but only about 8 per cent of hospital days (Leeb, Jokovic, Sandhu & Zinck, 2006), so reducing high-cost intensive care unit stays is an important strategy to reduce overall costs.

We're on a journey away from the bed. In 1978, 86 per cent of operating room services in the USA were inpatient services. In 1998, 80 per cent of these same services were done on an outpatient basis.

Porter-O'Grady, 1998

There is a need for an integrated structure — one stop shopping — like a Community Health Centre.

Muriel Jarvis 2005

Much of primary health care in 2020 will be about using smart technology.

Michael Decter 2005

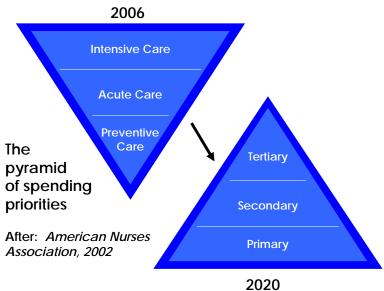


Figure 4. The Pyramid of Spending Priorities

In order to deal with Canada's changing population and cultural demographics, the health system will need to be much better prepared to deal with chronic diseases, global-health issues like infectious diseases, end-of-life issues and long-term care.

Equitable access to care will be a problem in 2020 for some Canadians, including Aboriginals, the poor and visible minorities. The Health Council of Canada goes so far as to say that health disparities already "are the number one health problem in the country" (2005, p. 9). Without purposeful and respectful corrective action to change these inequities across society, the equity gap within health care is likely to widen.

Ethical decision-making related to technology issues, end-of-life issues and allocation of resources will be paramount in the system as will be a focus on safety and quality. Pharmaceuticals (including production costs and the costs of their adverse health effects) and expensive diagnostics will push up the cost of health care. The health system will need to manage and balance both the high-tech and high-touch expectations of Canadians.

One topic that continues to befuddle and impede discussions of health care is that of sustainability of the health system. Many say strong societal support for a publicly funded medicare system will continue and there is still a lot of room for change within the public system. Others argue the system is not sustainable and privatization of some of the system needs to be considered. One provincial commission found that "our health system, which was designed for acute diseases and injuries treated by physicians, no longer meets our health needs" (Fyke, 2005). Sorting out financing and system performance indicators are critical aspects of redeveloping the health care system to meet needs in 2020. The push for efficiency and effectiveness will not go away. OECD argues that "with a long-term federal contribution to provincial health budgets now agreed, provinces should focus on greater efficiency, instead of seeking additional federal funding, in order to meet health care objectives" (OECD 2004a).

Along a similar line, the Conference Board of Canada in 2001 released a report on predicted health care system costs in which it argued that Canada's workforce productivity was lagging behind places like the U.S. and Scandinavia, and had to be increased (Brimacombe, Antunes, & McIntyre, 2001). The researchers noted that "Canada's productivity is stagnating, with a widening income gap between Canadians and Americans to the tune of more than \$8,000 US per person" (2001). Roberts asserts that increasing productivity would entail country-wide attention to the drivers of productivity: physical capital, human capital and innovation (2004). Productivity is still a concern four years after the Brimacombe report: in 2005 the Conference Board called it Canada's most significant economic weakness.

By 2020, the immediate crisis of wait times faced in 2006 will have been resolved but the Honourable Tim Sale, Minister of Health in Manitoba, warns that the public-private issue will not go away. Canadians are not willing to go totally private, and that won't change. Canadians want appropriate care but don't necessarily care, or even know, who they get it from. Whether a service is publicly funded but privately delivered is not always clear. Canadians prefer the public system to paying out of pocket, if the public system can provide quality services in a timely way. At the same time, Sale argues, if there is the potential for money to be made, there will always be people pushing for more private, for-profit care.

The impact of technology. Technology will continue to transform health care. Biotechnology, bioengineering and artificial intelligence will confront society with all sorts of issues and dilemmas. For example, how will nurses react to "colleagues" that are robots? How will patients respond when a robot replaces a human caregiver? Potentially even more troubling, how will we react to the non-human care partner that can think faster and more logically than we can? Emerging quantum technology (e.g. nanotechnology) will transform illness care by increasing the proportion of outpatient procedures, and making many surgeries less invasive or avoidable altogether. Issues with new technology and its availability will include long-term health impacts of some diagnostic tests and the need to determine costs and benefits.

The Human Genome Project has the potential to completely transform health and disease care by 2020. However, the anticipated availability of technology raises the question of consumerism versus health needs. As Deber asked during this study, "Just because I can find the information about what I should or could have, does that mean I need it or automatically will get it – and will it provide any benefit?" (2005).

Health care providers and workplaces. Human resources and working conditions will remain on the health system agenda, although by 2020, there will be a much more fluid delineation of roles among the health professions. Unless the work environment is dealt with in an honest and creative way over the next five years however, there will be great difficulty retaining health workers and attracting new ones. Working in unstable, chaotic and ever-changing environments is neither productive nor attractive to future health care workers and creates potential dangers and health risks for patients.

The role of unions will change by 2020. Some authorities believe unions will become obsolete because of globalization and the freedom for workers to move around the globe (Cetron & Davies, 2003). Furthermore, the problems unions originally evolved to address, essentially the transformation of workplaces in the industrial age, will largely have been resolved in places like Canada. What seems likely is that, like all the other groups, unions will transform and take on new roles. Workers and unions will need to find new ways to work with organizations that are trying to balance budgets while recruiting and retaining qualified, committed workers.

The only way forward is to focus on quality and safety.

Michael Rachlis 2005

Nurses are a trusted source of information as well as support.

Kathleen MacMillan 2005

The gen-Xers coming through will improve the working conditions.

Marlene Smadu 2005 The fundamental problem is that the people charged with leading the change are by definition not the right ones to lead it. It's not just about a skill set; it's about having a whole new world view.

Ginette Lemire Rodger, 2006, commenting at a CNA Health Human Resources Knowledge Series roundtable Many health care organizations operate in outdated, hierarchical ways. As Sister Elizabeth Davis said in her interview for this study, "Hierarchies are structurally defined to prevent new thinking. Hierarchies may be useful in a stable environment but are useless in an unstable one." Are there any stable health care environments? Employers will need to work with new and emerging leaders in management science and with employees to construct entirely new administrative structures and employer-employee relationships. "More of the same" or a gentle tweak simply will not take us forward to the kind of future before us in 2020. Employers will especially need to adapt their work settings to cope with the work-life values of echo boomers. Their work ethics of are often criticized by baby boom authors and managers, but 2020's health workers will not put up with the status quo. They will be committed to quality care and expect to function as parts of teams. They will not work in jobs where their mental and physical health is compromised for the bottom line. They are comfortable with technology and expect their opinions and ideas to be respected.

Future Nursing Trends

Labour shortages will be driving everything over the next 15 years. They are like a slow-moving train coming down the track, and though it's been getting worse for years, the federal government has not coordinated a national strategy to deal with it. The country just isn't prepared for the wreck that's about to happen.

Armine Yalnizian 2005

There is a need for language and cultural competency training for nurses to live in a multicultural society — more than English and French.

> Richard and Verna Splane 2005

Global, Canadian and health trends do not suggest a decreased demand for nurses in 2020. There is vast potential for nurses to take on new and stronger roles in health care, despite what's expected to be a continuing shortage of new nurses. If we assume that nurses will retire at about age 60, Canada could be short some 18,000 RNs by 2009, all things being equal. Ryten (2002) forecast a shortage of about 31 per cent by 2016. Those figures assume the same delivery models and demand as in 2006.

We heard from informants that we don't really understand what the right number and mix of nurses should be in the current system, let alone the system in 2020. But one thing is clear: If we maintain current delivery models and levels of demand, then the

If we maintain current delivery models and levels of demand, then the shortages of nurses, physicians and other professionals being experienced in 2006 are unresolvable.

shortages of nurses, physicians and other professionals being experienced in 2006 are unresolvable. The Conference Board of Canada warns that "Canada must review policies and practices that were designed for an era of labour surplus, and realign them with the new era of labour shortage" (2005, p. 2). Nursing and other health care providers are not exempt from that imperative.

By 2020, the nursing profession's ethnic diversity and gender mix will better reflect the community at large. There will be more nurses who speak languages other than English or French, especially in places like the lower mainland of B.C., where the proportion of people speaking the languages of China will continue to grow. Outreach will create opportunities for visible and language minority Canadians to attain employment equity.

Nursing and other health professionals will be more attuned to the needs of the communities with whom they work and will be seen as trusted advocates for individuals and communities. "Nursing, as *the* pivotal health profession, is well positioned to advocate on behalf of and in concert with individuals, families and communities who are in desperate need of a well financed, functional, and coordinated health care system that provides safe quality care (American Nurses Association, 2005, p. 4)

Fully portable credentials will be established so every nurse will have a pan-Canadian licence and a unique identifying number. Foreign-educated nurses will play an important role in the health workforce, and the credentialing, education and integration of these nurses into the workforce will be much smoother than today through national licensing and standards for all nurses. Global licenses that allow nurses to practice in many nations with a core set of skills will be established and contribute to the ease of migration and travel.

Nurses are close to patients – not just because of their knowledge but because of the nurturing, caring nature of nurse-patient relationships. Most nurses don't intimidate patients and they are easier to access than doctors. That close tie with patients is reflected in other measures as well; nurses and patients often have similar views in studies such as the annual *Health Care in Canada Survey* (Pollara, 2005). The non-nurse informants we interviewed suggested nursing will need to increase its responsibilities and the levels of patient care it provides. Most importantly, they stated that nursing must be proactive rather than reactive in creating and influencing the future. Some said nurses are the group most appropriate to meet increasing demands for timely access to health care.

We must remember that our most mobile resources are people.

> Bill Tholl 2005

What will the role of nursing be in 2020?

There is still ambiguity about what kind of nursing workforce [nursing] is seeking to create... the dichotomy about a capability to care versus academic ability is a wholly false one. One informs the other. The nurse's role is not one that will ever be explicitly defined or have clear boundaries in the way that a surgeon's, a radiographer's or a lab technician's is. It is one that evolves changes and incorporates parts of several others at the same time. Caring is a relatively simple task, if one has the capacity to do it, but nursing is an increasingly complex job. Some aspects of it could – and should – be much better defined but flexibility and adaptability are necessary, partly because nurses' roles are dependent on their setting and those settings are already highly variable and evolving.

Responsibilities of the nurse will increase — both going up and down — taking a wider swath of health care.

Bernard Blishen 2005

Hart, 2004, p. 244

Health and demographic influences in 2020 will create new opportunities for nursing. In environments of chaos and instability, there are opportunities for nursing to take on new and relevant roles. Three conclusions from a futures paper prepared by Sigma Theta Tau ten years ago remain relevant:

- Nurses need to align themselves with the needs of populations rather than the needs of the system;
- Nurses must join with communities in determining how best to improve health and care and in defining the role that nurses will play within an ideally restructured health care system; and
- Nursing needs to create partnerships with individuals and families in providing direct care; in communities in promoting health and preventing disease; and with colleagues in developing and managing health care systems that are both effective and cost efficient as well as humane and holistic.

Sigma Theta Tau, 1996

Caring for the ill or injured will be an essential part of nursing but helping people to help themselves stay healthy and functional will be the cost-effective primary goal. Today about 70 per cent of nurses work in hospitals or long-term institutions. By 2020... an estimated 75 per cent will work in the community.

Sibbald, 1995, p. 34

The two paths of nursing – caring and knowledge – will ground the profession. Nurses have both generalist and specialist foci and will therefore play a critical role in hands-on direct patient care – both in institutions and the community. More of the work of nurses will shift to the community. Nursing will happen where people live and work – schools, community centres, the workplace, homes. Because of Canada's increasingly diverse nature, this work will often be in communities with people who have varied cultural origins. The importance of cultural diversity and recognition will be critical to the practice of nursing in Canada. Nurses will be expected to speak languages other than English and French, and be knowledgeable about complementary and alternative healing.

Nurses will be expected to play active roles in health maintenance, case management, health education and health advocacy. The increasingly complex nature of health information will open up a whole new area for nursing as "health shepherds" – helping people to understand, access and navigate the health system and the available health information.

Nurses already help guide patients in the decisions they must make in areas such as genetic testing and chronic disease management and that role will strengthen. In chronic disease, nurses will play an important role in assessing, educating and supporting patients and their families. They'll also have a critical role to play in promoting and supporting self-care.

Examples abound worldwide of countries recreating nursing to enhance health care and promote health as opposed to primarily dealing with illness. For example, in Britain the National Health Service is predicting that by 2008 there will be 3,000 community "matrons" (experienced, skilled nurses) who will provide specialized, personalized care and health advice for patients with complex problems. By 2010 every cluster of schools will have access to a team led by a qualified school nurse (National Health Service, 2004).

Technology will be a major influence on the role of nursing as nurses become more comfortable and expert in workplace technology, including advances like artificial intelligence. However, as Martha Rogers noted in her interview for this study, nurses should be very careful of "defining nursing only in technological terms: many others can learn technology."

Nurses are the resource for population health, social care and primary care management and coordination as well as first line triage in a clinic.

Judith Maxwell 2005

In 2020, nurses will be the general contractor of health, using their communication and team skills to help the consumer develop a care plan. "Nurses will care with the person as opposed to caring for the person."

Finnigan, cited in Sibbald, 1995, p. 35

Porter-O'Grady's earlier comment about the "journey away from the bed" is critical in this discussion. Nursing practice will be driven increasingly by the way technology and science change human health and illness care. Once diseases can be diagnosed at the DNA level, even before birth, the lives of those with genetically-detectable illnesses will be shaped by that knowledge. Many illnesses will become curable as technology advances. At the least, the most debilitating effects of most of those illnesses will be preventable. That capability will reduce the burden of illness across society and affect the number of nurses and what they will do. Generally, less illness means fewer hospitalizations – and fewer nurses doing what they do in 2006. But it will fall to nurses to help patients understand diagnoses and their implications. Nurses, for

example, are well qualified to work with parents coping with a genetic diagnosis for a newborn and to support them as they make treatment and lifestyle choices

that could prevent some effects of genetic illnesses. These are not pipedreams for the year 2500 – they are what will shape careers and nursing practice for the next generation.

Family physicians will have more specialized practices, leaving a gap in the kinds of general care areas that many patients will still need. Nurses are well suited and educated to work in primary care teams and help fill that gap. The role of nurses, including NPs, working on teams with family practice and other specialty MDs will be much broader and more extensive than in 2006. Both NPs and generalist nurses will have prescribing authority, for example, and working together with MDs and other care providers, those nurses will provide a significant portion of primary care across the country. Several non-nurse informants participating in this study made clear their expectation that nurses should be providing this care now, and that the profession certainly should be preparing nurses to provide this kind of care much more fully in 2020.

The U.K. is well along in putting in place structures to change the ways care is accessed. As of April 2006, "qualified extended formulary nurse prescribers and pharmacist independent prescribers will be able to prescribe any licensed medicine for any medical condition – with the exception of controlled drugs," according to the U.K. Department of Health (2005). They explain "the extension means that specialist nurses running diabetes and coronary heart disease clinics will be able to prescribe independently for their patients. Pharmacists will be able to prescribe independently for the local community; for example, controlling high blood pressure, smoking cessation, diabetes, etc. This will take pressure off GPs, allowing them to focus on more complex cases and improving the availability of care for patients" (Department of Health, UK, 2005).

These new models will mean nursing and medicine must change more than their practices; the language of the professions must change as well. "Nursing diagnosis" and "nursing care plans," for example, already are outdated in the multi-disciplinary milieu rapidly becoming the norm in health care. They will be replaced with more generic terms and activities that value and describe the patient and his or her health needs, not the process of nursing. Nurses, doctors, speech pathologists and others will all meet the health needs of patients through team-generated care plans and more common language. To make the changes, all the health professions must break out of the silos that tend to be maintained by profession-driven terminology.

How will nurses be educated in 2020?

The university of 2020 will look very different than today – there will be fewer, more multicultural institutions, with much more distance- and online-learning and a focus on practice-based learning. More than 10 years ago, Yensen was talking about the need for virtual nursing education, so nurses could complete courses at multiple sites and perhaps graduate after taking courses at multiple universities in various countries (cited in Sibbald, 1995.) Many teachers in 2020 will have virtual appointments, which will start to change the very nature of universities and colleges. Universities and colleges in 2020 will be more tightly integrated in the provision of undergraduate education, and universities will be more focused on graduate level training and research. Nursing education will mirror these trends, moving more freely between colleges and universities.

We need to determine what education and support nurses need to become more independent thinkers and practitioners.

Deborah Tamlyn 2005 Knowledge in nursing cannot be dissociated from caring.

Nancy Field 2005

Self-care and multidisciplinary teams are the future.

Alain Pavilanis 2005

Basic education both for theory and practice will be rooted in the community, through a range of community placements. Acute-care placements will be a much smaller, but still important, part of the curriculum. Interdisciplinary training will begin early and will include all major health disciplines. Nurses in all categories will spend a great deal more time in common teaching situations than they do today.

The curriculum will need to be equally strong in the two streams: hands-on caring and knowledge development. There will be more attention to chronic diseases, aging, long-term care, end-of-life issues, complementary healing and ethical decision making. Because nurses will practice in the community, work there will be a focus throughout the curriculum. Adapting to change will be a key element of nursing education, along with leadership, communication skills, emotional intelligence and critical thinking (Hart, 2004). And because nurses will be expected to provide a great deal more primary care, their education in basic sciences and physical assessment will need to match those expectations.

Globalization and Canada's changing demographics imply the curriculum will focus on cultural diversity and global health competencies. Nurses will be educated to provide care in a variety of places. Entry to practice will be broad and generalist, not narrow and specialized – but after graduation, nurses will be able to specialize in various ways. Continuous and updated lifelong learning will be the norm and will become the responsibility of governments and employers as well as the individual nurse.

Concern over the number and availability of qualified educators is likely to grow. There will be a record number of enrolments in universities and colleges and over the next 10 years. Ontario alone will need more than 11,500 new faculty members to teach these students. At the same time new doctorates are at the lowest level in five years. So, just as demand for new professors is rising, the supply will be insufficient. To compensate, there may have to be increases in class sizes, a greater use of technology to deliver lectures and perhaps a drop in the average academic qualification of the teaching faculty.

This scene is further complicated by the drop in the Canadian birth rate in the late 1990s, which means that having increased the number of educators over the next decade, we will then need to reduce it again (Foot, 2003). Dividing nursing education between colleges and universities will help to reduce demand on the small cadre of university professors and maximize their ability to conduct research and focus on graduate teaching.

Furthermore, to become full participants in a world of interdisciplinary care and be co-educated with other professionals, education of the three regulated nursing groups will have to become much more integrated. In 2020, nurses will share classroom and clinical experiences through harmonized education models and will understand each others' education and scopes of practice because they share them.

Getting to that future cannot begin without knowing who is applying to nursing, who is admitted and who is not, how many qualified applicants are offered and denied admission, how long students spend in school, and what their attrition and graduation rates are. Even in 2006 we know little of this except at the level of individual schools. It is unacceptable that we do not have readily-accessible, national data to respond to these basic questions. A key first step in creating future nursing education is establishing a pan-Canadian nursing education centre to receive and track applications, monitor seats, and begin to maximize

effectiveness of matching applicants to available places. Nursing education data collection has not made the leap past manual counts in individual schools. Leaders must push for unique identifying numbers and swipe cards (or even implanted microchips) for teachers and students to ensure timely and much more complete data. That technology is not new; it is the backbone of the banking system internationally for example, and can be applied effectively to nursing.

International leadership in education. Talk about nursing education cannot exclude the issue of internationally-educated nurses or international education. In Canada, such dialogue almost always turns quickly to the phenomenon of brain drain, and of wealthy nations like Canada "poaching" workers from less-developed countries. This need not be the case, and it will not be so as the century moves along and power shifts away from North America to the South and East.

Canada has an opportunity to create groundbreaking models of education and employment that are future-oriented and position us as a global leader in that unfolding future. We can begin by establishing much more effective use of the seats in schools of nursing in Canada and the U.S. We have more applicants than there are seats in schools of nursing in Canada but in the U.S. the opposite is true. We could take advantage of that and send students to the U.S. to study, especially since the vast majority of Canadians live within a hundred miles of the U.S. border and so many American universities have seats sitting empty.

Secondly, given our high immigration rates and dependence on foreign-educated professionals, Canada should explore innovative education models to build interactions and synergy between ourselves and nations from whom we attract (or want to attract) the most immigrants. It may be possible to establish models of reciprocal nursing education that would allow some flow back and forth between nations, taking advantage of the seats, infrastructure and younger teaching workforces in other countries by sending some Canadian students to those schools. Innovative thinking about distance learning, multi-university degrees and real and virtual clinical placements and skills training should drive these models. The experience should enrich both nations, bringing a wider world view, stronger understanding of other cultures and broader career opportunities both ways.

It may even be possible to meet Canadians' health needs more effectively by employing more internationally-educated nurses through a reciprocal plan for education, recruitment and repatriation. For example in areas such as the lower mainland in B.C., a program with China might see groups of Canadian nurses taking some or even all of their education in a university in Beijing to prepare them for working with Chinese people in B.C. or other cities. Chinese students at the Beijing end would similarly be encouraged to enter the education program for Canadian employment settings, with the intention to immigrate to Canada to practice nursing. Those nurses would have several years of exposure to Canadians and would visit Canada for clinical training. The intention would be to create a purposeful and planned approach to benefit both countries, not a drop-in harvest of graduates from a vulnerable nation.

Finally, Canada has an opportunity to create a global nursing education program that would strengthen nursing internationally. Canada could exert the strongest possible leadership with a coalition of like-minded partners (e.g. a sample of Commonwealth nations, an alliance of the Americas, or an Indo-Chinese-Canadian council) to produce commonly agreed-upon competencies, core skills and curricula – and begin to build a truly global vision of nursing starting from its educational foundations. Such a program would demand extensive distance

education, the development of programs to let students be trained at several universities concurrently, and by extension, multi-national licensing to ease migration, build surge capacity, and be ready to respond to large scale emergencies. All of these strategies bring global experience to the participants who will be much more sophisticated practitioners. Importantly, these innovations will tumble the ineffective and wasteful duplication of precious resources currently holding back nursing in so many nations.

Nursing leadership

If nursing continues in the present mode, there will be a heavy price to pay.

> Donaldson 1999, p. 274

It is time for a shift of focus. Leaders must focus on health and the health system, not on nurses and nursing. Nurses need to leave behind the old boxes of nursing research, nursing administration and nursing care in favour of broader, patient-focused and system-focused approaches. Nurses will be expected to be strong advocates for patients, families, communities and social issues. Moving the talk about activism to action will demand strong, visible and charismatic nurse leaders, and curricula also must reflect this change.

Given what we heard during this study, the public expects nurses to lead major change in health care. That means new and different leadership styles, new education models at the undergraduate and graduate levels and new ways of thinking about research. We are not preparing people to be leaders of nursing; we are preparing nurses who will be leaders within the health system and across communities. At the time she was Dean of the School of Nursing at Johns Hopkins University, Sue Donaldson talked about the challenge this way: "The insularity of nurse researchers and doctoral programs in nursing guarantees three things:

1) obscurity and limited utilization of nursing knowledge, 2) underdevelopment of disciplinary knowledge and research, and 3) truncation of support for nursing research" (1999, p. 274). The theme of her message, which was a challenge to the research community, should provoke all the domains of nursing to think about how the profession is perceived and how it will move forward.

Your responsibility, in all you say and do, is to create a line of hope – a line of hope that emanates from the seven generations before you, and which will extend forward, because of your leadership, for the next seven generations. You are creating the course of history. You want to do it by design, not by default.

Dr. Judith Shamian talks with eloquence about being a CEO "right now, but whatever role I take on, I will always be a nurse." That kind of thinking must remain in the hearts of nurse leaders. It's about leading people and systems, and seeing it through a nursing lens, not leading nurses, nursing units or nursing departments.

Nursing has been described as "a battleground over which competing interests fight it out to implement their vision of the future" (Sibbald, 2005). Nursing is seen by some outsiders as being divided and, at times, self-serving. No more. Nursing must focus on its strengths but, at the same time, recognize its shortcomings. To lead change

across the system, nurses need to set aside old boundaries and speak more unified and consistent messages.

None of this can happen without strong and courageous nurse leaders. They will have to be more representative of the Canadian population – both from a gender and ethnic perspective. To attain that diversity will take work, starting with involving more nurses at the grassroots in professional bodies and building organizational structures to ensure participation of practising nurses at all levels. By

Neufeld, 2005

2020 nursing leaders will have led and facilitated an open and respectful discussion of critical health and nursing issues.

New goals and a new commitment are required to move nursing to 2020. The strongest possible leadership will be needed from the federal Office of Nursing Policy and its provincial/territorial counterparts, professional associations and unions representing the three regulated nursing groups, and leaders in associations such as the Academy of Canadian Executive Nurses. To wield the greatest possible influence as we build nursing and health care for the patients of 2020, it may be most effective if there is one umbrella association for all Canadian nursing to which the many groups belong or are affiliated.

The nursing profession frequently comes across as self serving. Professions must move away from protecting themselves — they were set up to protect the public and have drifted into protecting themselves.

Ken Fyke 2005

How might nursing look in 2020 - and how do we build it?

By 2020, nursing and the nursing family will look very different than now, with collaborative, tightly-integrated relationships among the regulated nursing professions. Nursing, like other professions, needs to overcome thinking in silos. That cannot happen without a frank discussion among the three groups about their relationships now and how to build a common future. In 2020, there will be far fewer nursing associations and organizations, working in co-ordinated ways to represent all the regulated nursing groups.

Leaders across the regulated nursing groups have expressed an eagerness to make changes that will strengthen the profession to make it an effective force for health in the nation's future – important in light of the fact non-nurse informants we interviewed expressed high expectations that nurses are central to managing the future health care systems. Many, in fact, expressed confidence that such transformational changes should and would be led by nurses rather than by physicians or governments.

The expectations are high. Is nursing ready to play in that arena? Key to fully integrating the professions is the resolution of six major issues:

- 1. Clarify the licensed/regulated scope of practice for each group.
- Curtail or eliminate the habit of employers dictating scopes of practice.
- 3. Revolutionize nursing education, create common nursing education, career ladders.
- 4. Improve relationships across the three regulated groups.
- 5. Explore issues of regulation, common licensing, and national licensing.
- 6. Address and resolve the issue of multiple messages to maximize nursing's influence on public policy.

What nursing categories will be needed in 2020? It is critical to engage in an honest conversation about what categories of nurses will be needed to meet the needs of the population and service demands in 2020. The LPN role, for example, originated during a war to provide more bedside-care nurses and was to be phased out in five years. Will LPNs be needed in 2020? If so, should their role change, perhaps to allow a mix of advanced practice RNs (e.g. NPs) and other specialized RNs (or RPNs) working with LPNs, and no generalist RNs at all?

And what of the RPN? The category stands out from the others because its numbers are small, exist only in four provinces, and RPNs are the only nurses to

graduate with a speciality. Like LPNs, RPNs evolved to fill a specific need for care. What is their place in 2020? Will they be needed? On the one hand, given shortages of nurses overall and growing demands for mental-health services, RPNs could play an important role in meeting mental-health needs in 2020. On the other, it requires significant resources to maintain an education and regulatory infrastructure for a third category of nursing in four provinces when the mental-health care provided by RPNs in those provinces is provided by RNs in the other nine provinces and territories. If there is a desire to better integrate nursing groups and harmonize education and regulation across Canada, what are the risks and benefits of maintaining three categories? And if there are unique RPN skills needed by patients but not provided in other provinces, then why are they not?

Canadians deserve an honest debate about what nursing roles will be needed in 2020. And beyond what the public needs, what roles will meet employer and system needs most effectively? Maybe the best solution for patients and the system would be to have just one single category of nurse with a variety of specialties and roles within it. Or maybe an entirely new general technical nursing category is called for – some hybrid of nurse and technician that would function in the high-technology, outpatient diagnostic/procedural care settings that will characterize most acute care in 2020 and beyond.

How much of what is done by GPs will nurses take on in a new system? And how much RN and RPN work will LPNs take on? It causes anxiety among providers to hear talk of replacement, but reality is that demands for care services across the country will far exceed supply for the foreseeable future. The mix of services and who provides them has already changed and will change a great deal more by 2020. Canadians demand access to physicians because in our system access basically means seeing a doctor; that's led to enormous pressures on physicians and long waits in some places – but many of those services could be provided by nurses and others.

Much has been made of the tension between physicians, nurses and NPs around scope of practice, replacement and so on. The truth about medical and nursing practice is that much of what nurses do in 2006 was considered the purview of physicians as recently as 20 years ago. When baby boomers were children, nurses were not allowed to give injections in many jurisdictions; much of what was strictly RN practice even a decade ago is done now by LPNs. Much care once considered to be the domain of health professionals in sterile inpatient treatment rooms (e.g. chemotherapy) has moved past physicians and nurses to be managed perfectly well by patients and families in their own homes with minimal or no on-site involvement of health professionals. None of that has threatened or diminished medical or nursing practice in any way; the demands for both are greater than ever. The RNs of 2020 will provide much more of the primary care that is provided by GPs today. The extent of that practice needs to be described. Similarly, the future role of the physician will be significantly different. The scope of practice and the mix of physicians, RNs, LPNs, RPNs and other providers cannot even begin to be mapped without these fundamental underpinnings of a new model first being discussed, planned and resolved by all the groups involved.

Summary

The road ahead for nursing will be exciting and difficult. Is there an appetite, a will and a passion to create revolutionary change?

Whether all three regulated categories are needed is uncertain. What would best serve the public in 2020? There is a push for specialization in all professions and nursing must respond to that. Ongoing problems of access to primary care (in part the result of declining interest in family practice among physicians) will have a significant impact on nurses.

It would be erroneous to suggest that there can or should be only one nursing community or one set of views on nursing. However, the way nursing grew up in this country a century ago is not useful in 2006 and will be obsolete in 2020. Health care across the country needs a co-ordinated, integrated approach by nurses if they are to inform policy decisions and help shape the country's health care systems. Thousands of voices speaking a focused group of messages in different ways is a very different and much more effective thing than those voices all speaking out with different messages.

Nursing and the other health professions are already in a new world. Robots soon will be with us, and if nurses and others can let some things go, then deploying that kind of technology should relieve some of the staff shortages and pressures. There always will be a need for specialists in the field of medicine, although it seems clear as the century moves along much more of that work will be at the microscopic level, using

nanotechnology instead of scalpels and sutures. There is an emerging demand for a highly-trained, primary-care provider who would blend the best skills of RNs with those of GPs into a new role offering primary care assessment, treatment, and referral to specialist physicians.

Finally, for the foreseeable future, there will be a need for people with nursing skills in both acute and non-acute care settings who are especially focused on services for older people. To attract and retain an appropriate mix of staff, it will be critical that balancing work and life be integrated into the professional ambience of all patient-care settings. Institutional working conditions must be addressed – not just studied – to reflect the contemporary evidence and best practice knowledge generated over the last 20 years.

The nurses of Canada don't have their act together—when doctors speak with one voice, people listen; when nurses speak with a divided one, people don't listen.

Bill Tholl 2005

...it often turns out that all sorts of out-ofthe-box solutions – things like union activity, government regulation, safe staffing ratios, universal health care – are off limits... I've often wondered how nurses can change the odds that work against them when so many potential solutions are excluded from consideration.

Gordon, 2005, p. 401

CHAPTER FIVE

Nursing and the Health System in 2020: Scenarios and Options

The Pressing Need for Change

Changing the course of nursing in time to avoid a health care *Titanic* is a generation-long commitment needing purposeful planning and funding. To serve the needs of Canadians in 2020 and beyond, the fundamental organizing structures of nursing will have to evolve. Time is not on our side; the change must start now. The Conference Board notes that "the world is changing more rapidly than ever before, and Canada must position itself to respond and act" (2005, p. 24). Nursing must do its part in that national effort, and better yet, lead others to do the same.

Ogden (2003) describes the future as one filled with chaos, panic and golden opportunities. Those who survive the accelerating pace of life on earth will be those most adaptable to change.

It will be painful for any group or organization to think about a future in which it does not exist, or in which its role and influence must shift, but the issue here is not saving nursing, medicine or any other profession. The issue is ensuring Canadians have access to a responsive and appropriate system of services that builds health and treats illness. To get there, we must weave the dynamics of 2006 with the trends and issues likely to influence the world in 2020, and then put in place structures to help us move the current quagmire to the kind of nimble, responsive and proactive delivery

system that will meet the demands that lie ahead.

Discussing nursing productivity in 1990, Altman and colleagues said "sustainable increases in health care productivity will require a fundamental rethinking of the organization of work." Most nations have tinkered with their health care systems, chipped away at problem areas and re-organized some facets of delivery including the mix of caregivers. But foundational shifts in how systems are structured, where power lies, and where decisions are made have not happened. The need for that kind of ground-shaking change in work design is even more pressing today than it was in 1990. But to make it happen, public policy, and who makes it, must undergo the same fundamental "rethink" – in this instance taking into account nursing's particular history, but looking forward with new kinds of bold and innovative solutions.

The history that brought us to this juncture is well known. Forging a new path – "drawing new maps" as Sister Elizabeth Davis says – will mean courage, hard work and change. It may indeed mean national-level legislative change that will require years of commitment and struggle. But maintaining outmoded structures that are not serving Canadians well now, never mind in the future, makes no sense. The divisions between nursing groups, and their sometimes-competing agendas, cannot be

allowed to continue. The potential scenarios for education and practice proposed here would move nursing toward a more integrated future in 2020.

Honest and respectful debates will need to be held within nursing and across health care. The contribution that all health and nursing organizations bring to the health of Canadians in 2020 must be evaluated. Some organizations will disappear, others will change, and new ones will emerge.

Like the world around it, Canadian nursing is in a state of constant flux and upheaval. Health system decision-makers find themselves confronted by a raucous mix of feelings and attitudes across nursing. In the midst of it all, policy makers have been under intense public pressure to both control costs and provide more and better care. Every government at every level in this country is immersed in plans for major health system reforms that cannot proceed without a strong, healthy and energized nursing workforce. Unfortunately many of these plans are not co-ordinated across jurisdictions, so expectations, services and programs may conflict. Given that landscape, and the fairly rocky road of nursing that led up to the end of the last century, it is clear that traditional policy options and responses are not going to provide the kinds of solutions needed to build the health and illness care system for the 21st century.

The structures and practices that characterize nursing in 2006 were largely developed for the 19th and 20th centuries. They were created for purposes and values that have shifted significantly – and will be dramatically different by 2020. Yet most talk about shortages, scope of practice and leadership has taken place in the context of that old, obsolete framework. Nurses must talk about new approaches to health promotion, illness prevention and the treatment of disease and injuries.

Moving from idea to debate to action will be an immense challenge. Lack of trust and respect are still barriers among regulated groups. Speaking at the Canadian Medical Association in 2005, American policy authority Ted Marmor cautioned that noble intentions are only one piece of the puzzle. He reminds us that it is essential to create safe spaces to have honest and difficult conversations. In fact he advised that "if confidence and trust are broken, then you're out, out of the club" – in other words what is said in confidence as these issues are laid on the table, must not be betrayed in public or used later as "ammunition."

HealthCast 2020 identifies seven common features for sustainability that include:

- the need for common ground among stakeholders;
- a digital backbone;
- incentive realignment;
- quality and safety standardization;
- strategic resource deployment;
- innovation and process change; and
- adaptable models of care delivery centered on the needs of patients.

PriceWaterhouseCoopers 2005

Building Scenarios

Assumptions about 2020

To guide development of the scenarios, certain assumptions were made about how the world will look in 2020 and how health care and nursing will be situated in it. These assumptions were based on interviews, literature review and consultation:

Obstacles to investment in human capital should be tackled. More effective programmes for adult education are needed to improve literacy skills and provide opportunities for Canadians without qualifications to improve their labour market prospects.

OECD, 2004a

Societal

- Globalization will be the norm.
- Travel and migration will increase, and will increasingly be normal everyday events.
- Technology, in all its forms, will have dramatically changed how we communicate with each other, deal with illness and maintain health.
- The population of Canada will look dramatically different than it does in 2006. The cultural and ethnic make up of communities will be significantly more diverse on average. The Aboriginal community will grow sharply in some urban centres and in Western Canada. In large urban centres like Toronto, Montreal and Vancouver the visibleminority population will become the majority.
- The preoccupation with global security and emergency preparedness which has been dubbed the "fear society" will continue.

The Health Care System

- Canadian health spending will grow slowly to about 13 14 per cent of GDP.
- Exponentially rising costs for pharmaceuticals and other treatments will have been constrained by 2015 before they break the system. Forums for dialogue about ethical implications of emerging treatments, including who gets what treatment, for how long and at what cost, will be established with nurse leadership by 2010.
- The interest of Canadians in health/wellness will grow and be reflected in a
 desire to strengthen health care versus illness care. Primary health care will
 be fully implemented. Canadians want more information and choices in
 their lives, and this is no different for health. There will be a range of
 personalized choices for patients, a shift towards independence and
 various provider options including complementary health practitioners.
- Health will be defined more broadly to take into account incomes, poverty, literacy, the environment and other broad determinants of health.
- Nurses, other providers, patients and families will be confronted by much more complex ethical issues related to beginning- and end-of-life technologies, treatment options and costs, and the implications of human cloning and artificial intelligence.
- Patients will be actively involved in their health care. Self-care will be the norm. Health professionals will be viewed as advisors and resources.
- Health records will be electronic, transferable and accessible by the patient.

 Communities, families and volunteers will be formally recognized and supported as critical partners in health promotion and maintenance.

The health care system in 2020 will be confronted with a variety of global health issues including:

- o More virulent infectious diseases that spread more quickly;
- More mental-health problems, especially related to stress, anxiety and fear:
- The patient safety agenda an increased focus on complications caused by care and what is needed to reduce and control them;
- The health and social needs of migrating populations, which will include treatment of communicable diseases not common in Canada, and mental health issues like torture; and
- The reality that Canadians will travel more and travel farther, and they will expect to carry their own complete, computerized health records with them.

The health care system as we have created it is not sustainable for 2020, nor should it be. Key changes:

- Health care will be much more focused on the places people live, work and play – homes, communities, schools, retail settings, and work settings – than on treatment settings. It will be less focused on providers and more focused on people, communities and wellness.
- Health care will not first mean hospitals, surgeons and hightechnology diagnostics; that type of health care will be the exception that fewer and fewer Canadians will experience.
- The system will do a better job of balancing hospitals, wait times, and diagnostic technologies with strategies and mechanisms that emphasize and improve health.
- To support care that will happen in the community, budgets will shift in emphasis away from hospitals, physicians and drugs toward wellness strategies based in communities, families and individuals.
- Most health maintenance activities and illness treatment will take place in community settings, not in hospitals. The push in community settings and homes will be on health, illness/injury prevention, lifestyle modification, literacy, ameliorating the impacts of poverty and so on.
- Much more care, and much more complex care, including acute, long-term and palliative care, will be provided in homes, hospices, and other community settings.
- o Hospitals will be settings only for short-stay and outpatient services, critical and emergency care and transplant care. There will be more long-term care and transitional care beds in the system, alternative living options for seniors, and better supports to keep people in their homes. Hospitals will be smaller overall, more regional/tertiary in nature, and will be essentially short-stay intensive care environments.

- The bulk of surgical and other invasive procedures will be done on outpatients with traditional medical/surgical nursing care taking place in homes. Human donor transplants and artificial replacements will replace many therapies.
- Improved audio and video technology will enable telehealth options, reduce the need for surgical and other invasive procedures and reduce the need to travel for such procedures. It will also increase access to health and illness care options for isolated Canadians.
- Clinical, monitoring and automated diagnostic technologies will reduce demands for nurses in hospitals, allowing nurses to follow computer-generated treatment algorithms and focus on care issues beyond technology.
- Technology will drive integration of Canada's 13 "mini health systems" into a more streamlined pan-Canadian system. It will force development of standardized ways to document care, for example, in electronic health records, and standardized ways of recording the costs of care.
 Other traditions, including regulatory and related professional bodies in each province and territory will also be integrated.
- o Wait times seen in 2006 will be resolved long before 2020.
- o Quality, safety and accountability will be paramount in 2020.

Health Human Resources

- Care in 2020 will be delivered using fewer professionals in models that are more
 effective for the system, more satisfying to patients, and more rewarding to the
 workforce.
- Patient and community needs will determine the mix of health care providers most appropriate for the population.
- Multiple gateways into the health care system and points of access to care through a range of providers, including physicians, will be the norm.
- More human and non-human (robotic) care partners will be added to the system to deliver non-professional aspects of care, allowing nurses, physicians and others to focus on what they are best prepared to do for patients.
- Shortages will be particularly acute in rural, remote, Northern and Aboriginal settings. Interest in working in such settings will decline, not grow, despite lucrative recruitment incentives. Accessing health using audio and video technology, and travelling to access in-person care, will become increasingly common.
- In institutional and community settings, health and illness care will be
 delivered by fully integrated, multi-professional teams who co-care for
 patients. Accountability will be team based; professional care will be led by
 the provider most appropriate for the patient and his/her health issues, and
 this provider may change over time.
- Complementary and alternative health care providers (e.g. acupuncturists, massage therapists, homeopaths) will be integrated members of health care teams.
- Assistive and supportive health care workers (e.g. personal support workers)
 will be an increasingly important part of the health care system and more integrated into teams in long-term care, home care and rehabilitation settings.

Introduction to scenarios

One option always open to nursing is to carry on and make no change to current models, structures, and relationships. Based on the evidence from this study however, that would be a very dangerous course for nursing to follow. The scenarios that follow represent an opening discussion for the purpose of framing key issues and putting them clearly on the table. Themes for the scenarios were developed in six areas. The options that follow are not the only ones, but the ideas in them were brought forward most consistently in literature and by those interviewed, which is why they are more fully developed here.

One certainty is that nurses need to immerse themselves in a thoughtful, facilitated dialogue about the regulated categories, and what skills and roles are needed. No one answer emerged as a result of the literature review or interviews conducted for this study, except for clear signals about streamlining, the need for new roles in nursing by 2020, consolidating nursing's confusing, multiple messages, and dismantling silo behaviour and organizations. Needs-based human resource planning, already endorsed by other health professions, would provide a reasonable ground from which to launch that discussion.

These scenarios may sound revolutionary to some and too cautious to others. However, based on the data collected for this study, revolutionary thinking, not just evolutionary thinking, is needed in nursing and action is long overdue. Nurses are being called to act, to change and to be strong, visible leaders. Talking just about nursing research for example, Donaldson warned the insular behaviour of nursing and "preoccupation with identity, boundaries, and process" (1999, p. 277), left unchecked, would lead to a future she described as an "expensive cocoon" (1999, p. 274). It is worth noting that Donaldson issued that dire prediction six years ago. We have a very great deal to do in a very short span of time if we truly hope to shape a new health system for 2020.

Are we in the driver's seat or is someone else taking us for a drive?

Deborah Tamlyn 2005

Don't worry about influencing the agenda – set it.

Bill Tholl 2005



The system: health and illness care in 2020

Scenario: The preferred future

The health care system in 2020:

- provides appropriate access to broadly defined health services and providers;
- provides care based on need and appropriateness, not on ability to pay;
- recognizes the critical contribution that social determinants, social programs and health promotion make to the health of individuals, families and communities;
- is accessed through community-based primary health care teams and organizations; and
- serves clients who are fully involved and in control of their own health and health care.

2020 finds Canadian health care at a point of transition. The last of the baby boomers are starting to turn 60. The focus of the health care system is on health, self-care and communities and care is fully integrated. Seamless movement among different levels of care is the norm.

Canadians in every community now have in-person or tele/video-health access to a health care team, 24 hours a day, seven days a week. Few Canadians are admitted to hospitals as in-patients. Fewer surgeries are performed; surgery is shorter, and is performed in most cases with patients awake.

Most health problems in younger Canadians are avoided or treated well before surgery is needed, and most acute illnesses and injuries are treated through drugs and/or nanotechnology. Environmentally-caused illnesses are more common. Chronic illnesses related to organ dysfunction are mostly treated with donated or artificial organs. The system still struggles to manage the effects of illnesses, chronic diseases, and injuries among the huge cohort of older Canadians.

In the North, all first contacts now are with nurses, but in 2020 this

everywhere in Canada.

will be the norm

Bernie Blais 2005

GPs will be more focused on specialized areas; their expertise will be better utilized with more complicated patients.

> Michael Rachlis 2005

Doctors don't want to be GPs anymore — it's too expensive.

Chantal Hebert 2005

Communities are moving away from doctors as primary care provider and are more open to alternative providers like NPs and RNs.

Rosemarie Goodyear 2005

Who provides care and where does it take place in 2020?

1. The health system in 2020 is structured very differently than in 2006. The bulk of workers and funding are directed to the home and community levels, where people work, live and play. One of the underpinning premises of this model is that individuals and families play a fundamental role in achieving their own health, and professionals most often play a supportive role.

As represented in Figure 5 health is maintained, and health care services are organized, at four levels:

- i. The largest contributor to the creation and maintenance of health comes from self-care the proactive and informed choices made by individuals and families to keep themselves healthy (e.g. lifestyle choices) and to manage minor acute health problems and chronic illnesses. Self-care is driven by individuals wherever they live, including residents of long-term care facilities (e.g. nursing homes). This first level of care represents all the things Canadians do on their own to maintain and improve their health and that of their partners and families. Dealing with minor illnesses, brushing teeth, trying to eat a healthy diet, exercising all these activities are examples of self-care taking place at this level. Self-care takes place in the socio-environmental-political-cultural context of the individual and is influenced by resources available.
- ii. The second tier represents all the community health and social resources in place to support health and keep people well. At this level, professionals start to become involved and provide services that include the treatment of diseases and injuries that cannot be managed by individuals on their own. These shared-care resources and strategies include community health centres (access to nurses, physicians and other providers), telehealth, home care, community social programs (e.g. parenting, smoking cessation, seniors' walking programs, affordable food options), and supports such as religious institutions and school programs.



After CABE, RIBA, The Nuffeld Trust & the Medical Architecture Research Unit, South Bank University, 2002; and the National Health Service, 2005

Figure 5. Primary Health Care in Canada, 2020

- iii. Third-tier activities are all those diagnostic and treatment services (including surgeries) that take place on an outpatient basis in hospitals, diagnostic centres and related settings. The role for health professionals here is related to diagnosis and treatment of illnesses that require more complex management and treatment.
- iv. The fourth tier represents in-patient care, including acute, rehabilitation, complex continuing care (chronic care), and long-term care (e.g. nursing homes). Acute care primarily includes short-stay intensive care, transplant services, trauma and burn care, and use of technologies that create a need for nursing care. This is the level where health professionals are more predominant but the importance of shared care is still here. The patient still has a role here but the larger part is given over to health professionals.

Shared care in 2020. Shared care includes shared accountability for health, for making health care decisions and for actually carrying out health care activities. Shared care implies that at some points, health professionals play a larger role and at others the patient is in charge. Shared care doesn't mean "one or the other," it means there is shared responsibility for creating and maintaining health and a shared responsibility for coping with illness. Health care providers have an increasing role in health and illness care as patients move through the various tiers, and the goal of shared care at each level is to strengthen health so that the patient never has to seek and access care at the next level.

In this model, health care providers have no hands-on role in self-care except in situations where residents require the assistance of a caregiver to carry out their personal self-care activities. An example would be a quadriplegic patient who requires assistance to carry out the mechanics of self-directed personal choices related to exercise or nutrition. Self-care is about the choices we all make in our lives, based on what we have learned from health professionals, parents, teachers and others.

On the other extreme, in the top tier, in-patient care, the reverse is true, and there is a much smaller role, possibly even no role, for self-care, but a significant role for health care providers. An example would be a post-operative heart-transplant patient on a ventilator in a critical-care unit, or a frail elderly male living in a nursing home and requiring assistance with most activities of daily living.

Between these extremes lies the range of shared care, where individuals and families collaborate with care providers in their health care decisions and services.

- 1. Every Canadian has a primary caregiver who may be a nurse, NP, family-practice physician, social worker or other health professional in a community health centre. A range of health professionals provide gateways to primary care and further access to the broader health care system.
- 2. All health care providers working in the public health care system in Canada are salaried employees of the publicly-funded, publicly-administered health care system.
- 3. All health and illness services within the public system are provided in facilities accredited by the Canadian Council on Health Services Accreditation. Accreditation standards include measures of quality and safety for patients balanced with similarly stringent measures of quality and safety for health care providers in all categories.

The ability of the Canadian health care system to meet the health challenges of the future will depend on the development of a robust, dynamic and responsive system of primary health care. This will require a shift from the focus on curative, individual services to population-based services that support individuals, families and communities in dealing with factors that affect their health. Services will need to be more comprehensive and integrated than they are today to address these challenges.

> Ken Hoffman 2005

- 4. First contact with the primary care health system, which occurs at Tier II for most individuals, is with a member of a health care team in a community-health centre. This caregiver conducts a culturally sensitive assessment and determines, in consultation with the team, the most appropriate primary provider to work with the patient and family. This primary caregiver may be, for example, a nurse, a physician or a social worker. The needs of the patient, family or community will dictate the primary care provider assigned.
- 5. Community health centres are staffed with care coordinators appropriate to the community and population being served, as negotiated with the community and regional health authority.
- 6. All physicians are specialized, including the specialty of family practice. Most family-practice physicians are employed in community health centres and are integral members of those teams. Most other specialized, physician-provided care, diagnosis and treatment take place in and around hospitals, diagnostic facilities and hospital satellites. However, because most health care is focused at the community level, physician specialists are more accessible to patients and caregivers in community health teams than they are in 2006.
- 7. In the most isolated settings, the skill sets of the team approach are replicated using audio-video technology enabling Canadians to see and speak with a caregiver. Even the smallest towns have broadband access and video-phone technology in place, linked to the nearest appropriate community health centre, and many Canadians have access directly from their homes.
- 8. Complementary and alternative practitioners (e.g. acupuncturists, naturopaths, homeopaths, massage therapists) are active, integral members of the health team; referrals to them are commonplace.
- 9. Community volunteers and family members are vital and integral members of the health team. Community members are actively involved in health promotion efforts at the local level.
- 10. Determinants of health are the basis for all health planning and implementation. The focus of the system is on disease prevention and health promotion. Communities and community members are partners and leaders in creating healthy living environments.
- 11. Health care professionals are considered by the public to be partners and consultants in their care. Self-care and patient-led care will be the norm. Access to web-based health information influences health communications and patient-provider agreements.

GETTING TO THE PREFERRED FUTURE:

What conditions need to be in place to make the preferred future a reality?

- Unique identifying number and personal electronic health record for every Canadian by 2012.
- Wireless, broadband access available to every citizen in Canada by 2010.
- Improved literacy, technological understanding and access to technology, including computers.
- Develop technology that is responsive to low literacy levels, multiple languages and physical/cognitive disabilities.
- All facilities providing care within the public system (e.g. hospitals, rehabilitation settings, community health centres) are accredited by the Canadian Council on Health Services Accreditation by 2015.



The roles, scopes and practice settings of nurses in 2020

Scenario: The preferred future

How do we find the right fit of worker and what needs to be done? We need to look at what nurses do not need to do.

> Deborah Tamlyn 2005

There is a challenge in rural nursing and in not understanding the specialist-generalist role of nurses.

Barb Oke 2005

The nurse of 2020 will be the main person to help people find their way through the system. Roles will be opening up and broadening in chronic health, palliative care, community; however, nurses will still be involved in acute care and need to be very attuned to technology.

Ken Fyke 2005 The contribution and cost effectiveness of nurses is well documented. In 2020, the primary function of nurses is to help patients enhance their own self-care, remain in their homes, access appropriate care, prevent illness and injury, understand and manage technology, recover from injuries and illness, and die in comfort. Nurses diagnose and treat acute and chronic health problems, provide hands-on care in homes and institutions, co-ordinate care teams, educate communities, and help shepherd patients through the complex choices and technology that characterize preventive, acute, chronic, long-term and end-of-life care.

Where do nurses work in 2020?

- 1. The majority of nurses work in settings outside acute hospital care. In 2006, about 70 per cent of nurses worked in institutional settings; by 2020 that pattern has begun to flip to the community, where two-thirds of nurses soon will work.
- 2. Regardless of setting, most nurses work in multi-disciplinary teams.
- 3. At Tier II in the primary health care model, nurses, including advanced-practice nurses, are a common point of first contact for primary care. They are affiliated primarily with health and with the delivery of services that maximize health, reduce illness and injury and help people to remain in their homes. Health and wellness nursing services and broad program-planning in communities (including community health centres/clinics, neighbourhood drop-in centres, sexual health centres, telehealth, home care, schools and work settings) are delivered primarily by RNs and RPNs.
- 4. At the Tier III level of care, outpatient procedures and diagnostic services are delivered by a mix of nurses. There is a higher proportion of LPNs in the workforce than there was in 2006. LPNs play a larger role in pre-operative/pre-procedure and peri-operative settings. In post-operative/post-procedure settings, there are comparatively more RNs providing direct care, case management and coordination of discharges.
- 5. Tier IV includes all inpatient institutional care.
 - Transitional (rehabilitation) and long-term care nursing services in institutions (e.g. nursing homes) are delivered primarily by LPNs with the support of assistive personnel (e.g. personal support workers), and in consultation with NPs and family-practice physicians.
 - In acute care, there is a mix of nurses from all categories. They are highly specialized and provide direct care, lead teams, coordinate care, and serve as managers, teachers and clinical experts.

What do nurses do in 2020?

6. Nurses:

- Provide the bulk of primary care, including assessment, diagnosis, treatment, prescribing, making referrals and evaluating effectiveness of care;
- Act as health "shepherds" helping patients to understand options and navigate the health system;
- Provide health information, teach, assist patients to make decision about care options and self-care;
- Serve as advocates for patients, families, communities, vulnerable populations and the environment;
- Serve as primary links to the system, to specialty treatment, and to resources such as information about diseases;
- Develop and implement broad programs of health promotion and illness prevention in schools, workplaces and communities, and are a strong, visible presence;
- Facilitate patients' understanding and management of technology;
- Coordinate care and care teams in institutional and community settings;
- · Lead telehealth across Canada; and
- Supervise and deliver traditional nursing services.
- 7. Health professionals do not carry out any tasks that can be accomplished safely by non-human care partners (robots), other machines or other care partners (including assistive personnel, family members, teachers, or patients themselves.) For example:
 - In institutional settings, if patients are unable to manage their own medications, then medications are delivered to patients and monitored by pharmacy technicians and/or robots, not nurses.
 - Respiratory care is managed by respiratory technologists and technicians.
 - Robotic technology is used to provide assistive services such as securing supplies.
- 8. Between 2020 and 2060 more nurses will be educated and employed to focus on the health issues of older Canadians.
- Nurses in all settings provide care that is sensitive to the diversity of Canadian society.
- 10. Nurse researchers in 2020 conduct studies that place less emphasis on nurses and nursing processes than was the case 20 years ago, focusing instead on health, the needs of patients and communities, and providing sound evidence to guide policy and practice. Research conducted by nurses is interdisciplinary. Research to determine more cost-effective ways to provide safe, high-quality health and illness services is being led by nurse researchers.

There is a huge role for nursing in supporting people in self-care — both health self-care and illness self-care.

> Trevor Hancock 2005

Nurses are key to primary care — you can't have better, faster access to primary care without more nurses on the front lines, using their full scope of competence.

Armine Yalnizaian 2005

GETTING TO THE PREFERRED FUTURE:

What conditions need to be in place to make the preferred future a reality?

Infrastructure required now to meet the needs of 2020

- New curricula to prepare nurses for enhanced roles in health care
- Interdisciplinary education models developed and implemented
- Mechanisms to resolve scope-of-practice issues in nursing and across the health professions
- Pan-Canadian discussion of the RN, RPN and LPN roles must be held to determine what roles will most
 effectively serve the needs of Canadians, governments and employers in 2020. Collapsing the number of
 categories, retitling and/or changing the scope of practice all require a purposeful and honest dialogue
 leading to a clear plan for transformation.
- Legislation changes to reflect new nursing roles (including broader diagnostic and prescribing authority)

3

Nursing human resources: the number and mix of nurses in 2020

Scenario: The preferred future

Canada is able to attract and retain a sufficient supply of healthy nurses to meet demand. They work in practice environments that optimize outcomes for patients, employees and the system. The focus, mix and practice settings of the regulated nursing groups have changed significantly from the turn of the century. There is a much stronger role for RNs in primary health care and RPNs in primary mental health care, and LPNs have greater responsibilities within long-term care. Much more care for elderly and long term care is needed, and that demand will continue until 2040. Much of that care is provided by LPNs. Therefore the mix of RN/RPN to LPN has shifted from the level in the year 2006 to increase the proportion of LPNs.

- 1. Absenteeism and overtime rates among nurses are the same as the rates for all other Canadian workers.
- 2. 70 per cent of nurses in all categories have access to full-time positions or the equivalent.
- 3. More RNs and LPNs in 2020 are practicing as nurse specialists (certified) within institutional and community settings.
- 4. Accreditation is awarded to institutional and community employers based on:
 - Indicators of implementation of healthy workplace strategies.
 - Turnover among nurses that does not exceed the Canadian average.

The number and mix of nurses

Ryten predicted in 2002 that Canada would need some 363,000 RNs by 2016, and would fall short by nearly a third. It is unclear whether either number will be correct given new delivery models and the mix of services that will be provided by MDs, nurses, pharmacists and so on. But clearly current numbers will fall far short of predicted needs, and governments must be engaged immediately with schools and employers, educating health professionals to put in place the human and physical resources to accommodate more students.

The number and mix of nurses in 2020 will depend on multiple forces, and before they can be accurately planned, those factors need to be resolved. For example, if the workforce moves from 50 per cent full-time work to 70 per cent full-time work, if nurses are working at the higher end of their scopes of practice, and if a new delivery model

is in place, fewer nurses may be needed overall. If RNs are going to take on more primary care roles in lieu of falling numbers of GPs, then more RNs may be needed – and more LPNs, if they take on some of the responsibilities of the RNs.

To increase the number of nurses, robust simulation and predictive modelling will be required. However, even without undertaking the kind of multi-level modelling that experts like Tomblin Murphy (2002) argue is required, we still can walk through options and scenarios for 2020 based on the numbers we know in 2006. For example:

Option 1: Steady Growth: "20 by 20."

Based on Ryten's analysis in 2002, with no intervention in the nursing labour market, Canada will be short of RNs by about 30 per cent by the year 2016. That prediction was based on maintaining current demand levels in proportion to population growth, and not changing the delivery model. This prediction assumes that demand drives supply, meaning Canada will have to graduate tens of thousands of nurses more than we do now by 2020 to meet the demand for services – if they keep doing what they have always done.

To avoid that predicted shortfall, Ryten suggested that Canada should be graduating some 18,000 RNs per year rather than the current 8,000. If the delivery system and the roles nurses play are the same in 2020, then the number of seats in schools of nursing will have to increase significantly, at least until the number of nurses in the workforce can be stabilized.

- It is not feasible to increase seats by the 10,000 each year (or more) needed to avoid the kinds of shortages predicted by Ryten. The only feasible option for increasing the number of graduates is to add in the range of 1,000 seats per year from 2006 to 2020, to reach 20,000 RN graduates per year by 2020. (Student intake must out-number the desired number of graduates to allow for attrition.)
- Given a new primary health care delivery model suggested, and different roles for nurses, a more appropriate and feasible nursing human resources target may be to increase seats in all nursing categories (not just RNs), to produce 20,000 nursing graduates by 2020.
- In conjunction with increasing the number of seats in schools of nursing, there is another option for increasing the number of nurses without recruiting nurses from other nations. If shortages are predicted even within a different delivery model, and if the number of applicants to schools for RNs in Canada continues to out-number available seats, governments could purchase empty seats in U.S. schools of nursing so some applicants could be educated in the U.S. A reciprocal agreement with the U.S. could be established, and return-of-service agreements with students put in place. This strategy carries the risk that graduates would want to remain in the U.S., or would want to return to the U.S. after fulfilling obligations related to return-of-service agreements. On the positive side, there are empty seats in many American schools of nursing, the delivery models, culture and language are similar to Canada's, and the schools are nearby. Furthermore, purchasing seats in existing schools takes advantage of the infrastructure of classrooms, educators and clinical settings already in place, meaning the program could be launched quickly.

Option 2: Maintain the ratio, change the delivery model.

The current ratio of all nurses to population in Canada is about 10,000 per million Canadians. Given predictions of global shortages and falling interest in nursing and health professions, a second option for the future is to, in a sense, ignore the gap predicted by Ryten and approach the numbers from a different vantage point.

In a redesigned system of health and illness services, the roles and numbers of all providers will be very different from those predicted in current models. We have 10,000 nurses per million citizens now, so one option is to graduate enough nurses each year, balanced with retirements and other exits, to maintain that ratio. The model of care developed will take into account how population needs can be met with a ratio of 10,000 nurses per million citizens. The forces of need and available supply are then combined to determine where and how nurses (and all other providers) will practice.

Projecting forward to 2020, at about 38 million citizens, Canada would need 380,000 nurses in this scenario. In her study, Ryten predicted that there would be approximately 248,000 RNs in the workforce by 2016. However CNA data suggest that Ryten's prediction was about 11 per cent below actual current numbers. If that trend continues, there should be about 273,000 RNs working by 2016, and more by 2020. When that number is combined with LPN and RPN graduates, it would be feasible to reach, or come reasonably close to reaching, the 380,000 target without a significant further increase in seats in schools of nursing and without offshore recruitment.

Implementing this sort of strategy would allow resources to be directed to strengthening nursing education, maintaining the current ratio of seats and graduates, and generating the new curriculum that will be required for 2020. Furthermore it will reduce pressures caused in Option One by the juxtaposition of high retirement rates of teachers against rapidly increasing numbers of seats in schools of nursing. However, the strategy involves a fundamental re-think of the nursing human resources problem and a leap of faith that the present ratio can and should be sustained. Importantly, it moves the discussion away from "How can we find a supply to meet constantly growing demand?" to saying "Canada has 380,000 nurses in 2020. That is the resource we have available as a nation. How will we most effectively employ and deploy them to meet the identified health needs?"

Whether this is the right number and mix cannot be judged in isolation of other data, such as number of physicians and what the precise roles of nurses will be. However, given the financial resources and human efforts currently being invested in the shortages issue, funds might be better used in redesigning nursing roles with a steady ratio in mind than to continue on the track of shortages and the constant battle for seats.

GETTING TO THE PREFERRED FUTURE:

What conditions need to be in place to make the preferred future a reality? Infrastructure required now to meet the needs of 2020

- 1. Canadian leaders must come to an agreement about a realistic number of health care providers, including nursing, needed in the future to implement a reformed health care system.
- 2. Ensuring a sufficient supply of nursing services depends most fundamentally on a pipeline of candidates who want to become nurses, getting them into and through nursing education programs, and then keeping them in their jobs and careers. No variable is more important in this constellation of variables than the terms and conditions of work. Therefore, our most urgent recommendation is that those variables be addressed immediately across the country by:
 - Implementing recommendations of the Canadian Nursing Advisory Committee across the continuum of care;
 - Implementing a national pay scale to eliminate provincial/ territorial inequities, adjusting for regional cost of living differences;
 - Modernizing collective agreements to meet the needs of the nurses who will work in 2020;
 - Merging the safety and quality needs of patients, fiscal realities of the system, and the need for nurses to have secure, full-time jobs;
 - Reducing absenteeism and overtime to the national average by the end of 2010;
 - Achieving utilization/productivity levels that do not exceed 85 per cent +/- 5 per cent; and
 - Competing with the terms and conditions of work in place in the other countries (e.g. USA) that will try to attract Canadian nurses.
- 3. CNA should lead a pan-Canadian discussion of nursing supply and nursing roles in conjunction with the federal/provincial/territorial Advisory Committee and Health Delivery and Human Resources as well as physicians, other relevant providers and health service researchers.
- 4. Create a multi-professional, multi-stakeholder mechanism to:
 - Weave results of all the recent sector studies, the International Medical Graduate task force, the Internationally-Educated Nurses task force;
 - Oversee the planning, implementation and evaluation of the recommendations from all these studies;
 - Compare and contrast various simulation/forecasting models to determine the number of health professionals needed in 2020;
 - Set targets with governments for the number of RNs, LPNs, RPNs, NPs and MDs that will be needed to meet population health needs within the new delivery system; and
 - Coordinate forecasting efforts with international efforts underway by groups such as the WHO and OECD.



Nursing education in 2020

Scenario: The preferred future

Educating nurses for 2020 is a more complex challenge than in any previous generation. However, modular models have simplified the path from first entering nursing school through to the doctoral level. The new system streamlines nursing education, offering common points of entry across the country. It is based in core competencies that allow nurses to exit and later re-enter education without having to repeat courses. Most importantly, nurses graduate with a common, readily-transferable skill and knowledge set that will enable them to practice in any area of the country.

Assumptions underpinning education models

- The health care system of 2020 is a fundamentally different place and the
 roles nurses play will change similarly. Therefore nursing education must be
 redesigned in the same way. If nurses are expected to be leaders and to
 function in advanced primary-care roles, then the education system needs
 to teach them those competencies.
- Nursing is one profession, carried out by different kinds of providers;
 therefore they should have much of their education taught in common.
- There is value in interdisciplinary and intradisciplinary education.
- Education for nurses should be structured to facilitate progression through education levels without requiring repetition.
- Nursing will continue to be competency-based at a pan-Canadian level; hence all schools of nursing must align curricula in common to meet the competencies.
- Nursing is a practice discipline. To be relevant to society, nurses must graduate with the skill sets needed by patients, workplaces and employers. Employers should be involved in the determination of competencies and priorities.
- Nurses will be educated primarily by nurses holding the nexthighest level of education (i.e. PhD-prepared nurses will teach master's students, master's-prepared nurses will teach baccalaureate students, and so on).
- To meet nursing service demands and be relevant in 2020, nurse educators must be strongly engaged in practice settings where nursing takes place.
- By 2020 online capability will be significantly enhanced and will be the norm. Modular education will be available and transferable around the country and beyond.

Nurse training is about getting bodies through an educational system as cheaply as possible. Yet, the government wants a nursing workforce that can take on the work of junior doctors, as the latter group sees its working week decline and role evolve. This requires highly educated staff with a strong academic background. However, it — mistakenly — presupposes that nurses will not be required to undertake their caring role, which is exacerbated, as they also need to pick up work from other health and social care staff as those disciplines are reorganized or face cuts.

We need a fundamental shift in our thinking about education. By 2020, all providers will be educated differently in order that the client/patient/resident is truly at the center of care. By this I mean that we are talking about a fundamental change in health professions education, where providers are taught to listen, facilitate, accompany, and direct to meet the client's needs. That is what client-centered means. We are not here to give orders, prescribe, and mandate — that is all provider-centered care. To create a different kind of health professional, the fundamental curriculum design will be as important as how it all occurs in terms of years and courses and classrooms.

> Marlene Smadu 2005

Education Scenarios

- 1. In 2020, all regulated nurses are co-educated for much of the first two years, and share a substantial amount of their classroom and clinical education with other health care trainees.
- 2. Nursing education takes place in nursing learning centres, built on a lattice model involving community colleges, universities, real and virtual clinical-practice settings and care providers from all disciplines. Much of the teaching and learning takes place online, in satellites and through other distance programs. Community colleges and universities are well-integrated institutions with many collaborative programs for all health professionals.
- 3. Nursing education is structured on modules that allow re-entry to higher levels of education or specialization across a nursing role within an education level. The ability to specialize in various ways is reflected in the different education-delivery options that follow. A generalist education, obtained jointly with other nurses and other health professionals, is a normal part of nursing education in 2020.
- 4. For potential candidates already holding university degrees, second-entry programs9 are offered in all the scenarios that follow.

A note about mental-health care and RPN education. Models to integrate LPN and RN education seemed to emerge more readily than models to integrate RPN education with either of the other two categories. If a system of separately regulated and educated RPNs is sustained in the four Western provinces, then models must be developed in which all three types of nurses share a significant part of their education with each other and with other providers. Because a full dialogue with RPN colleagues has not been held, it was decided not to model the RPN education stream here. One possible model for specialized mental health nursing education is discussed in option three following this section. It must be noted that given the tremendous burden of mental illness predicted to lie ahead, all nurses will need to be equipped with a broad base of knowledge and skills related to mental and development health and illness. Of all the areas of knowledge in nursing, perhaps no other cuts across all the specialties and all nursing services in the same way as mental health. It is clear that mental health and illness will have to be included forcefully in all nursing curricula so that it will be a core competency for anyone practicing nursing. How those services can be most effectively delivered to patients and communities merits a thoughtful, thorough discussion.

⁹ Second-entry programs are university nursing programs designed for students who have previous university preparation in another discipline. Typically they allow students who have completed another degree, or parts of another degree, to move through an accelerated nursing program – graduating for example, in two years instead of the normal four years.

EDUCATION DELIVERY MODEL - OPTION ONE

Two – Four – Six – Eight – Ten. From Novice to Scientist: A Harmonized Nursing Education and Career Plan by 2020

UNDERGRADUATE - GENERALIST EDUCATION

 Nurses are educated in four modular spheres (see Figure 6), articulated to make movement into advanced education levels easier, and sharing a significant amount of teaching time in common.

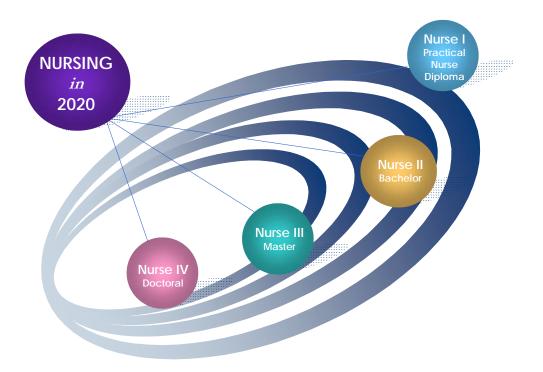


Figure 6. Nursing Education Model, 2020, Option 1

- All RNs and LPNs enter the profession together in the Nurse I program, and have the option to move through the nurse II (RN) stream and on to nurse III and IV (see Figure 7). The spheres include:
 - o Diploma in practical nursing (two years)
 - Baccalaureate degree (two years post the diploma in practical nursing)
 - o Master's degree (two years post-baccalaureate)
 - Doctoral degree doctor of nursing science or doctor of nursing practice (two years post-master's), or doctor of philosophy (four years post-master's)
- Most nurses in the workforce will be educated at the nurse I and nurse II levels.
- Candidates choose their stream before entry, and entry requirements are higher for the nurse II stream than for the nurse I stream.

- Nurse I and nurse II education takes place in collaborative programs in community colleges and universities; more education during the first two years takes place in college settings, most of the second two years takes place in universities (including by distance methods).
 - Most classroom and clinical nursing education is shared for the first two years.
 - As appropriate, clinical and classroom courses in areas such as communication, team functioning, basic sciences and pharmacology are co-taught with other health professions.
 - Following graduation, all nurse I and nurse II graduates may specialize and be certified in a variety of clinical areas at their respective levels, or may take more advanced education at the next level.

NURSING ROLES & EDUCATION IN 2020

Nurse I Practical Nurse Diploma

LPN

- •2-year Diploma in Practical Nursing
- Direct nursing services in homes, communities, institutions
- Generalist education, may be certified in all clinical specialties



RN

- 4-year Baccalaureate in Nursing
- Coordination of services in homes, communities, institutions
- Direct services in primary care settings
- Generalist education, may be certified in all clinical specialties



Advanced Practice Nurse

- Master of Science
- Education, research



Nurse Scientist

- PhD
- Research, education

Figure 7. Nursing Roles & Education in 2020, Option 1

At the end of the first two years of common nursing education:*

All nursing students will write a common credentialing examination based on core competencies that would graduate all of them at the nurse I level, with a diploma in practical nursing, and allow them to use the title "LPN."

At the end of four years:*

All nurse II students will write a common credentialing examination based on core competencies that will graduate them with a bachelor of science in nursing, and allow them to practice using the title "RN."

*In this education model, based in core competencies, there is *no* additional licensing examination after graduation. Graduation with a diploma or degree signals that the student has achieved the competencies required to practice as an LPN or RN.

GRADUATE EDUCATION

To strengthen the nursing profession and support inter-professional practice, nurses in 2020 are encouraged to pursue graduate education in nursing and a variety of other fields (e.g. policy, public health, business administration, education). To meet the health needs of Canadians in 2020, nurses must bring to the table a broad knowledge and skill set beyond nursing.

Regardless of field of study, master's and doctoral programs are based on core sets of competencies and concepts. The resulting common skill sets (e.g. critical thinking) encourage and support more effective inter-professional practice and education, but also facilitate transferability of credits for ongoing graduate education within and between universities.

The model recognizes that nurse leaders need to be prepared for many roles. Therefore in the new model, graduate education will be offered in a professional, non-thesis stream preparing clinical, administrative and policy leaders, as well as a traditional academic stream (with thesis) preparing nurse scientists, as follows:

Professional stream:

- A two-year master's program leading to professional (non-thesis) degree, master of nursing, and
- A further two-year doctoral program leading to professional doctor of nursing science or doctor of nursing practice

Academic stream:

- A two-year master's program leading to academic master of science (includes a thesis), and
- A further two-year doctoral program plus thesis (total three-four years postmaster's) leading to the traditional doctor of philosophy

EDUCATION DELIVERY MODEL - OPTION TWO

Undergraduate Education: Two plus Two plus One

Because nurses graduate as generalists, this model for undergraduate education is similar to option one, but adds an internship year for all nurses upon completion of a baccalaureate program in nursing. After completing four years, the nurse is designated a graduate nurse for a year-long internship, during which time clinical specialty education and certification would take place. Upon completion of the specialty education and certification the nurse is eligible to practice using the title "RN."

Practical example:

On graduation from the four-year program, a nurse who chose the mental health stream would use the title graduate nurse (mental health). After a further year of education and after passing the certification examination, the nurse would use the title RN (mental health), and could add that she or he has a specialty certification within the mental health sphere – for example, addictions – depending on the course of study during the internship year.

Graduate education would be offered in the same model as option one, above.

EDUCATION DELIVERY MODEL - OPTION THREE

Undergraduate Education: Two plus Two

In this model for undergraduate education, all categories of nurses enter nursing programs for a common, generalist education for the first two years.

Nurses entering the practical nurse stream exit the program after two years and are able to practice as generalist nurses in the LPN role. They may specialize after graduation within the LPN sphere.

Those nurses who continue on for the second two-year block specialize in one of: mental and developmental health, adult critical care and institutional care, child critical care and institutional care, or home and community care. Graduates are able to practice as RNs with a specialty in one of the four domains of clinical practice. They would use titles such as RN (mental health), RN (adult), RN (children) and RN (community health).

RNs and LPNs may further specialize and be certified within specific areas of practice (e.g. gerontology, renal, maternal/newborn).

Although they choose different specialties, core competencies allow nurses to move to common graduate education, and all of them will use the RN title.

Graduate education would be offered in the same model as option one, above.

Note that this model would result in two categories of nurses, RN and LPN, with the RPN role of 2006 being folded into the new mental-health RN specialty.

EDUCATION DELIVERY MODEL - OPTION FOUR

Status quo. Some common curriculum, separate programs

In this model for undergraduate education, the RN and LPN streams are separate, with the LPN residing in community colleges and RNs all in universities or in collaborative college/university programs.

During the first two years of both programs, curriculum and clinical practice take place in common where feasible.

In both streams, some teaching and clinical practice takes places with other health professionals. Curricula is modular in design, allowing easier entry for LPNs wishing to move to the RN category.

LPNs and RNs may certify in clinical specialties within their areas of practice.

Graduate education takes place as per the other models.

GETTING TO THE PREFERRED FUTURE:

What conditions need to be in place to make the preferred future a reality?

Infrastructure required now to meet the needs of 2020

- Create a unique identifier for all nursing students.
- Establish a central application centre to track all nursing applications, seats, enrolment, graduation and attrition in the country.
- Explore the development of a core curriculum in practical nursing and registered nursing.
- Put in place agreements among educational institutions and practice settings to co-educate and cross-appoint faculty.
- Develop financial and other incentives to encourage and compensate practicing nurses who take on teaching roles in schools of nursing and mentoring students and new graduates in practice settings.
- Increase opportunities and financial support for practicing nurses to pursue advanced education while working and remaining in Canada.



Ensuring responsiveness, quality and patient safety: regulating nurses in 2020

Scenario: The preferred future

Entry to practice for all LPNs in Canada is a two-year diploma in practical nursing. Entry to practice for all RNs is a four-year bachelor of science in nursing (for RPNs, a four-year bachelor of science in psychiatric nursing.)

To practice and use the regulated titles across the country, all nurses hold a common, pan-Canadian licence, allowing them to practice in any Canadian jurisdiction.

Nursing has become the first major health profession to regulate all its categories and members centrally and is leading the way toward a pan-Canadian regulatory body for all health professions.

Nurses educated in Canada

- 1. In conjunction with the new curriculum, all RNs and LPNs educated in Canada write competency-based examinations at the completion of year two of nursing school. If successful they are granted a diploma in practical nursing and are able to practice using the title "LPN" in Canada.
- 2. Those students who continue on to complete the baccalaureate degree write a second set of examinations at the completion of year four of nursing school. If successful they are granted a baccalaureate degree in nursing and are able to practice using the title "RN" in Canada.

Internationally educated nurses

Recognizing that countries educate nurses in many different ways and not all have the same requirements for entering practice as Canada:

- 3. The credentials of internationally-educated nurses are assessed individually in a national assessment centre using the prior learning assessment and recognition model, and as appropriate, are granted a Canadian licence.
 - For internationally-educated nurses who do not meet the minimal requirements, a program of study is recommended by the assessment centre.

How do we protect the public?

- 4. Nurses in all categories hold pan-Canadian licences with a central database for all regulated categories.
 - The central registry establishes and communicates the core scopes of practice for nurses in all areas of Canada.
 - Each province and territory hosts a regulatory satellite office charged with maintaining quality and administering discipline decisions to protect the public.
 - When a nurse takes on employment, it is the responsibility of the nurse and employer together to enter the nurse's unique identifying number into the central database, which informs the local jurisdiction that the nurse is now going to practice in that province/territory.
 - Each regulatory satellite is responsible for informing the nurse of any special regulations affecting nursing practice in that jurisdiction.
 - Each nurse practicing in a jurisdiction is responsible for knowing, understanding and practicing according to the local legislation. A written agreement of understanding is signed by the nurse and the Canadian regulatory body or its agent (e.g. the employer) before the nurse can practice.
 - Discipline issues are tracked using the nurse's identifier number. When a
 decision is made, it is entered within 24 hours into the national database
 so that if the nurse changes jurisdictions the information is available to
 employers and the public immediately.

GETTING TO THE PREFERRED FUTURE:

What conditions need to be in place to make the preferred future a reality?

Infrastructure required now to meet the needs of 2020

• Existing legislation regarding provincial/territorial delegation of regulatory authority must be examined with appropriate changes proposed and a transformational plan developed.



Diversifying nursing: careers in nursing for all Canadians

Scenario: The preferred future

Canada's nursing workforce in 2020 is not sustainable and cannot be self sufficient without attracting a diverse cadre of "non-traditional" candidates. In 2020 the nursing workforce mirrors the public it serves in its diversity by gender, ethnocultural background, age, physical ability, sexual orientation and religious beliefs. Nurses in all roles include men and women of diverse backgrounds and beliefs, reflecting the communities they serve. Professional nursing practice is no longer focused only on direct clinical services in institutions and homes; it has transformed to be a much broader information and knowledge practice. That evolution has allowed candidates having different kinds of physical abilities, and who historically have not been able to pursue careers in nursing, to enter the profession. Nurses who develop disabilities also have more career options to pursue within nursing.

Assumptions

- Canada's only population growth in 2020 comes from immigration.
- The vast majority of immigrants to Canada come from visible minority populations and/or do not have English or French as their first language.
- The proportion of Canadians who identify as being part of a visible minority, including Aboriginals, exceeds 20 per cent and continues to grow.
- Visible minority and Aboriginal nurses aspire to leadership roles in all the domains of nursing practice.
- Strategies to attract and retain Aboriginal nurses are developed in conjunction
 with a focused effort to address wage parity issues across jurisdictions and
 between band- and non-band-employed nurses, and improving other wellknown barriers to recruiting and retaining nurses in Aboriginal communities (e.g.
 safety, access to professional supports, and access to technology). Many of
 these issues are addressed by 2011, through implementation of the plan for
 transformation generated by the Office of Nursing Services, First Nations and Inuit
 Health Branch, Health Canada.

Reaching out, reaching forward

- 1. "20 by 20" and "10 by 20".
 - In 2020, at least 20 per cent of formal nursing leaders (nurse managers, nurse executives, nurse educators, deans and directors, advanced practice nurses, policy leaders, and nurse researchers) come from Canada's Aboriginal and visible-minority population.

- In 2020, at least 10 per cent of the nursing workforce is made up of males, and by 2030, at least 20 per cent of the nursing workforce will be made up of males.
- 2. Outreach programs were in place by 2008 to recruit candidates who have not traditionally applied to nursing programs (e.g. men, visible-minority Canadians, people with different physical abilities).
- 3. Accreditation criteria for all health care delivery and education settings include:
 - evidence of having implemented best practices that address the elimination of discrimination and bias;
 - the existence of outreach strategies to attract and retain non-traditional applicants; and
 - proactive hiring of visible minorities.

For example, leaders in all practice, education, research, administrative and policy environments have implemented recommendations such as those contained in the Registered Nurses Association of Ontario's best practice guideline, *Embracing Cultural Diversity in Health Care: Developing Cultural Competence* (2006).

4. Curricula in schools of nursing have been adapted to reflect the diversity of Canada and are sensitive to differences across cultures, religious beliefs, age groups, sexual orientation and physical abilities.

- 5. To improve care and reduce conflict in the workplace, ongoing professional-development programs are offered to nurses already in practice, to expose them to changing demographic patterns in Canada, and strategies to manage changing expectations.
- 6. Particular attention is paid to attracting and retaining Aboriginal nurses. Strategies suggested by the Aboriginal Nurses Association of Canada include development of more nursing access and outreach programs, establishment of satellite, community-based nursing education programs, and creation of additional bursary and other incentive programs.

Changing curriculum to make it better for Aboriginal Peoples makes it better for everyone.

Marlene Smadu 2005

GETTING TO THE PREFERRED FUTURE:

What conditions need to be in place to make the preferred future a reality?

Infrastructure required now to meet the needs of 2020

Before we can set meaningful targets and plan programs, there is a need to move beyond anecdotal evidence and to describe the present and evolving gender and ethno-cultural make-up of the nursing workforce. Therefore, by the end of 2008, all nursing regulatory bodies will request on an annual basis that members voluntarily state any ethno-cultural and language affiliation/status with which they wish to be identified, and will report that data to CIHI along with all other nursing data.

CHAPTER SIX

The Next Steps

The scenarios advanced in this report were generated in response to evidence that the present system is not working as well as it should be, either for those it serves or for those providing services. Furthermore, it is not designed for the health needs of 2020.

Every person interviewed for this report expressed serious concerns about the health care system. Resolving those concerns is not just up to nursing; moving this agenda forward will require intensive long-term commitment from nurses, physicians, and other care providers across Canada. However, as the largest provider of services across the system, nursing must play a central, active, leadership role in the discussion. Government partners must be involved, but nurses must lead the nursing agenda.

Nurses must lead the nursing agenda.

Ideas have been put forward in this report to provoke discussion about the structure of the health care system in 2020, how Canadians will access health care in a timely way, and the role nurses will play in providing quality primary health care services. First among those, nurses must be leaders in the discussion of how funding for the system can be sustained, what services will be provided within the public system and who should meet those demands.

One scenario suggests that the country refocus discussion of human resources away from shortages to strategies for recruiting and retaining nurses and other providers in a redesigned system. Scenarios were presented to suggest Canada should develop an innovative, more harmonized nursing-education model, and a similarly streamlined pan-Canadian licensing structure. Another scenario suggests targets to diversify the nursing profession in all roles and domains of practice by 2020.

Canadians are capable of confronting thorny challenges, discarding long-held views, and getting down to the job of finding solutions.

Conference Board of Canada 2005, p. 8

Shared leadership with broad participation across nursing will be needed to undertake a thoughtful dialogue in each of these areas, and then to plan and take action. The timelines are ambitious. The lengthy roster of organizations representing nurses across the current regulated groups must engage immediately in a collaborative plan to make it possible to transform nursing practice, education, research, and administration by 2020.

Creating the nursing profession that can meet the health needs of Canadians in 2020 cannot be left just to formal nurse leaders,

but it is the job of senior nurse leaders to be visionary and courageous. They must put the processes and mechanisms in place to involve nurses at all levels across Canada in the implementation of bold new plans. As Sandra MacDonald-Rencz said during the Merrickville consultation, our greatest challenge in all this is not content knowledge, it is to "change, renew and rejuvenate" ourselves.

Nursing as we know it was started 150 years ago by the formidable Florence Nightingale. A key challenge in 2006 is to find and support the revolutionaries, the maverick thinkers and the Nightingales of the 21st century. Leaders already in place must shake off old patterns and teach, mentor, support and push forward new, young and brave nurse leaders.

As this project unfolded, the high levels of enthusiasm and great respect shown for and by nurses was striking. The public puts far more trust and faith in nurses than nurses sometimes put in themselves. The public is waiting, and looking to nurses to act forcefully. The messages are clear; the ball is now in the nurses' court.

IMMEDIATE TRANSFORMATION PLAN

Three processes must be developed and put in place in the short term to move the futures agenda:

- Dissemination of this document to nurses across roles, practice domains, and across the country;
- Development of mechanisms for national dialogue, consensus, and priority-setting regarding futures scenarios; and
- Creation of the map, timelines, activities and milestones to implement an over-arching plan for the future of health care and nursing

Given the impending 100th anniversary of the Canadian Nurses Association – Canada's first national nursing organization – in 2008, all Canadian nursing organizations might consider joining in a spirit of collaboration to develop and implement transformation plans that can be launched in 2008, and meet annually thereafter until the transformation is complete. Possible first steps could include:

- Holding first meetings by October 2006;
- Creating a mechanism, such as a national futures task force or council, if appropriate; and
- Generating a plan for implementation of a broad new vision for nursing that could be announced by 2008.

All transformational changes must be in place by 2015 to account for the turnaround time needed to graduate nurses ready to practice in a new model by 2020.

Resources

i) References

Advisory Committee on Health Human Resources. (2000). *The nursing strategy for Canada*. Retrieved July 2005, from http://www.hc-sc.gc.ca/english/nursing/

Alberta Government. (2001). *A framework for reform: Report of the Premier's Advisory Council on Health* (D. Mazankowski, Chair). Edmonton, AB: Author.

Alberta Government. (2005). *Labour mobility*. Edmonton AB: Human Resources and Employment, Alberta Government. Retrieved January 2006, from http://www3.gov.ab.ca/hre/profsandoccs/canada.asp

American Nurses Association. (2002). *Nursing's agenda for the future: A call to the nation*. Washington, DC: Author.

American Nurses Association. (2005). *ANA's health care agenda 2005*. Washington,DC: Author.

Author Unknown. (2005). Busiest hurricane season on record finally ends. *consumeraffairs.com.* Retrieved Nov. 30, 2005, from http://www.consumeraffairs.com/news04/2005/hurricane_season.html

Besner, J., Doran, D., Giovannetti, P., Girard, F., Hill, McGillis Hall, L., et al. (2005). *A systematic approach to maximizing nursing scopes of practice*. Ottawa, ON: Canadian Institutes of Health Research.

Brimacombe, G., Antunes, P., & McIntyre, J. (2001). The future cost of health care in Canada, 2000 to 2020: Balancing affordability and sustainability. Ottawa ON: Conference Board of Canada.

Burström, B. (2002). Increasing inequalities in health care utilisation across income groups in Sweden during the 1990s? *Health Policy*, 62(2), 117-129.

Campaign 2000. (2002). *Putting promises into action: A report on a decade of child and family poverty in Canada.* Retrieved September 10, 2005, from http://www.campaign2000.ca/

Canadian Broadcasting Corporation News. (2006, February 15). Arctic sea ice melting at an alarming rate, satellites show. *CBC News, Health and Science*. Retrieved February 15, 2006, from http://www.cbc.ca

Canadian Council on Social Development. (2001). *Equality, inclusion and the health of Canadians. Submission to the Commission on the Future of Health Care in Canada*. Ottawa: Author.

Canadian Federation of Medical Students. (2005). *Decreased interest in family medicine*. Retrieved April 30, 2005, from

http://www.cfms.org/representation/papers_view.cfm?id=13&what_section=communication

Canadian Institute for Health Information. (2004a). *Health care in Canada 2003*. Ottawa, ON: Author.

Canadian Institute for Health Information. (2004b). *Improving the health of Canadians*. Ottawa, ON: Author.

Canadian Institute for Health Information. (2005a). *Drug expenditure in Canada 1985 to 2004.* Ottawa, ON: Author.

Canadian Institute for Health Information. (2005b). *Health care in Canada 2004*. Ottawa, ON: Author.

Canadian Institute for Health Information. (2005c). *Workforce trends of licensed practical nurses in Canada, 2004.* Ottawa, ON: Author.

Canadian Institute for Health Information. (2005d). Workforce trends of registered nurses in Canada, 2004. Ottawa, ON: Author.

Canadian Institute for Health Information. (2005e). *Workforce trends of registered psychiatric nurses in Canada, 2004.* Ottawa, ON: Author.

Canadian Institute for Health Information. (2005f). *Understanding emergency department wait times: Who is using emergency departments and how long are they waiting?* Ottawa, ON: Author.

Canadian Institutes for Health Research (2005). *Health care system.* Ottawa, ON: Author. Retrieved January 2006, from www.cihr-irsc.gc.ca/e/28899.html.

Canadian Nurses Association. (2002). *Advanced nursing practice*. Ottawa, ON: Author. Retrieved October 14, 2005, from http://cna-aiic.ca/CNA/practice/advanced/default_e.aspx

Canadian Nurses Association. (2006). *Trends in illness and injury-related absenteeism and overtime among publicly employed registered nurses.* Ottawa ON: Author.

Canadian Nursing Advisory Committee. (2002). *Our health, our future: Creating quality workplaces for Canadian nurses*. Ottawa, ON: Health Canada.

Canadian Policy Research Networks. (2005). Diversity gateway. Ottawa, ON: Author.

Carroll, Jim. (2004). The end of retirement. *The Association Agenda*. Toronto, ON: Canadian Society of Association Executives.

Cetron, M. & Davies, O. (2003). Trends shaping the future: Technological, workplace, management, and institutional trends. *The Futurist*, *37*(2), 30-44.

College of Family Physicians of Canada. (2004). *Family medicine in Canada – vision for the future*. Mississauga, ON: Author.

Commission for Architecture and the Built Environment, Royal Institute of British Architects, The Nuffeld Trust & the Medical Architecture Research Unit, South Bank University. (2002). 2020 vision: Our future health care Environments. Norwich, UK: The Stationary Office.

Conference Board of Canada. (2005). *The world and Canada: Trends reshaping our future*. Ottawa, ON: Author.

CTV News (2006). Canadians trust judges but not politicians. Retrieved March 20, 2006 from http://www.ctv.ca

Curran, C. (1992, November). *Building towards the future*. Paper presented at The National Conference on Nursing Administration, Ottawa, ON.

Currie, R. (2005). *Health, health care, and the sexes: A new perspective.* Winnipeg MB: Manitoba Centre for Health Policy, University of Manitoba.

Davis, E. (2005, March). *Dory, rainbow and inukshuk: The journey to a strong health system in Canada*. Paper presented at the Canadian Health Services Research Foundation 7th Annual Workshop – Leveraging Knowledge: Tools & Strategies for Action, Montreal, QC.

Day, G. & Schoemaker, P. (2005). Scanning the periphery. *Harvard Business Review Online*, Retrieved November 14, 2005, from http://harvardbusinessonline.hbsp.harvard.edu

Department of Finance. (2000). *Backgrounder on federal support for health in Canada*. Retrieved September 22, 2005, from http://www.fin.gc.ca/toce/2000/health_e.html

Department of Health, UK. (2005). *Nurse and pharmacist prescribing powers extended*. London: Department of Health Press Releases. Retrieved February 27, 2006, from www.dh.gov.uk/PublicationsAndStatistics/PressReleases

Donaldson, S. (1999). The growth of collaborative and interdisciplinary research. In Sullivan, E. (Ed.), *Creating nursing's future: Issues, opportunities, and challenges* (p. 271-285). St. Louis, MO: Mosby.

Economics Research Associates. (2004). *Public use facilities study: City of Winnipeg.* Winnipeg, MB: Author. Retrieved September 22, 2005, from www.winnipeg.ca/interhom/pdfs/PUFS

Edwards, N. & Riley, B. (2006). Can we develop wait lists for public health issues? *Canadian Medical Association Journal*, 174(6), March 14, 2006. Retrieved March 22, 2006 from http://www.cmaj.ca

Enright, M. (2005, December 18). Africa: With guests Stephen Lewis and Martin. [Radio Broadcast]. *The Sunday Edition.* Ottawa, ON: CBC Radio One.

Evans, R. & Roos, N. (1998). What's right about our health care system. Toronto Star, September 21, 1998, p. 1.

Faculty of Nursing University of Toronto (2003). *History of the faculty*. Retrieved December 12, 2005, from http://www.nursing.utoronto.ca/faculty/history.aspx

Falk-Rafael, A. (2005). Speaking truth to power: Nursing's legacy and moral imperative. *Advances in Nursing Science*, 28(3), 212-223.

Foot, D. (2003, September 10). Baby boom meets baby bust. *The Globe and Mail*, pp. A23.

Foot, D. (2005, October 1). Open the door, but not just yet. *The Globe and Mail*, pp.A25.

Fyke, K. (2005, June). Why change isn't happening, and what you can do about it. Paper presented at the Alberta College of Pharmacy/Alberta Association of Registered Nurses Conference, Jasper, AB.

George, L. (2005, October 3). The real epidemic is fear. Macleans, 118(40), 46-52.

Gordon, S. (2005). *Nursing Against the Odds. How health care cost cutting, media stereotypes, and medical hubris undermine nurses and patient care.* Ithica, NY: ILR Press.

Government of Ontario, Ministry of Education and Ministry of Training, Colleges & Universities. (2006). *Choosing your occupation in Ontario*. Retrieved February 22, 2006, from www.edu.gov.on.ca

Hancock, T. (1999). Future directions in population health. *Canadian Journal of Public Health*, *90*, S1-S65.

Harper, T. (2003). What is Nanotechnology? (doi:10.1088/0957-4484/14/1/001). *Nanotechnology* 14. Retrieved February 21, 2006, from IOP Electronic Journals.

Hart, C. (2004). *Nurses and politics: The impact of power and practice*. New York: Palgrave MacMillan.

Health Canada. (2002). *A report on mental illnesses in Canada*. Ottawa, ON: Author.

Health Council of Canada. (2005). *Health care renewal in Canada: Accelerating change*. Toronto, ON: Author.

Henry Street Settlement. (2004). *About our founder, Lillian Wald.*New York NY: Author. Retrieved January 6, 2006, from http://www.henrystreet.org/site/PageServer?pagename=abt_lwald

Hjertqvist, J. (2002). *User fees for health care In Sweden – A two-tier threat or a tool for solidarity?* Winnipeg, MB: The Frontier Centre for Public Policy. Retrieved November 17, 2005, from http://www.fcpp.org

Hurst, J., & Siciliani, L. (2003). *Tackling excessive waiting times for elective surgery: a comparison of policies in twelve OECD countriies. OECD Health Working Papers*, No. 6, Paris: Author. Retrieved November 2, 2005, from http://www.oecd.org/dataoecd/31/10/17256025.pdf

Institute for Health care Improvement. (2005). *Case for improvement.* Retrieved March 13, 2006, from http://ihi.org

Irvine, C., & Gratzer, D. (2002). *Medicare and user fees: Unsafe at any price?* Halifax, NS: Atlantic Institute for Market Studies.

Keung, N. (2004, October 10). Nursing homes face crisis in long-term care. Why some beds are suddenly empty. *Sunday Star*, p. A1, A8.

Kirby, M. (2002, June 14). How the tyranny of niceness handicaps nurses. *The Age*. Retrieved August 2005, from http://www.theage.com.au/articles/2002/06/13/1023864323033.html

Kltson, A. (1996). Does nursing have a future? *British Medical Journal*, *313*, 1647-1651. Retrieved November 2, 2005, from http://bmj.bmjjournals.com/cgi/content/full/313/7072/1647

Kouri, D. (2000) *Saskatchewan 2020 technical report*. Regina: Saskatchewan School Boards Association. Retrieved September 7, 2005, from http://ssta.sk.ca/research/social_trends/2020.pdf

Lalonde, M. (1974). A new perspective on the health of Canadians: A working document. Ottawa, ON: Department of Health and Welfare.

Leeb, K., Jokovic, A., Sandhu, M., & Zinck, G. (2006). CIHI survey: Intensive care in Canada. *Health care Quarterly*, *9*(1), 32-33.

Levy, M. (2005). *The stigma of mental illness in the United States*. San Francisco, CA: Author. Retrieved January 18, 2005, from

http://www.lawandpsychiatry.com/html/stigma_of_mental_illness.htm

Lewis, S. (2003, May). *Diseases without borders: An economic struggle?* Paper presented at Conference de Montréal, CIDA/IDRC International Forum, Diseases Without Borders: An Economic Struggle?, Montreal, QC.

MacDonald, G. (1999). First Nations and Inuit regional longitudinal health survey. Ottawa, ON: First Nations and Inuit Regional Longitudinal Health Survey Steering Committee.

Madore, O. (2003). *The Canada Health Act: Overview and options*. Ottawa, ON: Economics Division, Library of Parliament, Parliamentary Information and Research Service, Government of Canada.

Maggi, L. (2000). A conversation with Suzanne Gordon. *The American Prospect Online*, February 3, 2000. Retrieved September 14, 2005, from http://www.prospect.org/webfeatures/2000/02/maggi-I-02-03.html

Mansell, D. (2004). Forging the future: A history of nursing in Canada. Ann Arbor, MI: Thomas Press.

Martin, P. Sr. (1955, December). Citizens' forum discusses the possibility of medicare. *Citizens' Forum*. Ottawa, ON: CBC Radio. Retrieved October, 2005, from http://archives.cbc.ca/IDCC-1-73-90-458/politics_economy/medicare

McKay, M. (2005). Public health nursing. In Bates, C., Dodd, D., and Rousseau, N. (Ed's.), *On all frontiers: Four centuries of Canadian nursing* (pp. 107-123). Ottawa, ON: University of Ottawa Press and Canadian Museum of Civilization.

McPherson, K. (2005). The Nightingale influence and the rise of the modern hospital. In Bates, C., Dodd, D., and Rousseau, N. (Ed's.), *On all frontiers: Four centuries of Canadian nursing* (pp. 73-87). Ottawa ON: University of Ottawa Press and Canadian Museum of Civilization.

Millar, W.J. (2001). Patterns of use – alternative health care practitioners. *Health Reports*, 13(1), 9-21.

Mirolla, M. (2004). *The cost of chronic disease in Canada*. Ottawa, ON: The Chronic Disease Prevention Alliance of Canada.

Montague, T. (2004). *Patients first: Closing the health care gap in Canada*. Etobicoke, ON: John Wiley & Sons Canada Ltd.

Murray, C., and Lopez, A. (1996). *The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990, and projected to 2020* (Vol. 1). Cambridge, MA: Harvard University Press.

Mussallem, H. (1965). *Royal commission on health services: Nursing education in Canada*. Ottawa, ON: Queen's Printer.

National Advisory Committee on SARS and Public Health (D. Naylor, Chair) (2003). Learning from SARS: Renewal of public health care in Canada. Ottawa ON: Health Canada. National Association of Clinical Nurse Specialists. (2005). *What is a clinical nurse specialist?* Harrisburg, PA: Author. Retrieved February 16, 2006, from http://www.nacns.org/fags.shtml

National Health Service. (2004). *NHS Improvement plan 2004: Putting people at the heart of public services.* London: Author. Retrieved September 15, 2005, from www.dh.gov.uk

National Health Service. (2005). *Self-care: A real choice.* London: Author. Retrieved September 15, 2005, from http://www.dh.gov.uk

National Primary Health Care Conference. (2004). *A thousand points of light? Moving forward on primary health care.* Winnipeg, MB: Author. Retrieved September 15, 2005, from http://www.eicp-acis.ca/en

Nebbia, G. (2001). The limits to growth revisited [Special issue]. Futures, 33(1), 43-54.

Neufeld, K. (2005, February). *The evolving role of nursing leadership.* Paper presented at the Canadian Nursing Leadership Conference: The Changing Face of Nursing Leadership: Diversity, Partnerships, Innovations, Ottawa, ON.

O'Brien-Pallas, L. (2005). *Health human resources planning: A brief overview.* Toronto, ON: University of Toronto, Health Human Resources Network. Retrieved January 17, 2006, from http://www.hhr.utoronto.ca/overviewhhrp.cfm

O'Brien-Pallas, L., Alsknis, C., Wang, S., Birch, S., Tomlin Murphy, G., Roy, F., et al. (2003). Early retirements in nursing: Estimating the size of the problem in Canada. *Longwoods Review*, 1(4), 2-9.

O'Brien-Pallas, L., Thomson, D., McGillis Hall, L., Pink, G., Kerr, M., Wang, et al. (2004). Evidence-based Standards for Measuring Nurse Staffing and Performance. Ottawa, ON: CHSRF. Retrieved January 5, 2006, from http://www.chsrf.ca

O'Brien-Pallas, L., Gail Tomblin Murphy, T., White, S., Hayes, L. Baumann, A., Higgins, A., et al. (2005a). *Building the future: An integrated strategy for nursing human resoruces in Canada*. Ottawa, ON: The Nursing Sector Study Corporation.

O'Brien-Pallas, L., Duffield, C., Tomblin Murphy, G., Birch, S., & Meyer, R. (2005b). *Nursing workforce planning: The policy trail.* Geneva, SZ: International Council of Nurses Global Nursing Review Initiative.

O'Connor, A. (2001). Using patient decision aids to promote evidence-based decision making. *Evidence-Based Medicine*, 6, 100-102.

Ontario Medical Association. (2005). *The Ontario physician shortage 2005.* Toronto, ON: Author.

Organization for Economic Cooperation and Development. (2003). *Health at a glance: OECD indicators 2003.* Paris: Author.

Organization for Economic Cooperation and Development. (2004a). *Economic survey of Canada 2004*. Paris: Author.

Organization for Economic Cooperation and Development. (2004b). *Towards high performing health systems*. Paris: Author. Retrieved March 1, 2006, from http://www.oecd.org.

Organization for Economic Cooperation and Development. (2005a). *Ageing and employment policies – Canada.* Paris: Author. Retrieved March 7, 2006, from http://www.oecd.org

Organization for Economic Cooperation and Development. (2005b). *Health at a glance: OECD indicators 2005.* Paris: Author. Retrieved February 10, 2006, from http://www.oecd.org

Organization for Economic Cooperation and Development. (2005c). *OECD Economic Outlook No. 78 – Canada*. Paris: Author. Retrieved February 23, 2006, from http://www.oecd.org

Organization for Economic Cooperation and Development. (2005d). *Trade and structural adjustment: Embracing globalisation*. Paris: Author. Retrieved February 23, 2006, from http://www.oecd.org.

Organization for Economic Cooperation and Development. (2005e). *Trends in international migration*. Paris: Author. Retrieved February 3, 2006, from http://www.oecd.org

Organization for Economic Cooperation and Development. (2006). *Economic policy reforms: Going for growth 2006. Progress in responding to the 2005 policy priorities – Canada country note* Paris: Author. Retrieved March 9, 2006, from http://www.oecd.org

Oxman-Martinez, J., and Hanley, J. (2005). *Health and social services for Canada's multicultural population: Challenges for equity.* Policy Forum Strategique. Canada 2017. Serving Canada's multicultural population for the future. Policy Forum. March 22-23, 2005. Discussion Papers. Canadian Heritage, Multiculturalism. Retrieved December 2005 from http://www.pch.gc.ca/progs/multi/canada2017/index_e.cfm

Pearce Snyder, D. (2004). Five meta-trends changing the world. *The Futurist,* 38(4), 22-28.

Pollara. (2005). *Health care in Canada survey 2005*. Retrieved November 29, 2005, from http://pollara.ca

Porter-O'Grady, T. (1998). A glimpse over the horizon: Choosing our future. *Orthopedic Nursing*, 17(2), March/April 1998 Supplement.

PriceWaterhouseCoopers. (2005). *HealthCast 2020: Creating a sustainable future.* Retrieved March 2, 2006, from http://www.pwc.com

Pringle, D., Green, L., and Johnson, S. (2004). *Nursing education: Historical review and current capacity*. Ottawa, ON: The Nursing Sector Study Corporation. Retrieved December 12, 2005, from http://buildingthefuture.ca

Pringle, D. (2005). From the Editor-in-Chief: Something to celebrate at the best of times and the worst of times. *Nursing Leadership, 18*(4). Retrieved February 17, 2006, from http://longwoods.com

Public Health Agency of Canada. (2004). *Physical activity increases health care costs in Canada*. Retrieved December 12, 2005, from http://www.phacaspc.gc.ca/pau-uap/fitness/work/why3_e.html

Quebec Commission on Medicare. (2001). *Emerging solutions: Report and recommendations* (M. Clair, Chair). Quebec, QC: Ministry of Health and Social Services.

Rachlis, M. (2005). *Public solutions to health care wait lists*. Ottawa: Canadian Centre for Policy Alternatives. Retrieved March 13, 2006, from http://www.policyalternatives.ca

Raphael, D. (2002). *Interviews with women's health experts.* Toronto, ON: Sunnybrook and Women's College Health Sciences Centre. Retrieved January, 2006, from: http://www.womenshealthmatters.ca/interviews

Roberts, G. (2004). *The fiscal implications of what is in and out of the medicare basket.* Powerpoint presentation prepared by the Conference Board of Canada, November 30, 2004. Retrieved March 13, 2006, from http://www.law.utoronto.ca/healthlaw/basket/docs/1

Government of Saskatchewan, Regional Colleges Review Committee. (1999). *Background information for strategic planning workshops, Regional Colleges Review*. Retrieved September 7, 2005, from http://www.sasked.gov.sk.ca/branches/institutions/rc_review/strategicplanningphases.htm

Richardson, S. (2005). Unionization of Canadian nursing. In Bates, C., Dodd, D., and Rousseau, N. (Ed's.), *On all frontiers: Four centuries of Canadian nursing* (pp. 213-223). Ottawa, ON: University of Ottawa Press and Canadian Museum of Civilization.

Rogers, M. (1997). *Canadian nursing in the year 2020: Five futures scenarios*. Ottawa, ON: Canadian Nurses Association.

Romanow, R. (2002). *Building on values: The future of health care in Canada: Commission on the future of health care In Canada.* Retrieved July 14, 2005, from http://www.hc-sc.gc.ca

Royal College of Nursing. (2004). *The future nurse: The RCN vision.* London: Author.

Ryten, E. (2002). *Planning for the future: Nursing human resource projections.* Ottawa, ON: Canadian Nurses Association.

Saskatchewan Commission on Medicare (Kenneth J. Fyke, Commissioner). (2001). Caring for medicare: Sustaining a quality system. Regina, SK: Commission on Medicare. Retrieved 2005, from http://www.health.gov.sk.ca

Schoen, C., Osborn, R., Huynh, P., Doty, M., Zapert, K., Peugh, J., & Davis, K. (2005). Taking the pulse of health care systems: Experiences of patients with health problems in six countries. *Health Affairs* Web Exclusive November 3, 2005, W5-509–W5-525.

Shamian, J., O'Brien-Pallas, L., Kerr, M., Keohoorn, M., Thomson, D., & Alksnis, C. (2001). *Effects of job strain, hospital organizational factors and individual characteristics on work-related disability among nurses.* Toronto, ON: Workplace Safety & Insurance Board.

Sholzberg-Gray, S. (2005, November 29). *Health care in Canada roundtable* [Television Broadcast]. Ottawa, ON: Canadian Parliamentary Access Channel.

Sibbald, B. (1995). 2020 vision of nursing. *Canadian Nurse*, 91(3), 33-36.

Sigma Theta Tau International Leadership Institute. (1996). *Heathy people: Leaders in partnership.* Indianapolis, IN: Author.

Simoens, S., Villeneuve, M. & Hurst, J. (2005). *Tackling nurse shortages In OECD countries (OECD Working Paper #19)*. Paris: Author.

Smith, M. and Simpson, J. (2003). Alternative practices and products: A survival guide. *Health Policy Research Bulletin*, 7 (November 2003), 3-5.

Spetz J. (2005). The cost and cost-effectiveness of nursing services in health care. *Nursing Outlook*, 53(6), 305-309.

Standing Senate Committee on Social Affairs Science and Technology. (2002). Study on the state of the health care system in Canada (1999-2002). Retrieved 2005, from www.hc-sc.gc.ca/hcs-sss/com/kirby/index_e.html

Statistics Canada. (2001). Population projections. *The Daily, March 13 2001*. Retrieved October 2005, from http://www.statcan.ca/Daily/English/010313/d010313a.htm

Statistics Canada. (2002). *Aggregated analysis of census data*. Ottawa, ON: Author.

Statistics Canada. (2004). *Joint Canada/United States survey of health, 2002-03.* Ottawa, ON: Author.

Statistics Canada. (2005). *Canada's visible minority population in 2017* (#91-541-XIE). Ottawa, ON: Statistics Canada.

Statistics Canada (2006). *Labour force characteristics*. Ottawa, ON: Author. Retrieved March 3, 2006, from http://www40.statcan.ca/l01/cst01/econ10.htm?sdi=full%20time

Sturtevant, A. (2003). Futures forecasting. In Love, P. & Estanek, S. (Ed's.), *Rethinking student affairs practice*. Retrieved October 22, 2005 from http://www.rethinking-student-affairs-practice.com

Supreme Court of Canada. (2005). *Citation: Chaoulli v. Quebec* (Attorney General). Retrieved September 28, 2005, from http://www.lexum.umontreal.ca/csc-scc/en/pub/2005/volume1/html

Sutherland, R. (2005). Where Romanow went wrong: Putting health care ahead of health. Plevna, ON: Author.

Thornicroft, G. & Maingay, S. (2002). The global response to mental illness. *British Medical Journal*, *325*, 608-609.

Tomblin Murphy, G. (2002). Methodological issues in health human resource planning: Cataloging assumptions and controlling for variables in needs-based modeling. *Canadian Journal of Nursing Research*, 33 (4), 51-70.

Toronto Environmental Alliance. (2005). 2005 Toronto smog report card. Retrieved January, 2006, from http://www.torontoenvironment.org/files/Smog_Rep_05.pdf

United Nations. (2005). Report on the world social situation in 2005: The inequality predicament. Retrieved August, 2005, from http://www.un.org/esa/socdev

United States Census Bureau. (1999). *World population profile.* Retrieved 2005, from http://www.census.gov

University of British Columbia. (2002). University of British Columbia 2001-2002 Annual Report. Vancouver, BC: Author. Retrieved March 1, 2006, from http://www.publicaffairs.ubc.ca/annualreports/2002/health care.html

Walker, M. (2003). Swedish style reforms, not more money, the key to solving health care dilemma. Press release from The Fraser Institute, Vancouver BC, Feb. 10, 2003. Retrieved March 1, 2006, from http://www.fraserinstitute.ca

World Future Society. (2004). *Future survey: Top ten trends, forecasts, and proposals.* Retrieved March 3, 2005, from http://www.wfs.org/fstop10fal04.htm

World Health Organization. (1978). *Declaration of Alma-Ata*. USSR: Author. Retrieved November 23, 2005, from: http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf

World Health Organization. (1986). *Ottawa charter for health promotion.* Ottawa, ON: Author.

World Health Organization. (2002). *Nursing and midwifery services: Strategic directions 2002-2008.* Geneva, SZ: Author.

Yalnizyan, A. (2004). *Squandering Canada's surplus: Opting for debt reduction and "scarcity by design"*. Ottawa, ON: Canadian Centre for Policy Alternatives.

Zaracostas, J. (2005). WHO calls for 2% reduction per year in chronic disease mortality. *British Medical Journal*, 331, 798.

ii) Bibliography

Achterberg, J. (1991). Woman as healer. Boston: Shambhala.

Advisory Committee on Health Delivery and Human Resources. (2003). A report on the nursing strategy for Canada. Ottawa, ON: Health Canada.

Ahlburg, D., & Brown Mahoney, C. (1996). The effect of wages on the retention of nurses [Special Issue: Part 1]. *The Canadian Journal of Economics*, 29, S126-S129.

Aiken, L., & Salmon, M. (1994). Health care workforce priorities: What nursing should do now. *Inquiry*, *31*(3), 266-275.

Aiken, L. H., Smith, H. L., & Lake, E. T. (1994). Lower Medicare mortality among a set of hospitals known for good nursing care. *Medical Care, 32*(8), 771–787.

Aiken, L. H., Salmon, M., Shamian, J., Giovannetti, P., Muller-Mundt, G., & Hunt J. (1998, April). *An international study of the effects of the organization and staffing of hospitals on patient outcomes.* Presentation at Outcomes/ Indicators Session, WHO, CCNM, Korea.

Aiken, L.H., Sloane, D.M., & Sochalski, J. (1998). Hospital organization and outcomes. *Quality in Health Care*, 7(4), 222-226.

Aiken, L.H., Havens, D.S., & Sloane, D.M. (2000). The magnet nursing services recognition program: A comparison of two groups of magnet hospitals. *American Journal of Nursing*, 100(3), 26.

Aiken, L., Clarke, S., Sloane, D., Sochalski, J., Busse, R., Clarke, H., et al. (2001). Nurses' reports on hospital care in five countries. *Health Affairs*, 20(3), 43-53.

Aiken, L.H., Clarke, S.P., & Sloane, D.M. (2002). Hospital staffing, organization, and quality of care: Cross-national findings. *International Journal for Quality in Health Care*, 14(1), 5-13.

Aiken, L.H., Clarke, S.P., Sloane, D.M., Sochalski, J., & Silber, J.H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association*, 288(16), 1,987-1,993.

Aiken, L., Clarke, S., Heung, R., Sloane, D., & Silber, J. (2003). Educational levels of hospital nurses and surgical patient mortality. *Journal of the American Medical Association*, *290*, 1617-1623.

Aitken, M. E., Rowlands, L. A., & Wheeler, J. G. (2001). Advocating for children's health at the state level: Lessons learned. *Archives of Pediatrics and Adolescent Medicine*, *155*(8), 877–880.

Akyeampong, E. B. (1999). Missing work in 1998: Industry differences. In *Perspectives on labour and income* (Cat. No. 75-001-XPE), 11(3), 30-36. Ottawa, ON: Statistics Canada.

American Association of Colleges of Nursing. (2001). *Enrollment increase insufficient to meet the projected need for new nurses.* Washington, DC: American Association of Colleges of Nursing.

American Nurses Association. (2001). *Analysis of American Nurses Association staffing survey.* Warwick, RI: Cornerstone Communications Group.

American Organization of Nurse Executives. (2002). *Acute care hospital survey of registered nurse vacancy and turnover rates.* Washington, DC: Author.

American Society of Health-System Pharmacists. (2003). *Pharmacy staffing survey 2003*. Bethesda, NY: Author.

Anderson, G., & Hussey, P. (2001). Comparing health system performance in OECD countries. *Health Affairs*, *20*(3), 219-243.

Anderson, G., Reinhardt, U., Hussey, P., & Petrosyan, V. (2003). It's the prices, stupid: Why the United States is so different from other countries. *Health Affairs*, 22(389), 89-105.

Andrieu, M. (1999). Population growth: Facing the challenge. *OECD Observer*, *217/218* (Summer 1999). Paris: OECD.

Antonazzo, E., Scott, A., Skatun, D., & Elliott, R.F. (2003). The labour market for nursing: A review of the labour supply literature. *Health Economics*, *12*(6), 465-478.

Askildsen, J., Baltagi, B., & Holmas, T. (2003). Wage policy in the health care sector: A panel data analysis of nurses' labour supply. *Health Economics*, *12*(9), 705–719.

Association of Canadian Academic Health care Organizations. (2004). *Reaching our potential... investing in the health and health care of Canadians*. Ottawa, ON: Author

Association of Colleges of Applied Arts and Technology. (2001). *The 2001 environmental scan for The Association of Colleges of Applied Arts and Technology of Ontario*. Toronto, ON: Author.

Audit Commission. (1997). Finders, keepers: The management of staff turnover in NHS trusts. Abingdon UK: Author.

Author Unknown (1996.) Recommendations for the preferred future of nursing. *Journal of Nursing Administration*, 26(10), 5-6

Baker, G. & Norton, P. (2002). *Patient safety and health care error in the Canadian health care system: A systematic review and analysis of leading practices in Canada with reference to key initiatives elsewhere.* Ottawa, ON: Health Canada.

Barton, P., Bryan, S., & Robinson, S. (2004). Modelling in the economic evaluation of health care: Selecting the appropriate approach. *Journal of Health Services Research and Policy*, *9*(2), 110-118.

Bates, C., Dodd, D., and Rousseau, N. (Ed's.), *On all frontiers: Four centuries of Canadian nursing*. Ottawa, ON: University of Ottawa, ON Press and Canadian Museum of Civilization.

Baumann, A., O'Brien-Pallas, L., Armstrong-Stassen, M., Blythe, J., Bourbonnais, R., Cameron, S., et al. (2001). *Commitment and care: The benefits of a healthy workplace for nurses, their patients and the system*. Ottawa, ON: Canadian Health Services Research Foundation.

Baumann, A. and Underwood, J. (2002). *Innovation and strategies for addressing nursing workload* (Working Paper Series 02-01). Toronto, ON: Nursing Effectiveness, Utilization and Outcomes Research Unit, McMaster University, Hamilton, and University of Toronto.

Baumann, A., Blythe, J., Kolotylo, C., & Underwood, J. (2004). *The international nursing labour market*. Ottawa, ON: The Nursing Sector Study Corporation.

Baumann, A., Blythe, J., Kolotylo, C., & Underwood, J. (2004). *Mobility of nurses in Canada*. Ottawa, ON: The Nursing Sector Study Corporation.

Bennett, C., & Rick, A. (2000). *Kill or cure? How Canadians can remake their health care system* (1 ed.). Toronto, ON: HarperCollins.

Birch, S., O'Brien-Pallas, L., Alksnis, C., Tomblin Murphy, G., and Thomson, D. (2003). Beyond demographic change in health human resources planning: An extended framework and application to nursing. *Journal of Health Services Research and Policy*, 8(4), 225-229.

Blegen, M. A., & Mueller, C. W. (1987). Nurses' job satisfaction: A longitudinal analysis. *Nursing and Health, 10*(4), 227–237.

Blegen, M.A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. *Nursing Research*, *42*(1), 36-40.

Borda, R., & Norman, I. (1997). Factors influencing turnover and absence of nurses: A research review. *International Journal of Nursing Studies*, *34*(6), 385-394.

Braithwaite, J., & Westbrook, M. (2005). Rethinking clinical organizational structures: An attitude survey of doctors, nurses and allied health staff in clinical directorates. *Journal of Health Services Research and Policy*, *10*(1), 10-17.

Branham, F. (2000). *Six truths about employee turnover.* New York: American Management Association.

British Columbia Select Standing Committee on Health. (Val Roddick, Chair). (2001, December 10). *Patients first: renewal and reform of British Columbia's health care system.* Victoria, BC: Select Standing Committee Health. Retrieved 2005, from http://www.legis.gov.bc.ca/CMT/37thparl/2nd-session/health/reports/Health-Report-2001.pdf

Browne, G. (2001). Key findings from the System-Linked Research Unit on Health and Social Service Utilization. Presented to the Advisory Committee on Health Human Resources' Working Group on Nursing & Unregulated Health care Workers. Ottawa, ON. October 24, 2001.

Buchan J., Parkin, T., & Sochalski, J. (2003). *International nurse mobility. trends and policy implications*, Geneva, SZ: World Health Organization.

Buchan, J. & Seccombe, I. (1991). *Nurse turnover costs: A review for the Royal College of Nursing*. IMS Report No. 212. Brighton, UK: Institute of Manpower Studies, University of Sussex.

Buchan, J. (1994). Lessons from America? US Magnet hospitals and their implications for UK nursing. *Journal of Advanced Nursing*, 19, 373-384.

Buchan, J. (2002). *International recruitment of nurses: United Kingdom case study.* London: Royal College of Nursing, World Health Organization and International Council of Nurses.

Buchan, J., Ball, J., & O'May, F. (2001). If changing skill mix is the answer, what is the question? *Journal of Health Services Research and Policy*, 6(4), 233-238.

Buchan, J., & Calman, L. (2004). *The global shortage of registered nurses: An overview of issues and actions.* Geneva, SZ: International Council of Nurses.

Buchan, J., & Calman, L. (2005). *Skill mix and policy change in the health workforce: Nurses in advanced roles.* Paris: Organisation for Economic Cooperation and Development.

Buchan, J., & Edwards, N. (2000). Nursing numbers in Britain: The argument for workforce planning. *British Medical Journal*, *320*, 1,067-1,070.

Buchan, J., Parkin, T., & Sochalski, J. (2003). *International nurse mobility: Trends and policy implications*. Geneva, SZ: World Health Organization.

Buchan, J., & Seccombe, I. (2002). *Behind the headlines – A review of the UK nursing labour market in 2001.* London: Royal College of Nursing.

Buchan, J., & Seccombe, I. (2003). *More nurses, working differently?: A review of the UK nursing labour market 2002 – 2003.* London: Royal College of Nursing.

Buchan, J., & Thompson, M. (1997). *Recruiting, retaining and motivating nursing staff: The use of clinical ladders.* Brighton, UK: Institute for Employment Studies, University of Sussex.

Buerhaus P., Needleman, J., Mattke, S., & Stewart, M. (2002). Strengthening hospital nursing. *Health Affairs*, *21*(5), 123-132.

Buerhaus, P., Staiger, D., & Auerbach, D. (2000). Implications of an aging registered nursing workforce. *Journal of the American Medical Association*, *283*(2), 948-2,954.

Bureau of Health Professions. (2002). *National sample surveys of RNs, March 1996 & 2000*. Washington, DC: Bureau of Health Professions, Health Resources and Services Administration.

California Nurses Association. (2003). *Improved RN-to-patient staffing protects patient safety.* Retrieved 2005, from http://www.calnurse.org/cna/12202/ratiopayexodus.html

Cameron, S., Horsburgh, M., & Armstrong-Stassen, M. (1994). *Effects of downsizing on RNs and RNAs in community hospitals* (Working Paper 94-6). Hamilton, ON: The Nursing Effectiveness, Utilization and Outcomes Research Unit, University of Toronto and McMaster University.

Canadian Health Services Research Foundation. (2001). *Myth busters: The aging population will overwhelm the health care system.* Ottawa, ON: Author.

Canadian Health Services Research Foundation. (2003). User fees would stop waste and ensure better use of the health care system. *Journal of Health Services Research and Policy*, 8(2), 125-126.

Canadian Institute for Health Information. (2001). An environmental scan of research transfer strategies. *Canadian Population Health Initiative*. Ottawa, ON: Author.

Canadian Institute for Health Information. (2001). Canada's health care providers. Ottawa, ON: Author. Retrieved 2005, from http://www.cihi.ca/HCTReport2001/toc.shtml

Canadian Institute for Health Information. (2001). Supply and distribution of registered nurses in Canada 2000. Ottawa, ON: Author. Retrieved 2005, from http://www.cihi.ca

Canadian Institute for Health Information. (2002). *Health care in Canada 2002*. Ottawa, ON: Author. Retrieved 2005, from http://secure.cihi.ca/cihiweb/hcic/hcic.html

Canadian Institute for Health Information. (2003). Workforce trends of licensed practical nurses in Canada (2002). Ottawa, ON: Author.

Canadian Institute for Health Information. (2003). *Workforce trends of registered nurses in Canada (2002)*. Ottawa, ON: Author.

Canadian Institute for Health Information. (2005). *National health expenditure trends 1975–2005*. Ottawa, ON: Author. http://secure.cihi.ca

Canadian Labour and Business Centre. (2002). Full-time equivalents and financial costs associated with absenteeism, overtime, and involuntary part-time employment in the nursing profession: A report prepared for the Canadian Nursing Advisory Committee. Ottawa, ON: Author.

Canadian Labour and Business Centre. (2003). *Illness and injury-related absenteeism among publicly employed Registered Nurses, Report Commissioned for the Office of Nursing Policy*. Ottawa, ON: Health Canada.

Canadian Nurses Association. (1997). *Getting started: A political action guide for Canada's Registered Nurses*. Ottawa, ON: Author.

Canadian Nurses Association. (2000). Nursing is a political act: The bigger picture. *Nursing Now. Issues and Trends in Canadian Nursing*, 8. Ottawa, ON: Author.

Canadian Race Relations Foundation. (2002). *Facts about racism and policing.* Toronto, ON: Author.

Canadian Race Relations Foundation. (2002). *Systemic racism in employment in Canada: Diagnosing systemic racism in organizational culture.* Toronto, ON: Author.

Carroll, Jim. (2005). Integrating "Gen-Y" as employees and member. *The Association Agenda*. Toronto, ON: Canadian Society of Association Executives. Retrieved 2005, from http://www.jimcarroll.com/articles/assoc-20.htm

Carroll, Jim. (2005). What's happening to our careers? Reflections on the changing nature of skills and career capabilities. *The Association Agenda*. Toronto, ON: Canadian Society of Association Executives. Retrieved 2005, from http://www.jimcarroll.com/articles/assoc-20.htm

Ceci, C. (2002). When difference matters: The politics of privilege and marginality. In McIntyre M. & Thomlinson, E (Ed.), *Realities of Canadian nursing: Professional, practice and power issues* (p. 427-446). Philadelphia: Lippincott, Williams & Wilkins.

Centre for the Advancement of Health. (2001). *Communicating health behavior science in the media: Tips for researchers.* Washington, DC: Author.

Centres of Excellence for Women's Health. (2001). *Research Bulletin, 2*(1), Summer edition.

Cheek, J., & Gibson, T. (1997). Policy matters: Critical policy analysis and nursing. *Journal of Advanced Nursing*, *25*(4), 668–672.

Chiha, Y.A., & Link, C.R. (2003). The shortage of registered nurses and some new estimates of the effects of wages on registered nurses labor supply: A look at the past and a preview of the 21st Century. *Health Policy*, 64(3), 349-375.

Chunharas, S. (2001). Linking research to policy and action. In Neufeld N., & Johnson, N. (Eds.), Forging links for health research: Perspectives from the Council on Health Research for Development. Ottawa, ON: International Development Research Centre.

Clark, P., & Clark, D. (2003). Challenges facing nurses' associations and unions: A global perspective. *Internaional Labour Review*, 142(1), 29-47.

Clarke, H., Giovannetti, P., & Shamian, J. (1998, June). *Outcomes of hospital staffing: A cross-national study.* Paper presented at Canadian Nurses Association Biennial Convention, Ottawa, ON.

Clarke, H., Lashinger, H., Giovannetti, P., Shamian, J., Thomson, D., & Tourangeau, A. (2001). Nursing shortages: Workplace environments are essential to the solution. *Hospital Quarterly* 4(3), 50–55.

Coffman, J., Rosenoff, E., & Grumbach, K. (2001). Racial/ethnic disparities in nursing. *Health Affairs*, *20*(3), 263-272.

Cohen, J., Gabriel, B., & Terrell, C. (2002). The case for diversity in the health workforce. *Health Affairs*, *21*(5), 90-102.

Coles, C. (2004). Trends halting population growth. *The Futurist*, 38(5), 15-17

Coles, C. (2005). Four countertrends in global demography. The Futurist, 39(1), 9.

College of Family Physicians of Canada. (2004). *Responses from think tank groups: CFPC board meeting.* Mississauga, ON: Author.

Committee on Institutional and Policy-Level Strategies for Increasing the Diversity of the U.S. Health Care Workforce. (2004). *In the nation's compelling interest: Ensuring diversity in the health care workforce*. Washington, DC: The National Academies Press.

Couffinhal, A. (2001, October). *The French Health Care System: A brief overview.* Presentation at the Permanent Working Group of European Junior Doctors. Paris.

Coulter, A., & Cleary, P. (2001). Patients' experiences with hospital care in five countries. *Health Affairs*, *20*(3), 244-252.

Cramer, M. E., Chen, L.-W., Mueller, K. J., Shambaugh-Miller, M., & Agrawal, S. (2004). Predictive model to determine need for nursing workforce. *Policy, Politics, & Nursing Practice, 5*(3), 174-170.

Crosswaite, C., & Curtice, L. (1994). Disseminating research results: The challenge of bridging the gap between health research and health action. *Health Promotion International*, *9*(4), 289–296.

Dannemiller, K., & Jacobs, R. (1992). Changing the way organizations change: A revolution of common sense. *Journal of Applied Behavioral Science*, *28*(4), 480–498.

Dault, M., Lomas, J., & Barer, M. (2004). *Listening for direction II.* Ottawa, ON: Canadian Health Services Research Foundation.

Davis, P., & Howden-Chapman, P. (1996). Translating research findings into health policy. *Social Science and Medicine*, *43*(5), 865–872.

de Kervasdoué, J. (2002). *Health and the health system in France*. Retrieved May 5, 2005, from http://www.ambafrance-uk.org/article.php3?id_article=355

Dearing, J. & Rogers, E. (1996). *Agenda-setting*. Thousand Oaks, CA: Sage Publications.

Decter, M., & Villeneuve, M. (2001). Repairing and renewing nursing workplaces. *Hospital Quarterly*, *5*(1), 46-49.

DeFriese, G. (2002). The visualization of primary care. *North Carolina Medical Journal*, 63(4), 186-188.

DePalma, J. (2004). Research on complementary therapies in home care. *Home Health Care Management & Practice, 16,* 521-523.

Department of Health. (2001). *Investment and reform for NHS staff: Taking forward the NHS plan.* London: Department of Health.

Department of Health. (2004). Choosing health: Making healthy choices easier. London: NHS. Retrieved 2005, from http://www.dh.gov.uk/PublicationsAndStatistics/Publications/ PublicationsPolicyAndGuidance

Department of Health. (2005). *Self-care: A real choice.* London: NHS. Retrieved 2005, from www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/SelfCare.

Department of Health and Children. (2002). *Towards workforce planning. The nursing and midwifery resource*. Dublin, ROI: Department of Health and Children.

Department of Justice. (2002). Canadian Charter of Rights and Freedoms. Retrieved 2005, from http://laws.justice.gc.ca/en/charter/#garantie

Devlin, N., Appleby, J., & Parkin, D. (2003). Patients' views of explicit rationing: What are the implications for health service decision-making? *Journal of Health Services Research and Policy*, 8(3), 183-186.

Dierckx de Casterlé, B., Milisen, K., & Darras, E. (2003). *Het verpleegkundig beroep in crisis? Een onderzoek naar het professional zelfbeeld van verpleegkundigen.* Brussels: Ministry of Social Affairs, Health and Environment.

Dillard, M., & Hennard, J. (2002). The approaching age of virtual nations. *The Futurist*, 36(4), 24-29.

Doran, D., McGillis Hall, L., Sidani, S., O'Brien-Pallas, L., Donner, G., Baker, G. R., et al. (2001). Nursing staff mix and patient outcome achievement: The mediating role of nurse communication. *International Nursing Perspectives*, 1(2-3), 74-83.

Douglas, M., Meleis, A., Eribes, C., & Kim, S. (1996). The work of auxiliary nurses in Mexico: Stressors, Satisfiers and Coping Strategies. *International Journal of Nursing Studies*, *33*(5), 495-505.

Drucker, P. (1993). *Post-capitalist society*. New York: Harper Collins Inc.

Duffield, C. & O'Brien-Pallas, L. (2002). The nursing workforce in Canada and Australia: Two sides of the same coin. *Australian Health Review*, *25*(2), 136-144.

Dussault, G., Fournier, M.-A., Zanchetta, M., Kérouac, S., Denis, J.-L., Bojanowski, L., et al. (2001). *The nursing labor market in Canada: Review of the literature.*Presented to the Invitational Roundtable of Stakeholders in Nursing, Montreal, QC. Retrieved 2005, from www.gris.umontreal.ca/rapportpdf/R01-03.pdf

Duxbury, L., & Higgins, C. (2001). *Work-life balance in the new millennium: Where are we? Where do we need to go?* CPRN Discussion Paper No. W | 12. Ottawa, ON: Canadian Policy Research Networks.

Fagin, C. M. (2001). When care becomes a burden: Diminishing access to adequate nursing. New York: Milbank Memorial Fund.

Falch, T. (2001). Collective bargaining in the public sector and the role of budget determination. *European Journal of Political Economy*, 17(1), 75-99.

Falch, T., & Strøm, B. (2003). *Teacher turnover and non-pecuniary factors*. Working Paper 1/2004. Trondheim, Norway: Department of Economics, Norwegian University of Science and Technology.

Falcon, R., & Spalding, L. (2004). *Expanding meanings of health*. California: Institute for the Future Health Horizons Program.

Farella, C. (2002). Erase the hate: The truth about racism in nursing. *Nursing Spectrum - Career Fitness Online*. Retrieved 2005, from www.nursingspectrum.com

Farella, C. (2002). School of hard knocks: Is racism a fixture of nursing academia? Nursing Spectrum - Career Fitness Online. Retrieved 2005, from www.nursingspectrum.com

Feldman, P., Nadash, P., & Gursen, M. (2001). Improving communication between researchers and policy makers in long-term care: Or, researchers are from Mars; policy makers are from Venus. *The Gerontologist*, 41(3), 312–321.

Felkey, B. (2002). Information technology looms large in the present and future of health care. *Health care Leadership and Management Report*, 10(4), 1-7.

Fernandez, C., Bouthillette F, Raboud, J., Bullock, L., Moore C., Christenson, J., et al. (1999). Violence in the emergency department: A survey of health care workers. *Canadian Medical Association Journal*, *161*(10), 1,245-1,248.

Fischman, J. (2005). Who will take care of you? *U.S. News and World report*. Retrieved 2005, from

http://www.usnews.com/usnews/health/articles/050131/31patient.htm

Fooks, C. (2003). *Implementing primary care reform in Canada: Barriers and facilitators.* Ottawa, ON: Canadian Policy Research Networks Inc.

Foot, D. (2002, March 21). Boomers blow up census. *The Globe and Mail*, pp. A17. Retrieved 2005 from http://www.davidfoot.com/globe9.html

Freeman, R., & Marmor, T. (2003). Making sense of health services politics through cross-national comparison. *Journal of Health Services Research and Policy*, 8(3), 180-182.

Fritsch, K. (2001). *Health Workforce Migration – Western Pacific Region*, Paper presented at the Global Nursing Partnerships Conference, Atlanta GA, 19 October 2001.

Gearon, C. (2005). Medicine's turf wars: Specialists without M.D.'s are pushing for more medical power. Are they ready-and are you? *U.S. News and World report*. Retrieved 2005, from

http://www.usnews.com/usnews/health/articles/050131/31turf.htm

Gebbie, K., Wakefield, M., & Kerfoot, K. (2000). Nursing and health policy. *Journal of Nursing Scholarship*, 32(3), 307–315.

Glouberman, S. (2001). *Towards a new perspective on health policy* (CPRN Study No. H | 03, 2001). Retrieved 2005, from http://www.cprn.com/cprn.html

Glouberman, S. (2002). *Structures, power and respect: The nurse's dilemma.* Ottawa, ON: Canadian Nursing Advisory Committee.

Gray A., & Normand, C. (1990). Hidden costs of turnover. *Health Service Journal*, 100, 1,646-1,647.

Gray, A., & Phillips, V. (1994). Turnover, age and length of service: A comparison of nurses and other staff in the National Health Service. *Journal of Advanced Nursing*, 19(4), 819-827.

Gray, A., & Phillips, V. (1996). Labour turnover in the British National Health Service: A labour market analysis. *Health Policy*, *36*(3), 273-289.

Gray, A., & Phillips, V., & Normand, C. (1996). The costs of nursing turnover: Evidence from the British National Health Service. *Health Policy*, *38*(2), 117-128.

Graydon, J., Kasta, W., & Khan, P. (1994). Verbal and physical abuse of nurses. *Canadian Journal of Nursing Administration*, 7(4), 70-89.

Greenberg, K. (2004). The avenger of cities. *Literary Review of Canada, May 2004*, 3-5.

Gruenwoldt E, Saulnier M, Shortt S. (2004). *The taming of the queue: toward a cure for health care wait times.* Ottawa, ON: Canadian Medical Association and Canadian Nurses Association.

Gulliford, M., Figueroa-Munoz, J., Morgan, M., Hughes, D., Gibson, B., Beech, R., et al. (2002). What does 'access to health care' mean? *Journal of Health Services Research and Policy*, 7(3), 186-188.

Gunderson, M., & Riddell, W. (2000). The changing nature of work: Implications for public policy. In W.C. Riddell & F.S.T. Hilaire (Eds.), *Adapting public policy to a labour market in transition* (pp. 1-37). Montreal, QC: Institute for Research on Public Policy.

GW News Center. (2000). *GW researcher offers millennium forecast of future breakthroughs top-ten lists are highlights from Online Think-Tank on Emerging Technologies.* Washington, DC: Office of University Relations, George Washington University. Retrieved January 1, 2006, from

http://www.gwu.edu/~media/pressreleases/01-01-00-GWForecast.cfm

Hadorn, D., & the Steering Committee of the Western Canada Waiting List Project. (2003). Setting priorities on waiting lists: Point-count systems as linear models. *Journal of Health Services Research and Policy*, 8(1), 48-54.

Hamermesh, D., & Oswald, A. (2001, May 15) Equity and fraternity. *The Guardian*. Retrieved November 5, 2005, from

http://education.guardian.co.uk/egweekly/story/0,,490708,00.html

Hammond, P. (2002, July). *Enhancing diversity in the health professions*. Paper presented at The National Leadership Summit on Eliminating Racial and Ethnic Disparities Health, Washington, DC.

Hartz, A., Krakauer, H., Kuhn, E., Young, M., Jacobson, S., Gay, G., et al. (1989). Hospital characteristics and mortality rates. *New England Journal of Medicine*, *321*, 1720–1725.

Hay Group. (2001). *The retention dilemma: Why productive workers leave – Seven suggestions for keeping them.* Toronto, ON: Author.

Hayes, P. (2002). *Responding to health workforce shortages: State initiatives, activities and policies.* Olympia, WA: Department of Health, Workforce Training and Education Coordinating Board.

Haylock, P. J. (2000). Health policy and legislation: Impact on cancer nursing and care. *Seminars in Oncology Nursing*, *16*(1), 76–84.

Government of France. (2004). Health insurance: ensuring the future of the French health care system. Retrieved 2005, from http://www.premierministre.gouv.fr/en/information/special_reports_98/health_insurance.

e_ensuring_the_100/

Heinrich, J. (2001). *Nursing workforce – Emerging nurse shortages due to multiple factors*. Washington, DC: General Accounting Office Report to the Chairman, Subcommittee on Health, Committee on Ways and Means, House of Representatives.

Helms, L., Anderson, M., & Hanson, K. (1996). "Doin' politics:" linking policy and politics in nursing. *Nursing Administration Quarterly*, 20(3), 32–41.

Hemingway, M. & Smith, C. (1999). Organizational climate and occupational stressors as predictors of withdrawal behaviours and injuries in nurses. *Journal of Occupational and Organizational Psychology*, 72(3), 285-299.

Henry, F., & Ginsberg, E. (1985). Who gets the work? A test of racial discrimination in employment. Toronto, ON: Urban Alliance on Race Relations and the Social Planning Council of Metropolitan Toronto.

Hewison, A. (1999). The new public management and the new nursing: Related by rhetoric. Some reflections on the policy process and nursing. *Journal of Advanced Nursing*, 29(6), 1377–1384.

Hirsch, B. & Schumacher, E. (1995). Monopsony power and relative wages in the labor market for nurses. *Journal of Health Economics*, 14(4), 443-476.

Hobson, K. (2005). Doctors vanish from view. *U.S. News and World report*. Retrieved 2005, from http://www.usnews.com/usnews/health/articles/050131/31choices.htm

Honoré, C. (2004). *In praise of slow: How a worldwide movement is challenging the cult of speed.* Toronto, ON: Alfred A. Knopf Canada.

Hospital and Health care Compensation Service. (2000). *Hospital salary and benefits report, 2000-2001*. Oakland, CA: Author. Retrieved 2005 from http://www.gov.mb.ca/health/nurses/index.html

Hutchison, B., Abelson, J., & Lavis, J. (2001). Primary care in Canada: So much innovation, so little change. *Health Affairs*, 20(3), 116-145.

Illinois Hospital Association. (2002). The Illinois hospital workforce today and tomorrow. *Data Points, September 2002*, Naperville, IL: Hospital Information Services Department, Illinois Hospital Association.

Ingersoll, R. & Rossi, R. (1995). Which types of schools have the highest teacher turnover? (Publication No. 95-778). Washington DC: Department of Education.

Innvaer, S., Vist, G., Trommald, M., & Oxman, A. (2003). Health policy-makers' perceptions of their use of evidence: A systematic review. *Journal of Health Services Research and Policy*, 7(4), 239-244.

Institute for the Future. (2004). 2004 ten-year forecast: Perspectives. Menlo Park, CA: Author.

International Council of Nurses. (1994). *Planning human resources for nursing – Reference Document.* Geneva: Author.

International Council of Nurses. (2000, September). *Overview paper: ICN workforce forum Reykjavík, Iceland 16–17 September 2002,* Geneva, SZ: Icelandic Nurses Association.

International Forum for the Defense of the Health of People. Health as an essential human need, a right of citizenship, and a public good: Health for all is possible and necessary. (2002). *International Journal of Health Services*, 32(3), 601-606.

Ipsos-Reid, CTV, & The Globe and Mail. (2002). Message to the Premiers from the Canadian public about health care: Clean up mismanagement and inefficiency in the system, don't restrict access to services or charge individuals a fee. Toronto, ON: Ipsos Canada. Retrieved 2005, from http://www.ipsos-reid.com

Ipsos-Reid. (2002). *The annual Aventis health care survey.* Toronto, ON: Ipsos Canada. Retrieved 2005, from www.ipsos-reid.com

Irvine, D., & Evans, M. (1995). Job satisfaction and turnover among nurses: Integrating research findings across studies. *Nursing Research*, 44(4), 246-253.

Irwin, J. (2001). Migration patterns of nurses in the EU. *Eurohealth*, 7(4), 13-15.

Jackson, M. (2001, December 11). For many Generation X'ers, grass Is greener at home. *New York Times Online*, C2. Retrieved 2005, from http://select.nytimes.com/gst/abstract.html?res=F10E1EF83D5B0C728DDDAB0994D94 04482

Jansen, P., Kerkstra, A., Abu-Saad, H., & van der Zee, J. (1996). The effects of job characteristics and individual characteristics on job satisfaction and burnout in community nursing. *International Journal of Nursing Studies*, 33(4), 407-421.

Johnson, Dan. (2002). The university of the future. *The Futurist*, 36(3), 7-9.

Joint Provincial Nursing Committee. (2004). *Good nursing, good health: Progress report November 2003.* Toronto, ON: Ministry of Health and Long-Term Care.

Kany, K. (2004). Nursing in the next decade: Implications for health care and for patient safety, *Online Journal of Issues in Nursing*, *9*(2). Retrieved 2005, from http://www.nursingworld.org/ojin/topic24/tpc24_3.htm

Kelleher, S. (2005). Clash over "little blue pill" for women. *The Seattle Times*. Retrieved 2005, from http://seattletimes.nwsource.com/html/health/sick5.html

Kelleher, S. (2005). Disease expands through marriage of marketing and machines. *The Seattle Times*. Retrieved 2005, from http://seattletimes.nwsource.com/html/health/sick3.html

Kelleher, S. (2005). Rush toward new weight-loss drugs tramples patients' health. *The Seattle Times*. Retrieved 2005, from http://seattletimes.nwsource.com/html/health/sick2.html

Khalema, N. (2005). *Who's healthy? Who's not?* Edmonton: University of Alberta Centre for Health Promotion Studies.

Kimball, B., & O'Neil, E. (2001). The evolution of a crisis: Nursing in America. *Policy, Politics & Nursing Practice 2*(3), 180–186.

Kingdon, J. (1995). *Agendas, alternatives, and public policies.* New York: Harper Collins College Publishers.

Kizer, K. (2001). Establishing health care performance standards in an era of consumerism. *Journal of the American Medical Association*, 286, 1,213-1,217.

Knaus, W., Draper, E., Wagner, D., & Zimmerman, J. (1986). An evaluation of outcome from intensive care in major medical centers. *Annals of Internal Medicine*, *104*(3), 410–418.

Koehoorn, M., Lowe, G. Rondeau, K., Schellenberg, G., & Wagar, T. (2002). *Creating high-quality health care workplaces* (CPRN Discussion Paper No. W | 14). Ottawa, ON: CPRN.

Kosel, K., & Olivo, T. (2002). The business case for workforce stability. *VHA Research Series 2002, 7.* Irving, TX: Voluntary Hospitals of America, Inc.

Kozyrskyj, A., Lix, L., Dahl, M., & Soodeen, R-A. (2005). *High-cost users of pharmaceuticals: Who are they?* Winnipeg, MB: Manitoba Centre for Health Policy.

Kramer, M. & Schmalenberg, C. (2003). Magnet hospital nurses describe clinical autonomy. *Nursing Outlook*, *51*(1), 13-19.

Lafer, G., Moss, H., Kirtner, R., & Rees, V. (2003). Solving the nursing shortage. Best and worst practices for recruiting, retaining and recouping of hospital nurses. Eugene, OR: University of Oregon, Labor Education and Research Center.

Laschinger, H. K. S., Shamian, J., & Thomson, D. (2001). Impact of magnet hospital characteristics on nurses' perceptions of trust, burnout, quality of care and work satisfaction. *Nursing Economics*, 19(5), 209-219.

Leigh, J., Markowitz, S.B., Fahs, M., Shin, C. & Landrigan, P.J. (1997). Occupational injury and illness in the United States, estimates of costs, morbidity, and mortality. *Archives of Internal Medicine*, *157*, 1,557-1,568.

Lenain, P. (2000). Santé to the French health system. *OECD Observer, 223* (October 2000). Retrieved May 12, 2005, from

http://oecdobserver.org/news/fullstory.php/aid/356/Sante_to_the_French_health_system_.html

Levine, S., & Marek, A. C. (2005). Nurses step to the front: In hamlets and high-tech hospitals, nurses are taking on bigger roles. *U.S. News and World report.* Retrieved 2005, from http://www.usnews.com

Ligon, K. & de los Reyes, A. (2005). Nursing enters fast lane. *Advance for Nurses*. King of Prussia, PA: Advance Magazines. Retrieved June 24, 2005, from http://nursing.advanceweb.com

Livraghi, G. (2003). *Data on Internet activity worldwide*. Italy: Gandalf. Retrieved 2005, from http://gandalf.it

Lomas, J. (2000). Using 'linkage and exchange' to move research into policy at a Canadian foundation. *Health Affairs*, 19(3), 236–240.

Lovewell, M. (2004). Micro-enterprise rules the day. *Literary Review of Canada, May* 2004, 6-8

Lowe, G. (2000, March). *The challenges of becoming 'The employer of choice' for young workers*. Paper presented to the IPAC Conference on The Future of Work in the Public Sector, Victoria, BC.

Lowe, G. (2002 October 4). Work force singing a new kind of blues: Knowledge-based employees are dangerously overworked and managers must find new strategies to make their environment healthy. *The Globe and Mail*. Retrieved 2005, from http://www.grahamlowe.ca

Lowe, G. (2003). *Healthy workplaces and productivity: A discussion paper.* Ottawa, ON: Canadian Policy Research Networks and Health Canada.

Lowe, G., & Davidman, K. (2001). *Re-thinking employment relationships: Implications for workers, employers and public policy* (CPRN Discussion Paper No. W05). Ottawa, ON: Canadian Policy Research Networks.

Lowe, G., & Schellenberg, G. (2001). What's a good job? The importance of employment relationships (CPRN Study No. W | 05). Ottawa, ON: Canadian Policy Research Network.

Lowe, G., Schellenberg, G., & Shannon, H. (2003). Correlates of employees' perceptions of a healthy work environment. *American Journal of Health Promotion*, 17(8), 390-399.

Mable, A. & Marriott, J. (2002). *Steady state. Finding a sustainable balance point: An international review of health workforce planning.* Ottawa, ON: Health Canada.

Malone, B. (1998). President's message: Diversity, divisiveness and divinity. *American Nurse Online*, Jan/Feb 1998. Retrieved 2005, from http://www.nursingworld.org/tan/98janfeb/presiden.htm

Marek, A. C. (2005). More nurses needed. *U.S. News and World report.* Retrieved 2005, from http://www.usnews.com/usnews/health/articles/050131/31nurses.b.htm

Maslove, L. (2005, January). *Key and current health policy issues in Canada*. Presentation to students in the Masters program in nursing at the University of Ottawa. Ottawa, ON: *Canadian Policy Research Networks*. Retrieved 2005, from http://www.cprn.com/en/doc.cfm?doc=1152#

Maxwell, J. (1998). *Health and health policy for the 21st Century.* Ottawa, ON: Canadian Policy Research Networks. Retrieved 2005, from http://cprn.org/en/doc.cfm?doc=607#

McCarthy, G., Tyrrell, M., & Cronin, C. (2002). *National study of turnover in nursing and midwifery*. Dublin, ROI: Department of Health and Children.

McGillis Hall, L., Irvine Doran, D., Baker, G. R., Pink, G. H., Sidani, S., O'Brien-Pallas, L., & et al. (2001). *A study of the impact of nursing staff mix models and organizational change strategies on patient, system and nurse outcomes.* Toronto, ON: University of Toronto.

McGillis Hall, L., Irvine Doran, D., Baker, G. R., Pink, G., Sidani, S., O'Brien-Pallas, L., et al. (2003). Nurse staffing models as predictors of patient outcomes. *Medical Care*, 41(9), 1096–1109.

McPherson, K. (1996). *Bedside matters: The transformation of Canadian nursing, 1900-1990.* Toronto, ON: Oxford University Press.

Meadows, S., Levenson, R., & Baeza, J. (2000). *The last straw. Explaining the NHS nursing shortage.* London: King's Fund.

Milne, C. (2005). Canada Health Infoway spends on public health. *Medical Post, 41*(14). Retrieved April 13, 2005, from http://www.medicalpost.com/mpcontent/article.jsp?content=20050411_150524_6020

Milstead, J. (1999). *Health policy and politics: A nurse's guide.* Gaithersburg, MD: Aspen Publishers, Inc.

Ministry of Health. (1999). *New Zealand nurses and midwives 1997.* Wellington, NZ: New Zealand Health Information Service.

Mittelmark, M. (2001). The psychology of social influence and healthy public policy. *Preventive Medicine*, *29*(6 Part 2), S24–29.

Moene, K. & Wallerstein, M. (2001). Inequality, social insurance and redistribution. *American Political Science Review*, *95*(4), 859-874.

Monitoring Committee. (2002). *Implementation of recommendations of the Commission on Nursing. Third annual progress report of Monitoring Committee.*Dublin, ROI: Department of Health and Children.

Montini, T., & Bero, L. A. (2001). Policy makers' perspectives on tobacco control advocates' roles in regulation development. *Tobacco Control*, *10*(3), 218–224.

Mundy, G. (2001). Aged & community services Australia: Submission to the Senate Inquiry into Nursing. Canberra, AU: Parliament of Australia.

Munro, L. (2003). A Few good nurses. A forum on best practices for integration of internationally trained nurses. Hamilton, ON: Immigrant and Refugee Employment Service Committee, Hamilton Training Advisory Board, Human Resources Development Canada, and Ontario Ministry of Training, Colleges, and Universities.

National Center for Health Workforce Analysis. (2002). *Projected supply, demand and shortages of registered nurses: 2000-2020.* Washington, DC: US Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions.

National Health Service. (2002). *HR in the NHS Plan: More staff working differently.* London: Department of Health.

National Health Service Executive. (2000). *Recruiting and retaining nurses, midwives and health visitors in the NHS – A progress report.* London: Department of Health UK.

Needleman J., Buerhaus, P., Mattke, S., Stewart, M., & Zelevinsky, K. (2001). *Nurse staffing and patient outcomes in hospitals.* Boston: Harvard School of Public Health.

Needleman J., Buerhaus, P., Mattke, S., Stewart, M., & Zelevinsky, K. (2002). Nurse-staffing levels and the quality of care in hospitals. *The New England Journal of Medicine*, 346(22), 1,715-1,722.

Nelson, A. (2002, July). *Understanding and eliminating racial and ethnic disparities in health care*. Paper presented at The National Leadership Summit on Eliminating Racial and Ethnic Disparities Health, Washington, DC.

New Brunswick Health & Wellness (2005). *Nursing resource strategy.* Fredricton, NB: Author. Retrieved 2005, from http://www.gnb.ca

New Brunswick Premier's Health Quality Council. (2002, January). *Report from the Premier's Health Quality Council: Health renewal.* Fredericton, NB: Premier's Health Quality Council. Retrieved 2005, from http://www.gnb.ca/op_cpm/e-phqc.pdf

Newfoundland & Labrador Health & Community Services (2002). *Update on nursing*. St. John's, NF: Author. Retrieved 2005, from http://www.gov.nf.ca/releases/2002/health/0321n30.htm

Newman, K., & Maylor, U. (2002). The NHS Plan: Nurse satisfaction, commitment and retention strategies. *Health Services Management Research*, 15(2), 93-105.

Newschaffer, C., & Schoenman, J. (1990). Registered Nurse shortages: The road to appropriate public policy. *Health Affairs*, *9*(1), 98-106.

Nicol, M. (2003). Genetics and nursing: Preparing for future health care development. *Nursing Praxis in New Zealand*, 19(2), 27-40.

North Carolina Division of Social Services and the Family and Children's Resource Program. (n.d.). Turnover in Child Welfare. *Children's Services Practice Notes, 4*(3), 1-8. Retrieved 2005, from http://ssw.unc.edu/fcrp/Cspn/vol4_no3/cspnv4_3.pdf

Northwest Territories Health & Social Services. (2002). *Retention and recruitment plan for the NWT allied health care professionals, nurses and social workers.* Yellowknife, NT: Author. Retrieved 2005, from http://www.hlthss.gov.nt.ca

Northwest Territories Health and Social Services System. (2002). *Northwest Territories health and social services system: Action plan 2002-2005.* Yellowknife, NT: Author. Retrieved 2005, from http://www.hlthss.gov.nt.ca

Nova Scotia Health (2002). *Update on the nursing strategy April 2002*. Halifax, NS: Author. Retrieved 2005, from http://www.gov.ns.ca

O'Brien-Pallas, L. (2002). Where to from here? [Editorial and discourse]. *Canadian Journal of Nursing Research*, 33(4), 3-14.

O'Brien-Pallas, L., Baumann, A., Donner G., Lochhaas-Gerlach, J., Luba, M., Lakats, L., et al. (1998). *Health human resources: An analysis of forecasting models.*Ottawa, ON: Canadian Nurses Association.

O'Brien Pallas, L., Baumann, A., & Villeneuve, M. (1994). The quality of nursing worklife. In Hibberd J., & Kyle M. (Ed's.), *Nursing management in Canada* (p. 391-409). Toronto, ON: W.B. Saunders Canada.

O'Brien-Pallas, L., Birch S., Baumann A., & Tomblin-Murphy, G. (2001). Integrating workforce planning, human resources, and service planning. *Human Resources Development Journal*, *5*(1-3), 2-16.

O'Brien-Pallas, L., Duffield, C., & Alksnis, C. (2004). Who will be there to nurse: Retention of nurse nearing retirement. *Journal of Nursing Administration*, *35*(6), 298-302.

O'Brien-Pallas, L., Irvine Doran, D., Murray, M., Cockerill, R., Sidani, S., Laurie-Shaw, B., et al. (2001). Evaluation of a client care delivery model part 1: Variability in nursing utilization in community home nursing. *Nursing Economic\$*, 19(6), 267-276.

O'Brien-Pallas, L., Irvine Doran, D., Murray, M., Cockerill, R., Sidani, S., Laurie-Shaw, B., et al. (2002). Evaluation of a client care delivery model part 2: Variability in client outcomes in community home nursing. *Nursing Economic\$*, 20(1), 13-21.

O'Brien-Pallas, L., Meyer, R., Alksnis, C., Tomblin Murphy, G., Williams, S., Thomson, D., et al. (2002). *Nursing education data: Evaluation of strategy 7 of the nursing strategy for Canada.* Ottawa, ON: Health Canada.

O'Brien-Pallas, L., & Shamian, J. (Principal Investigators) With Buchan, J., Duffield, C., Hughes, F., Laschinger, H., Stone, P., & Griffin, P. (2003, February). *An international examination of the cost and impact of turnover on patient safety and nurse outcomes: Preliminary findings.* Presented at the Fifth Joint National Conference on Quality in Health Care, Toronto, ON.

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(2), 42-50.

O'Leary, D.S. (2002). Framing the issues: In pursuit of solutions to the national nursing workforce dilemma: Presentation to the Nurse Staffing Roundtable. Washington, DC: Nurse Staffing Roundtable.

O'Neill, M. & Dupere, S. (2005). Health promotion: the next generations. *Reviews of Health Promotion and Education Online*. Retrieved 2005, from http://www.rhpeo.org/reviews/2005/10/index.htm

Occupational Health and Safety Agency for Health care in BC. (2004). *Trends in workplace injuries, illnesses, and policies in health care across Canada*. Vancouver, BC: Author.

Occupational Safety and Health Administration. (1998). *Guidelines for preventing workplace violence for health care and social service workers.* Retrieved 2005, from http://www.osha-slc.gov/SLTC/workplaceviolence/guideline.html

Ogden, Frank. (2003). *The future of your profession*: Keynote and Plenary Address for Health 2003- News at e-health. Retrieved 2005, from http://www.drtomorrow.com

Office of Nursing Policy. (2004). *Trends in illness and injury-related absenteeism and overtime among publicly employed Registered Nurses*. Ottawa, ON: Health Canada.

Oliver, A. (2002). Unintended consequences of applying economic evaluation (2002). *Journal of Health Services Research and Policy*, 7(3), 129-130.

Ontario Ministry of Health & Long Term Care. (2001). Good nursing good health: A good investment. Progress report on the nursing task force strategy in Ontario. Toronto, ON: Author. Retrieved 2005, from http://www.health.gov.on.ca/english/public/pub/ministry_reports/nurserep01/616209_moh_good_nursing.pdf

Ordre des infirmières et infirmiers du Québec. (2000). Le financement et l'organisation des services de santé et des services sociaux. Mémoire présenté à la Commission d'étude sur les services de santé et les services sociaux. Montréal, QC: Author.

Organisation for Economic Cooperation and Development (1994). Health for all in the 21st century? *Highlights*, No. 7. March 1994.

Organisation for Economic Co-operation and Development. (2001). *OECD environmental outlook*. Paris: Author.

Organisation for Economic Co-operation and Development. (2003). *Employment outlook: Towards more and better jobs.* Paris: Author.

Organisation for Economic Co-operation and Development. (2003). *Health at a glance: OECD indicators 2003*. Paris: Author.

Ose, P., & Beglinger, J. (2004). *Guiding principles in determining appropriate nurse staffing: A position paper for acute care in the state of Wisconsin*. Madison, WI: Wisconsin Organization of Nurse Executives.

Oulton, J. (1999). Nursing's future. In A. Maslin (Ed.), *Nursing the world: Celebrating the past, claiming the future*. London: Nursing Times Books.

Panel Presentation (transcribed, November 1999). Future Horizons Presentation: Change Scenarios for Health and Health Care. Proceedings of 1998 OHA Convention & Exhibition, Toronto. Retrieved 2005 from http://www.changefoundation.com

Pelton, J. (2004). The rise of telecities: Decentralizing the global society. *The Futurist, 38*(1), 28.

Peterson, C. (2001). Nursing shortage: Not a simple problem – No easy answers. *Online Journal of Issues in Nursing*, *6*(1). Retrieved 2005, from http://www.nursingworld.org/ojin/topic14/tpc14_1.html.

Policy and Strategic Projects Division. (2001). *Nurse recruitment and retention committee. Government response.* Melbourne, AU: Victorian Government Department of Human Services.

Pope, G., & Menke, T. (1990). Hospital labor markets in the 1980s. *Health Affairs*, 9(4), 128-137.

Prescott, P. (1993). Nursing: An important component of hospital survival under a reformed health care system. *Nursing Economic\$*, *11*(4), 192–199.

Price, J., & Mueller, C. (1981). A causal model of turnover for nurses. *Academy of Management Journal*, *24*(3), 543–565.

Prince Edward Island Health & Social Services. (2005). Nursing recruitment and retention strategy. Charlottetown, PE: Author. Retrieved 2005, from http://www.gov.pe.ca

Pronovost, P., Dang, D., Dorman, T., Lipsett, P.A., Garrett, E., Jenckes, M., et al. (2001). Intensive care unit nurse staffing and the risk for complications after abdominal aortic surgery. *Effective Clinical Practice*, 4(5), 199-206.

Rankin, J., Quinn, J., Shephard, M., Duncanson, J., & Simmie, S. (2002, October 20). Police target black drivers. *The Toronto Star*, A-01, A-08.

Rankin, J., Quinn, J., Shephard, M., Duncanson, J., & Simmie, S. (2002, October 19). Singled out: Star analysis of police crime data shows justice is different for blacks and whites. *The Toronto Star*, A-01.

Rantz, M. (2003). Does good quality care in nursing homes cost more or less than poor quality care? *Nursing Outlook, 51*(2), 93-94.

Regan, W. (1982). Professional nursing education: No barriers. *The Regan Report on Nursing Law, 23*(5), 1.

Roos, N., Burchill, C., & Carriere, K. (2003). Who are the high hospital users? A Canadian case study. *Journal of Health Services Research and Policy, 8*(3), 5-10.

Rosegrant, M., Paisner, M., Meijer, S., & Witcover, J. (2001). *Global food projections to 2020.* Washington, DC: International Food Policy Research Institute.

Rosenthal, R., & Rosenthal, H. (2003). *Keeping patients safe: Transforming the work environment of nurses.* Washington, DC: Institute of Medicine of the National Academies.

Royal College of Nursing. (2002). *RCN submission to spending review 2002.* London: Author. Retrieved 2005, from http://www.rcn.org.uk/news/display.php?ID=273&area=Press

Rozie-Battle, J. (2002). African American youth in the new millennium: An overview [Issue: African-American adolescents in the urban community: Social services policy and practice interventions]. *Journal of Health and Social Policy*, 15(2), 1-12.

Ryten, E. (1997). A Statistical picture of the past, present and future of Registered Nurses in Canada. Ottawa, ON: Canadian Nurses Association.

Sauvé, R. (2000). *COUNTDOWN – Future shortages in the Canadian labour market*. Ottawa, ON: People Patterns Consulting.

Schumacher, A. (2005). Doctors put patients first in health care debate. *Canadian Medical Association Journal*, 173(3), 277-278.

Scott, J., Sochalski, J., & Aiken, L. (1999). Review of magnet hospital research. *Journal of Nursing Administration*, 29(1), 9–19.

Scottish Integrated Workforce Planning Group. (2002). *Planning together.* Edinburgh, UK: Scottish Executive.

Seago, J., Spetz, J., Coffman, J., Rosenoff, E., & O'Niel, E. (2003). Minimum staffing ratios: The California workforce initiative survey. *Nursing Economics*, *21*(2), 65-70.

Secretary of State for Health. (2000). *The NHS Plan. A plan for investment. A plan for reform* (Cm 4818-I). London: HMSO.

Shahar, A. (2003). The holistic future of aging. *The Futurist*, *37*(5), 8.

Shamian, J., & Chalmers, B. (1996). *Nurse effectiveness: Health and cost-effective nursing services. Review of literature and policy and organizational recommendations.* Toronto, ON: The Global Network of WHO Collaborating Centres for Nursing/Midwifery Development.

Shamian, J., & Villeneuve, M. (2000). Building a national nursing agenda. *Hospital Quarterly*, 4(1), 16-18.

Sharkey, S., Larsen, L., & Mildon, B. (2003). An overview of home care in Canada: Its past, present, and potential. *Home Health Care Management & Practice*, 15(5), 382-390.

Shaw-Taylor, Y. (2002). Culturally and linguistically appropriate health care for racial or ethnic minorities: Analysis of the US Office of Minority Health's recommended standards. *Health Policy*, 62, 211-221.

Shields, M. (2003). *The global shortage of Registered Nurses: What can policy-makers learn from the econometric evidence on nurse labour supply?* Melbourne, AU: Victorian Department of Treasury and Finance.

Shields, M., & Ward, M. (2001). Improving nurse retention in the National Health Service in England: The impact of job satisfaction on intentions to quit. *Journal of Health Economics*, 20(5), 677-701.

Sigma Theta Tau. (1996). Arista 11 envisions nursing's preferred future role. *Reflections*, *22*(3), 26-27.

Simpson, J. (2003). Utilization patterns and trends. *Health Policy Research Bulletin*, 7, 9-13. Retrieved Sept. 20, 2005, from http://www.hc-sc.gc.ca/sr-sr

Skelton-Green, J. (1996). The perceived impact of committee participation on the job satisfaction and retention of staff nurses. *Canadian Journal of Nursing Administration*, 9(2), 7–35.

Slavitt, B., Stamps, P., Piedmont, E., & Haase, A. (1978). Nurses' satisfaction with their work situation. *Nursing Research*, *27*(2), 114–120.

Smedley, B., Smith, A., & Nelson, A., (Ed's). (2002). *Unequal treatment: Confronting racial and ethnic disparities in health care.* Washington, DC: National Academies Press.

Smith, C. (2000, March). Addressing racism and equity in Canada today: The challenge of our time. Paper presented at the Fourth National Metropolis Conference, Toronto, ON

Smith, G., & Seccombe, I. (1998). *Changing times: A survey of registered nurses in 1998.* Brighton, UK: Institute of Employment Studies.

Sobel, R. (2005). The next generation. *U.S. News and World report.* Retrieved 2005, from http://www.usnews.com/usnews/health/articles/050131/31rachel.htm

Spetz, J. (2002). *Revised cost estimates of minimum nurse-to-patient ratio proposals*. San Francisco, CA: University of California, San Francisco Center for California Health Workforce Studies & Department of Community Health Systems, School of Nursing.

Spetz, J. (2002). The value of education in a licensed profession: The choice of associate or baccalaureate degrees in nursing. *Economics of Education Review*, 21(1), 73-85.

Staiger D., Spetz, J., & Phibbs, C. (1999). *Is there monopsony in the labor market? Evidence from a natural experiment* (NBER Working Paper No. 7,258). Cambridge, MA: National Bureau of Economic Research.

Statistics Canada. (2001). Canada e-Book. Ottawa, ON: Author. Retrieved 2005, from http://142.206.72.67/r000_e.htm

Statistics Canada. (2003). *Household internet survey.* Ottawa, ON: Author. Retrieved 2005, from www.statcan.ca/english/sdds/4432.htm

Stone, P., Tourangeau, A., Duffield, C., Hughes, F., Jones, C., O'Brien-Pallas, L., & et al. (2003). Evidence of nurse working conditions: A global perspective. *Policy, Politics & Nursing Practice, 4*(2), 120-130.

Sullivan, T., Kerr, M., & Ibrahim, S. (1999). Job stress in health care workers: highlights from the National Population Health Survey. *Hospital Quarterly*, 2(4), 34-40.

Swedish National Institute of Public Health. (2003). Sweden's new public health policy: National public health objectives for Sweden. Sandviken, SW: Sandvikens Tryckeriz.

Tarlov, A. (1999). Public policy frameworks for improving population health. *Annals of the New York Academy of Sciences*, 896, 281–293.

Tarlov, A. (2000, August). The future of health in Canada: "The art of the possible". Proceedings of the 69th Annual Couchiching Summer Conference, Geneva Park, Orillia ON, August, 10–13, 2000.

Taylor, C. (1997). The ACIDD test: A framework for policy planning and decision-making. *Optimum, The Journal of Public Sector Management, 27*(4), 53–62.

Taylor Bell, M. & Khodeli, I. (2004). *Public health worker shortages.* Lexington, KY: Council of State Governments.

The Nursing Executive Center. (2000). *The nurse perspective: Drivers of nurse job satisfaction and turnover.* Washington, DC: The Advisory Board Company.

Thomson, D. (2002). *Nurse job satisfaction – Factors relating to nurse satisfaction in the workplace*. Ottawa, ON: Canadian Nursing Advisory Committee.

Tourangeau, A., Giovannetti, P., Tu, J., & Wood, M. (2002). Nursing-related determinants of 30-day mortality for hospitalized patients. *Canadian Journal of Nursing Research*, *33*(4), 71-88.

Turner, T. (1990). *The composition and implications of metropolitan Toronto's ethnic, racial and linguistic populations.* Toronto, ON: Municipality of Metropolitan Toronto, Multicultural and Race Relations Division.

United Kingdom Central Council for Nursing, Midwifery and Health Visiting. (2001). *Fitness for practice and purpose.* London: Post-Commission Development Group, United Kingdom Central Council for Nursing, Midwifery and Health Visiting.

Valentine, N. (2000). The evolving role of the chief nurse executive in the Veterans Health Administration: Policy and leadership lessons. *Policy, Politics, and Nursing Practice, 1*(1), 36-46.

Valpy, M. (2004). A prophet for a toxic age. *Literary Review of Canada, May 2004*, 9-11.

Viewpoints Research. (2002). *Nurses' definitions of respect and autonomy in the workplace: Summary of focus groups with Canadian Nurses.* Ottawa, ON: Canadian Nursing Advisory Committee.

Von Holzen, R. (2005). The emergence of a learning society. *The Futurist, 39*(1), 24-26.

Wagner, S., Bookey-Bassett, S., Clement-Gallien, L., & Bulter. J. (2002). *A catalogue of current strategies for healthy workplaces.* Ottawa, ON: Canadian Nursing Advisory Committee.

Wasekeesikaw, F. (2002). Challenges for the new millennium: Nursing in First Nations communities. In M. McIntyre & E. Thomlinson (Eds.), *Realities of Canadian Nursing: Professional, practice and power issues* (pp. 447-469). Philadelphia: Lippincott, Williams & Wilkins.

Watt, J., Dickey, M. & Grakist, D. (2004). *Middle childhood matters: A framework to promote healthy development of children 6 to 12.* Ottawa, ON: Child and

Youth Health Network for Eastern Ontario. Retrieved April 29, 2005, from http://www.child-youth-health.net

Welch, A. (2001). The new futurists. Insight on the News, 17(3), 10.

West, E., & Scott, C. (2000). Nursing in the public sphere: Breaching the boundary between research and policy. *Journal of Advanced Nursing*, 32(4), 817–824.

While, A. & Blackman, C. (1998). Reflections on nursing as a career choice. *Journal of Nursing Management*, 6, 231-237.

White, K. (1961). Ecology of medical care. *The New England Journal of Medicine*, 265(18), 885-892.

Williams, B. (2002, July). *The impact of the nursing shortage on visible role models.* Presented to The National Leadership Summit on Eliminating Racial and Ethnic Disparities Health, Washington, DC.

Wilson, D. (2005). Many new drugs have strong dose of media hype. *The Seattle Times*. Retrieved 2005, from http://seattletimes.nwsource.com/html/health/sick4.html

Wilson, D. (2005, June 26-30). New blood-pressure guidelines pay off – for drug companies [Special Report]. *The Seattle Times*. Retrieved 2005, from http://seattletimes.nwsource.com/html/health/sick1.html

Wong, J., Murray, G., & McMurchy, D. (2002). *Consumers and Canadian health care: A trending analysis of consumerism.* Toronto, ON: The Change Foundation and IBM Consulting.

World Future Society. (2004). *Forecasts: Top 10 forecasts from Outlook 2005*. Retrieved 2005, from http://www.wfs.org/forecasts.htm

Worzel, Richard. (1997). Facing the future: The seven forces revolutionizing our lives. Toronto, ON: Stoddart Publishing.

Worzel, Richard. (2004). *Straws in the wind*. Toronto ON: FutureResearch.com. Retrieved 2005, from http://www.futuresearch.com/articles.php?showsite=79

Zabalegui, A. (2002). Nursing education in Spain – Past, present, future. *Nursing Education Today*, *22*(4), 311-318.

iii) Contact Information for Selected Nursing and other Organizations/Associations

Selected Pan-Canadian and International Nursing Organizations

Nursing speciality associations (e.g. critical care, nursing history) may be accessed through the Canadian Nurses Association's web site. Provincial/territorial associations may be accessed through the national organization web sites listed below.

Acronym	Organization	Web site	
ACEN	Academy of Canadian Executive Nurses	http://www.acen.ca	
ANA	American Nurses Assoc.	http://www.nursingworld.org	
ANAC	Aboriginal Nurses Assoc. of Canada	http://www.anac.on.ca	
CAAPN	Canadian Assoc. of Advanced Practice Nurses	http://www.caapn.com	
CANR	Canadian Assoc. for Nursing Research	http://www.canr.ca	
CASN	Canadian Assoc. of Schools of Nursing http://www.casn.ca		
CCPNR	Canadian Council for Practical Nurse Regulators	http://www.ccpnr.ca	
CFNU	Canadian Federation of Nurses Unions	http://www.cfnu.ca	
CNA	Canadian Nurses Assoc.	http://www.cna-aiic.ca	
CNSA	Canadian Nursing Students Assoc.	http://www.cnsa.ca	
CPNA	Canadian Practical Nurses Assoc.	http://www.cpna.ca	
ICN	International Council of Nurses, Geneva	http://www.icn.ch	
ONP	Office of Nursing Policy, Health Canada	http://www.hc-sc.gc.ca/hcs-sss/nurs-infirm/index_e.html	
RCN	Royal College of Nurses, United Kingdom	http://www.rcn.org.uk	
RPNC	Registered Psychiatric Nurses of Canada	http://www.rpnc.ca	

Selected Pan-Canadian and International Organizations (Non-Nursing) of Interest to Nurses

Acronym	Organization	Web site	
ACHDHR	Advisory Committee on Health Delivery & Human Resources (Federal/Provincial/ Territorial Governments)	http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/strateg/plan/credentials-criteres_e.html	
CACHCA	Canadian Alliance of Community Health Centre Assoc's.	http://www.cachca.ca/	
CHC	Canadian Health Coalition	http://www.healthcoalition.ca	
СНА	Canadian Health Care Assoc.	http://www.cha.ca	
CHSRF	Canadian Health Services Research Foundation	http://www.chsrf.ca	
CIHI	Canadian Institute for Health Information	http://www.cihi.ca	
CIHR	Canadian Institutes for Health Research	http://www.cihr.ca	
CMA	Canadian Medical Association	http://www.cma.ca	
CPRN	Canadian Policy Research Networks	http://www.cprn.org	
	Conference Board of Canada	http://www.conferenceboard.ca	
НСС	Health Council of Canada	http://www.healthcouncilcanada.ca	
HSSA	Health Science Students Assoc.	http://www.health- disciplines.ubc.ca/hssa	
NHPN	New Health Professionals Network	http://www.futurefaceof medicare.ca	
OECD	Organization for Economic Cooperation & Development, Paris	http://www.oecd.org	
WHO	World Health Organization, Geneva	http://www.who.int	

Appendix A

Informants Interviewed

John Anderson

Vice-President, Strategic Partnerships and Alliances, Canadian Council on Social Development Ottawa ON

Lucille Auffrey, RN MScN

Executive Director, Canadian Nurses Association Ottawa ON

Bernie Blais

Deputy Minister, Health and Social Services, Government of Nunavut Igaluit NU

Bernard Blishen

Research Director, The Royal Commission on Health Services (This commission produced *The Hall Report* in 1964) Havelock ON

Anne Sutherland Boal

Chief Nurse Executive and Assistant Deputy Minister, Clinical Innovation and Integration, British Columbia Ministry of Health Victoria BC

Gabrielle Bridle

Immediate Past President, Canadian Practical Nurses Association Toronto ON

Patrick Case

Immediate Past Chair, Canadian Race Relations Foundation, and Director, Human Rights and Equity Office, University of Guelph Guelph ON

Anne Coghlan, RN MScN

Executive Director, College of Nurses of Ontario Toronto ON

Sister Elizabeth M. Davis, BA BEd MA MHSc LLD

Consultant, Health Policy & Administration, and Doctoral Candidate, Loretto College, University of Toronto
Toronto ON

Raisa Deber, PhD

Professor, Department of Health Policy, Management and Evaluation, University of Toronto Toronto ON

Michael B. Decter

Chair, Health Council of Canada, St. Elizabeth Health care, and Ontario Cancer Quality Council, and President, Lawrence Decter Investment Council Inc. Toronto ON

Lisa Dutcher

President, Aboriginal Nurses Association of Canada, and Coordinator, First Nations & Inuit Home & Community Care Program, NB & PE Fredericton NB

Pat Fredrickson

Executive Director, College of Licensed Practical Nurses of Alberta and Past President, Canadian Practical Nurses Association Edmonton AB

K.J. Fyke, BSP MHSA LLD (Hon)

Health Policy Consultant Victoria BC

L. Dawn Fyke, RN BEd MPA

Heath Policy Consultant. Victoria BC

Michael Garreau

President, Canadian Nursing Students Association Toronto ON

Rosemarie Goodyear, BN MSA

Vice President, Community Services, Central Regional Integrated Health Authority Gander, NL

The Right Honourable Herb Gray

Chair, The International Joint Commission Ottawa ON

Deborah Grey

Author, Teacher, Consultant and former Member of Parliament (Reform) Edmonton AB

Trevor Hancock, MD

Public Health Physician and Health Promotion Consultant, BC Ministry of Health Victoria BC

Chantal Hebert

National Affairs Writer, *The Toronto Star*, Guest Columnist, *Le Devoir*, and Political Commentator, *The National* (CBC) Montreal QC

Ken Hoffman

Consultant in Community Health and Community Economic Development Ottawa ON

Verna Holgate

Executive Director, College of Licensed Practical Nurses of Manitoba Winniped MB

Suzanne F. Jackson, PhD

Director, Centre for Health Promotion, University of Toronto
Toronto ON

Muriel Jarvis

Executive Director, Family Plus/Life Solutions St. John NB

Mark Kingwell, PhD DFA

Professor of Philosophy, Trinity College, University of Toronto Toronto ON

Gordon MacDonald

Executive Director, College of Licensed Practical Nurses of British Columbia Vancouver BC

Kathleen MacMillan, RN PhD

Dean, School of Health Sciences, Humber Institute of Technology and Advanced Learning Toronto ON

Judith Maxwell

President, Canadian Policy Research Networks Ottawa ON

Barbara Oke, RN BN MHSA

Executive Director, Office of Nursing Services, First Nations and Inuit Health Branch, Health Canada
Ottawa ON

Annette Osted

Executive Director, College of Registered Psychiatric Nurses of Manitoba Winnipeg MB

Charles E. Pascal

Executive Director, The Atkinson Charitable Foundation
Toronto ON

Alain Pavilanis, MD CM CCFP FCFP

President, College of Family Physicians of Canada, Director of Family Medicine Residency Training, St. Mary's Hospital, and Associate Professor, McGill University Montreal QC

Andre Picard

Journalist, Author and Public Health Reporter, The Globe and Mail Montreal QC

Dorothy M. Pringle, RN PhD

Professor and Dean Emerita, Faculty of Nursing, University of Toronto Toronto ON

Michael Rachlis, MD

Health Policy Consultant and Associate Professor, University of Toronto Department of Health Policy Management and Evaluation Toronto, ON

Martha Rogers, RN PhD

Associate Dean, Atkinson Faculty of Liberal and Professional Studies, York University Toronto ON

Judith Shamian, RN PhD LLD

President and Chief Executive Officer, Victorian Order of Nurses Canada
Ottawa ON

Linda Silas, RN BScN

President, Canadian Federation of Nurses Unions Ottawa ON

Marlene Smadu, RN EdD

Associate Dean of Nursing, Regina Site, University of Saskatchewan, and President-Elect, Canadian Nurses Association Regina SK

Richard B. Splane, OC PhD LLD

Health and Social Policy Consultant Vancouver BC

Verna Huffman Splane, OC MPH LLD

Health and Social Policy Consultant, and Honorary Professor & Associate Faculty, Faculty of Nursing, University of British Columbia Vancouver BC

Deborah Tamlyn, RN PhD

President, Canadian Nurses Association Halifax NS

William Tholl

Executive Director, Canadian Medical Association Ottawa ON

Michael Walker, PhD

Executive Director, The Fraser Institute Vancouver BC

Armine Yalnizyan

Consulting Economist and Atkinson Fellow Toronto ON

Jean Yan, RN PhD

Chief Nurse Scientist, World Health Organization Geneva Switzerland

Marc Zwelling

President, Vector Research + Development Inc. Toronto ON

Appendix B

Participants, Speakers and Staff - Merrickville Consultation

PARTICIPANTS

Lucille Auffrey RN, MN

Executive Director Canadian Nurses Association Ottawa ON

Donna Brunskill, RN

Executive Director Saskatchewan Registered Nurses' Association Regina SK

Dawn Bruyere RN BA BScN MScN

Research Project Manager, Steroid-Induced Osteoporosis in the Pediatric Population, Canadian Incidence Study, Pediatric Bone Health Clinical Research Program Children's Hospital of Eastern Ontario Ottawa ON

Salma Debs-Ivall, RN, MScN

Corporate Associate Coordinator of Nursing Education, The Ottawa Hospital, and Cultural Consultant (Private) Ottawa ON

Nancy Edwards, RN PhD

Professor and Canadian Health Services Research Foundation/Canadian Institutes for Health Research Nursing Chair School of Nursing, University of Ottawa Ottawa ON

Paul Fisher, LPN

Vice Chair Canadian Council for Practical Nurse Regulators St. John's NF

Michael Garreau, BScN (c)

President, Canadian Nursing Students Association Toronto ON

Pat Griffin, RN BSc(NsgEd) MHA PhD

Executive Director
Canadian Association of Schools of
Nursing
Ottawa ON

Laurie Jenkins, RN BScN MBA

Patient Care Manager Sunnybrook & Women's College Health Sciences Centre Toronto ON

Nancy Lefebre, RN MScN

Chief Clinical Executive, Senior Vice President, Knowledge & Practice Saint Elizabeth Health Care Markham ON

Sandra MacDonald-Rencz

Acting Executive Director Office of Nursing Policy, Health Canada, Ottawa ON

Martine Mayrand Leclerc, RN MGSS/MHA PhD

Professor Université du Québec en Outaouais Gatineau QC

Mikki Millar, RN (NP)

Primary Care Nurse Practitioner Cypress Health Region Leader SK

Kaaren Neufeld, RN, MN

Chief Nursing Officer St. Boniface General Hospital Winnipeg MB

Sue O'Hare LPN

President Canadian Practical Nurses Association Coombs, BC

Barbara Oke, RN BN MHSA

Executive Director, Office of Nursing Services First Nations and Inuit Health Branch Health Canada Ottawa ON

Martha Rogers, RN MScN EdD

Associate Dean York University Toronto ON

Julia Scott, RN BA MBA

Consultant Clarendon Enterprises Ltd. Unionville ON

Nancy McNinch Shosenberg RN BScN MHSc

Health Consultant Oshawa ON

Linda Silas, RN BScN

President Canadian Federation of Nurses Unions Ottawa ON

Marlene Smadu, RN BScN MAdEd EdD

Associate Dean College of Nursing, University of Saskatchewan Regina SK

Marg Synyshyn, Reg. Psych.N. BHS (Psych.Nsg.)

Program Director
Winnipeg Regional Health Authority
Manitoba Adolescent Treatment
Centre
Winnipeg MB

Deborah Tamlyn, RN PhD

President
Canadian Nurses Association
Ottawa ON

Richie Tika, RN

Staff Nurse York Central Hospital Richmond Hill ON

Yasmin Vali, RN MHSA

Director The Scarborough Hospital Scarborough ON

GUEST SPEAKERS

Abby Hoffman

Executive Co-Ordinator, Pharmaceuticals Management Strategies Health Canada Ottawa ON

Sister Elizabeth Davis*, BA BEd MA MHSc LLD PhD cand.

Chair
Canadian Health Services Research
Foundation
*Recording provided by Canadian
Health Services Research Foundation

Marc Zwelling, BSJ

President The Vector Poll™

FACILITATOR

Dianne Parker-Taillon, BScPT MSc

Management Consultant
D. Parker-Taillon and Associates
Consulting
Ottawa ON

CNA STAFF

Janet Davies

Director, Public Policy

Nancy Field

Data Analyst

Jane MacDonald, RN MHSc

Primary Health Care Consultant

Michael Villeneuve, RN MSc

Senior Nurse Consultant

Appendix C

Project Methodology

Methodology

The Toward 2020 report reflects work that was undertaken in three phases.

- 1. Leading trends and their implications were harvested from a review of published literature that focused on futures thinking, particularly on what is being said by futurists in the English language literature. It also examined trends in demographics, labour force, health/illness, and technology. This review involved academic, peer reviewed literature, reports and studies from Canadian and global think tanks, major non-governmental organizations, and focused futurist literature. Documents published from 1999 to 2005 were included in the search.
- 2. Face-to-face and telephone interviews were conducted with nurse and non-nurse leaders to solicit their frank, honest opinions about the future, and where appropriate, nursing's place within it. A convenience sample of 35 Canadians known to be leaders in academics, philosophy, business, politics and health care initially was selected. A snowball effect, wherein certain informants were interviewed based on the recommendations of other informants familiar with their work, also generated names for the study. In the end, 48 Canadian leaders (see Appendix A) participated in the interview phase of the study.
- 3. Participants were invited by e-mail to participate in the project using a common invitation tailored in minor ways to those informants known to the investigators. A second e-mail invitation and phone call were used to follow up as needed.
- 4. Using an informal, qualitative interview methodology, the investigators met privately with each informant in person or by telephone with a targeted interview time of 30 minutes. Some informants were interviewed by only one investigator but in most cases, both investigators took part. The interview questions (see Appendix D) were provided in writing to the participants in advance. Following a 5-minute explanation of the larger project, informants were asked the open-ended questions about their perceptions of the future using the interview guide. Based on individual responses and area of interest/expertise, we also asked other questions and probed into specific areas. The sessions were not recorded; written notes were taken for each session, and verbal permission was granted by each informant to be listed as having been included in the study.

5. Finally, an in-person consultation was held in October 2005 with 28 leaders from a variety of roles in nursing across Canada (see Appendix B). The purpose of the consultation was to solicit feedback on the initial draft of this report, and to seek the assistance of nurse leaders in developing the recommendations.

Findings

Review of Literature. A variety of themes were identified from the literature surveyed and resulted in an extensive discussion. Because the themes and information captured were of such interest – and could not all be fully integrated into the present synthesis. The full discussion may be accessed in Appendix E. An annotated bibliography representative of the literature reviewed also is appended for the information of readers see Appendix F.

Interviews. From among the 57 informants finally invited to be interviewed, three were unable to participate, and six never responded. All other invitees (n=48) accepted the invitation to participate and were interviewed (see Appendix A.)

During the interviews, various themes were discussed and reinforced by many of the participants. We asked the interviewees to broadly focus on what issues/trends/patterns they see for 2020. Many of the interviews, scheduled for 30 minutes, went on for an hour or more as led by those interviewed – we were not short on informed opinion and thoughtful debate about the future.

Key points and themes are listed in bullet format in Appendix G. In addition, a paper presenting key messages about future relationships among RNs, LPNs and RPNs was prepared following interviews with the relevant groups (see Appendix H).

Stakeholder Consultation. 30 Nursing leaders were purposefully selected to participate in this consultation held in Merrickville, Ontario. Leaders were chosen to represent the five pillars of nursing: education, practice, research, policy and administration. Regional representation was also a factor. The consultation was 2.5 days long. The purpose of the consultation was to receive feedback and encourage discussion on the draft document. The paper and any recommendations were then finalized taking these comments into consideration.

Appendix D

Interview Questions

Toward 2020 - A Visioning Exercise

CNA is developing a "Visions for Nursing in 2020" paper. We thank you so much for agreeing to share your ideas and visions for the future with us.

Our challenge is to think about where the world is going to be in 15 years and where and how nursing will – and should – be positioned to deal with various scenarios. Of course, we would like a crystal ball to tell us exactly what will be happening but... This is why we are speaking to several people who, we think, have thought about what the world might look like in 2020 and might be able to provide wisdom and opinions on where nursing could be. We have also hired a consultant to conduct a literature review of the relevant futures documents and articles.

Specifically what we are seeking in our 30 minute conversation is your thoughts and opinions on the following question:

1. What are the key issues, trends and priorities that will face Canadian society in 2020 (e.g. communities, individuals, families and the environment)? Some specific themes that we have thought about in this category could relate to: consumerism, technology, migration, social determinants, work issues, work-life balance issues, gender and diversity, literacy and education, etc. We know there are other themes that you may want to highlight.

We would like you to focus most of your time on this question (probably 20 minutes) – we really want to get a sense from you of what you think Canada (and the world) will look like in 2020.

Perhaps we could spend the final 10 minutes on health, and more specifically on nursing if applicable. It will be our job, after completing the interviews, to consider where nursing needs to be in 2020.

- 2. What do you see as the major health issues and trends in 2020?
- 3. What will the health system need to look like in 2020?
- 4. What should nursing look like in 2020?

We would also appreciate your ideas for references, articles and other people to speak with.

Thanks very much.

Appendix E

Discussion of Themes Identified in the Literature Search: The Futures Agenda for 2020

Prepared by Louise Hanvey, Consultant

Edited by Michael Villeneuve and Jane MacDonald

This paper is available as an electronic document in pdf format. To request a copy of the paper, please contact the authors at:

APPENDIX F

Futures Agenda for 2020: Annotated Bibliography

Prepared for the Canadian Nurses Association By Louise Hanvey

March 31, 2005

This paper is available as an electronic document in pdf format. To request a copy of the paper, please contact the authors at:

Appendix G

Conversations with Canadians: Summary of key themes identified in informant interviews, February-August 2005

Jane MacDonald, Primary Health Care Consultant Michael Villeneuve, Senior Nurse Consultant Canadian Nurses Association

This paper is available as an electronic document in pdf format. To request a copy of the paper, please contact the authors at:

Appendix H

Canada's Registered Nurses, Licensed Practical Nurses and Registered Psychiatric Nurses: Building Blocks for a Shared Vision of a Shared Future

Michael Villeneuve Canadian Nurses Association

This report briefly summarizes issues identified during interviews with RN, RPN and LPN leaders.

This paper is available as an electronic document in pdf format. To request a copy of the paper, please contact the authors at:

Go out from this place with new partners and serve your communities.

Go where there is disunity and despair, and speak the language of reconciliation and hope.

Go out and create space for reflection and innovation, and change the world.

Kaaren Neufeld Executive Director and Chief Nursing Officer St. Boniface General Hospital Winnipeg Manitoba

Speaking on the Evolving Role of Nursing Leadership Canadian Nursing Leadership Conference February 14, 2005

