

DISCUSSION PAPER NO.28

Planning for Care: Approaches to Health Human Resource Policy and Planning

by
Pat Armstrong, Ph.D.
York University
and
Hugh Armstrong, Ph.D.
Carleton University



Catalogue No. CP32-79/28-2002E-IN ISBN 0-662-32970-8

Although the views expressed in the paper are those of the author(s), each of the papers was subjected to an independent peer-review process. The Commission would like to thank the Institute of Health Services and Policy Research (IHSPR) of the Canadian Institute of Health Research for their oversight and administration of the peer-review process for these papers. The work of the authors, the reviewers and IHSPR will serve to make these papers an important contribution to the Commission's work and its legacy.

Contents

Highlights	iv
Executive Summary	v
Introduction	1
The Nature of Care	3
The Human Resources for Care	8
Educating for Care	11
Accountability and Governance in Care	15
The Complexities of Planning for Care	19
Conclusion	22
Notes	23
References	24

Highlights

Answering the question "How do health human resource policies and practices promote or inhibit change?" means first deciding about how care is understood and what kind of change is at issue. A care-as-different model leads to different options than a care-as-another-business model, and a continuing shift to individual responsibility leads to different resource requirements than, say, a national public home-care program does.

A number of factors then need to be taken into account:

- The full range of care providers, paid and unpaid, because a change in the role of one has an impact on the others. Research and policy tend to focus on doctors and nurses, who together account for less than a third of the paid labour force in health and social services;
- The characteristics of the labour force, and of those who need care, because these shape the options available and the kind of care required;
- A variety of means to ensure accountability, in addition to policies on scope of practice, certification and licensure;
- A recognition of tensions to be balanced in developing accountability, and the need to include providers and citizens in decision-making;
- Training for the full range of providers;
- Changes in the content of formal education to promote communication, teamwork, interdisciplinary knowledge, an understanding of health determinants—especially gender, income and culture;
- Continuing education in and outside the workplace, time for sharing knowledge on a daily basis, and a recognition of tacit learning;
- Bridging and upgrading programs, combined with prior-learning assessment and recognition, to enable providers to adapt to new demands within specific contexts;
- A balancing of specialized skills with more openness to new occupations and overlapping responsibilities, and a balancing of standards without standardization that ignores context;
- More explicit policies about levels of responsibility in health human resource planning:
- More systematic collection of data on health human resources; and
- Support for improved working conditions and secure employment, and for increased opportunities for providers to influence care decisions.

The emphasis in this paper is on identifying principles and approaches rather than on formulating specific solutions.

Executive Summary

Shortly after the Commission on the Future of Health Care in Canada asked us to address the question "How do health human resource practices and policies promote or inhibit change?", the Canadian Institute for Health Information (CIHI) released its report on *Canada's Health Care Providers*. The Canadian Policy Research Networks also prepared a lengthy report summarizing the literature and the issues related to human resource planning for doctors and registered nurses (RN). Instead of repeating what is in these reports, we take as given the wealth of information they provide, and set out to complement them. Our emphasis is on identifying principles and approaches to planning for change, rather than on providing details or recommending particular solutions.

We begin by looking at values, because these shape what people working in care do and how they are organized to carry out their work. Two broad alternative models for understanding the nature of care are presented, along with their implications for human resource planning. A care-as-different model entails an emphasis on autonomy; on accountability through provider colleagues, judgements and specialization; and on teams based on complementary skills. A care-as-another-business model suggests a greater emphasis on flexibility for employers in assigning work, on managerial control, on the delegation of tasks to lowest-costs care providers, and on citizen participation through such means as report cards. These and other features of the different models are linked in turn to current and future reforms that shape health human resource requirements. Four major ones are identified: a redefinition of hospitals to cover only the most acute care, increasingly complex care in long-term facilities, a shift of more complex care to households, and the promotion of primary care reform supported by telehealth. New initiatives, such as a national public home-care program, would also have important effects on resource needs.

Once the central values are established, it is essential that the entire range of providers be included in plans for change. Most research and public policy debates have focused on doctors and nurses, who together constitute less than a third of the paid labour force in health and social services. Yet, the literature on the determinants of health tells us that managers and cleaners, therapists and pharmacists, clerical staff and dietary workers all play critical roles in health, supporting other providers and establishing safe environments for care. Moreover, the largest group in care provision remains invisible in planning—the mainly female unpaid caregivers. Changes affecting one group necessarily reverberate throughout the paid and unpaid workforce. Highly organized, hierarchical and gendered, the paid labour force is also aging. These factors too influence the possibilities for change. So does the kind of care required by an increasingly multi-cultural/racial, educated and elderly population that is more likely to suffer from chronic diseases and disabilities.

In planning for education, the full range of paid and unpaid providers should be considered, and formal, continuous and tacit learning taken into account. Bridging and upgrading programs, combined with procedures for prior-learning assessment and recognition, would allow providers to respond to the new demands created by reforms, changing populations and new technologies. Curricular changes would put more emphasis on communication skills, interdisciplinary approaches and teamwork, as well as on the knowledge required to actively participate in

planning reforms and evaluating evidence. Workplace learning would allow contexts to be taken into account and encourage providers to take up work in different locations and facilities.

Accountability is also a critical issue. One means of ensuring accountability is through licensing and self-regulation. Adjusted to meet new demands for greater sharing of tasks, transparency and citizen participation, these methods still have an important role to play. Contracts negotiated with organizations representing providers constitute an equally important component. Some consideration should also be given to the lack of regulation in vast fields within the health-care sector, especially the work of unpaid providers. Citizens in general and patients in particular have a role to play, but as is the case with providers, it is important to ensure that their participation be meaningful. There are inevitable tensions in developing accountability mechanisms, tensions between those who manage and make decisions about the system and those who provide care, between patients and providers, and among providers themselves. These tensions need to be acknowledged and accommodated in organizing for change, and a balance achieved between standards and the need for flexibility that allows contexts for care to be taken into account.

Federal and provincial governments have played important roles in shaping both supply and demand. These roles are diminishing, however, with international trade agreements, regionalization, funding reductions combined with instability in funding over time, and privatization. There are few ways to track changes in health human resources at the national, provincial or local level. Before more effective planning for change can be undertaken, decisions must be made about the responsibilities at each level, and better data must be collected. Finally, fine balances between standards and standardization, and between planning and choices, must be established.

Perhaps most importantly, providers at all levels will be more open to positive change if they have secure employment along with appropriate working conditions, and if they fully participate in the decision-making process. They are also more likely to support change if it is based on a recognition of the specificity of health care.

For all these reasons, planning for care in ways that recognize the need for both change and stability is necessarily an unfinished, messy project.

Introduction

Shortly after the Commission on the Future of Health Care in Canada asked us to address the question "How do health human resource practices and policies promote or inhibit change?", the Canadian Institute for Health Information (CIHI) released its report on *Canada's Health Care Providers* (CIHI 2002). The Canadian Policy Research Networks have also just completed a substantial report summarizing the literature and issues related to human resource planning for physicians and registered nurses (RN) (Koehoorn, Lowe, Rondeau et al. 2002). Instead of repeating what is in these reports, we take as given the wealth of information they provide, and set out to complement them. Our emphasis is on identifying principles and approaches to planning for change, rather than on providing details or recommending particular solutions. Many of the latter are available to the Commission and to the general public. This paper suggests ways for assessing them.

Addressing the Commission's question means, in the first instance, setting out what kinds of change are at issue. This, in turn, means identifying both the kinds of change now underway and the options available for future change. The choices made about change necessarily imply choices about the nature of care. Only with a model for care in view can one assess whether health human resource planning initiatives are or will be successful. Hence, the attention devoted in the next section to a discussion of two distinct models for care. The extent to which one or the other model is adopted will shape the criteria by which the success of planning initiatives may be measured, and more specific recommendations assessed.

This is not to suggest that the criteria for successful planning can be simple or straightforward. Even with agreement on a preferred model for care, and thus on the desirable directions for change, health human resource planning is inevitably somewhat messy and incomplete. The contexts and dynamics of change, the tensions among criteria that are all compatible with the preferred model, and the very complexity of the vast field of activity known as health care all serve to complicate matters. It takes a wide diversity of providers to deliver health care. The rise or fall of any one group of providers, as well as changes in the relationships among these groups, will have profound effects on the kinds of care available. So too will the education of providers, both because it influences the skills and perspectives they bring to their work and because it is a vital factor in determining how many providers are available. Another important ingredient in health human resource planning is the nature of health care decisionmaking, regulation and control. This element has a significant impact on the quality and kinds of care and on the ways in which providers respond to change. Subsequent sections of the paper consider the current human resources for care and the relationships among groups of providers, education for care, and accountability and governance for care. The range of these influences on health human resource planning, as well as the tensions within and among them, all contribute to the inevitable messiness and incompleteness of this planning.

Before ending this section, however, a word on the kinds of change now underway. For at least a century, the history of health care in Canada has been one of constant evolution but, during the last decade, reforms in health care have been more dramatic. These reforms take four obvious forms. The first is the restructuring of hospital care to focus on acute, short-term, technology-dependent interventions. This development is in turn linked to a second,

the significantly altered care provided in long-term facilities. People in long-term care now have complicated medical needs that are often combined with mental health problems. With hospital and long-term facilities now focused on sophisticated medical care, more and more complicated care is provided at home. This third aspect of reform has, like the others, been made possible by developments in technologies and drugs, as well as by new ideas about management, responsibilities, costs, evidence and the nature of care. A fourth kind of reform is now receiving increasing attention—primary care and telehealth. All these reforms are taking place within significantly changed international and national contexts, about which more will be said later. These contexts shape many of the options available and the consequences of selecting among these options. In our view, many proposals for health human resource planning fail to take these contexts sufficiently into account.

This is not to suggest that current reforms and contexts tightly determine the options for future change. There are choices to be made in how care is best understood and pursued. We now turn to a discussion of contrasting approaches to the nature of care and to some of their implications for health human resource planning.

The Nature of Care

One approach to health human resource planning begins by recognizing the specificity of health care. Within this perspective, health care is not a business like the rest, and people working in health care differ in some significant ways from those employed in other sectors. Many of the differences may seem obvious—merely common sense—but they are important to identify because they provide the backdrop for any consideration of change and resource planning.

Perhaps most obviously, health care is about human life. This means that the risks, and consequences, cannot be assessed exclusively or even primarily in economic terms. Health care is also about individuals, each with their own specific complex of health issues and each shaped by particular cultural, social and economic contexts. Although it is clearly important to search for patterns in population health and for evidence about the efficacy of particular interventions, it is equally important to understand that such patterns do not necessarily play out in the case of a particular individual in a particular social context. Indeed, evidence in health care is primarily about what works relatively well, most of the time, for a significant proportion of people. Decisions about actual care, however, are necessarily made about individuals, who may be among those who do not fit the pattern. Health care needs and the methods of addressing them can never be precisely, scientifically established. As a result, the notion of being able to determine accurately what is the right thing to be done by the right person to the right person at the right time in the right place is simply inappropriate in health care. It requires a skilled practitioner to connect evidence to the specific case and some trust that this will be the case. "Whatever the technologies, medicine depends on the quality and credibility of interpersonal relationships between clinicians and patients and the organizational forms that support them" (Mechanic 2002, p. 466). The same applies to nurses and others who provide most of the daily care.

Moreover, care is an interactive process, with both the care provider and care recipient engaged in ways that necessarily have an impact on what can and will be done, as well as on the effect of what is done. The best science cannot predict exactly how individuals will react to treatment, because care is about a relationship among persons, each of whom brings his/her own attitudes, experiences and situation into the exchange. Nor is it a simple matter to determine what an individual provider will do in a particular case. The health of both patients and providers is determined by an array of factors, including their psychological, social, physiological, economic and physical situations, and so are their responses. And adverse events, including the process of dying, create particular needs for support and care in both patients and providers.

These specific characteristics of care have consequences for care work. They mean that providers must have knowledge of whole people and their particular contexts, as well as knowledge of the complex and different ways individuals respond to care. This requires a range of complementary skills that are either integrated within individual providers or possessed by different individuals working together to provide care. These specific characteristics mean as well that many of those providing care need not only have a range of skills, but also both the autonomy required to make judgements about the particular needs of the person requiring care and the possibility for collaboration or consultation on care. Evidence provides a guide rather than the rules for care. It is combined with experience and skill to create the expert

(Benner 1984). Autonomy, in turn, requires that providers take responsibility and be trusted to take responsible action. In addition, the nature of care means that care delivery involves a wide range of skills and locations. Providers typically view themselves as working in health care whether they perform the surgery or clean up after the surgery, whether they administer regional health authorities or book patient appointments in clinics, whether they are paid well to provide care in a hospital or paid nothing at all to provide care at home. And the research findings on the determinants of health support their view.

It would be wrong, however, to suggest that this understanding of health care is universally shared. Indeed, many reforms over the last decade have been based explicitly or implicitly on the assumption that health care is a business like any other and that employees within the system can be managed like any others. Such reforms have been adopted without evidence that they are appropriate for care providers and sometimes even without evidence that they have worked well in other sectors.

The amalgamation of hospitals mimics similar amalgamations in the corporate sector. Across Canada, more than 30 major teaching hospitals have recently been merged into giant organizations (Levine 2000, p. iii) and many small community hospitals have been closed or transformed. Markham and Lomas (1995) argue that there is no empirical evidence to demonstrate economic efficiency, quality or human resource gains with multi-hospitals, and some evidence suggests that costs may increase, flexibility and responsiveness to individual patients' needs decline, and relationships with employees deteriorate. Similarly, downsizing in health care services imitates a strategy used in other sectors, even though research on downsizing corporations indicates that a majority of those initiatives did not increase productivity, a significant number raised expenditures, and both morale and trust usually declined (Appelbaum, Everard and Hung 1999). Moreover, "efficiency" for one organization often turns out to be simply the off-loading of costs onto another organization, or to individuals and households where women typically have to pick up the burden of extra unpaid work. In the words of Janet Gross Stein (2001, p. 71), "efficiency is an intensely political concept".

"Between 1994 and 1996, 85 per cent of Canadian hospitals reduced their workforce by more than 10 per cent" (Wagar and Rondeau 2000, p. iv). The largest decrease was in management and executive positions, but 14% of maintenance staff and 12% of nursing staff also lost their jobs. Some of this reduction reflected new technologies that made both day surgery and complex home care possible, as well as a philosophical shift that defined care at home not only as better care but also a matter of public preference. Not surprisingly, with job reductions have come lower employee satisfaction and more conflict for those who remained (Wagar and Rondeau 2000, p. iv). New jobs in the community have not made up for the job losses in the institutional sector (Kazanjian 2000, p. 6), and little has been done in long-term care facilities to accommodate the transformed care needs. Meanwhile, the shift to home and long-term facility care has often meant a literal shift to care as a business, given that a growing number of these services are provided on a for-profit basis, as part of large corporations.

Human resource strategies have also been imported from outside the health-care sector, and these too have contributed to dissatisfaction and conflict. Total quality management practices have been among the most popular, in part because their emphases on participation and

teamwork, on improving processes and customer satisfaction, and on multiskilling and innovation all seemed to fit well with health care (Hassen 1992). However, in a context of cost-cutting, downsizing and the notion that health care is like any other business, these promises have not been fulfilled (Armstrong, Armstrong, Choinière et al. 1997; Lam and Reshef 1999). Instead of teamwork, there is often a fragmentation of care work into a series of tasks performed by the lowest-skilled and lowest-cost care provider, or by quickly trained unpaid providers, most of whom are women.

More managerial control, exercised especially through measurement techniques and care pathways, and the emphasis on the elimination of waste defined as extra beds or time not performing medical tasks, have been central features of the reforms. This assumption of control often conflicts with the traditional exercise of autonomous clinical judgement by health professionals. At the same time, flattened hierarchies tend to concentrate control at the top while delegating responsibility, with fewer resources, to those delivering care. One place where the conflict becomes obvious is in the use of information technologies. Computer-based patient records technology, for example, which was "initially sold as facilitating nursing work, improving coordination between nursing and medical activities, improving quality of care, and lowering costs, resulted in information overload and standardization, clerical tasks load increases, work organization rigidity, and expert autonomy negation" (Sicotte, Denis and Lehoux 1998, pp. 440-1). The main problem was identified as the failure to base technologies on the way nursing is practiced; in other words, the failure to recognize the specific nature of care work. Task measurement strategies borrowed from the private sector face similar problems, because of the assumption that a specific task will take the same time without regard to the particular patient or provider.

The consequences of these strategies are obvious in the high rates of illness and injury among nurses and assisting occupations. Health sector workers are over 50% more likely than other workers to miss work due to illness or injury. If the absenteeism rate of RNs were reduced to that of all other workers, the equivalent of almost 5,500 more nurses would be at work full-time each year (CIHI 2002, p. 87)—almost exactly the number of RN diploma and baccalaureate graduates in 1999 (CIHI 1999, p. 31). "There are high burnout rates, feelings of job insecurity especially among less experienced nurses, and work-family conflicts" (CIHI 2002, p. 87). Part-time and casual employment is much more common than in other sectors, and so is multiple job holding. These patterns too can be linked to managerial strategies that fail to take the specificity of health care into account. Noting that current management practices have produced growing job dissatisfaction among nurses, the Final Report of the Canadian Nursing Advisory Committee (CNAC 2002) is blunt on the urgent need to address issues such as workload, overtime, absenteeism, illness and injury, turnover, paperwork burden, front-line management by nurses, and chief nurse positions. It concludes that the need is "not to repair nursing, but rather to renew and repair the work environments in which nurses practice" (CNAC 2002, p. 25). In other words, it is about business practices that fail to recognize the specific characteristics of care work. The same holds for the working environments of others health care providers.

Of course, Canada is not alone in these developments. Management strategies and the accompanying technologies are shared globally, and so increasingly is management personnel. More for-profit involvement in Canada has also meant more foreign corporations involved in care.

Just as there is evidence of an international move towards defining care as a business like the rest, so too is there evidence of widespread problems in workplace design (Baumann and O'Brien-Pallas 2001). A study of nurses in five countries concluded that, in emulating industrial models, hospital management has created problems in work design that are contributing to an uneven quality of care, medical errors and adverse patient outcomes, as well as increased nurse dissatisfaction and high levels of stated intentions to leave the profession (Aiken, Clarke, Sloane et al. 2001; see also Burke and Greenglass 2000). Moreover, it is not clear how far international trade agreements will force Canada in this direction. What is clear, however, is that they set limits on how much we can experiment, and that failed experiments would be costly in terms of both actual expenditures and loss of control over care policy (Gold 2002; Sanger 2001; Pollock and Price 1999). It is also clear that for those negotiating and enforcing international trade agreements, health care is a business—and one that is growing rapidly. This international context must be taken into account when developing strategies for health-care reform, and thus for health human resources.

The more or less enthusiastic embrace by governments, here and abroad, of the care-as-another-business model does promote the increased participation by for-profit firms in health care funding and delivery. However, a distinction must be made between comparing the models and describing the public and private sectors. In this section, we compare models rather than describe sectors. Although our preference for the care-as-different model will be obvious, the main point of the section is to argue that the choice between models has implications for the kind of workforce that is required.

The care-as-different model stresses skill acquisition, continuous learning through practice, clinical autonomy, accountability through judgements based on evidence, as well as peer or (less often) citizen review, and collaboration through teams with complementary skills. The careas-another-business model emphasizes a division of labour based on quickly learned tasks, accountability through evidence-determined practices and managerial control, and substitution of lower-skilled for higher-skilled providers, as well as flexibility in assigning providers to tasks. The two overlap, of course. For example, both encourage more care by nurse practitioners and midwives, although their reasons differ. In the former model, these providers are supported because they focus on the whole person and spend more time on health promotion, while in the latter model they are supported because they are thought to be less expensive substitutes for physicians who would otherwise provide the care. The former entails an expansion of skills; the latter, a denigration of skills. Both also encourage evidence-based decision-making, although the former sees evidence as a means of giving providers more control and enhancing their care, while the latter sees evidence as a means of controlling providers and making sure the least expensive care is provided. Each broad model also encompasses competing perspectives about who should do what. Many physicians, for example, understand primary care in terms of a medical model, with physicians assisted by others, while RNs tend to favour a more collaborative approach with nurses playing expanded roles.

These necessarily brief and simplified descriptions are intended to demonstrate the importance of models and contexts in structuring care. Before planning for change begins, the models need clarification, and decisions must be made about which model prevails, and to what extent it prevails. Such decisions are in turn linked to those about the nature of care to be

provided, where, and within what kind of structure. The introduction of a national public homecare or palliative care program, for example, would mean that more resources are required, and the model guiding the program would determine how much of this care is provided by RNs, licensed practical nurses (LPN) or other paid and unpaid providers, educated for the care or not.

The Human Resources for Care

The health-care labour force is highly organized, with 62% belonging to a union and an additional number represented by professional organizations (Akyeampong 2001, p. 52). This workforce is highly structured along complex, hierarchical lines, although these structures have been flattened to eliminate many middle-management positions in recent years, and some teamwork has always been part of care delivery. Doctors still define what is medically necessary but their authority is increasingly challenged by managers, patients and other providers. More than 30 occupations and professions are regulated under various pieces of provincial or federal legislation (Koehoorn, Lowe, Rondeau et al. 2002, p. 11), but they account for a minority of the workforce employed in the sector and there are no regulations covering unpaid care. Moreover, there is considerable diversity among jurisdictions in terms of rights for individual providers, unions, and employers. As well, there is considerable diversity in rules and practices linked to different work locations. Equally important, there are often significant differences between what people actually do and what the regulations or policy documents say they do. Home-care providers and hospital employees, for example, operate under different regimes, as do doctors and nurses working in the same hospital. Nurses in the North of the country have a wider range of duties than those working in the South, and care which in a facility can be provided only by a regulated provider is often provided at home by someone with little or no formal training.

These structures mean that the organizations representing providers must be involved in change, and that there is a wide range of organizations and regulations to take into account. While these organizations press for their members' interests, it does not necessarily mean that they resist change or fail to take patient needs into account. Research on a major hospital strike, for example, demonstrates that the predominantly female employees were motivated primarily by concerns for their patients (White 1990), and research on physicians indicates that they were much more open to change before recent reforms than after (Woodward 2000, p. 14). It is, then, the kind of change that is at issue, along with the speed of change and the involvement of providers in decision-making about change.

The health sector encompasses a wide range of jobs. Twenty per cent of paid employees in this sector are nurses. Along with doctors, who remain the most powerful group in care work, nurses have received the most policy and research attention. Some of the others are dentists, social workers, therapists and technologists, but a significant proportion is accounted for by housekeepers, laundry and clerical workers, trades people and dietary aides. The *Canada Health Act* recognizes that everyone employed in a hospital is necessary to care. More recently, however, these support services have been equated with hotel services and contracted out, explicitly rejecting notions of their specificity. Yet, research shows that "the technical sophistication of hospitals and the responsibilities of support workers require a different set of skills and training than would be required in a hotel", especially as care becomes more complex (Cohen 2001, p. i). Moreover, the work is integral to that done by recognized professionals and makes it possible for them to do their jobs. The farther care moves from the hospital, the less it is provided by regulated professionals and the more likely it is part of a business. However, B.C. research indicates that support work is also critical to the health of those cared for at home (Hollander and Tessaro 2001). Health human resource planning, then, must not only take support

workers into account in terms of numbers but also in terms of training and regulation. This is particularly the case as care moves away from hospitals and away from regulated professions.

The health-care labour force is also highly gendered. More than 1.5 million people work in the paid health and social services labour force, and more than 80% of them are women (CIHI 2002, p. 40). Women account for a similar proportion of unpaid primary care providers, although their actual numbers are more difficult to determine. We do know that those providing care as family, friends and volunteers significantly outnumber paid providers, and that paid services complement unpaid ones, not the other way around (Armstrong and Kits 2001). Although women have moved in increasing numbers not only into the labour force but also into traditionally male-dominated health care jobs, and some men have moved into female-dominated work, nursing and support occupations remain women's work and so does care at home. Indeed, the National Forum on Health (1997, p. 19) used the term "conscripted" to label the requirement that women provide unpaid home care to household members. This means that many women providing paid care are increasingly expected to provide unpaid care at home as well.

Even without a disabled child, frail parent or ill spouse at home, women are more likely than men to experience conflicts between family and paid work. Given that most men still earn more than most women, women are also more likely to be tied to their spouse's place of work. However, with their partners employed and with changing values about parenting, men too are less willing to work hours that make their home life difficult. Moreover, women are socialized to feel responsible for care, and struggle hard to make up for the growing gaps in the system in ways that both make the consequences of cutbacks less visible and undermine their health. Equally important, they are expected to provide care. Delivery systems are based on this expectation. As providers of most of the hands-on care, women are held responsible for care by their employers, patients and professional organizations. Similarly, those providing care at home, without pay or training, are also held responsible for their family members' care. The female domination of this work has contributed to the invisibility of many skills involved in care, as well as to the invisibility of the paid and unpaid care work now being done by women to make up for the gaps left by health care reforms (Morris 2001). These patterns have significant implications for pay, workforce distribution and care location, as well as for openness to change. Policies to promote change need to take both paid and unpaid care, as well as the gendered nature of the workforce, into account (Armstrong, Amaratunga, Bernier et al. 2001).

The health-care labour force is also aging. As a result of women staying in the labour force and of reductions in both hiring and education, the average age of those working in the health sector is well over 40 for the first time. This means that many are finding it increasingly difficult to work under current conditions. Many are near retirement or contemplating early retirement. Equally important, intensified working conditions limit their possibilities for sharing what they know with new recruits on a daily basis. This means not only that planning must contemplate replacements for the large numbers soon to retire, but also that strategies are required now to ensure that those currently employed stay until retirement age and share what they know during that time (Schetagne 2001, p. 20; Kazanjian 2000, p. 6; CNAC 2002, p. 37). It means as well that there are important differences within each occupational group that need to be considered in planning. Moreover, cutbacks throughout the last decade mean that there is an age gap in the labour force, with very few people between the oldest and youngest groups.

In addition, resources include those who are currently unemployed or underemployed in care. There are people who have already left because they were laid off or found working conditions too difficult, and others who have seen their hours reduced to part-time or have been shifted to casual work. There are also those who are employed but denied the opportunity to use the knowledge and skills they possess. They constitute a reserve that could be drawn back into care if conditions are changed to offer secure, full-time employment as well as enough support and time to provide appropriate care. Foreign-trained providers represent another reserve, one that we are increasingly tapping. However, this means that other countries are paying for the educated labour force we recruit and may be left without the resources they require. Furthermore, there are additional questions about the culture of care learned in other countries and the regulations regarding professional practice in Canada.

Finally, the nature of the labour force is linked to the nature of the required care. Care needs are changing. The most talked-about change is the aging of the population. There are intensive debates about its impact. Some warn of catastrophic consequences, while others maintain that seniors today are healthier than their ancestors, and that the costs of care are in many ways created more by the care we provide than by inevitable demands of aging (Canadian Health Services Research Foundation 2001). From this latter perspective, changes are required in the kind of care provided rather than primarily in the amount of resources dedicated to care. One strategy, which may reduce costs while increasing comfort and dignity, would be to reallocate some resources to palliative or hospice care. In any case, more geriatric services will be required. More people with severe disabilities are living longer, as are others with chronic diseases. Some of these persons are demanding more control over their providers, and all need some care. More of the population has migrated from Asia, Eastern Europe, Latin America and the Caribbean, and more of the population has Aboriginal origins. At the same time, there are fewer social supports provided by government, fewer children around to support family members in their old age, more women in the labour force, and fewer spouses as a result of higher divorce rates.

Demand is also created independently of these demographic changes. The growth in advertising for drugs and treatments on traditional mass media and the Internet helps shape the demand for care, sometimes in inappropriate ways. "The result of this deluge of information on the supposedly pervasive risks to personal health is that people feel much more vulnerable" (Petrie and Wessely 2002, p. 690). All these developments have implications for the structure of care delivery and the kind of care required, and thus for the kinds of change providers will have to address.

To conclude, a successful health human resource strategy must include employer-union-professional association cooperation; recognition of the diversity of care settings, populations needing care and occupations in health care; acknowledgement that people in unregulated occupations or providing unpaid care for family, friends and neighbours are vital to the system; gender-sensitive approaches that take explicit account of the competing demands placed on women in particular; initiatives to retain older health-care workers and help them share their experience with entrants to the sector; efforts to make fuller use of those who are underemployed in health care, who left what they deem an unattractive field or who have foreign credentials we could better recognize; and ongoing attention to shifts in the population needing care.

Educating for Care

The history of education for care is in part a history of increasing specialization, years of formal education and continuing studies (CIHI 2002, pp. 18-29). At the same time, however, a growing number of care providers are quickly trained or have little or no training, especially on-the-job training. While most formal training happens in public institutions, there is also some formal workplace training. Approaches to education vary not only over time and among jurisdictions, but also with approaches to care. Planning for care involves the consideration of all these.

A central issue in planning for the future is who should receive formal health care training. Although there is a consensus that health is shaped by a host of factors, including the physical and social environment, health care is often treated as a determinant separate from the rest. Thus, those defined as health care professionals receive specialist training while those involved in ensuring the environment for care is safe have seldom been required to take courses on health. Defining support functions as hotel services reflects this approach, but there is at the same time a growing recognition that these providers too require particular skills. For example, research from Montreal demonstrates the importance of hospital cleaners in disease prevention (Messing 1998). and hospitals in B.C. prefer to hire cleaners who have completed a three-month community college program (Cohen 2001, p. 6). Similarly, research on clerical staffing concludes that inconsistencies and the lack of training standards undermine both efficiency and quality of care. leading to recommendations for training programs that "close the skills gap" (Hospital Employees Union et al. 1999, p. 13). Even though a great deal of care is now provided at home by family, friends and volunteers, there is little formal training and even less consistency in addressing this skills gap. The lack of training, like that in some paid support services, reflects both the invisibility of the work and the assumption that women who do the majority of the work are natural caregivers. The health consequences for providers and care recipients are often negative. At the same time, the notion that health care is a business like any other means that managers in health care are not required to have health-care education. Indeed, some come directly from other sectors. For Henry Mintzberg, arguably Canada's foremost management expert, the cult of measurable efficiency has had immoral consequences. He illustrates his position with reference to health care, where "We're starting to find out what we lost, but it took years to find out. They [i.e., managers who use cost-benefit analysis but lack substantive knowledge of health care] knew what they were saving instantly' (quoted in Swift 1999, p. 19).

The need to consider education for the entire range of people working in health care is linked in turn to education for teamwork. Teamwork has a long tradition in this area, especially among nurses. Today, nursing shortages, efforts to cut costs and new management philosophies are encouraging strategies that integrate more Licensed Practical Nurses, care aides and others into care teams (Canadian Practical Nurses Association 2000). Similarly, there is renewed interest in promoting teams for primary care, involving nurse practitioners, midwives, therapists, social workers, pharmacists and others. This could mean strategies to train existing staff by upgrading skills and preparing for teamwork. The Hospital Employees Union, for example, maintains that "support for team nursing and increased practical nurse education will go far in alleviating those pressures and enhancing the quality of bedside care" (Hospital Employees Union et al. 1999, p. 3). Bridging programs would not only allow providers to acquire appropriate skills, but also permit providers to move from one category to another without undermining skill requirements.

A focus on teamwork could also include more interdisciplinary and shared courses in initial education programs, as well as more training on working in collaborative teams.

There is concern, however, that these strategies could lead to substitution rather than complementarity, and serve to reduce education and training periods instead of recognizing that all providers need a solid background in health. There is also concern that such courses would take time away from critical skills training. There is concern as well that one occupation and care model would dominate, with physicians and their bio-medical model in particular viewed with suspicion by some. In Ontario, midwives opted for a separate university program in part because they feared medical dominance. Finally, the costs of ongoing training and education are also an issue, particularly for women, few of whom have the time or the money to take courses outside their paid work hours.

Shared courses, interdisciplinary courses and training in collaborative teamwork are not the only suggestions in course content for providers that would help them adapt to change. Flexner's famous report on health care, released early in the twentieth century, recommended that humanities courses would promote communication with patients and other providers. Only small progress has been made in this direction, in spite of many more subsequent inquiries supporting this development. Communication skills have received more attention and become increasingly important with a multicultural and highly educated population. The Internet too has contributed to the need for these skills, as has the focus on informed choice (Mechanic 2002). Courses on the structure of the health-care system have also been suggested, especially in these times of rapid change. With inequality, culture, sex, and gender now recognized as determinants of health, these subjects too warrant attention. And the aging of the population, combined with a shift to community and palliative care, means more emphasis needs to be placed on care for the elderly and care at home. A shift to health promotion strategies, along with more evidence-based practices, is also on the agenda. The problem here, of course, is that there is limited time in any program, although these issues could be addressed by integrating them into all course materials. Such material may also be uncomfortably placed within a curriculum that privileges certain kinds of evidence (Muzzin, 2001). Another partial solution would be to make greater use of procedures for prior-learning assessment and recognition.

Additional skills and content could be introduced in workplace education programs, with a focus on the particular needs of the location and population served. Workplace education can help providers learn about new technologies and new patient needs. Requiring that a certain proportion of the payroll be dedicated to education, as now happens in Quebec, could encourage this (Schetagne 2001, p. 20). Research on physician education suggests that the location of educational institutions also matters. People trained in rural areas are more likely to work there. The same may be true for those who receive much of their training in home care or long-term care facilities.

Teamwork is not exclusively or even primarily learned in a classroom. Indeed, much of what providers need to know is learned tacitly, as they work with others and outside formal learning structures. In addition, the rapid changes in health-care organizations and the continual introduction of new technologies mean that learning must be a regular aspect of all providers' work. Some professions require their members to take continuing education courses. Some are

considering ways of assessing skills on an ongoing basis. Some employer-union contracts build formal learning programs into the workplace. But there is little consistency in continuing education policies across health-care occupations and little research on their effectiveness. Little attention has been paid to educating those in long-term or home care for their new demands. Moreover, the move to care in isolated households means that there are few opportunities to learn from and share with others unless there are organized attempts to create such opportunities.

Along with the emphasis on continuing education has come a renewed interest in tacit learning and mentoring. At the same time, it has become increasingly difficult for experienced providers to share what they know or learn new ways of practicing. This is mainly because a business model focused on raising short-term productivity means that workloads have increased in ways that leave little time or energy to share or to learn. Research on nursing leads to a recommendation for greater flexibility in allowing older staff to work shorter hours while retaining their permanent, regular positions. "This flexibility for older staff would ensure that they continue to work and would allow proper mentoring of the new recruits by senior RNs. improve working conditions, and enhance quality of care. Such a policy requires sustained collaboration between employers and unions" (Kazanjian 2000, p. 6). Similarly, a report on skill shortages recommends that employers negotiate clauses in collective agreements that allow a gradual move to retirement while providing a "period during which the transfer of knowledge to younger workers could be accomplished" (Schetagne 2001, p. 20). Of course, this approach would also mean more time for younger workers to learn, and it may conflict with the "business-like" emphasis on measurable tasks and cost-cutting in care. It would allow older workers to learn from younger ones. Although the focus in tacit learning is usually on individuals, groups also learn and do so within specific organizational contexts that influence how they learn. Examining the introduction of new cardiac surgery technology, a U.S. researcher has concluded that "It may even be counter productive to encourage organizations to quickly adopt new technologies that require tacit knowledge for improvement and present a need for independence among users. This is because it is hard to explain how to improve teamwork and coordination" (Anonymous 2002, p. 26). Instead, alternative means such as participation in other, more experienced teams must be developed in order to transfer knowledge.

New areas such as telehealth also mean new requirements for learning. Currently, phone service lines rely on experienced nurses trained to provide other kinds of care. Assessments have focused more on whether these services reduce the use of emergency rooms and doctors' offices than on the kinds of skills required (Lattimer, Sassi, George et al. 2000). Other forms of telehealth have received even less assessment focusing on the skills required or the full range of patient needs. For example, there is little research on what happens to social supports when patients receive care through telecommunications systems.

This still leaves the question of how learning is assessed and how graduates are recognized. There are wide variations across the country in how people move from education to practice and few ways of tracking movement after they do graduate. There have been calls for a single standard in education and in admission to practice in some fields, combined with a single registration number that would make it possible to track practitioners. This would require much more coordination among jurisdictions and with organizations representing providers. It would also involve the assessment of costs and benefits. Standardization is not supported by all. It could

undermine the diversity that has developed in response to regional differences in needs and it could promote competition among jurisdictions for providers.

Less attention has been paid to prior-learning assessment and recognition. This procedure enables us to put to use knowledge and skills acquired through experience or in other countries, while benefiting from the diverse sources of such knowledge and skills. Bridging programs too could help fill the demand for a range of other providers with the skills needed for care.

If the future holds more long-term and home care, more primary-care teams and telehealth, more technologically sophisticated interventions as well as more health promotion, then education programs within and outside the workplace will need to provide an environment that enhances the kinds of skills and relationships required for these quite different forms of care. Given that the future necessarily involves serving a more culturally and economically diverse population, and a gendered one, education programs must prepare providers to be sensitive to this diversity.

Accountability and Governance in Care

Debates about accountability in health care are as old as the Hippocratic oath. For much of the twentieth century, the emphasis was on ensuring that those defined as professionals had the necessary skills and adhered to ways of practicing determined by their peers. Policies on scope of practice linked to licensing, certification and registration² reflected what professions defined as required skills. Indeed, the very definition of a profession was, to a large extent, based on the notion of self-regulation and an acquired body of theoretically based knowledge. The history of the twentieth century was also a history of processes whereby more occupations successfully sought professional status, gaining them both more recognition and more control over their work (Johnson 1972). From the 1960s onward, claims that professions were more about self-interest than protection of patients, combined with an increasingly educated public, led to demands for more involvement by patients in care decisions and more citizen participation in the regulation of professions (Blishen 1991). In response, lay members were added to professional regulatory bodies, their processes were made more transparent and some patient rights were recognized (Flood and Epps 2001, p. 4). More recently, task-based regulatory models have been introduced to limit licensing to tasks considered to involve potential for serious harm. There is an increasing interest in formal skill maintenance and testing, as well as in surveys of patient satisfaction.

Today, the emphasis is on evidence-based practice, on cost control and on greater flexibility for managers in assigning tasks. Comparable "calculative technologies make it possible to render visible [activities] of individuals, to calculate the extent to which they depart from norms of performance and to accumulate such calculations in computers and files and to compare them" (Peter Miller, quoted in Exworthy and Halford 1999, p. 5). Accountability often means counting, and strategies such as those that base physicians' income on a fixed rate for each patient signed up for the service (capitation and rostering) seek to ensure doctors are financially accountable for care. Much less attention has been paid to the unregulated occupations, although their responsibilities and their compensation are usually delineated in contracts. Unpaid providers seldom face any kind of formal accountability mechanisms.

Accountability, then, is a complex term with quite different meanings. There are debates about whom providers are accountable to, for what actions, and through what processes. Are they accountable to their peers, to their patients, to their employers, to citizens who pay taxes, to governments that decide policies, or to all of these? Is accountability about money, practice, opinions, responsibilities, and relationships with colleagues? Is it about reporting and regular assessment, self-regulation and complaints, regular upgrading and education? There are also debates concerning how rigidly lines between providers' scopes of practice should be drawn.

There are no simple answers to these questions, but rather tensions that must be balanced in determining strategies that will make it possible for positive changes to happen.

First, there are tensions between managers/employers/governments and providers over control and the nature of their practice. Managers and governments are promoting a flexible labour force in ways that imitate similar practices in business. Multiskilling would allow easy deployment and would mean new approaches to scope of practice, allowing more providers to do currently restricted tasks. And task division would allow both the substitution of some workers

for others, freeing the most skilled for specialized tasks, and faster training for tasks defined as least skilled. The farther care moves away from hospitals and from regulated professions, the more flexibility is promoted.

Against this position are those who support collaborative, integrated services based on a recognition of specialized, complementary skills and the need for comprehensive patient care, as well as on the desirability of self-regulation. For example, nursing organizations argue that care in long-term facilities requires regulated providers and skill upgrading courses to accommodate new care needs and changing technologies. Among both governments and provider groups, there are also disagreements about the degree of specialization required. Registered Nurses, for example, have long been divided over whether or not a B.Sc.N. degree should be the minimum educational requirement. This continuing debate reflects, in part, different views of care.

There is considerable evidence supporting the need for regulation and for highly skilled workers, especially in terms of care by Registered Nurses (CNAC 2002, p. 24). Licensing rules linked to scope of practice do help protect patients and providers. Indeed, there is a case to be made for extending regulations to emerging categories. Pharmacy technicians provide just one example (Peartree Solutions 2001). Yet, variations across the country in terms of how scope of practice is defined and who is regulated, as well as variations within provinces in terms of who does what, suggest that the lines cannot be rigidly drawn. So does the overlap in areas of services covered. There is evidence indicating that nurse practitioners and midwives can safely do some of what doctors do. There is much less research on the impact of multiskilling in health care or on the use of other providers. Again, pharmacy technicians provide an example. "[T]here is little disagreement that the organized use of properly trained unlicensed personnel can be beneficial to organizations, patients, and health care practitioners" (Backman 2000, p. 33). What is required is a balance between skill protection and flexibility.

Tensions between managers and providers arise not only over skills but also over control. Managers seek both to have greater control over what providers do as a means of planning and cost cutting and to have providers in general, and physicians in particular, take more responsibility for cost control. Bed reductions and care pathways are examples of the former; capitation and rostering of the latter. Salaries for doctors represent a middle ground between capitation and fee-for-service, with cost control delinked from procedures or number of patients. and with more potential for choice based on need. At the same time, providers maintain that peers are the only ones in a position to assess their care and that autonomy is required to ensure that they can use their judgement to apply evidence in an individual case. Some see autonomy as integrally linked to payment methods. Support workers too argue that they need flexibility in their schedules to allow them to decide on the quality required in particular cases. Moreover, trust is a critical and necessary part of the system, because providers cannot be under constant surveillance and because rules cannot be developed to cover every case. Here, too, tensions need to be balanced rather than addressed by choosing one approach over the other. What is clear is that when and to the extent that providers and their organizations participate genuinely and fully in designing and implementing change, they are less likely to resist it. More importantly, they contribute to better decision-making about whether change should occur, how quickly and in what directions (see, e.g., Carrier and Tolbert 1998, esp. pp. 20-23, 28).

Second, there are tensions between patients and providers. Many, but not all, patients want to influence health care decision-making and gain some say over their own treatment, while many providers seek to maintain the autonomy necessary to direct patient care based on their knowledge. Policy-makers are encouraging patient and citizen participation in order to promote the appropriate use of cost-effective services, reduce dependence, improve responsiveness and increase understanding or acceptance of policy decisions (Coulter 2001). Participation can be one means of addressing the growing demand for services. Patient surveys, decision aids, citizens' juries and patient bills of rights have all been offered as ways to improve care and keep providers accountable.

Critics suggest that patients are often not in a position to judge, because they lack the knowledge, time or inclination and because their participation may reinforce prejudices against specific groups such as homosexuals or the mentally ill (Rosén 2001). Most patient assessment is summative rather than formative; that is, it grades the care rather than offering means to improve it. Administrative data on performance also have severe limitations, creating the impression of quality assessment while offering data that are often of little use in distinguishing among services (Naylor 2002). A U.S. study of hospital report cards found "ratings poorly discriminated between any two individual hospitals process of care or mortality rates" (Krumholz, Rathore, George et al. 2002, p. 1277). The *Maclean's* ranking of hospitals is similarly "limited to simple parameters that cannot reflect the multidimensionality of treatment-effectiveness indices or health-care environments as these exist in the real world" (Page and Cramer 2001, p. 297).

Moreover, patients may have few choices among services, especially in rural areas, so data may simply make them anxious about care while blaming providers for problems that are the result of the system rather than of a particular provider's practice. Indeed, various forms of participation may be primarily used to legitimate rationing decisions and shift blame. Patient participation makes no sense if there are no means for the system to respond, and is too often based on a "consumer" or "market" model of care that defines quality and access exclusively in terms of individual choice and purchasing care. Equally important, a strategy focused on patient demands ignores the ways the private, for-profit sector seeks to increase demand as a means of expanding sales. Direct-to-consumer advertising for prescription drugs provides just one example (Mintzes, Barer, Kazanjian et al. 2002).

There is a distinction to be made between individual patient participation in their own education, diagnosis and treatment, and the more collective, citizen participation in health care decision-making. There are also distinctions to be made between consultation and decision-making, and between regular participation and occasional input. The case has successfully been made for the ongoing involvement of citizens on regulatory and governing bodies, where they gain experience and knowledge while bringing their own expertise to bear on the process. How they are selected (by appointment or election) and whom they represent (themselves or particular groups) are more contentious issues, as is the decision-making process itself. So is citizen consultation on what services should be provided for whom. While citizens serving on regional boards decide broad policy on services, providers still usually retain the right to define what is needed in the particular case, including what is defined as medically necessary. Similarly, there are issues related to the accountability of individual practitioners and those related to their participation as a group in decision-making. In addition to promoting job satisfaction,

their participation in management and governance allows the system to benefit from their expertise and encourages providers to be more open to change (Backman 2000, p. 28). Critics warn, however, that such groups mainly defend their own interests, and some fear physicians in particular will dominate. What needs to be balanced here is not only providers' judgement and patients' or citizens' rights, but also the responsibility of policy-makers to decide, as well as take responsibility for their actions, with the responsibility and rights of patients.

Third, there are tensions among providers. Some doctors have fought hard against the licensing of midwives, Registered Nurses against the use of Licensed Practical Nurses, and so on. In doing so, they are protecting not only their self-interest but also (their perceptions of) the quality of care provided under current conditions. For example, the literature suggests that care quality in hospitals and long-term facilities is directly related to the proportion of RNs: the higher their share of the work, the higher the quality of care (Shamian and Thomson 1999). Furthermore, "the ability of nurses to practice their profession according to the professional standards and values is a key determinant to their satisfaction and commitment" (Backman 2000, p. 28). Breaking down care into tasks reduces their capacity to provide comprehensive care, across the full spectrum of caregiving. Employment insecurity, combined with the effort to make care a series of easily learned tasks and declining autonomy are thus important factors in the resistance to redefining scope of practice.

Yet, a move toward greater flexibility and teamwork need not require abandoning scope of practice regulations or undermining provider quality. It is possible to organize comprehensive care by expanding the group involved in care and by basing care on their combined skills and collaboration. It does require appreciation of the skill sets of other providers and a sharing of power. Such a strategy can simultaneously ensure quality while allowing a wider range of providers to participate and to share both knowledge and responsibility. Working in teams also makes daily work visible, thus encouraging accountability of providers to those who know about quality care. However, this kind of strategy requires employment and income security, as well as recognition of the need for training and the importance of skills. And teamwork cannot be the only solution, because teams are difficult to organize or inappropriate in some areas.

Building accountability into change requires recognizing that accountability is about more than finances, and that finances involve values. It is also about the quality of care in both the short and the long term, and about trust in both the providers and the system. It is difficult to base accountability for care on a market model of competition and choice. In a market model, too much is short-term and confidential, and too little is secure and continuous. If care is to be integrated, there will be too few organizations available to make choices among competitors meaningful. And the stakes are much too high and the means of assessment much too limited to base accountability on competition, even if there were enough providers to compete. There are tensions in all accountability strategies that need to be accommodated, and this accommodation means continuous collaboration among the full range of organizations representing providers, employers, patients and governments. Moreover, providers are more likely to be open to new accountability processes if employment is secure.

The Complexities of Planning for Care

Social, economic, political and demographic factors establish contexts for health-care needs and demand. So do assumptions about the nature of care and how it should be delivered, because these assumptions shape what kind of care providers are required.

If the emphasis is on the specificity of care, then collaborative teams based on the recognition of complementary skills will be promoted, although multiple models will be contemplated in order to accommodate the quite different needs of different populations and the variety of practice strategies. This means continued emphasis on specialized skills and scopes of practice, while allowing for more occupations such as midwives or paramedics and more overlaps in scope of practice. Emerging occupations such as pharmacy assistants and new assignments such as telehealth would require regulation and specific training. Those working in long-term care facilities and home care would participate in upgrading programs to meet new demands, and bridging programs would be encouraged. Attention would be paid to training support workers and unpaid providers. It would also mean the return of some middle managers that are trained in the specific fields they direct, and less emphasis on physician care in some areas. Equally important, providers and the organizations representing them would participate in decision-making about change and play an important role in developing accountability mechanisms.

If the emphasis is on business practices and costs, then teams based on much more flexible scopes of practice and limited training for specific tasks would be the norm both inside and outside facilities. Accountability would emphasize data collection, financial factors and managerial control. Management training would focus on business skills, not health-care skills. Patient participation would be encouraged, and so would public measurement of outcomes as means of promoting competition and results. Contracts would be the way to specify care, rather than relying on scope of practice and self-regulating professions.

In addition to making assumptions about care, it is also necessary to decide about the role various levels of government play in planning, in education, in accountability and in employment. The federal government now influences health human resource planning through data collection, support for research and teaching, the principles governing the financing of most public health care, the provision of Aboriginal health care and health protection measures, and immigration policies. International agreements, signed by the federal government, as well as other pressures such as security concerns following September 11, place some restrictions on the government's right to decide who enters and leaves the country, and what kinds of services are provided within the country. Other federal initiatives, such as support for primary-care reform, also influence resources. But these different aspects of federal involvement are not well coordinated with each other, and there is little systematic planning for resources at this level.

Although provinces and territories are more directly involved in human resource planning, they too lack systematic and coordinated planning mechanisms. Indeed, the current Ontario and B.C. governments have eliminated their healthcare labour adjustment agencies. And reforms have reduced the control they did have in some areas, as have federal reductions in funds and changes in funding. "Since almost all jurisdictions have decentralized health-care delivery by regionalizing or by implementing similar measures of devolution, at least in so far as care

delivery by non-physician providers is concerned, government no longer possesses as many direct policy levers that can be applied to employment and/or deployment issues" (Kazanjian 2000, p. 10). The move to allow more private educational institutions and health services also further limits government planning, as does the continuing right of the regulated professions to control educational requirements, the absence of regulation for other health care providers, and international trade agreements.

Currently, there are only limited common data on providers across the country, and even more limited centralized information on education, qualifications and admissions to practice. A variety of reports have suggested that planning must begin with the systematic collection of such information and a means of tracking where individual providers go (e.g., Backman 2000; Kazanjian 2000; CNAC 2002). With such data, there would at least be a better understanding of current resources, their allocation and skill mix. These reports have also recommended a national organization to "identify strategies and methods of supporting better human resource planning" (Backman 2000, p. 81). This could include support for more consistency across jurisdictions in terms of education for and admission into practice. The 1995 Agreement on Internal Trade (AIT) promises both greater freedom of movement for members of regulated professions and a movement towards more common standards for entry and practice. Other occupations in health are not part of the plan. However, provinces and territories wish to retain at least some control, as do provider organizations, not only in order to protect their own interests but also to respond to local needs and resources. Moreover, if standards are the same and movement is easy, each jurisdiction will compete with the others for labour. At the same time, though, the female domination of the labour force may contribute to make providers less mobile.

There are basically three sources of provider supply. One is the existing supply, including both persons currently employed, full or part-time, and those unemployed, or those trained in health care but employed in other areas. Is there a shortage of skilled providers or a shortage of good jobs for skilled providers? The high injury rates, combined with the large numbers of persons not employed full-time in their profession, suggest the latter. U.S. research indicates that physicians' job satisfaction and willingness to practice decline as their control is reduced (Williams, Conrad, Scheckler et al. 2001). The same relationship almost certainly holds in Canada. Recall that a major survey of hospital nurses in several countries, including Canada, links high levels of job dissatisfaction to the current shortage (Aiken, Clarke, Sloane et al. 2001). Appropriate working and educational conditions, as well as secure employment and trust, are essential ingredients to attract providers back into health care.

Another source of supply is new recruits. There does not appear to be a shortage of people willing to enter education programs, although rapidly rising tuition fees seem to be changing who is entering programs and what kind of work they seek when they leave. This is especially the case for medical students, who are increasingly likely to come from households with high socio-economic status (Kwong, Dhalla, Streiner et al. 2002). Students in Ontario medical schools, where tuition fees have recently climbed steeply to become the highest in the country, also anticipate higher indebtedness upon graduation, at \$80,000 for those entering in 2000 as against \$57,000 for those who entered in 1997 (Dhalla, Kwong, Streiner et al. 2002, Table 3). Meanwhile, graduates are flocking to residency openings in surgery, leaving 109 openings in the less lucrative field of family medicine unfilled in the initial "matching" exercise (Sullivan 2002).

There does seem to be a shortage of those willing to work in areas now requiring new recruits and a shortage of good jobs. Secure employment would undoubtedly encourage retention in these areas. So would the creation of more employer-sponsored training opportunities. Research on physicians in Ontario demonstrates that market solutions are unlikely to solve the location problem (Blomqvist and Tissaaratchy 2002). The high proportion of women, combined with changing male attitudes towards work and family responsibilities, means that more organizational accommodation to family needs is also required.

The third source of supply is foreign-trained providers. This raises critical questions about appropriate skills and about relying on other countries' resources. There is little systematic assessment of this source, so it is difficult to suggest strategies beyond research on consequences and options. One advantage for Canada in employing foreign-trained providers is that they bring needed language skills and cultural sensitivity to serving segments of our diverse population.

Demand is linked not only to the higher education of the population and access to the Internet, but also to advertising designed to increase demand, especially for prescription drugs. The growing proportions of elderly, of people with chronic diseases and disabilities, and of people with capacity in neither French nor English also affect demand, as does the shift to long-term care facilities and home care. This means a changed emphasis in education programs, along with more integration of education into workplace activities.

To sum up, federal and provincial governments have played important roles in shaping both supply and demand. These roles are diminishing, however, with international trade agreements, regionalization, funding reductions and instability, and privatization. There are few ways to track changes in health human resources at the national, provincial or local levels. Before more effective planning for change can be undertaken, decisions must be made about contributions at each level, and better data must be collected. And fine balances between standards and standardization, and between planning and choices, must be set.

Conclusion

An array of proposals for health human resource planning has been made. And more are being completed for the Commission. The challenge is to develop the means to assess them, rather than to add another one to the heap. This paper is intended to set out the kinds of questions that need to be asked about such work. While these questions are raised throughout the paper in more detail, they can be summarized as follows:

- 1. What model of health care guides the analysis and recommendations? Is health care understood as a business like any other or is it understood as different, with its own specific kinds of values, personnel, relations, work organization, decision-making structures and demands?
- 2. How are the global, national, regional, local and institutional contexts taken into account?
- 3. What social, economic, cultural and other demographic components are included in the understanding of the changing demands for care and how will the proposed strategies balance or otherwise address these demands?
- 4. Is the entire range of paid and unpaid providers considered, and are their current work structures recognized and the relationships among providers, as well as their specific characteristics, addressed?
- 5. How is education understood and does this understanding encompass formal and informal learning for the full range of paid and unpaid providers? Is knowledge sharing seen as a critical aspect of daily practices, and continuing education as an integral part of workplace culture?
- 6. How is accountability defined and does this definition extend beyond finances, scopes of practice and certification regulations for some providers? Who is accountable to whom, for what, through what processes, for what time period, and on the basis of what evidence? Are the tensions between managers/governments and providers, between patients and providers, and among providers considered? Is employment security considered alongside flexibility? How much influence do providers affected by decisions have over their content and timing?
- 7. Does planning for care recognize the tensions, diverse approaches and complexity inherent in health care, and the need to balance conflicting pressures in different ways, in different places, and at different times? Does it recognize, and make explicit, the roles of various levels of government, of providers and of citizens?

Planning for health care will always be a somewhat messy and unfinished project. This paper sets out some of the mess, and some basic issues and approaches to planning for what will always be a work in progress.

Notes

- 1. Elsewhere (e.g., Armstrong, Armstrong, and Connelly 1997) we have used the term "privatization" to label not only the development of private sector funding and delivery, but also the transfer of work to private households and the adoption within the public sector of private-sector practices. This latter form of privatization, which is consistent with the care-as-another-business model, is often termed "reinventing government" (see, for example, Osborne and Gaebler 1993; Treblicock 1994) or "new public management" (see, for example, Aucoin 1995; Shields and Evans 1998).
- 2. Only those with the relevant license are allowed to perform a given task, e.g., prescribe medications. Only those who are certified can use a specific occupational title, e.g., physiotherapist. Whether or not under a licensure or certification framework, a government agency or professional association may register members. This registration may be voluntary or compulsory for those in the occupational group (CIHI 2002, p. 24).

References

- Aiken, Linda H. et al. 2001. Nurses Report on Hospital Care in Five countries. *Health Affairs* 20 (3), 43-53.
- Akyeampong, Ernest B. 2001. Fact-Sheet on Unionization. *Perspectives on Labour and Income* 13 (3), 46-54.
- Anonymous 2002. Learning How and Learning that: Different Patterns of Performance Improvement for Tacit and Explicit Knowledge. http://kuuc.chair.ulaval/english/master.php?url=bulletin.php (26 March).
- Appelbaum, Steven H., Andrea Everard, and Loretta T.S. Hung. 1999. Strategic Downsizing: Critical Success Factors. *Management Decision* 37 (7), 535-552.
- Armstrong, Hugh, Pat Armstrong, and M. Patricia Connelly. 1997. The Many Forms of Privatization. *Studies in Political Economy* 53 (Summer), 3-9.
- Armstrong, Pat et al., eds. 2001. Exposing Privatization: Women and Health Reform in Canada. Aurora: Garamond.
- Armstrong, Pat et al. 1997. Medical Alert: New Work Organizations in Health Care. Toronto: Garamond.
- Armstrong, Pat and Olga Kits. 2001. One Hundred Years of Caregiving in Canada. Ottawa: Law Commission of Canada.
- Aucoin, Peter. 1995. *The New Public Management: Canada in Comparative Perspective*. Montreal: Institute for Research on Public Policy.
- Backman, Allen. 2000. Job Satisfaction, Retention, Recruitment and Skill Mix for a Sustainable Health Care System. Report to the Deputy Minister of Health for Saskatchewan.
- Baumann, Andrea and Linda O'Brien-Pallas. 2001. The Status of the Nursing Workforce in Ontario: The Numbers and the Worklife Issues in November 2001. Report submitted to the Ontario Nurses' Association.
- Benner, Patricia. 1984. From Novice to Expert: Excellence and Power in Clinical Nursing Practice. Menlo Park, CA: Addison-Wesley.
- Blishen, Bernard. 1991. Doctors in Canada. Toronto: University of Toronto Press.
- Blomqvist, Åke and Piyanjali Tissaaratchy. 2002. Patterns of Physician Service Utilization and Supply: Recent Evidence from Ontario. Currently under review.
- Burke, Ronald J. and Esther R. Greenglass. 2000. Effects of Hospital Restructuring on Full Time and Part Time Nursing Staff in Ontario. *International Journal of Nursing Studies* 37, 163-171.
- Canadian Health Services Research Foundation. 2001. Myth: The Aging Population Will Overwhelm the Healthcare System. *Links* 4 (4), available at <<u>www.chsrf.ca</u>>.

- Canadian Practical Nurses Association. 2000. *Primary Health Care: What is it and where do Licensed Practical Nurses (LPNs) Fit?* Ottawa: Canadian Practical Nurses Association.
- Carrier, Betsy and Jennifer Tolbert. 1998. *The Health Care Workforce at Safety Net Hospitals and Health Systems: Future Directions and Strategies for Change*. Washington: National Association of Public Hospitals and Health Systems.
- CIHI [Canadian Institute for Health Information]. 1999. Supply and Distribution of Registered Nurses in Canada, 1999. Ottawa: CIHI.
- . 2002. Canada's Health Care Providers. Ottawa: CIHI.
- CNAC [Canadian Nursing Advisory Committee]. 2002. *Our Health, Our Future: Creating Quality Workplaces for Canadian Nurses*. Ottawa: Health Canada for the Federal/Provincial/Territorial Ministers of Health Advisory Committee on Health Human Resources.
- Cohen, Marjorie Griffin. 2001. Do Comparisons between Hospital Support Workers and Hospitality Workers Make Sense? Report prepared for the Hospital Employees Union [CUPE].
- Coulter, Angela. 2001. Citizens and Patients as Partners in Health Services An Overview of Various Methodologies to Include Citizens and Patients in Decision Making, in *European Health Forum Gastein 2000: Information and Communication in Health*. Bad Hofgastein [Austria]: Gunther Leiner, p. 155-162, available at <www.efhg.org>.
- Dhalla, Irfan et al. 2002. Characteristics of first-year students in Canadian medical schools. *CMAJ* 166 (8), 1029-1035.
- Exworthy, Mark and Susan Halford. 1999. Professionals and Managers in a Changing Public Sector: Conflict, Compromise and Collaboration? in *Professions and the New Managerialism in the Public Sector*, edited by Exworthy and Halford. Buckingham [U.K.]: Open University Press, p. 1-17.
- Flood, Colleen and Tracey Epps. 2001. Can a Patients' Bill of Rights Address Concerns About Waiting Lists? Draft Working Paper, Health Law Group, Faculty of Law, University of Toronto.
- Gold, E. Richard. 2002. Health Care Reform and International Trade, in *Health Care Reform and the Law in Canada*, edited by Timothy A. Caulfield and Barbara von Tigerstrom. Edmonton: University of Alberta Press, p. 223-244.
- Gottlieb, Laurie N. 2000. Editorial: Shortage of Nurses, Shortage of Nursing. *Canadian Journal of Nursing Research* 32 (3), 3-5.
- Hassen, Philip. 1993. Rx for Hospitals: New Hope for Medicare in the Nineties. Toronto: Stoddart.
- Hollander, Marcus and Angela Tessaro. 2001. Evaluation of the Maintenance and Preventive Model of Home Care: Final Report. Victoria: Hollander Analytical Services.
- Hospital Employees Union. 1999. Briefing Note on Health Human Resources Research and Planning: Focus on Practical Nursing. [Burnaby]: Hospital Employees Union.
- _____. 1999. Vancouver/Richmond Health Board, and Healthcare Labour Adjustment Agency. Executive Summary Report on Research Into Information Technology Staffing.

- Johnson, Terrence J. 1972. Professions and Power. London: Macmillan.
- Kazanjian, Arminée. 2000. Nursing Workforce Study, Volume V: Changes in the Nursing Workforce and Policy Implications. Vancouver: Health Human Resources Unit, Centre for Health Services and Policy Research, University of British Columbia.
- Koehoorn, Mieke et al. 2002. Creating High-Quality Health Care Workplaces. CPRN Discussion Paper No. W14. Ottawa: Canadian Policy Research Networks.
- Krumholtz, Harlan M. et al. 2002. Evaluation of a Consumer-Oriented Internet Health Care Report Card. *JAMA* 287 (10), 1277-1287.
- Kwong, Jeff C. et al. 2002. Effects of rising tuition fees on medical school class composition. *CMAJ* 166 (8): 1023-1028.
- Lam, Helen and Yonatan Reshef. 1999. Are Quality Improvement and Downsizing Compatible? *Relations industrielles/Industrial Relations* 54 (4), 727-744.
- Lattimer, Val et al. 2000. Cost analysis of nurse telephone consultation in out of hours primary care: evidence from a randomised controlled trial. *BMJ* 320 (15 April), 1053-1057.
- Levine, David. 2000. A Letter from David Levine, in *The Merger Decade: What Have We Learned from Canadian Health Care Mergers in the 1990s?* A report on the Conference on Health Care Mergers in Canada organized by the Ottawa Hospital and the Association of Canadian Teaching Hospitals. Ottawa: Canadian Health Services Research Foundation.
- Markham, B. and Jonathan Lomas. 1995. A Review of the Multi-Hospital Arrangements Literature: Benefits, Disadvantages and Lessons for Implementation. *Health Care Management Forum* 8 (3), 24-35.
- Mechanic, David. 2002. Socio-Cultural Implications of Changing Organizational Technologies in the Provision of Care. *Social Science and Medicine* 54, 459-467.
- Messing, Karen. 1998. Hospital Trash: Cleaners Speak of Their Role in Disease Prevention. *Medical Anthropology Quarterly* 12 (2), 168-187.
- Mintzes, B. 2002. An Assessment of the Health System Impacts of Direct-to-Consumer Advertising of Prescription Medicines (DTCA). Volume I: Executive Summary. Vancouver: Health Policy Research Unit, Centre for Health Services and Policy Research, University of British Columbia.
- Morris, Marika. 2001. Gender-Sensitive Home and Community Care and Caregiving Research: A Synthesis Paper. Final Report to the Women's Health Bureau, Health Canada.
- National Forum on Health. 1997. Values Working Group Synthesis Report, in *Canada Health Action: Building on the Legacy. Volume II: Synthesis Reports and Issues Papers*. Ottawa: Minister of Public Works and Government Services.
- Naylor, C. David, 2002. Editorial: Public Profiling of Clinical Performance. JAMA 287 (10), 1323-1325.

- Osborne, David and Ted Gaebler. 1993. *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*. New York: Penguin.
- Page, Stewart and Ken Cramer. 2001. *Maclean's* Rankings of Health Care Indices in Canadian Communities, 2000: Comparisons and Statistical Contrivance. *Canadian Journal of Public Health* 92 (4), 295-298.
- Peartree Solutions. 2001. A Statistical Analysis of Human Resource Issues in the Pharmacy Profession in Canada: Detailed Report. [Ottawa]: Canadian Pharmacists Association for Human Resources Development Canada.
- Petrie, Keith J. and Simon Wessely. 2002. Editorial: Modern Worries, New Technology, and Medicine. *BMJ* 324 (23 March), 690-691.
- Pollock, Allyson M. and David Price. 2001. Rewriting the Regulations: How the World Trade Organization Could Accelerate Privatisation in Health-Care Systems. *The Lancet* 356 (9 December), 1995-2000.
- Rosén, Per. 2001. Citizens and Patients as Partners in Health Services Is It Necessary to Include Patients and Citizens in the Discussion on Priority Setting? in *European Health Forum Gastein 2000: Information and Communication in Health*. Bad Hofgastein [Austria]: Gunther Leiner, p. 162-165, available at <www.ehfg.org>.
- Sanger, Matthew. 2001. *Reckless Abandon: Canada, the GATS and the Future of Health Care*. Ottawa: Canadian Centre for Policy Alternatives.
- Schetagne, Sylvain. 2001. Building Bridges across Generations in the Workplace: A Response to Aging of the Workforce. Vancouver: Columbia Foundation.
- Shamian, Judith and Donna Thomson. 1999. The Effectiveness and Efficiency of Nursing Care: Cost and Quality. Ottawa: Canadian Federation of Nurses' Unions.
- Shields, John and B. Mitchell Evans. 1998. *Shrinking the State: Globalization and Public Administration "Reform"*. Halifax: Fernwood.
- Sicotte, Claude et al. 1998. The Computer-Based Patient Record: A Strategic Issue in Process Innovation. *Journal of Medical Systems* 22 (6), 431-443.
- Stein, Janet Gross. 2001. The Cult of Efficiency. Toronto: Anansi.
- Sullivan, Patrick. 2002. Medical Students Grab Surgery Slots, Ignore FP Posts. CMAJ 166 (8), 1077.
- Swift, Jamie. 1999. Saving the Corporate Soul. Canadian Forum 78 (June), 16-21.
- Treblicock, Michael J. 1994. The Prospects for Reinventing Government. Montreal: C.D. Howe Institute.
- Wagar, Terry H. and Kent V. Rondeau. 2000. Reducing the Workforce: Examining its Consequences in Health Care Organizations. *Leadership in Health Services* 13 (3), i-viii.
- White, Jerry P. 1990. *Hospital Strike! Women, Unions and Public Sector Conflict*. Toronto: Thompson Educational Press.

- Williams, Eric S. et al. 2001. Understanding Physicians' Intentions to Withdraw from Practice: The Role of Job Satisfaction, Job Stress, Mental and Physical Health. *Health Care Management Review* 26 (1), 7-19.
- Woodward, Cristel A. et al. 2000. Changes Over Time in Attitudes Towards Health Care Policy Options. Research Working Paper 00-01, Centre for Health Economics and Policy Analysis, McMaster University.