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New Models for the New Healthcare

Towards a Canadian Model of Integrated Healthcare

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From the Bottom Up and Other Lessons from Down Under
Sandra G. Leggat and Michael Walsh

Formal and Informal Systems of Primary Healthcare in an Integrated System: Evidence from the United Kingdom Anne Rogers and Rod Sheaff

Horizontal and Vertical Healthcare Integration: Lessons Learned from the United States S. Robert Hernandez

Integrated Delivery Systems Now or ... ?? Judith Shamian and Stephen J. LeClair

Integrated Health Organizations in Canada: Developing the Ideal Model John Marriott and Ann L. Mable

The Capital Health Region's Early Experiences: Moving Towards Integrated Healthcare
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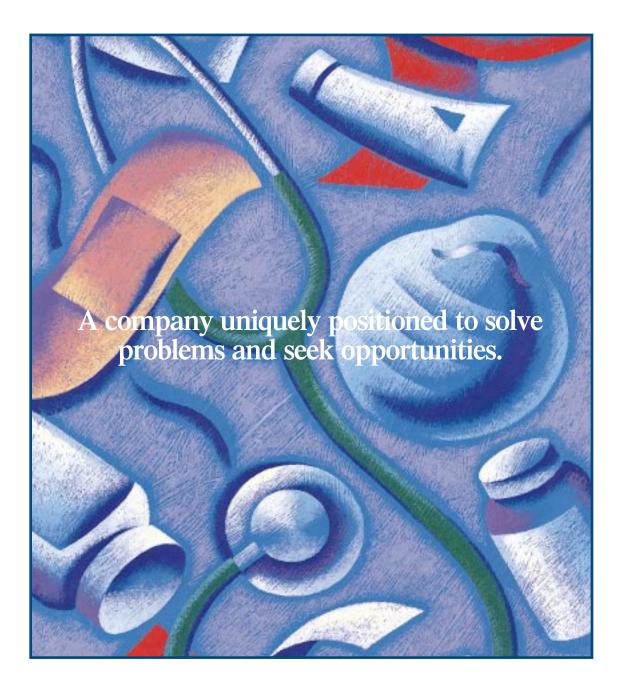
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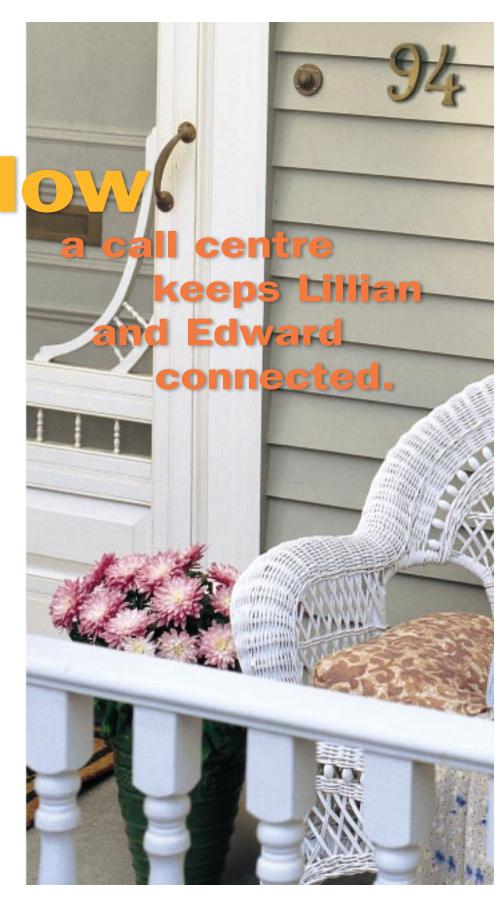
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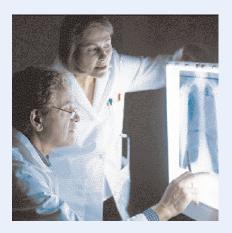
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MINISTRY OF HEALTH

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Memorandum to the Premier

From the Deputy Minister of Health

Premier,

Less than two years ago you honoured me with an appointment as Deputy Minister of Health. Although we have spoken several times since, this is the first occasion on which I have felt an issue to be of such importance that I am setting my views out in writing. Oddly, my note is not prompted by the impasse in negotiations with the Medical Association or by the recent labour disputes in the hospital sector. Nor is it prompted by the media obsession with labelling every health story, a health crisis. The problems we face in implementing the health reform program are well known to you. Rather, I read something sensible and wanted to pass it along.

This afternoon as I clawed my way through the weekend pile of material, a task familiar to you, I came upon a first-rate piece of work by three of Canada's most insightful analysts (Leatt, Pink and Guerriere) on the health policy scene. Don't be alarmed, Pink is his name not his political persuasion! These are not simply academics tendering advice from the safety of the university. These are also thinkers and doers willing to manage and plan real health services. Of importance is their review of the experience of other jurisdictions and the lessons to be drawn. The article is attached and is worth a read but that is not the point of this note, merely the spark.

The other spark for this memorandum was a careful reading of the rather gloomy polling results examining public confidence in our health system and the government's management of same. Our most recent opinion surveys show two clear trends. First, the public are fearful that healthcare services are eroding and will not be there when they or their loved ones require them. Second, the public is fed up with studies, task forces and committees. They want action – solutions, not studies – is how the pollster summarized her findings. The newly announced, three-year Senate Committee is exactly the opposite of what the patient ordered!

A health system needs to be credible with the public to survive. Absent their trust, the door is open for rapid and destabilizing change.

This winter, overcrowded emergency rooms became the lightening rod for all those fearful about our healthcare system. Our nurses blamed the backlog on nursing shortages caused by cutbacks. Our public health doctors recommended flu shots for the elderly. Our hospital managers and their boards demanded more dollars from the provincial governments. Health reformers advocated greater investment in home and community care. As well, voices were raised in favour of the mysteriously labelled primary care reform. Absent bold action, these same issues will return next winter.

For most of the past century our healthcare delivery system has been evaluated on the basis of inputs. We measured the number of physicians, the number of dollars spent, and the number of hospital beds. Just about any input we could count was measured in terms of growth, and these inputs were seen as a bigger and better health system. Skepticism began to set in as it became apparent that diminishing returns accompanied much of the healthcare spending. As we moved through the 1980s into the 1990s we had the rise of the outcomes movement. This is based on the fundamental proposition that it would be better to evaluate the success of medical and health interventions, even those of health policy, on the basis of outcomes rather than inputs. This movement has fundamentally challenged the old methods of informal evaluation. The paper appended is in the new world of examining evidence.

Of particular note in the paper are six strategies for moving ahead. These are stated as follows:

- Focus on the individual
- Start with primary healthcare
- Share information and exploit technology
- Create virtual networks at local levels
- Develop practical needs-based funding models
- Implement mechanisms to monitor and evaluate

These themes could be summarized boldly as "It's The Patient - Stupid!" This is a refreshing place to start as most health policy begins either with providers or financing. By starting with the patient we have some chance of improving service to the patient, a laudable goal. But how to get from here to there? And how will we know when we are there? The authors also ask and answer that question. How will we know when we have a genuine health system? Their nine tests can be summarized below along with the implication of each for health system change:

When patients:

- 1. Don't repeat medical histories for each provider. This requires "wiring" the health system so that medical histories are available to all relevant providers on a health information network, a.k.a. the Internet.
- 2. Don't repeat tests for each provider. Ditto wire the system.
- 3. Are not the key information source for providers. *Ditto*.

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- 4. Do not have to wait at one level of care because of incapacity at another level of care. More capacity in both long-term care and home care would be needed to meet this test.
- 5. Have 24-hour access to a primary-care provider. This requires reorganization of doctors in family practice easy to say and tough to do.
- 6. Have easy-to-understand information about quality of care and outcomes to allow informed choices about providers and treatment options. *Much more consumer/patient information is needed to meet this test*.
- 7. Are offered one-call shopping for appointments of various types. A call service linked to a health information system is required.
- 8. Have a wide choice of primary-care providers at the time they are needed. The reorganization of primary-care providers beyond the doctors is essential to this test.
- 9. Have chronic diseases managed on a proactive not a reactive basis including testing, home care, self-care support and education. *Improvements to home care and patient information are needed here*.

It is well accepted among policy thinkers that Canada urgently needs to reorganize its primary-care system. Fee-for-service general practitioners, often in solo practices, are anachronistic. In this information age, physicians must be part of a larger healthcare team. As in other developed nations, we need primary-care organizations with enrolled patients, multidisciplinary staff and a proper funding base. Nurses need to play a much larger role in primary care. Incentives must be recast to encourage greater health not more frequent visits.

It is time for bold action to restore confidence. You have the credibility to bring leadership to the task of genuine health reform. Bold actions could transform our provincial healthcare system from its current beleaguered state into a modern health system equal to the expectations of the residents (taxpayers and voters) of this province.

What is to be done? I recommend that your government consider an urgent and bold action plan with the following seven practical steps:

- 1. Nurse Call Lines. Make them rapidly available to the whole provincial population to provide health information without a visit to the emergency room or the doctor's office. There are a range of vendors capable of providing this service rapidly and competently. A 1-800-*health* number would be tangible proof of action.
- 2. More and Better Funded Home Care. This is needed on a 24-hour a day, 7-day a week basis. A greater emphasis on support and education for patients with specific chronic diseases is a genuine need within home care. You could challenge the Federal Health Minister to match our province's already significant spending on home care or, in fact, to match the entire cost of this package of measures. The likely and predictable response is that we utilize the funds already provided, which are inadequate to funding the current system.

- 3. 24/7 PRIMARY CARE. Doctors, nurses and others should always be available in urgent care clinics. This will require a major breakthrough with the Medical Association, but it *can* be achieved. The appeal to the public will be greater access, closer to home.
- 4. Public Report Cards. Health data to enable consumer report cards are rapidly being developed. These must detail access, quality, speed and outcomes of health services. They should be used to reward those health organizations that improve their performance. They must also chart the health of the local community. Report cards will eventually be provided because the public is demanding them. Better to lead than follow.
- 5. Consumer-Centred Information. Link the excellent web sites of disease specific groups such as the Arthritis Society and others in a series of community portals on the Internet. For example, a health portal for our capital city would be a consumer site linked to all providers, hospitals, clinics, home care and these disease specific sites. Similar sites would be developed across the province.
- 6. WIRE THE SYSTEM. Commit investment to wiring the health system over the Internet. This could be accomplished in three to five years. It will cost hundreds of millions of dollars. It will save, over the next decade, a multiple of its costs. Our pharmacies are already linked together but need to be linked to the rest of the system. Next, all physicians, hospitals and laboratories should be linked together to allow all providers and patients access to electronic medical records, to allow instant reporting of lab test results and instant transmission of prescriptions.
- 7. More and Better Funded Long-Term Care. This is the only permanent fix for the bottleneck at the acute-care hospital. Patients needing long-term care are still inappropriately stuck in needed acute-care beds.

There is complete consistency between the above list and the health reform agenda of your government. The article by Leatt, Pink and Guerriere is an elegant statement of our urgent need to inform and support patients and their families. An integrated, modern healthcare system is not possible in the absence of an informed and enabled consumer. Confidence will not be restored without bold action.

Your loyal and faithful Deputy Minister of Health

Prepared by Michael B. Decter. Mr. Decter is the Chair of the Canadian Institute for Health Information. He has served previously as Deputy Minister of Health for Ontario and is the author of *Healing Medicare — Managing Health System Change the Canadian Way.* The views expressed are his own and do not reflect the views of the Canadian Institute for Health Information.

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Towards a Canadian Model of Integrated Healthcare



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~

CANADA DOES NOT HAVE INTEGRATED HEALTHCARE. Canada has a series of disconnected parts, a hodge-podge patchwork, healthcare industry comprising hospitals, doctors' offices, group practices, community agencies, private sector organizations, public health departments and so on. Each Canadian province is experimenting with different types of organizational structures and processes with the intent of improving the coordination of services, facilitating

better collaboration among providers and providing better healthcare to the population. However, regional health authorities and their variants in Canada do not possess most of the basic characteristics of integrated healthcare such as physician integration and a rostered population (Hospital Management Research Unit 1996,1997).

In contrast, most developed countries are currently emphasizing integration of the components of healthcare as a

^{*} At the time of writing this paper Prof. Leatt was on secondment as CEO, Ontario Health Services Restructuring Commission, Toronto, Ontario

solution to many of the problems that plague national health systems (Raffel 1997; Saltman and Figueras 1998). This paper uses evidence from the international experience to recommend strategies for achieving integrated healthcare in Canada. In the first section integrated healthcare is defined. Next, some of the reasons why countries are moving towards integrated healthcare are presented. Canadian progress to date towards an integrated system is then outlined. In the last sections of the paper, lessons learned from the international experience are summarized and used as a basis for proposing several strategies of moving towards a distinctive Canadian model.

What Is Integrated Healthcare?

When Shortell and others developed the notion of an "organized delivery system," they began by characterizing an ideal health system as one that:

- focuses on meeting the community's health needs;
- matches service capacity to meet the community's needs;
- coordinates and integrates care across the continuum;
- has information systems to link consumers, providers, and payers across the continuum of care;
- provides information on costs, quality, outcomes and consumer satisfaction to multiple stakeholders - consumers, employees, staff, payers, community groups and external review bodies;
- uses financial incentives and organizational structure to align governance, management, physicians and other providers to achieve objectives;
- is able to continuously improve the care it provides;
- is willing and able to work with others to ensure objectives are met (Shortell et al. 1996).

From the characteristics was born the concept of integrated or coordinated healthcare.

The Ideal System

Shortell et al. (1993, 1994) originally described organized delivery systems (ODSs) as "networks of organizations that provide or arrange to provide a coordinated continuum of services to a defined population and who are willing to be held clinically and fiscally accountable for the outcomes and the health status of the population being served." Organized delivery systems typically embrace all levels of care primary, secondary, tertiary, restorative/rehabilitative and long-term. The key characteristics of an organized delivery system are the organization's breadth, depth and geographic dispersion. Organized delivery systems do not require common ownership what ties the organization together is the clinical and fiscal accountability to a defined population.

Since the seminal 1993 work of Shortell et al. the definitions and models of integrated healthcare focus on the coordination of health services across the continuum of care, as well as the collaboration among providers and provider organizations in the delivery of health services. Two methods of integration have been identified: horizontal integration, which involves the affiliation of organizations that provide a similar level of care under one management umbrella; and vertical integration, which involves affiliation of organizations providing different levels of care under one management umbrella (Conrad and Shortell 1996; Integrated Delivery Systems 1997).

Types of Integration

Types of integration identified by Shortell et al. (1993, 1996) include:

- Functional Integration the extent to which key support functions and activities (such as financial management, human resources, strategic planning, information management, marketing and quality improvement) are coordinated across operating units so as to add the greatest value to the system. Integration involves shared or common policies and practices for each of these functions, but does not mean mere centralization or standardization of these activities.
- Physician Integration the extent to which physicians are economically linked to a system, use its facilities and services and actively participate in its planning, management and governance. Key relationships include the development of a common medical staff, shared credentialing, group practice activity and physicians serving on system boards and committees.
- Clinical Integration reflects an umbrella concept including the notion of continuity of care, coordination of care, disease management, good communication among caregivers, smooth transfer of information and records, elimination of duplicate testing and procedures and, in general, making sure things don't fall between the cracks.

Why Are Many Countries Moving towards Integrated Healthcare?

The evolution of health services has resulted in healthcare being organized around functions; that is, healthcare organizations have responsibility and authority flowing up and down through a series of chimneys. These chimneys are usually more concerned with protecting the territory of providers than with the quality of the experiences of consumers or patients (Griffith, Sahney and Mohr 1995). In other words, healthcare is characterized by multiple practitioners and specialists and complex organizational structures that have been created around the needs of professional groups and not around the needs of patients (Shortell et al. 1996).

The consequence has been increasingly dissatisfied consumers, escalating costs and a recognition by many providers that there has to be a better way of organizing care. Thus, many countries have attempted to take the principles of integrated care and apply them to their own health reforms as a potential solution to many long-standing problems (Marriott and Mable 1998; Klein 1998; Manning 1999). Some of the reasons why many countries are moving towards integrated healthcare are listed below.

Consumers

- Consumers want "one-stop shopping."

 More sophisticated consumers are beginning to demand changes so that care is provided in the right time, in the right place and when convenient for them (Herslinger 1998).
- *Consumers want treatment choices.*They want to know what is the "best" treatment, which, in cases where experts

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- disagree, means having a choice (Bernstein and Gauthier 1999).
- Consumers want a greater choice of providers. Non-medical clinicians (for example, nurse practitioners, midwives, chiropractors and optometrists) are increasingly prominent as healthcare providers, especially in primary care (Cooper et al. 1998). The burgeoning growth of complementary medicine also suggests that Canadians are seeking a wider choice of healthcare providers.
- Consumers want timely access to health services. People want to be able to see their family physician or undergo diagnostic tests and treatment within a reasonable period of time (Curtis et al. 1998).
- Consumers want reassurance that care is of a high quality. They want to be able to decide between better technical care

- and interpersonal care, and the location of these services (Finlayson et al. 1999).
- Consumers want better information to make decisions. There is no coordinated place for consumers and the general public to obtain relevant, up-to-date information on health and healthcare (Schaeffer and Volpe 1999).
- Consumers do not want their time wasted by providers. They do not want to repeat their health histories each time they meet a new provider, have tests and other procedures repeated unnecessarily or wait for the availability of a provider or for necessary services (Berwick 1989).

Quality of Care and Outcomes

• *There are gaps in care.* The movement of care from the acute inpatient hospital to a home or community

How will patients know when an integrated healthcare system exists?

When they:

- do not have to repeat their health history for each provider encounter
- do not have to undergo the same test multiple times for different providers
- are not the medium for informing their physician that they have been hospitalized or undergone diagnostic or treatment procedures; been prescribed drugs by another physician; not filled a previous prescription; or been referred to a health agency for follow-up care
- do not have to wait at one level of care because of incapacity at another level of care
- · have 24-hour access to a primary care provider
- have easy-to-understand information about quality of care and clinical outcomes in order to make informed choices about providers and treatment options
- can make an appointment for a visit to a clinician, a diagnostic test or a treatment with one phone call
- have a wide choice of primary care providers who are able to give them the time they need
- with chronic disease, are routinely contacted to have tests that identify problems before they occur; provided with education about their disease process; and provided with in-home assistance and training in self-care to maximize their autonomy

- setting has produced gaps in care, often because of rigidities in provider payment eligibility and methods. Health systems need to adapt more quickly to changes in clinical practice.
- Primary care and specialty care are not well coordinated. In the words of an Ontario primary care physician: "There is rarely any communication between family doctors and specialists ... We get people coming out of hospital having had treatments and procedures, and we have no knowledge of them" (Foss 1999).
- There should be more use of evidencedbased practice. Currently there is little use of outcome research to drive changes in practice. Better integration can provide an environment for outcome research where care and treatment can be linked to changes in population and individual health status (Kindig 1998).
- There are no incentives to keep people well. Healthcare is a sickness model driven by episodes of care. Clinical practice increasingly emphasizes disease prevention and health promotion practices and ensures that when people do become sick they are treated at the most appropriate point or location at every point in the continuum of care (Flower 1993).

Cost

- There are redundancies and duplication in the care process. Opportunities are being missed to improve the efficiency and effectiveness of services for example, repeat history taking and diagnostic procedures (Berwick 1989).
- There are no incentives in place to ensure that the right amount and quality of services are provided. Some organizations and/or funding mechanisms

provide incentives to increase the volume of care, and others provide incentives for less care without appropriate safeguards to ensure that standards are met (Persaud and Narine 1999; Blendon et al. 1998; Enthoven and Singer 1998; Felt-Lisk et al. 1999).

In summary, there is imbalance in the system. The values of professionals and their need for autonomy have overruled the needs of consumers. Integration does not call for an end to professional autonomy, but for greater attention to the common good of communities and individual consumers and patients.

Canadian Progress towards Integrated Healthcare

Every Canadian province is struggling to reduce health expenditures without jeopardizing access and quality of care. Rapidly changing technology, an aging population, demand for greater accountability in the system and growing awareness of unexplained variations in clinical practice compound this challenge. However, the capacity of the system to respond is, in part, a product of how it is organized and funded (Hospital Management Research Unit 1996).

Starting in the mid-1990s, Canadian health policy-makers, academics and practitioners began considering the relevance of the concept of integrated care for Canada. This occurred when costs of healthcare were rapidly escalating and provincial governments were concerned about deficits and reining in spending. There is always reluctance in Canada to look to the United States for ideas about healthcare, but the idea of non-profit, integrated care modified for Canada's

unique situation had a great deal of appeal to many providers (Naylor 1999).

Although no one at that time questioned the importance of the basic tenets of the Canada Health Act, Canadians were willing to explore mechanisms to control costs while maintaining access and quality. Leatt et al. (1996) described a model of Canadian integrated care that included the following characteristics: the system provided a continuum of health services to a defined population; health services were funded by capitation payments, and risk was shared by the system and providers; consumer choice was maintained; primary care practitioners were seen as the coordinators of the system; a full spectrum of care was provided within the system; governance of the system was performance oriented; management was of the system rather than of individual institutions; strategic alliances were seen as an important organizational arrangement; and there was needs-based planning and informationbased decision-making.

By the late 1990s, most Canadian provinces, with the notable exception of Ontario, had implemented some form of regional health authority as a way of transferring responsibility for the allocation of resources and control of costs from the provincial to the regional level. To date, there has been little evaluation of the outcomes of the move to regional health authorities. Although this approach may have reduced some of the problems of uncoordinated care among organizations, it is not clear whether it has improved integration of many patient-care processes. Essential components for integrated care have been excluded from the authority of regional

bodies – drugs and medical care being the most important. A regional health authority without responsibility for physicians and pharmaceuticals cannot provide integrated healthcare. Finally, there are other systematic differences between integrated delivery systems and regional health authorities (see Figure 1).

In Ontario, the Health Services
Restructuring Commission (1997) developed a vision of integrated healthcare that was widely distributed. Provider interest in the concepts of integrated care gained momentum and resulted in many communities submitting proposals for pilot projects that were not taken up by the Ontario Ministry of Health. Meanwhile, the Health Services Restructuring
Commission was actively rationalizing the hospital system through horizontal integration and recommending major reinvestment in community settings.

Lessons Learned about Integrated Healthcare

A literature review using key words such as "integrated care" or "integrated health system" produces hundreds of articles, most of them focused on specific diseases, health conditions, or care processes. Unfortunately, there is a paucity of literature relating to performance of integrated health systems as a whole. There are a number of case studies such as Coddington et al. (1996, 1997), but the ability to generalize from these cases is limited. Shortell et al. (1996) compared 11 organized delivery systems and found substantial variation in the extent of functional, physician and clinical integration. Functional integration was easier to achieve than physician and clinical integration. Most of the system literature

focuses on managed care, which includes a much greater diversity of organizations than just integrated care. Nevertheless, some lessons learned that are relevant to a

Science Centre, July 1, 1996.

Canadian model of integrated care can be discerned from the system literature and are summarized here.

Figure 1: Comparison of Integrated Delivery Systems with Regional Health Authorities	
Typical Characteristics of an Integrated Delivery System	Typical Characteristics of a Regional Health Authority
Membership is defined by consumer choice	Membership is defined by geography
Consumers can choose among multiple systems in large urban centres	Consumers have no choice of system
Money follows the consumer	Money does not follow the consumer
Competition among systems for consumers	No competition for consumers
IDS manages all essential health issues	RHA does not manage physicians, drugs and other services
System revenue is determined by capitation payment for each enrolled consumer	RHA revenue is based on historical provider budgets or capitation for geographically defined population
Practitioner payment mechanism is primarily capitation	Practitioner payment mechanism is primarily fee-for-service
Financial incentives to providers for good performance - quality of care, clinical outcomes, productivity and consumer satisfaction	No financial incentives to providers for good performance
System-wide and provider-specific information systems	Provider-specific information systems only
Widespread adoption of clinical guide- lines and pathways that transcend providers	Variable adoption of clinical guidelines and pathways that are provider-specific
Primary care focus	Ad hoc focuses

What Are the Characteristics of Successful Integrated Care?

Coddington et al. (1997) as well as other authors identified some common characteristics of successful integrated health systems:

- Physicians play a key leadership role.
 Whether or not they are the CEO, physician-leaders are instrumental in bringing together physicians and the other parts of the system. An increasing number of integrated systems have a physician leader and non-physician administrator working side by side (Schulz et al. 1997).
- The organizational structure promotes coordination. For example, there may be joint ownership, management contracts and joint executive committees to promote collaboration across the system (Kaluzny et al. 1995; Zuckerman and Kaluzny 1995).
- Primary care physicians are economically integrated. A top priority with many integrated health systems is recruitment and retention of primary care physicians through generous compensation, financial incentives, continuing education opportunities and other ways of improving their quality of professional life (Luft 1996; Luft and Greenlich 1996).
- Practice sites provide geographic coverage. The delivery of healthcare is planned to take into account demographic trends, geographic barriers, commuting patterns, travel times and other relevant factors. The provision of the entire continuum of services including physicians' offices, diagnostic facilities, ambulatory surgery centres, and tertiary and quaternary care is planned to maximize accessibility and minimize duplication (Robinson 1998).

- The system is appropriately sized.

 The number of health professionals, inpatient facilities and community sites is sufficient to anticipate demand, and there is back-up available to handle unanticipated demand.
- *Physicians are organized.* There is movement from physicians working in solo practice to multidisciplinary team settings (Mullan 1998).
- Health plans are owned by the system. Health plans work in partnership with the system, sharing risk and being actively involved in ensuring that the system is efficient and effective. Enthoven and Vorhaus (1997) indicated a high-quality managed care plan is characterized by excellence in physician selection and development; health improvement; information systems; continuous quality improvement; cooperation with health purchasers; alignment of financial incentives and appropriate capitation; and patient involvement.

How Can Integrated Care Improve Quality?

In the last few years, several attempts have been made to review managed care plans in terms of their effectiveness in providing quality of care. Some of the major reviews are summarized below. In all of these studies, quality of care was defined as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (Institute of Medicine 1990: 21).

Hellinger (1998) reviewed evidence from 1990 onward about the relationship between managed care and quality. This review concluded that managed care has not decreased the overall effectiveness of care, but may have adverse effects on some vulnerable sub-populations. Evidence also suggests that enrollees in managed care are less satisfied with their care and have more problems accessing specialized services. Younger, wealthier and healthier persons are more satisfied with their health plans than older, poorer and sicker persons.

Miller and Luft (1997) analyzed evidence on the performance of managed care plans (mostly health maintenance organizations or HMOs) from 37 recently published peer-reviewed studies. Evidence from 15 studies comparing HMO results with non-HMO results showed basically no difference in quality of care. However, in several studies, enrollees with chronic conditions showed worse quality of care. The evidence did not support fears that HMOs uniformly lead to worse quality of care. However, hopes that HMOs would improve quality were not supported, either in part because of slow clinical practice change, lack of visit-adjusted capitation rates, or inadequate quality measurement and reporting.

Miller (1998) reported on a review of peer-reviewed literature for two HMO populations: those with chronic conditions and diseases, and those subject to discrimination due to income, colour or ethnic background. The findings again were mixed. Miller's analysis of elderly, ill persons showed worse quality of care as well as low utilization rates, and raised concerns about access to care and, in particular, access to home care. Miller concluded that access could be improved through capitation strategies, such as improving access to specialists; better

geographic access and choice of providers and facilities; more focus on providing culturally sensitive care; reduced waiting times; and providing incentives to attract enrollees.

Luft (1998) in a review of Medicare and managed care concluded that the published evidence on the performance of managed care plans is surprisingly even-handed in terms of satisfaction and quality. He pointed out that this is in contrast to the media coverage, which typically focuses on the problems of managed care. Luft suggested that the media might be relying on "old" data or that there is little interest in covering "no problem" stories. Brodie et al. (1998) examined media coverage of managed care over the past seven years and concluded that there has been a shift in the reporting of managed care from a "business" perspective to one emphasizing the "patient care" perspective with television and newspapers describing negative stories and anecdotes.

A number of studies have focused on the effects of HMOs on patients with specific diseases. For example, Seidman et al. (1998) reviewed 22 studies that compared the quality of cardiovascular care in HMO versus non-HMO settings. The studies had been published in peerreviewed journals and included both measures of process and outcomes of quality of care. The conclusions were that the HMO settings provided at least as good, and in some cases better, quality than the non-HMO settings. Outcomes of care for cardiovascular care were actually better in HMO settings.

Retchin et al. (1997) examined the experiences of stroke patients who were hospitalized in either HMO or

fee-for-service settings (400 each). Both experiences provided similar survival patterns and readmission rates for both sets of patients; however, HMO patients were less likely to be discharged to a rehabilitation facility. The authors concluded it could not be determined whether the higher use of nursing homes and the lower rate of rehabilitation use among HMO stroke patients in their study was a judicious use of expensive resources or a withholding of necessary care.

A number of studies have argued for a broader set of services to be provided by managed care plans. For example, a study of 35 HMOs (Schauffler et al. 1998) showed that California health plans that included health promotion and disease prevention were low in number, and participation rates of enrollees (only 2 to 3% plus) were promoted more as a marketing device than an attempt to improve health services.

Schlesinger and Gray (1988) indicate that, historically, managed care plans have been viewed within the narrow context of providing health services. This context should be widened to include contributions to all components of the community - schools, social services, employees and public health, for example. In future, plans should be viewed in terms of their benefit to the community as a whole by focusing on the social and economic factors affecting community health. Kindig (1998) also argues that a major reason for slow progress towards health outcome improvement is that there is no operational definition of what constitutes "population health" and little understanding of the financial incentives for achieving that goal. Kindig defines population health to include health, functionality and

health-related quality of life.

A number of methodological cautions were raised in all of these reviews through inconsistent definitions of quality of care and access to care (McGlynn 1997). Berwick (1996) also pointed out that studies of managed care performance are unable to separate the effects of capitation funding from other aspects of healthcare delivery.

How Should Integrated Care Be Organized?

According to Goldsmith (1993, 1994), a basic flaw in the integration movement in healthcare is the use of an obsolete, 19thcentury, asset-based model of integration, in which the accumulation of assets is assumed to mean economic advantage. Goldsmith advocates that integration does not necessarily need ownership, and it may be achieved by a variety of interorganizational arrangements such as strategic alliances, joint ventures and contracts. For these types of arrangements to achieve meaningful effects for patient care, there has to be a common (or at least connected) clinical information infrastructure. Coordination is not possible in a cost-effective way without good information exchange and a common understanding of the care process.

According to Bazzoli et al. (1999), horizontal integration and vertical integration can occur in both ownership-based and contractual-based integration. However, there is considerable debate on the relative cost-effectiveness and financial viability of each. Ownership-based integration can reduce transaction costs between separate production processes, produce economies of scope and scale, and facilitate imposition of

common information and clinical practice standards. Contractual-based arrangements are more flexible and can respond to local needs more easily. They can build trust between organizations, and elaborating within the contract can strengthen these ties. Networks allow the organizations to identify their core competencies and then purchase necessary inputs from others (Shortell et al. 1996).

Virtual integration refers to an arrangement in which healthcare organizations exist within a network of organizations working towards a common goal of providing healthcare to a given population but without common ownership. In describing virtual integration, Goldsmith (1994:27) indicates "it is clear that the hospital is not the center of the emerging healthcare delivery system. Where this center is, exactly, may vary from place to place inside a state but it is somewhere inside the physician community." Goldsmith states that virtual healthcare systems invest substantial resources in developing and maintaining their provider networks, focusing primarily on the community-based network of physicians.

There has been little empirical research on virtual integration in health-care. One exception is Robinson and Casalino (1996), who evaluated two alternative forms of virtual integration under managed care: (1) unified ownership between primary-care-centred medical groups and specialists, and (2) contractual networks between physicians and hospitals. In comparison with solo and small group practice, primary-care-centred medical groups had the advantages of economies of scale (better sharing of facilities); joint purchasing;

coordinating administrative services; risk sharing for unexpected health needs; lower transaction costs (more efficient negotiations); and potential for innovation. The authors concluded that vertical integration and unified ownership offer the potential for better coordination under changing circumstances. In vertically integrated organizations, subunits are united by common mission and goals, clear hierarchy and bottom line. Virtual integration through contractual relations has the advantage of autonomous adaptation to changing environments, and coordination is achieved by negotiated payments and performance guarantees. However, neither unified ownership nor contractual networks necessarily achieve integrated care from the patient's perspective.

How Should Systems Be Funded?

A common method of integrating care is population needs-based funding or global capitation, defined as the system funding that will pay for all insured health (and specific social) services required by the enrolled population for a predetermined period of time (for example, one year). The amount of money per enrollee is set prospectively and does not depend on the actual services provided to a person in that time period. Under capitation there are incentives to produce services efficiently and to use services to enhance enrollees' health. However, critics of capitation point out there are also incentives to stint on care and put select enrollees at risk (Dudley et al. 1998).

The United States, the United Kingdom, the Netherlands and New Zealand have the most experience with capitation. These countries have implemented formulas that include a wide range of need and risk adjustments, such as age, gender, standardized mortality rates, welfare status, disability and geography (Persaud and Narine 1999). In Canada, several provinces have also implemented capitation formulas with a variety of adjusters as a method of funding regional health authorities and various forms of primary care.

In an extensive review of the literature pertaining to capitation formulas, Hutchison et al. (1999) found that the evidence on the validity of alternative capitation formulas is sparse and inconclusive. Furthermore, the available literature suggests that the appropriateness and validity of adjusters included in capitation formulas can be expected to vary across settings. The authors stated that based on current research evidence, capitation formulae for integrated healthcare should include, at a minimum, age and sex and, where appropriate, additional needs adjusters and adjustments for geographic variation in costs of healthcare inputs. Examples of additional needs adjusters can be found in a recent study by Lamers (1999), who determined that, among other factors, perceived health and having functional disabilities, cancer, diabetes or rheumatoid arthritis were important for allocating healthcare resources in the Netherlands.

Lessons Learned

When the experience of system-level integration is examined, the conclusions are ambiguous. Although the number of highly integrated systems continues to grow (Industry Scan 1999), no agreement about the elements of a basic workable model has emerged. Managed care has

reduced costs through competition among plans and providers and through capitation. However, the potential of integrated care to improve quality of care, achieve better outcomes and increase access has not yet been widely realized (Burns et al 1998). To date, the system-level focus has been coordination at the corporate level among the insurance plan, physician organizations and hospitals. There appears to be less emphasis on out-of-hospital care or on the experiences of individual consumers in a seamless delivery of the continuum of care.

International experience provides a number of lessons for Canada:

- In comparison with traditional fee-forservice payment models, managed care plans show no overall difference in terms of satisfaction or quality of care.
- Under managed care, access may be adversely affected for specific populations such as the sicker elderly, those with chronic conditions, low income groups and certain ethnic groups, and satisfaction with services may be less for these groups.
- Bringing together hospitals, physicians and payers at the corporate level may, in some circumstances, provide financial incentives for integration, but this level of integration has no relationship to that at the local patient-care level.
- Although big-picture, integrated health systems may be the long-term goal, the goal of integration is achieved in a series of incremental steps.
- There is no "one best way" to achieve coordination. A variety of strategies must be tried in different communities.
- Some functional integration (administrative efficiencies) has been achieved.

However, realigning physicians and other clinicians to provide a seamless continuum of care has only just begun.

- Development of collaborative and interorganizational relationships among providers has met with limited success.
- Little consideration has been given to coordination of services at the community and individual levels, providing consumers with information or understanding wants, needs and preferences.
- There has been some attention paid to integrating the acute, inpatient experience, but insufficient attention to provision of services closer to home and in the community.
- There have been very few systematic attempts to monitor and evaluate integrated health systems as they have evolved.
- There is no one capitation formula that is appropriate in all settings, and much more research needs to be done to develop valid, needs-based formulas.

In theory, "integration" means coordination of health services and collaboration among provider organizations to create a genuine health system. In practice, this has not yet been realized.

Where Does Canada Go from Here? Strategies for Moving Ahead

Given these lessons learned, where does Canada go from here? What strategies for achievement of integrated healthcare should provinces be considering? Although there is no one model for achieving coordinated care at the community level, there are strategies that can be adapted to different circumstances to improve the patient-care experience.

After reviewing the literature on integrated care, we propose that provinces should consider the following six interrelated strategies.

1. Focus on the Individual

Greater attention needs to be given to healthcare as experienced by individuals and their families. The lens used to examine healthcare should be shifted from a provider focus to a focus on the needs and preferences of individuals. Methods must be developed for assessing individual and population health needs. Healthcare begins by providing individuals with access to knowledge about their health and how to maintain or improve it. Health services should be provided in the home or as close to home in the community as possible, where volumes are large enough to maintain high quality and economies of scale. Incentives must be realigned from treating disease to keeping people healthy.

There should be more emphasis on service quality in healthcare. Providing culturally sensitive care, publishing information in the languages of consumers, reducing wait times, answering questions, preserving dignity, customizing experiences, offering choices and providing comfort may not improve clinical outcomes, but are nevertheless important to individuals. Clinicians focus on high quality of care, but attention also needs to be placed on identifying who the consumers are, simplifying care processes, obtaining providers' commitment to service quality and paying regular attention to consumer satisfaction.

2. Start with Primary Healthcare

Primary healthcare is one of the building blocks of integrated healthcare. It is the first level of care and should be the first point of contact with the health services system. Individuals should be able to choose their own primary healthcare physician and other healthcare providers and expect timely access close to home or work. Multidisciplinary primary healthcare groups that provide a comprehensive range of services to a defined population should be established. Individuals should be asked to enroll with a primary care group. Both patients and providers make a commitment to meet the expectations set out in the enrolment agreement. Patients commit to receiving their services from the group, and providers commit to meeting the primary healthcare needs of the enrolled population. Primary healthcare services should typically include health promotion and disease prevention, diagnosis and treatment, supportive and rehabilitative services, comprehensive health assessments and being the referral agency to other parts of the system. When a particular provider is not available, an alternative provider in the group should be available to provide services.

Services should be available seven days a week and 24 hours a day. In addition to regular working hours, services must be accessible during evenings and weekends either through on-call services, after-hours services or telephone triage. Emergency departments of hospitals in urban centres should be used for true emergency situations. In rural or remote areas, emergency departments may remain the best after-hours care setting.

The services themselves should be

provided by the health professional that can best meet the individual's needs. For example, nurse practitioners, registered nurses, chiropractors, naturopaths, midwives, optometrists, pharmacists and others (assisted by comprehensive clinical practice guidelines) should be utilized to provide the right services for the population. Use of these clinicians leaves the physicians' time and skills for the more complex cases needing medical treatment.

The primary healthcare group should be responsible for coordinating each person's care with other community providers. Each group would make arrangements with specialist services, hospitals, home care, long-term care, mental health agencies and social services to ensure that the appropriate services are available when needed. Population health planning and target setting should be carried out (perhaps in conjunction with Public Health) and regular report cards provided to enrollees and payers on the extent to which health goals for the population are met and enrollees are satisfied with the services. The potential benefits to consumers, providers and payers of an approach to integrated care that places primary care at the centre of the system are great. Therefore, new models of primary care should be top priority for further system reform.

3. Share Information and Exploit Technology

The importance and power of information management and technology have been well recognized in most industries. Healthcare in Canada has been slow to embrace the broad advances in information management. Many providers are currently experimenting with various

approaches to increase the accessibility of health records by providers, but these efforts are not coordinated.

The way healthcare is delivered will have to change dramatically in order to take full advantage of information technology. For example, much of the ongoing care of persons with diabetes, hypertension, asthma and other chronic diseases will shift from physicians to other health professionals supported by clinical practice guidelines. Physicians will focus more on diagnosis, intervention during acute episodes and care-plan design. Monitoring will happen automatically through internet-based devices communicating with smart databases that warn physicians of significant changes in patient condition.

In order to achieve more integration of care processes and better collaboration among providers, information must be shared across the system. Management strategies must be developed to eliminate the necessity for duplicate history taking and repeat diagnostic tests because of the lack of ability to share information. Providers must have timely access to patient information that, at the same time, protects the privacy and confidentiality of health records. Healthcare organizations must be willing to share management information in order to improve functional and clinical efficiencies.

In Ontario, the Health Services Restructuring Commission has proposed a vision for an integrated health information network with an electronic consumer record at its core (see Figure 2). The proposed "network rigorously protects individual privacy and confidentiality and allows the real-time capture and exchange of relevant, accurate, standardized, and consumer-oriented health information" (Ontario Health Services Restructuring Commission 1999:14). The strategy will enable consumers to make better lifestyle and healthcare decisions; providers to deliver better quality, affordable healthcare; health system managers to make fact-based decisions; and payers to plan, allocate resources and improve policy decisions to meet population health needs. For example, the ICES Atlas on Cardiovascular Health and Services (1999) identified variations in drug prescribing, suggesting significant preventable morbidity and mortality among post-myocardial infarction patients. An integrated health information network that includes user-friendly clinical practice guidelines would help keep physicians abreast of new medical knowledge and help to ensure that patients receive optimal care.

Funding mechanisms must be adjusted to create incentives for integrated information systems, perhaps through inclusion of incentives in physician fee-for-service payment schedules. For example, a health ministry could license health networks that met certain connectivity standards and security criteria. The payment schedule could be twotiered: in addition to a standard technical fee for an X-ray, there could be a premium paid if the image is posted to a licensed network within 24 hours. This would allow the private sector to assist in the creation of health networks because a business case for financing this type of technology could be made. The government would not have to spend anything on network development until the network was up and running and successful as defined by the licence

Figure 2: Long-Term Vision of an Integrated Health Information Network

CONSUMERS

- Belief and comfort that privacy of health information is being respected
- Broad awareness of factors affecting good health
- Access to quality information on their own health to inform decision-making
- · Improved quality of care
- Understanding of available healthcare resources and services, and comfort with system performance

MANAGERS

- Accurate analysis and evaluations of healthcare systems performance at regional, institutional and providerspecific levels
- Ability to measure, monitor and analyze care delivery processes and the consequent clinical quality, cost and health outcomes achieved
- · Ability to effectively forecast needs

HEALTH INFORMATION NETWORK

The real-time capture and secure exchange of relevant accurate, standardized and consumer-oriented health information across the care continuum, upholding privacy needs.

PROVIDERS

- Rapid access to the consumers' relevant clinical and non-clinical data at all care delivery sites (e.g., demographics, health problems, encounters, test results, drugs prescribed, and dispensed, and treatments)
- Access to clinical practice guidelines and authoritative texts, journals and electronic resource to make better clinical decisions and provide better medical treatment at point of care (e.g., cost of various therapeutically equivalent treatment options, potential drug interactions and dosage errors)
- Secure electronic ordering, results transfer, scheduling and communication across the care continuum

PAYERS AND THE GOVERNMENT

- Tools for accessing population health
- Fact-based policy decision-making
- Understanding the availability of resources and demands to be met
- · Understanding the cost of care
- Accurate assessment of healthcare spending/allocation effectiveness

Note: This long-term vision has been widely discussed and is broadly shared by organizations/agencies across Ontario and Canada.

requirements. Hence, the government would face no risk of failed network implementation.

4. Create Virtual Coordination Networks at Local Levels

Although the creation of corporate governance models may in the long run prove to be the most efficient and effective type of integrated care, the notion of further extensive system-wide restructuring in Canada is daunting. Virtual networks that facilitate coordination without the necessity of sharing assets can be developed. Organizations that provide patient populations with the full continuum of care (primary care, long-term care, home care, public health, hospitals, rehabilitation programs and so on) can join together around common vision, goals, and standardized information systems and clinical practice guidelines. This could be achieved through financial incentives, regulation and consumer demands for more coordination among providers.

Interorganizational arrangements such as strategic alliances, joint executive committees, amalgamations and contracts can be used to enhance coordination of care and ensure collaboration among providers. These arrangements would enable the local system to assume responsibility and accountability for population health needs assessment, strategic planning, resource sharing, program alignment, service delivery and monitoring of quality and outcomes. Systems that serve small populations may not have the scale to undertake these responsibilities on their own and thus may have to share these types of resources with other systems. These activities would be greatly enhanced by the provision of timely population health databases. Information, organized geographically, by critical mass of providers, by population groups, and/or in defined self-sufficient health regions, would enable better planning, delivery and evaluation of health services. At the higher system level, it is necessary to define and ensure standards are met, to set policy and to truly provide governance to the system in the interest of the people being served.

Develop Practical Needs-Based Funding Methods

The current state of the art in capitation can be characterized as a classic "town versus gown" phenomenon. The town includes insurers and providers who need practical methods of forecasting expenditures in order to obtain managed care contracts. The town argues that the most dependable method of predicting next year's healthcare costs for a group of people is to look at previous years' costs of the same group. The town favours riskbased capitation formulas that are based on previous utilization simply because they work better than other methods. The gown includes academics and policymakers who prefer a method that allocates resources based on the healthcare needs of the population. The gown argues that prior-use methods perpetuate historical inequities and are highly related to provider supply and practice patterns that may or may not be appropriate. The gown favours needs-based capitation formulas because they drive change from a provider-focused to a population-focused healthcare system.

Both perspectives are understandable. The bottom line is that if Canada wants to move towards integrated care, then

there is an urgent requirement for more research into development of needs-based capitation formulas that are relevant in the Canadian setting. Capitation formulas that adjust for age and sex only are not credible with many providers, especially those who care for historically undeserved groups such as the mentally ill, recent immigrants and aboriginal peoples. Also the traditional capitation problems of adverse selection and stinting on care may be less likely if funding formulas explicitly adjust for the relatively high need of various groups. Needs-based capitation formulas that result in funding reallocations of plus or minus 50% might be interesting from an academic perspective, but would likely be greeted with hostility or ridicule from those charged with providing the care. In summary, the ideological superiority of needs-based funding has to be backed up with valid and practical methods that are credible to providers.

There should be experiments with alternative approaches to funding of integrated care. Perhaps healthcare for high-need groups should be funded through program budgets instead of capitation. It may be better for highly specialized services such as cardiac surgery to have specific eligibility criteria and be funded on a fee-for-service basis. In some circumstances, a reverse "peel the onion" approach should be taken to capitation - start with primary healthcare only and gradually add layers of care to the capitation funding as experience is gained. Explicit financial incentives could be considered for attainment of important health goals and system objectives. As a country with a health system in which there is one dominant payer, Canada

should be at the forefront of research and development into new methods of funding healthcare.

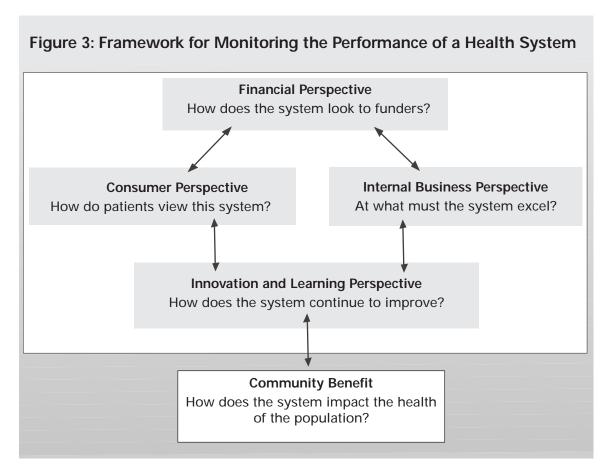
6. Implement Mechanisms to Monitor and Evaluate

Systematic mechanisms need to be developed to monitor and evaluate the impact of large-scale organizational change. Although such mechanisms are fraught with methodological difficulties (see, for example, Leggat and Leatt 1997), a framework with reliable indicators must be developed to monitor the effects of health reform on access, quality and affordability of health services. Although different stakeholders have different expectations and evaluative criteria for performance, an evaluation framework that considers the system as a whole can yield valuable information for consumers, providers, managers and payers (see also: Fowles et al 1996; Gruenberg et al. 1996; Robinson 1996).

Considerable progress has been made in recent years in the development of scorecards and report cards. To date, this work has focused primarily on hospitals and is only recently allowing comparison of performance among individual organizations or groups of providers. One of the most difficult challenges is identifying a succinct set of indicators that are valid and relevant to most stakeholders. So far, most efforts have been limited by their dependence on secondary data sets (usually collected for other administrative purposes) that are fraught with reporting variations and other data quality problems. These problems are exacerbated when the measurement unit of analysis is at the system level.

A popular approach that focuses attention on a mix of measures as opposed to the traditional emphasis on financial measures only is the "Balanced Scorecard" (Kaplan and Norton 1991) illustrated in Figure 3. Another approach might be to develop an "integration index" that would rate providers on various dimensions of integration. Formal measures of integration would allow empirical studies on the effects of integration, more rigorous accreditation assessments and more effective use of financial incentives to attain integration objectives.

One important question about monitoring and evaluation is "Who should perform the activities?" One strategy advocated by the National Health Service (1997) in the United Kingdom, and by the Agency for Health Policy Research in the United States is the formation of an independent council or commission made up of consumers and providers. Such a body (what Naylor, 1999, refers to as a Quality Council) would monitor accessibility, quality of care and outcomes; identify system-level problems or issues; and contract with appropriate researchers or consultants to investigate. The council would also have the responsibility to recommend policy changes and other actions to correct or improve the situation. The move to regional health authorities is changing the unit of analysis for performance measurement from individual organizations to regions or systems.



As information systems catch up with practice, inter- and intra-provincial comparisons of system performance will be possible.

Conclusion

In comparison with other developed countries, Canada has a relatively static healthcare system. Many providers are organized and paid in the same ways as when medicare was implemented in the 1960s. Although regional health authorities have addressed some of the pervasive problems of Canadian healthcare, progress has been slow and is incomplete. Fundamental system problems have either not been addressed or have been dealt with at the margin only, usually by throwing money at them. Unfortunately, fundamental problems are not solved in this way, and the list of problems is long: uncoordinated care, underuse of non-medical practitioners, provider payment methods with perverse financial incentives, emphasis on disease treatment, unexplained variations in service utilization, geographical maldistribution of practitioners, little use of information and information technology, waits and other access problems, retarded

dissemination of proven technology, little emphasis on consumer satisfaction, sparse evaluations of quality of care and outcomes, shortages of various health professionals, rigid role definitions that do not allow new models of care, and looming significant cost increases. These problems will only get worse as the demanding, consumerist generation of baby boomers reaches the age when people begin to use the health system in substantial numbers.

In the mid-1990s, provincial governments and providers were deterred by the magnitude of change implied by a move towards integrated care. Now that there is some international experience with integrated care and a greater appreciation of its strengths and weaknesses, it is time to move ahead with the Canadian tradition of incremental change. If we focus on the individual, start with primary care, share information and exploit technology, create virtual coordination networks at local levels, develop practical needs-based funding methods and implement mechanisms to monitor and evaluate, we believe that progress will have been made in creating a genuine and effective model of integrated healthcare in Canada.

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From the Bottom Up and Other Lessons from Down Under



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THE PREMISE OF LEATT, PINK AND GUERRIERE'S PAPER is that international experience with integrated healthcare can inform strategies for the establishment of integrated healthcare in Canada. The authors propose that based on international reforms, development of an integrated system of healthcare delivery for Canada can better meet the needs of consumers, improve quality of care and outcomes and decrease costs of service provision. A cynic might suggest that the most important global lessons to be learned are that consumers, when asked, cannot readily agree on the services they want or need (Robinson 1999); that

purchasers have difficulty defining what will be purchased in terms that ensure quality outcomes (Maynard 1994; Propper 1995; Robinson 1999); and that the level of competition, the amount of central control and the financing methods may have a greater impact on cost control than integrated service delivery (Berwick 1996). Although integration and coordination of care delivery has logical appeal, as highlighted by Leatt et al. there is limited empirical evidence on the impact of integrated healthcare on either individual or community health outcomes or value for money in healthcare delivery.

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Consistent with the experience of the United States, Leatt et al. suggest the essential characteristics of integrated health systems are coordinated service delivery with a broad range of services across the continuum of care, and clinical and fiscal accountability to a defined population. The Leatt et al. Canadian model proposes a whole-of-population approach, with individuals rostered to their primary healthcare group of choice. The primary healthcare group is responsible for coordinating the other care required, such as specialists, hospitals, home care, and long-term care. The method of funding the model is not fully developed, with the authors recommending more experimentation in alternative approaches to funding such a system of care. However, an underlying premise of the model is that funding would follow the consumer if he or she chooses to enroll with an alternative primary care group, implying capitation funding.

From the bottom of the globe, the experience of integrated care looks somewhat different to that described in the Leatt et al. paper. Since the early 1990s, Australia and New Zealand have been experimenting with various forms of integrated healthcare and have a track record of both success and failure. We present the down-under lessons learned for integrated healthcare.

Lesson 1

Not everyone requires integrated healthcare. Structure the system to serve those individuals and families that do.

Healthcare is a service, with similarities to other types of services. Although other services operate in a variety of market environments, from free market to tightly regulated, there are lessons to be learned from the organization of service delivery in other sectors that are applicable to healthcare. If we consider the experience of other service sectors, such as banking, travel, even hair dressing, we observe that these industries have adopted similar patterns to meet the needs of consumers. Within each of these industries there is a highly integrated service package that is available to those consumers who require this attention. There are also less integrated service offerings for those consumers who desire greater control, choice or flexibility. For instance, in the retail banking industry, consumers can opt for complete packages, including mortgage services, savings, chequing and even investment options available in person or online. The bank provides a highly integrated service for those customers who choose this approach, and some customers are willing to pay a fee for this coordination. Other customers prefer the unbundled option, where they choose different carriers for their mortgage, savings account and investment portfolio. Not all banking clients want or need fully integrated financial services. A recent survey of Western Australian banking customers found that only 69% identified the ability of the bank to provide a range of services as important to them. However, more frequent users of bank services tended to value a wider range of services more highly than less frequent users (Kaynak and Whiteley 1999).

Travel agencies offer fully integrated service packages to those consumers that choose this type of service. The integrated package can include transportation, accommodation and entertainment. Other customers choose to book their own travel, or use a combination of travel agent services and their own devices. The global success of the *Lonely Planet* and other such travel guides illustrates that not all travellers want or need fully integrated travel services. Hair stylists and beauty salons also provide the fully integrated hair, nails, massage, makeup and facial package, or enable their customers to choose a single service or a basket of services that best meets the individual's needs.

Representative of service industries in general, these industries have structured to address the needs of that group of people, often high users of a particular service, who require and choose to have their service package integrated for them. But these industries have also structured to address the needs of those individuals or groups that do not want or need integrated services. There are many people who would prefer to make service selections themselves and, given the choice, would not subscribe to a forced integrated service package. We would suggest that the healthcare sector should consider the extensive experience of other service sectors in organizing a population needsbased approach to healthcare. Basic principles of service marketing would suggest that integration of healthcare using a whole-of-population approach is neither necessary nor effective in ensuring healthcare needs are met.

Even in healthcare, successful integration efforts have used different levels of integration (e.g., collocation, linkage, coordination and full integration) to most appropriately meet community needs (Leutz 1999). Not all users of the system want or need healthcare integrated or

coordinated for them. In fact Leutz (1999) suggested that the most successful U.S. integration models use coordination of management and clinical care rather than full integration.

A recent study directed to increasing the integration of care delivery in Australia also found that a targeted approach to coordination and integration achieved greater benefit than a whole-ofpopulation approach. The 1995 reform agenda in Australia resulted in Commonwealth government mechanisms to trial integrated care. Nine Coordinated Care Trials with over 16,000 participants were initiated in different parts of Australia in 1997, with the interim evaluation results released in September 1999. Overall, the interim results of the effect of coordinated care on client health and well-being, service cost and use, hospitalization, readmission and length of stay were inconclusive (Commonwealth Department of Health and Aged Care 1999). The trials did suggest the need for coordinated care to be well targeted, with better results reported by those trials that addressed a more specifically defined population. The first law of integration proposed by Leutz (1999:83) states: "You can integrate all of the services for some of the people, some of the services for all of the people, but you can't integrate all of the services for all of the people."

Although the focus on high users has been questioned (Duckett 1996) in relation to difficulties in defining the target group and a potential overemphasis on cost savings to the detriment of service enhancements, the Coordinated Care Trials appear to show service enhancement as a positive outcome. The early indications from the Australia-wide

Coordinated Care Trials support a reasoned, focused approach to service coordination for a defined population of people with like needs. Long understood by the retail sector, market segmentation creates groups whose members are similar to one another in one or more characteristics and different from members of other segments. Different product, price, promotion and distribution strategies are targeted to different segments. Healthcare providers can learn from the experience of successful marketers. While the 1950s spawned mass marketing where all consumers were treated the same, the field has evolved and now uses smaller and smaller groups of consumers as marketing targets (Schiller 1989), with concepts such as mass customization (Radder and Louw 1999) and personalization (Goldsmith 1999) replacing mass marketing.

The whole-of-population approach is attractive in capitated funding schemes as it enables sufficient mix of high and low users to cover the financial risk. However, an integrated delivery system with a large mix of subscribers is unlikely to provide focused integrated programs to meet specific needs. Alternatively, focusing on the high users of the system – for example, individuals with chronic diseases - will enable the development of strong programs with proven outcomes in improving the health of these individuals. A capitated funding approach that recognized the lifetime healthcare costs of high-need individuals could provide sufficient incentive for health systems to care for these people with a genuine focus on improving their health status. Riskadjusted capitation for the high users of the health system allows both consumer and provider flexibility in designing

packages of care and gives the purchaser/ payer a financial cap and incentives to contain both consumption and costs.

In 1998 the New Zealand Health Funding Authority indicated that primary health service organizations would receive capitation funding for an enrolled population for all primary health services. Analysis of the predicted impact of this change suggested that while there would likely be some redirection of resources to those with greater need, it was unlikely that this move would result in clinical equity (Cumming and Mays 1999). It was suggested that without a very sensitive capitation formula, creamskimming could be a significant problem. We would suggest that an integrated healthcare system that only focused on the needs of the highest users would eliminate the issues associated with cream-skimming.

Davies (1999), in a commentary on the New Zealand reforms, stressed that purchasing decisions should not be devolved to a single level, but that different services were most appropriately purchased at different levels. Contrary to the singlelevel primary care group purchaser proposed in the Canadian model, Davies suggested that high-cost, rarely used services should continue to be purchased centrally; lowcost, predictable services such as primary care should be purchased by individuals or their agents; and in between, moderatecost, high-use services, such as those required for chronic diseases, should be purchased by local purchasers. This view provides support for integrated healthcare that focuses on the need of high users, with the primary care group assuming responsibility for integration of the moderate-cost, high-use services.

Individuals and families who are not high-need users require the assurance of public health services, health promotion services and the ability to access the healthcare system for episodic care when required. There is little need for integration of these services for the majority of the population, and funding should not be directed to this level of integration. In a 1999 interview, Uwe Reinhardt stated, "I think this whole notion of teams or integrated systems being made responsible for the health status of entire populations is a very dangerous path to think about or to go down. We have so much more to do just serving individuals who want to be served" (Carlson 1999:74).

Lesson 2

Integration can only be achieved through the establishment of appropriate financial and market incentives. International experience with integrated healthcare suggests that an integrated health system such as the model proposed by Leatt et al. would require planned reform to establish the appropriate incentives. We believe that mechanisms to ensure consumer choice without penalty, risk-adjusted capitated funding for the enrolled population and a strong regulatory framework are required. Each is discussed below.

Consumer Choice without Penalty

Leatt at al. contrast the characteristics of integrated delivery systems with those of regional health authorities. The defining characteristic is choice. Integrated systems enable consumer choice and therefore consumer "exit" if needs are not met. There are no barriers to changing enrolment or to service out of the plan.

International experience suggests that integrated care is achieved most successfully in systems where providers strive for the highest quality at lowest cost to attract and retain a client base. In a review of various HMO markets in the United States, Miller (1996) found that integration was accelerated within environments where there was competition for enrollees, and that all of functional, physician and clinical integration (as defined by Shortell et al. 1996) was achieved more quickly in areas where there was greater competition.

Scotton (1998) defines this use of market tools within a regulatory framework as managed competition and suggests that it is a natural progression of healthcare financing. In reviewing healthcare reform around the world (except for the United States, which, despite several attempts, has not implemented national health insurance), Scotton (1998) notes the establishment of national health/ health insurance programs designed to promote equitable access to healthcare as the first stage of development. The second stage, in response to growing costs, is the imposition of budgetary ceilings and controls. A large number of countries (for example, the United Kingdom, New Zealand, the Netherlands) have embarked on the third stage, microeconomic reforms involving managed competition, seen as the most promising means to deliver high-quality healthcare at a sustainable cost. Canada, it appears, remains in the second stage, using forced restructuring or regional health authority mechanisms to deliver the cost controls.

We believe that to be consistent with the principle of consumer choice and to target those most in need, consumers should have the choice of "opting in" to the integrated system or remaining with the existing care delivery system. Those consumers that opt in would enroll with their care purchaser/provider of choice. This level of consumer choice tied to capitation payment would ensure that the purchaser/providers have identified and planned their service offerings to best meet the needs of their target communities. Giving consumers the choice to participate, with no penalties imposed for not participating, provides the most powerful demonstration of consumer choice and ensures strong accountability to the enrollees by the purchaser/providers.

The quality and outcome provisions of the proposed model for Canada are largely dependent upon the availability of competing primary healthcare groups. While this may be realistic in urban areas, it is unclear how this competition can be achieved in rural/remote areas where there is a limited population base and few providers. The states in Australia face many of the same issues as the provinces in Canada, with concentrated urban centres and large geographic areas with sparse populations. Recognizing that needs are different, different healthcare system models have been established for the urban and rural areas of the country. We suggest that there should be a number of models for Canada, with urban models having similar structures, but using a number of different rural/remote approaches.

Risk-Adjusted Capitated Funding for the Enrolled Population

The benefit of consumer choice in ensuring needs-based, high-quality care, achieved through enrolment, changing

enrolment and disenrolment by consumers, is only possible when funding follows the consumer. This model is premised on enrolment with a purchaser/provider group, such as the primary care group proposed by Leatt et al., which agrees to share the financial risk for service provision for this enroled membership. Wilton and Smith (1999) have argued that budget holding has been successful in ensuring cost-effective care because of the financial incentives inherent in risk-adjusted capitated payments when the budget holder assumes the financial risk for the healthcare of the enroled population. Chernichovsky (1995) has stated that enrolment ensures the purchaser/providers have both incentive and ability to monitor care practices and outcomes for cost-effectiveness, efficiency and quality of care.

The capitated funding model is dependent upon a defined basket of services that are included in the funding. While healthcare consumers receive a large amount of care through the formal system, consumers also choose alternative therapies and over-the-counter remedies that fall outside of the formal system. Clearly, it will not be possible to integrate all discretionary care choices of consumers, and the model must identify the services that will be included.

Strong Regulatory Framework

Although it appears to be fundamental to the model, Leatt et al. do not include regulated market-based reforms as a strategy – possibly because, unlike some of the international systems that have implemented market-based healthcare reforms, Canadians continue to value publicly funded and administered

healthcare that ensures access for the entire population. Any mention of competition evokes images of the U.S. healthcare system next door. Canada is an ideal country to demonstrate that appropriately regulated, managed competition can strengthen a public healthcare system, improving access through more effective cost and quality control.

Regulation of the health system should focus on financial incentives for consumers to enroll in their provider organization of choice and to encourage providers to participate. The international experience is clear on the need to ensure sufficiently sized and resourced general practice (GP)/primary care organizations. Experience from the United Kingdom, the United States and Australia suggests the need to consider the limits on integration expectations where smaller GP practices exist (Miller 1996; Leutz 1999; Commonwealth Department of Health and Aged Care 1999). Historically, primary care physicians have not had the necessary resources to enable proactive organization within their communities (Miller 1996) and have required system efforts to ensure primary care organization that can effectively support the increased expectations placed on primary care.

In Australia, divisions of general practice were established as a result of the National Health Strategy of 1992 to bring together disparate GP practices in geographic areas. The Australian Commonwealth government offered financial incentives for the establishment of the divisions, with membership climbing to over 80% of all GPs in some states. GP divisions receive outcome-based funding from the government directed to the achievement of agreed strategic

objectives. Although the divisions are still relatively new, there has been significant impact, with general practices networking for continuing education, improved communication, after-hours coverage and more accessible services (LaTrobe University 1998). The evolving organization of general practitioners in Australia is laying the foundation for the integration of primary care with other elements of the healthcare system. It has been found that it is difficult to integrate GP services with other healthcare services without first having linkage and coordination among GPs. The establishment of the GP divisions in Australia has enabled community GPs to focus on unique strategies to best serve their communities.

Health systems that have implemented managed market competition have learned, sometimes after the fact, of the importance of a strong regulatory framework to preserve standards of care. Maynard (1994) has argued that the National Health System (NHS) reforms in the early 1990s in the United Kingdom were undermined by a lack of understanding and planning for the implementation of the competitive structures. International experience would suggest that major health system reform, with a strong regulatory framework in place is essential to effective use of competition in healthcare (Enthoven 1980; Chernichovsky 1995).

Lesson 3

Once the financial and market structure is in place, integration can best be achieved through a "bottom-up" approach.

Healthcare system development can be categorized as either push or pull. In push

development, the structure is designed and implemented from the top. The approach outlined by Leatt et al. is a clear push strategy, with the intermediary primary care groups responsible for defining, purchasing and providing healthcare to the membership population. Palmer (1994) suggests the push approach treats a service as a commodity. A push approach limits the ability of the enrolled members to define their care requirements.

On the other hand, in pull developments, the strategy is communicated, the broader financial and market organization is in place and communities demand the services required to meet their needs. In many ways the healthcare systems in Canada, Australia and New Zealand have traditionally been pull developments, as communities of interest identify needs and create the services required to meet these needs. Often these services become institutionalized and are brought into the publicly funded basket of services. We would suggest that implementation of integrated health care would be facilitated by enabling the communities to plan their needs and not impose a system structure from the top. Davies (1999) indicated that a strength of the reforms in New Zealand was the encouragement for initiatives to emerge from the bottom up, eliminating the "one size fits all" approaches that have previously dominated health systems. The primary care model currently being implemented in New Zealand facilitates a variety of structural responses. There are no preconditions detailing ownership, population served or location of the primary care organization (Gribben and Coster 1999). Recent reforms to achieve more integrated care delivery in the Netherlands were

thwarted when the government attempted to impose a structure from above. The government is now using a public choice approach as described by Mur-Veeman et al. (1999) where the broad policy parameters are communicated, leaving room for local solutions to promote coordination and integration.

The model we envision – a model that targets integrated service delivery to those consumers who most require this integration and that provides real consumer choice for these individuals – can only be achieved through consumer influence on the healthcare services provided. Advances in communications and information technology can only facilitate community influence. The growing use of the Internet and other information resources has been recognized as increasing the knowledge base of consumers, enabling greater involvement and understanding in managing their healthcare (Wilkins 1999). In the future it will be much easier to involve consumers in identifying and defining their care requirements.

Conclusion

In proposing a Canadian model of integrated healthcare, Leatt, Pink and Guerriere provide six interrelated strategies to further implementation of the model. The six strategies are: focus on the individual, start with primary healthcare, share information and exploit technology, create virtual coordination networks at local levels, develop practical needs-based funding methods and implement mechanisms to monitor and evaluate. While we support the underlying principles of these strategies, they are insufficient for implementation of integrated healthcare.

We provide advice for the construction of a workable, integrated healthcare model based on the recent reforms and system trials of Australia and New Zealand.

The down-under experience has provided three important lessons. The first is that not everyone requires integrated healthcare, and therefore the system should be structured to serve those individuals and families that require and/or choose integrated healthcare. The second lesson is that integrated healthcare will only be achieved with the establishment of essential incentives. The incentives we have identified include consumer choice without penalty, risk-adjusted capitated funding for an enroled population and a strong regulatory framework. The third lesson is that once the financial and market structure is in place, integration can best be achieved through a "bottomup" approach. The Canadian model should allow sufficient flexibility for local solutions. This approach will ensure true community involvement and accountability and will address the different needs of urban and rural/remote areas. We will watch with interest the progress of integrated care in Canada.

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According to Dr. Robert McMurtry, GWD Cameron Visiting Chair, Health Canada: "The figure about healthcare expenditures, on page 41 paragraph 3, [Healthcare Papers Vol.1 No. 1] is not accurate. The source should have been quoted, but it is not in accord with the Canadian Institutes of Health Information which generates the definitive numbers. For the record, the correct forecast (i.e., only 1997 numbers are final) is 9.1% of GDP not 9.8%. It is a difference of more than \$560 million. Canada ranks fourth in the world now by the foregoing measure. If we were at 9.8%, we would be back at second."

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Formal and Informal Systems of Primary Healthcare in an Integrated System:

Evidence from the United Kingdom



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LEATT, PINK AND GUERRIERE advocate creating integrated healthcare delivery systems in Canada, founded upon primary healthcare. They argue that integration involves organizational structures, financial incentives and information systems. They point to the need to focus on the types of integration occurring at different levels within a

system of healthcare and the need to examine the performance of integrated health systems as a whole. Most importantly in assessing the strategies needed for moving ahead in Canada, Leatt et al. point to the need to pay greater attention to healthcare as experienced by individuals and their families.

In this commentary, we wish to

^{*} The National Primary Care Research and Development Centre (NPCRDC) is funded by the Department of Health and based at the University of Manchester. NPCRDC is a multidisciplinary centre that aims to promote high-quality and cost-effective primary care by delivering high-quality research, disseminating research findings and promoting service development, based on sound evidence.

expand on two themes that are currently important in a British context. The first theme is the nature of formally integrated primary care - the way in which integration has accelerated under recent healthcare reforms and the conditions that appear to facilitate or obstruct the integration of primary care services. The second theme, which conventionally receives little attention in the integrated care literature, is the nature and relevance of the informal sector as part of an integrated system of care, that is, how to integrate formal and informal systems of care. As evidence, we use published studies; a multiple-case study of the formation of Personal Medical Services projects and Primary Care Groups in the United Kingdom; a stratified random sample survey of 72 (15%) of 481 English Primary Care Groups; and an analysis of the first-wave Personal Medical Services contracts.

Primary Care Integration

In many respects Britain has one of the most integrated, and centralized, health systems in the world. Of the characteristics of an integrated delivery system listed in Figure 1, (page 19) of Leatt, Pink and Guerriere's paper, the British National Health Service (NHS) unequivocally has seven, another one in theory, and the remaining three are being introduced. In theory, it has competition even at the primary care level because patients can choose their general practitioner (GP). The British government is currently promoting the use of evidence-based medicine ("clinical governance"), including clinical guidelines and protocols. Legislative changes in 1997 and 1999 permitted GPs to negotiate

their own contracts with their local Health Authority instead of using the standard national contract. The new Personal Medical Services (PMS) contracts can accommodate incentive payments. A national information strategy is being implemented to improve providers' exchanges of information including, in future, standardized, nationwide electronic patient records. Finally, virtual integration, in the form of promoting the networking of primary healthcare providers, is occurring through the formation of Primary Care Groups (PCGs) in each region. GP membership in PCGs is mandatory. U.K. experience thus appears relevant to other health systems interested in integrated delivery.

In some respects the British NHS has been what Leatt, Pink and Guerriere call "functionally integrated" since 1947. While all GPs are independent contractors (as in much of North America), their payment and terms of work are defined in a nationally uniform General Medical Services (GMS) contract. Similarly, in relation to "physician integration" credentialing for both hospital doctors and GPs is nationally uniform, as is their managerial role. Yet, despite this considerable degree of functional integration and the growing pressure to transfer healthcare from inpatient to community settings, NHS primary care has been far from integrated at the service delivery level. This experience corroborates Leatt, Pink and Guerriere's claim that integration at "corporate" and "functional" levels is one thing, integration at "clinical" and "physician" levels quite another.

Until the recent formation of Primary Care Groups, GPs have been almost completely detached from NHS management, in contrast to their salaried, hospital-based counterparts. During our survey of Primary Care Groups, we learned that the majority of GPs, in the areas surveyed, tended to practise alone or in small groups. (A mean of 26% of practices were solo, while group practices had a mean of 3.2 doctors.) Some GPs employed their own practice nurses and, less often, other paramedical staff including psychological counsellors. Others were served by nurses and other paramedical staff employed by community health services (CHS) trusts and outposted to general practices. CHS trusts provided a small proportion of domiciliary services independent of general practices and also managed small-scale community hospitals used by GPs in many areas (although many closed during the 1980s and 1990s). NHS dentists, pharmacists and opticians were organized independently. In deprived inner-city areas, hospital accident and emergency departments partly substituted for GP care of minor injuries and illnesses. One reason for this was that emergency departments offered greater accessibility for people living and working in or visiting the city centres. As well, standardized GP health authorities had removed many hospitals' financial ability to recruit GPs to areas where the quality of urban environment was poor, resulting in physician shortages there. Leatt, Pink and Guerriere's manifesto for integrated service delivery is thus relevant to English primary healthcare, too. However, since 1990 several new policies began accelerating the integration of English primary care delivery systems – one accidentally and two deliberately.

Fundholding: An Accidental Stimulus to Integration

The accidental stimulus to integration was GP fundholding, in which general physicians as gatekeepers to the healthcare system were given funding and management responsibility for a capitated patient population. Fundholding was introduced mainly for the purpose of reducing hospital costs and waiting times. Although GPs volunteered for fundholding, it was implemented with the usual high degree of functional integration in NHS corporate matters – national rules stipulated criteria for becoming a fundholding GP, and how the funds might be used. For example, the rules forbade GPs from converting any unspent funds into personal income, and created the "oneway valve" - fundholding GPs could transfer savings on hospital referral costs into primary care, but not vice-versa. In fact, 60% of fundholders used fund savings to upgrade practice premises that they personally owned and would sell on leaving practice (Audit Commission 1995). The next most common use was to develop primary care services, most often by setting up practice-based counselling services and by strengthening their nursing or physiotherapy support. In a few cases, fundholders set up outreach outpatient clinics staffed by hospital specialists.

Fundholding also gave hospitals hoping to attract extra income an incentive for routine negotiations with fundholders (promoting vertical virtual integration). The same desire to negotiate with GPs for a portion of funds applied to community health service providers (promoting horizontal virtual integration). In many parts of England, fundholding general

practices pooled their funds as "multifunds" to reduce the management costs of fundholding and to increase their bargaining power with community health service and hospital trusts. This approach became officially recognized when an experimental set of Total Purchasing Pilot Projects extended the scope of fundholding from non-urgent hospital and CHS cases (excluding, for instance, maternity and mental healthcare) to all services. In some districts, Health Authorities that wished to forestall the spread of fundholding (because it diminished their budgets and influence) and GPs with political objections to fundholding constructed local commissioning groups, under which the Health Authority either consulted groups of GPs about how to spend hospital and CHS budgets, or practically delegated control of these budgets to specific groups of GPs (Boswell and Girling 1993).

Personal Medical Services, Primary Care Groups and Primary Care Trusts: Deliberate Stimuli to Integration

A more deliberate attempt to integrate service delivery in NHS primary care services came with three innovations in the National Health Service (Primary Care) Act of 1997. It permits:

- 1. GPs to work as the salaried employees, either of NHS trusts or of general practices. This ends the monopoly of the independent-contractor model of organization.
- 2. General practices to make specific Personal Medical Services (PMS) contracts with their local Health

- Authority instead of using the broad national contract. Provided the range and quality of services that the general practice gives are no less than before, the two parties may formulate their PMS contract as they wish.
- 3. Health Authorities to make contracts with primary healthcare providers other than general medical practitioners. This ends the general medical practitioners' monopoly by permitting nurse practitioners to provide primary medical care.

In 1998, 81 Primary Care Group pilot projects were initiated, and at least that many more will follow by Autumn 2000. Again, GP participation is voluntary. In the first wave of projects, 49% used the NHS (Primary Care) Act essentially to reformulate their contract with the NHS in a simpler, more flexible way. However, 51% of the pilot projects were "PMS-plus" projects (Jenkins 1999), which extended existing general practice services by adding services previously provided by separate CHS trusts, or by introducing new services for undeserved populations (e.g., homeless people, refugees, students). At least two projects consisted of extensive networks with a central coordinating body – ensuring horizontal and clinical integration of general practices with community health services, social services (which in England are provided by local government), voluntary organizations and (in one case) an urban redevelopment project. In three other projects, nurse practitioners, wholly or partly, replaced medical GP contractors. There it was necessary to ensure that the nurse practitioners could refer patients to a doctor as necessary.

The Labour government faced a dilemma in dealing with fundholding. Publicly, the Labour government had opposed GP fundholding; however, when it came to power 1997 about half of all English GPs were fundholders. As well, fundholding appeared to have assisted with both the horizontal integration of primary care and, to GPs' advantage, vertical integration with secondary care (Glennister et al. 1994).

Labour's policy solution was to create Primary Care Groups (PCGs) for every population of (typically) 100,000. Every GP in the territory is a member. PCGs took over fundholders' funds from April 1999, and are more gradually taking over most of the Health Authorities' budgets for NHS hospital and community health services. Eventually PCGs will convert into independent Primary Care Trusts (PCTs) which will have additional responsibility for contracting and providing primary health services. In particular, the 1999 Health Act enables them, instead of the Health Authority, to make contracts with local GPs.

The new Primary Care Groups are GP dominated. Both the chair and a majority of board members are GPs. These boards will become the Management Executive (committees) when the PCG converts to a PCT. A critical function of PCGs (and PCTs) is the "clinical governance" of GPs – that is, the group monitors the quality of GPs' clinical work, devises and implements clinical protocols and guidelines and is responsible for the concomitant professional development (Department of Health 1997).

If they materialize as planned, PCTs will be able to do much to integrate NHS

primary care delivery systems. Insofar as they succeed in influencing GPs' clinical and referral behaviours, PCTs will be in a position to horizontally integrate the main sources of NHS primary care: the GPs and CHS services. New NHS providers such as walk-in clinics and NHS Direct (a help-line operated by nurse practitioners) are also being added. The PCG will also play a role in vertically integrating these with general practice. Nearly all this will be "virtual" integration of the kind Leatt, Pink and Guerriere favour, because the majority of GPs will remain independent practitioners for the foreseeable future.

The process of forming PCGs and PMS pilots is also relevant to health systems outside the United Kingdom. The studies mentioned above indicate that informal relationships among GPs, and between GPs and others, are an important aid – or obstacle – to horizontal integration. For example, the British Medical Association (BMA) played a significant role in acceptance of Primary Care Groups both nationally and through Local Medical Committees (LMCs). When PCG formation was originally announced, BMA leaders appeared relatively willing to collaborate with government, notwithstanding elements of the GP press that argued PCGs and PMS projects threatened GPs' independent contractor status (e.g. Reggler 1998; Marval 1999). Asthe 1998 BMA conference approached, a strong current of GP opposition to PCGs became evident. As a result, the BMA leadership hardened its position, and the government conceded a guarantee that all GPs who wished to could remain independent practitioners. The government also

conceded a GP majority and GP chairmanship of PCG boards. Many local medical committees organized the election of GP members to PCG boards in many locales, arranging candidatures and divisions of board seats behind the scenes so that in some cases the election was a foregone conclusion.

At a local level, GP "entrepreneurs" (cp. Hanlon 1998) have also played an important part in the formation of PCGs, because they are often able to communicate with and recruit other GPs who would have been more skeptical and resistant to NHS management approaches. Yet, by the same token, their role has raised obstacles to integration in some regions where past instances of "entrepreneurship" had divided GPs. In particular, the division between fundholders and non-fundholders, and the ensuing discussions over how to redistribute the extra resources that many fundholders had accumulated, proved a point of tension. In some places, groups of GPs attempted to form PCGs separate from those controlled (they feared) by colleagues with whom they had past or present disagreements, only to be overruled in most cases by the Health Authority or the regional office of the NHS Executive (the management tier above Health Authorities). One consequence of these informal processes has been, in a few areas, early signs of a possible GP "restratification"; a process also reported in Canada as doctors have become increasingly drawn into health service management (Coburn, Rappolt and Bourgeault 1997). Whatever effect restratification may have on the power of the medical profession (opinions differ), from PCG managers' viewpoint

the process would have the advantage of creating a layer of medical managers who would horizontally integrate general practice and other primary care services at the local level. This tends to corroborate Leatt, Pink and Guerriere's views.

Some of the larger PMS projects and, before them, multifunds, were formed by consolidating existing informal networks and links that GPs and others had already formed for the purpose of solving a common problem (e.g., opposing hospital closures, reducing administrative costs, improving coordination between different primary care and related services). As though repeating such a process, many PCGs in our survey reported "simply getting people to collaborate" (or words to that effect) as a main achievement during their first year. Conversely, where certain GPs informally opposed the creation of a particular PCG or PMS project, it was often because they feared losing either influence or patients (and therefore income, under a capitation scheme) to alternative providers such as nurse practitioners or CHS trusts. While British experience illustrates, as Leatt, Pink and Guerriere mention, the importance of aligning financial incentives in securing collaboration, it also shows other motives at work. For instance, collaboration is fostered when primary healthcare organizations cooperate to solve problems in service provision; and by developing projects and services for which health workers have a personal enthusiasm and which will raise the technical level of their clinical practice (e.g., by protocol development). These experiences also seem to suggest that one strategy for achieving integration, whether horizontal or vertical,

physician or clinical, is by creating ad hoc informal working relationships to tackle specific tasks, including what Leatt, Pink and Guerriere call clinical integration at patient level, and then gradually consolidate and formalize these relationships over time.

The Role of Local Communities, Laypersons and Users of Services in Integrated Care

Leatt, Pink and Guerriere argue - and the present authors agree – that the justification for integrated delivery systems is to meet patients' needs rather than providers'. Unfortunately, it is too early to draw conclusions about what impact greater integration is having on clinical quality in British primary healthcare. Neither is it yet known what impact the more integrated service delivery is having on patient choice of provider. In principle, NHS patients have the choice of any GP willing to sign them onto his or her list. But having found a GP, patients rarely exercise their choice so as to reward or penalize levels of service quality. On average, only about 12% of patients change their GP each year, the majority because they have changed address or their doctor has moved or retired. Only about 11% are prepared even to contemplate changing their GP in other circumstances (Corney 1999). The GPs also attempt to minimize "poaching." As an innovation, PCG boards all include at least one lay member, as did a handful of PMS project management committees. However, our survey found that these members have less influence on PCG board decisions than managers or GPs.

Recognizing and maximizing the

potential of users and local communities as co-producers and providers of healthcare is also relevant to providing integrated care that crosses the formal-informal healthcare divide. As with the involvement of the lay member on PCG boards, at present there are signs that involvement of the informal sector is lagging behind the forging of partnerships between state-run health and welfare agencies. For example, in our survey mental health was found to be an area where partnerships with those with formal responsibility for community and social care agencies are emerging, but this is not mirrored in relationships or involvement with user and voluntary organizations outside the statutory sector. So there is little sign, at this early stage, that more integrated service delivery has done much in practice to increase user influence over the management of primary care services.

Nonetheless, outside PCG boards numerous initiatives are being set up in the United Kingdom and elsewhere to improve the health of people living in an area by engaging with users and community resources. In the United Kingdom this is the focus of initiatives such as Healthy Living Centres that form the basis of strategic thinking in localities, articulated in "Health Improvement Programs" (HImPs). These initiatives regard primary care services as a broader public health resource besides a means of simply providing treatment to individuals. A recent evaluation study of a PMS nurse-led project in the deprived inner-city area of Salford (in northwest England) suggests that local people perceived the service as providing a stable source of social support in an area where

other sources of "social capital" and longstanding social networks were being eroded (Chapple et al. 2000). After May 1997, the Labour government greatly expanded area-based initiatives aimed at regenerating deprived communities. Health Action Zones form part of this agenda, and many regions are looking at implementing models of care that seek to integrate community development-type projects involving laypersons as volunteers within a broader system of health and social care resources. The Manchester Salford and Trafford Health Action Zones, for example, are introducing a primary care physician can scheme based within hospital accident and emergency departments. This scheme is designed to deal with people's problems in a way that goes beyond addressing the presenting complaint, through outreach work by GPs seeking to mobilize relevant resources and networks in the local community and health agencies.

The Relevance of an In-Depth Understanding of the Use of Services

No theory of integrated care would be complete without understanding the way in which patients move within and between different health and social care agencies. The complexity of patient action is often not considered by those concerned with designing the configuration of services. There is evidence that care pathways are not unilinear and may be highly individualized. Individuals, particularly those with a chronic illness, may move between several different forms of community and institutional care in the course of their illness. Formal system integration and patient experience do not

necessarily coincide. Patient experience often belies the assumption that formal healthcare delivery services are integrated. This is exemplified in a study of psychiatric patients receiving care from a number of different sectors – the voluntary sector, hospital and community support (Spicker et al. 1995). While a relatively coherent picture of formal care pathways could be established from documentary evidence, the researchers found that this was not reflected at the level of patients' experience. Informants did not conceive of their treatment in a coherent, linear way. They perceived a variety of institutional and community services contacts, fragmentation in receiving treatment and in the lengths of time they had experienced both symptoms and care. These perceptions gave them little sense of the progression or purpose associated with an integrated pathway. Instead, informants typically experienced an apparently aimless movement between services and felt they had little control over care decisions. When we turn to explore the nature of the patterns and processes of utilization, further discrepancies emerge between the way in which services are delivered and the way in which patients act. These aspects are often masked in large-scale, correlational, quantitative surveys of healthcare utilization (Pescoslido 1992). Qualitative research has been more illuminating about referral, access and help-seeking. The experience of patients is important in judging the nature and extent of care that needs to be integrated in order to meet patients' needs appropriately.

Various studies have illustrated the importance of the timing between the onset of problems and consultation in

decisions to seek care. They have also illustrated the importance of the extent to which people are able to contain and cope with signs and symptoms within socially defined situations and contexts; and the multiple possibilities in the decisionmaking process (e.g., Zola 1973; Alonzo 1980; Cunningham-Burley and Irvine 1991). The relationship between everyday events (activities and work) and the role of individuals' social networks likewise influence their decisions to seek care. A recent study of the use of primary care illuminated the way in which the past experience of health illness and service contact coalesced with people's more immediate social and domestic context in influencing their decisions to contact health services. A variegated relationship between need and use was found for those with long-term health needs. Those with ostensibly high needs might avoid service contact, preferring to accommodate symptoms in a different way if they had used services for a long time and found that they had little further impact on relieving pain or managing disability (Rogers et al. 1998). Understanding the way in which people use services is a necessary precursor to delivering a system of integrated care. The role of self-care as part of integrated care is also important.

Self-Care: A Hidden System of Care

Informal care and self-care are an important but often hidden aspect of the supply of healthcare. Ordinary people as providers of care have experience in caring for themselves and others. They regularly provide advice about and take responsibility for matters of health and illness. Self-care can act as both an

alternative and a supplement to formally provided care. This is clearly indicated in a recent survey undertaken at NPCRDC (Rogers and Nicolaas 1998). A four-week health diary was completed by 518 individuals. Half of these individuals had experienced one or more illness episodes, ranging from minor ailments to more serious conditions. Two hundred and fifty people experienced a total of more than 500 illness episodes within the four-week period. Just over 110 of these episodes resulted in contact with formal healthcare services. About 70% of all illness episodes involved some form of self-care activities. Self-care only activities were reported for 54% of illness episodes. Both self-care activities and professional healthcare were reported for 17% of illness episodes.

The amount of self-care undertaken is likely to have increased in recent years. In one area of self-care, self-medication, U.K. sales of non-prescribed, over-thecounter medications in the 1990s were equivalent to one-third of the NHS drug bill. They were used to treat one in four symptoms. Homeopathic and herbal preparations are an increasing source of self-medication for both acute and chronic conditions. The International deregulatory trend towards reclassifying prescription-only as over-the-counter medicines has increased the potential for lay choice in symptom treatment. The amount and nature of self-management undertaken is intrinsically bound up with what is provided and used by people from the formal care sector.

The familiarity of symptoms, familial and personal history of illness and experience of identifying and managing illness all form a backdrop to lay action. Additionally, assessments of what can and

what cannot be done about a problem are based on people's prior service contacts. Patients learn over time how to fit into what health professionals require of them. They get a sense of what doctors consider legitimate illnesses and the way in which health professionals respond to illness. This feeds back and coalesces with knowledge derived from other lay and folk sources and influences how illnesses are subsequently perceived and managed. The combination of personal knowledge and the way in which care is made available can limit or expand the control people have over their ability to selfmanage and their engagement with formal healthcare services. For example, good evidence exists that prescribing antibiotics for sore throats does little to alleviate symptoms, but does enhance belief in the efficacy of antibiotics and makes patients more likely to consult again (Little et al. 1997).

Patient-Led Health Services? Integrating Services at the Interface between Lay and Formal Care

There are persuasive arguments for ensuring that formal care systems integrate with both the experience of patients and the care that people provide for themselves. A truly integrated model of healthcare needs to respond to the actual types of self-care undertaken by people prior to and in addition to contacting services; and to the reasons for and ways in which people actually access formal healthcare. This requires recognition that within the lay arena, responses to illness are in constant flux and vary according to both changes in a condition and everyday contingencies.

The responses reflect both the ways in which people assess their health situations and the resources available to them at the time to manage illness. There are emerging examples in the United Kingdom of how a formal system of care can interface and provide a link with lay systems of care and help-seeking. The first is through promoting graduated access from informal to formal healthcare. An example of a service that attempts to map on closely to patient experience is the newly established NHS Direct, a nurse-led telephone help-line that was launched in the United Kingdom in three pilot sites in 1998 and is being rapidly extended nationally. (Similar schemes have been used in Denmark, Sweden and some American HMOs.) Though full evaluation is awaited of the British system, there are indications of high rates of satisfaction among callers. There is also evidence that this service provides a contact with the NHS that includes the option of integrating patients' own actions by reinforcing self-care activities, by providing reassurance and advice and offering supplementary advice on alternative sources of information or help (Munro et al. 1998).

Other services introduced under the "modernizing the NHS" policy are similarly designed to open up access to previously restricted knowledge and primary care. These include NHS Direct On-Line (a version of the triage system available through the Internet), walk-in centres and a wider role for community pharmacies in dealing with minor ailments. These services provide additional points of access, which in theory coalesce more closely with patient decision-making. Much more than this could, of course, be done to provide resources, infrastructure and legitimation for the development of mutual support and self-help groups. That would require a change in ethos among healthcare professionals and commissioners of services too, which is not easily achieved. There has been resistance among some GPs to the introduction of the NHS Direct, which they perceive as threatening their traditional autonomy and gatekeeping powers.

Professionals are also likely to have low levels of understanding of the expertise that patients have in managing their own illnesses (including accessing a range of traditional and alternative healing practices). Thus, knowledge flows and changing behaviour among professionals are likely to be as relevant and important as providing more comprehensive and empowering information to laypersons. Integrating systems of care may also require planning and redirection of some resources. It may mean, for example, that buildings and space used by general practices should be made available to community groups and others (e.g., voluntary groups) wishing to set up mutual support groups. Mixed models of care might also form part of official strategies for the commissioning and providing of healthcare. NPCRDC is, for example, currently involved in setting up and evaluating an Internet clinic based in an inner-city practice and aimed at providing Internet access for people who currently do not have it. The service is designed to act as both an alternative and a supplement to consultations with primary care professionals.

Conclusions

It is clear from Leatt, Pink and Guerriere's paper that as a solution to many of the problems that bedevil national health systems, integrated delivery systems should be met with both enthusiasm and caution. In the United Kingdom there is evidence of a high degree of functional integration. However, physician and clinical integration is far from complete. Informal mechanisms for integration among healthcare professionals are likely to be as important as formal structures and organizations designed to promote greater system integration. It is important that formal systems of care, however integrated, do not function as "black boxes." This will necessitate that the formal primary care system take greater steps towards acknowledging and involving the informal system of lay primary care in order to provide a truly integrated and accessible system that is able to meet the diversity and complexity of people's needs and demands for healthcare.

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Horizontal and Vertical Healthcare Integration:

Lessons Learned from the United States



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LEATT, PINK AND GUERRIERE provide a very rational argument for moving the Canadian healthcare system towards a more integrated model. They suggest that the current system in Canada is a hodgepodge of disconnected parts. The current system is viewed as providing uncoordinated care, with inadequate use of nonmedical practitioners, perverse payment incentives for providers, too much focus on treatment of disease, unacceptable wait times for services and related other problems. The authors provide extensive documentation of vital components of a system they envision for Canada, the rationale for adopting an integrated system of services, and conclude by suggesting strategies for achieving integrated healthcare. Change towards the

new system would concentrate initially on primary care, using virtual coordination networks at the local level. Innovative needs-based funding methods would ensure that individuals throughout Canada receive necessary services for keeping them healthy.

The purpose of this commentary is to examine integration and consolidation activities in the United States. These experiences will be assessed in an attempt to offer insights for the Canadian system envisioned by Leatt, Pink and Guerriere. While numerous differences exist between the delivery systems in the two countries that make direct comparison difficult, it is hoped that movement towards an improved Canadian system will benefit from our mistakes and successes.

Experience with Horizontal Integration

Horizontally and vertically integrated delivery systems have been recommended for over two decades as the panacea for numerous problems in the U.S. healthcare delivery system. During the late 1970s and 1980s horizontal consolidation of comparable types of organizations into multi-institutional arrangements was viewed as required for hospitals and other healthcare delivery organizations to remain competitive. The 1970s witnessed the growth of multi-hospital systems and the proliferation of nursing home chains. Hospital systems varied from the larger, national investor-owned hospital chains that stretched across the United States to regional not-for-profit systems that served a more local market comprising a medical trade area. This trend continued into the 1980s with consolidation occurring in specialty hospitals such as psychiatric facilities, physician groups and health maintenance organizations.

The very survival of hospitals was believed to rest upon the ability of these institutions to enter into horizontal relationships with similar facilities (Goldsmith 1981). Several arguments were presented for this consolidation towards larger systems. One was that hospital systems were capable of achieving economies of scale with their large size. The benefits of group purchasing, shared physical plant, shared capital and spreading fixed costs over a larger base of operation would lead to lower costs and eventually lower prices. A second rationale for development of these systems was that economies of scale would result. While these systems were predominantly comparable types of

facilities, a larger network of hospitals suggests that a greater variety of inpatient services would be available for patients using such a system. A third rationale for this development was the expansion of the service delivery network, especially the regional not-for-profit systems. Regional systems were viewed as being organized with a large, central hub facility and smaller facilities in more remote locations. Access to services by patients in more remote locations would be improved under these arrangements. The remote facility would benefit by having access to better management services available across the system, better access to capital, and tying into volume purchasing agreements. Patients would benefit from access to a better-run facility and having ease of entry into the more complex services provided at the core hospital.

Given the significant trend towards consolidation, what outcomes were achieved by this horizontal consolidation? A substantial body of research was conducted on multi-institutional arrangements during the 1970s (Zuckerman 1979). The majority of this research suggests that little evidence exists to support the claim that larger hospital systems achieve economies of scale. No information was found to support the claims that efficiencies are achieved as measured by indicators such as costs per admission. In fact, costs frequently increased as the service mix changed. There was limited evidence of improvement in non-financial outcomes. In some instances (especially rural areas), services to the local community are enhanced by the development of larger systems. Improved availability, access to care

and overall scope of services was found in areas that were previously undeserved. However, these gains were frequently accompanied by increases in the cost of care provided.

This evidence has not deterred health services executives from pursuing this strategy in the face of rising cost pressures. Additional waves of horizontal consolidation occurred during the 1990s among hospital systems, physician groups, health maintenance organizations, rehabilitation hospitals and numerous other health service entities. While some new evidence continues to suggest that service delivery capacity has expanded with this second wave of consolidation, results on economies of scale for hospital operations are mixed, with some studies finding cost savings (Alexander et al. 1995) and others not (Mullner and Andersen 1987). A major reason for these conflicting findings may be that it has not been possible to integrate the clinical side of operations with mergers and consolidation. Most integration activities, and any resulting economies, have occurred on the administrative side and in use of group purchasing. The largest percentage of cost savings are possible on the clinical areas. This is the area in which it has been the most difficult to achieve effective integration in the United States (Gillies et al. 1993; Devers et al. 1994; Shortell et al. 1993).

Focus on Vertical Integration

The call for vertical integration of health service organizations has been a more recent occurrence. Initial discussions of the value of vertical integration began in the late 1980s (Mick and Conrad 1988; Conrad et al. 1988). These early commentaries suggested that vertical

integration is appropriate when market transaction costs become excessive. The obvious attempt is to provide seamless access to healthcare across the continuum of service insurers and providers.

In a seminal work. Shortell and colleagues envision the need to "reinvent" the American hospital (Shortell et al. 1995; Shortell et al. 1996). The drive for restructuring of the healthcare delivery system is fostered by numerous factors pressing healthcare providers. A major impetus for change again relates to the need for cost containment. As in Canada, the costs of providing health services exceeds society's willingness to allocate adequate funding for the current system. Related to this concern is the movement away from fee-for-service reimbursement towards greater use of capitation and fixed-budget contracts in which providers become cost centres rather than revenue centres. The new realities require greater importance to be placed on disease prevention and health promotion rather than provision of medical services. Vertical integration is envisioned to change the role of the tertiary hospital from that of the "hub" of the system to a peripheral back-stopping role when other system components fail. Obviously, such a major shift requires restructuring governance and management structures, significant alteration in organizational values and cultures, redirection of corporate strategy and reallocation of capital funds.

To what extent are efforts underway to increase the level of vertical integration in the United States and to what extend has it been successful? There has been only episodic movement towards vertical integration of regional healthcare systems that has been documented to date.

While efforts towards vertical integration of the major components of the delivery system have been attempted in some areas of the country, such as Minneapolis (Herzlinger 1997), or in academic health science centres (Burns et al. 2000), there have been more failures than success stories. Herzlinger (1997) suggests that vertically integrated providers have trouble achieving desired outcomes when they purchase excess capacity that they cannot use, when they vertically integrate to protect a faltering business and when they lose focus of their primary business activity. This suggests several factors to be considered. First, retained excess capacity in a vertically integrated system adds unnecessary costs that would not otherwise be borne by free-standing components using market mechanisms to coordinate patient services. Second, integration should not be undertaken to save a component of the delivery system that should be re-engineered or significantly altered. Finally, entities should not stretch their managerial competencies into areas in which they have little or no expertise.

Most integration in this country has focused on selected components of the system, rather than the creation of seamless provider networks that encompass all aspects of the delivery system needed by consumers. Early attempts by insurers and health plans to achieve vertical integration have not been successful (Christianson et al. 1995; Gold et al. 1995). More recently, these organizations have practised vertical "disintegration" (Robinson 1999) by moving away from ownership between health plans and provider organizations towards contractual relationships in regional markets.

These insurers are now entering horizontal integration on a national scope so that they can achieve the economies required to offer the multiple products that diverse consumer groups desire. It is not possible to diversify into managed care products, methods of marketing, multiple benefits packages and related items without adequate scale.

The greatest attention has focused on the relationship between hospitals and physicians. Some studies suggest that financial performance is moderately affected by physician integration strategies (Goes and Zhan 1995; Molinari et al. 1995), although other studies have not found significant relationships (Alexander and Morrisey 1988; Morrisey et al. 1990). Most relevant is the finding that physician involvement in hospital board governance positively affects operating margins and occupancy, but not operating costs (Goes and Zhan 1995). Strong forms of integration such as salaried positions are associated with greater physician commitment and loyalty to the system (Burns, Shortell and Andersen 1998). Other research has examined use of structural mechanisms such as contracting mechanisms for handling managed care contracts (physician-hospital organizations and management services organizations), although the presence of these entities has been found to be less than 20% (Devers et al. 1994; Morrisey et al. 1996 Alexander et al. 1996). Healthcare organizations also use processes for achieving integration. These integrative processes include not only involvement of physicians through ownership, employment relationships or governance of hospitals, but also provision of management services, information sharing,

product line integration and clinical guideline utilization by the medical staff. These processes are more prevalent, and more important, than structural mechanisms (Burns et al. 1998), which leads the authors to conclude that tight integration of hospital and physician activities under one organizational umbrella is unlikely. Hospitals can focus on managing traditional internal inpatient activities well, but physician clinical activities are so unique that efficiencies are not gained by their joint operation. This conclusion is supported by the number of hospitals that are divesting themselves of the group practices they have recently purchased.

Important Lessons and Questions

This review of the U. S. experience with integrated healthcare offers some lessons derived from the mistakes than have been observed. It also offers additional questions that need addressing. These lessons and questions are raised knowing that the health systems of both countries represent distinct histories of idiosyncratic decisions based on different cultural value systems, competing political interests and internal capacities.

Management of integration processes between hospitals and physicians is critical for successful integration to occur. Routine sharing of cost and utilization data with the medical staff, integration of clinical and financial information, development and disseminating of practice guidelines, establishing accountability of clinical department heads for profit/losses of their clinical units and related mechanisms are essential for the system to be successful. Ongoing effort within Canada to develop an information

infrastructure is laudable. Equally important is the use of this information to build linkages among elements of the delivery system.

Because vertical integration might allow underutilized resources to remain and contribute to inefficient operations, excess capacity and duplication must be removed from the system. Normally market forces would eliminate inefficient providers of services. However, a vertically integrated delivery system might operate for extended periods with components of the system containing too many slack resources. It is critical that any excess capacity be removed before structural integration "freezes" system components into place. Much of this effort is well underway in Ontario under the auspices of the Health Services Restructuring Commission and is projected to be completed by 2003.

Movement towards vertical integration must not be viewed as a mechanism for protecting a segment of the system that needs major work. Frequently hospitals have undertaken diversification or vertical integration strategies in an effort to protect their core business, inpatient hospital services. Diversification was attempted with the illusion that profits from new ventures would be channelled back into the main enterprise, while vertical integration was often viewed as a mechanism for ensuring flows of patients into unfilled beds. The fundamental issue may be the need to engage in work redesign or re-engineering of systems and processes within the Canadian healthcare system.

Finally, system elements must not lose focus on the things they do best. Too often, integrated systems try to apply

management principles from one segment of the system to another, with limited success. Most hospital diversification strategies in the United States were unprofitable. Relatedly, too much time may be devoted to the interaction between units rather than the operations within units. Home services, physician office services, inpatient services and other activities should be managed under distinct managerial authority. Integration of health services within Canada should not rely upon uniform management practices and operations to be applied across all units of the delivery system.

Two major questions also need to be addressed. One deals with the singlepayer, uniform benefit package available to consumers, and the other concerns the extent to which clinical services are integrated and coordinated across the functions and activities of the various operating units of the system. Insurance coverage by a single payer within the Canadian system should be a plus because a single payer can direct fundamental change in the system. However, experience in the United States suggests that consumers may differ in needs and preferences depending on their stage in the life cycle, economic condition and numerous other factors. If movement towards integrated healthcare will have as its first premise that the focus is on the needs of individuals and their families. how does a "one size fits all" benefit package align with unique needs of individual Canadians?

The integration of clinical services within an organized delivery system is viewed by some as critical to success of an organized delivery system (Gillies et al. 1993; Shortell et al. 1996). These

experts argue that vertical integration and coordination of functions and activities of operating units at different stages of the healthcare delivery process are necessary for effective and efficient patient care. They envision chronic diseases and social morbidity as demanding close integration of services across the continuum of care. Thus, physician practices and hospital activities should be very closely aligned. Others (Burns et al. 1998) suggest that hospital inpatient services and physician clinical services are so distinct that little is gained by tightly coupling these activities. Thus, hospitals should contract with physicians for clinical services and physicians should contract with hospitals for inpatient support services, and market mechanisms are the best methods of coordination. The question becomes to what extent coordination of patient services should be achieved via control mechanisms of an integrated organization versus market mechanisms that prescribe outcomes to be achieved by individual system components?

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Integrated Delivery Systems Now or? ?*



COMMENTARY

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LEATT, PINK AND GUERRIERE provide a comprehensive paper that describes the nature of integrated healthcare, the rationale for it, the Canadian state of the art with respect to integrated healthcare, lessons learned and where we go from here. The reader might conclude from this paper that an integrated delivery system (IDS) is the natural next step that we have to undertake in developing the future of the Canadian healthcare system. The authors of this commentary challenge the supposition that an IDS is the next phase of our health system evolution. Furthermore, we raise some questions regarding the value that IDSs in Canada would provide beyond what could already be attained under regional health

authorities (RHAs). We will argue that the next decade needs to be a period of information integration, and of primary health care reform, where organizational structure and corporate decision-making are reformed to reflect partnerships between healthcare providers and managers.

The Integrated Delivery System: Does It Fit the Canadian Reality?

Throughout the 1990s the provinces and territories, with the exception of Ontario and Yukon, developed forms of regionalization. As Leatt, Pink and Guerriere describe in Figure 1 (page 19) of their paper, there are some basic differences between an RHA and an IDS.

^{*} The opinions expressed in this paper are those of the authors and not of Health Canada.

Prior to making a commitment to the notion of an IDS in its fullest, it is important to examine the fit between the basic underpinnings that drive the establishment of an IDS. Leatt et al. compare IDSs to RHAs in eight areas:

- 1. Membership
- 2. Consumer choice
- 3. Funding link to consumer
- 4. System competition
- 5. System management
- 6. System funding
- 7. Financial incentives
- 8. Primary care focus

For an IDS, areas 1 and 2 listed above are inextricably linked – membership in IDSs is defined by consumer choice. The evolution of healthcare delivery and membership in IDSs resulted from the heightened role of consumer choice in healthcare delivery. In the United States, IDSs emerged to meet the changing demands of the private payers of the healthcare system – employers, trade unions and individuals. Shortell, Gillies and Anderson (1994:48) cite the new economics of managed care as "the primary driver behind the formation of integrated delivery systems ... The driver predates current and proposed state and national health care reform initiatives as employers and major purchasers ... become more active in managing the growing costs of medical care." In addition, consumers were becoming more attentive to their individual healthcare needs and were demanding more comprehensive health coverage that focused on preventing illness, rather than treating illnesses, in settings that were close to home and accessible 24 hours a day. The creators of IDSs in the United States realized that they could attract consumers from HMOs and other suppliers of healthcare by offering a more comprehensive package.

Although moving to an IDS may nominally provide Canadians with choice, the minimum size and structure of an IDS necessary to function efficiently may provide only a limited segment of the population with choice. Kronick et al. (1993) estimate that 450,000 enrollees are needed to support a health maintenance organization (HMO) offering referral hospital services and its own staff physicians. They suggest that smaller numbers of enrollees (300,000) would support a 600-bed hospital but some cardiothoracic surgery and neurosurgery would have to be contracted out. Also, in order to offer true choice among providers, they note that there would have to be at least three providers serving each geographic region. Based on these numbers, over 1,000,000 consumers of healthcare would be necessary to support an HMO. Since IDSs provide greater breadth and depth than HMOs, it is not unreasonable to conclude that at least 1,000,000 consumers would be necessary to support the development of efficient IDSs.

The question of critical population is further complicated by international experiences with HMOs and IDSs, such as those cited by Leatt, Pink and Guerriere. The evidence cited suggests that marginal populations – that is, those with chronic conditions, the elderly or the poor – may not be well served by HMOs. This evidence suggests that, in an IDS, alternative arrangements may be needed for these segments of the population. In addition, Leatt, Pink and Naylor (1996) point out that alternative arrangements

may be needed for northern, rural and high-risk populations because serving this segment of the population may generate high costs or high variations in costs. Carving out segments of the population for alternative arrangements further reduces the available population necessary to constitute a critical population mass in Canada. What this suggests is that choice in Canada, under an IDS, may be limited to that segment of the population that is not poor, is not elderly, does not have special health needs and lives in certain urban areas. Such a system would fail to address dominant issues in the delivery of healthcare in Canada – in particular, the distressingly poor health of aboriginal Canadians, the lack of accessible service for those living in rural and remote areas and the impact of the greying of the population on the cost of the healthcare system. For a large segment of the Canadian population choice will not exist and therefore membership in an IDS will in reality be defined by geography.

Another difference between an IDS and an RHA listed by Leatt et al. is the presence of financial incentives that encourage quality of care, increased productivity and consumer satisfaction. For an IDS, the financial incentive that exists is the possibility of attracting more consumers that are willing to pay for better services, and the accompanying increase in revenue. RHAs do not have that built-in financial incentive. They are usually financed under a global budget.

Under an IDS in Canada, the lack of choice for most consumers also means that the market incentives that exist in the United States for the IDS to operate efficiently will not exist in Canada. The primary motivation for integrated systems in the United States was to "capture local and special markets and to attract and hold contracts" (Marriott and Mable 1998). IDSs continually redefine the functions and services they provide so that they can improve their market position. In Canada, without the population mass necessary to support competition among providers, providers will not have to "do things better" to make sure they are always relevant to the consumer.

In Canada, in the geographic areas where there is no competition for the providers, the IDS will effectively operate as a regulated monopoly. Revenues will be limited, based on capitation payments, and the IDS will be required to provide a basic set of services, which reflect the Canada Health Act, to the population they serve. The lack of efficiency incentives in regulated monopolies or crown corporations has always been a concern in Canada.

The final difference between an IDS and an RHA that we would like to focus on is the payment and incentives for practitioners. The pay of the practitioner in the IDS is primarily based on capitation, but other fiscal mechanisms are used to facilitate the effective operation of the system. The practitioner in the RHA receives payment on a fee-for-service basis. Again, it is not clear that in Canada the benefits that come from the form of remuneration for practitioners in an IDS will be an improvement over what could be offered under an RHA.

Capitation payments provide the IDS with a set of funds that can be used to design the optimal mix of functions and services for that system. The practitioners in the integrated system are usually provided a base salary, which is dependent

on the number of people enrolled in the system. The advantage of the base salary dependent on capitation is that the practitioner has no incentive to provide services or referrals that are not necessary. Under the fee-for-service mechanism, the overutilization of services is seen as a problem, especially in areas where there are an excess number of providers. In geographic or service areas where overutilization is a problem, the benefits to capitation-connected payments seem real.

In areas of the country where there is a shortage of providers, the benefits are not as clear. In these areas the problem facing the healthcare system is not usually that the providers are providing unnecessary services to each patient, but rather that providers do not have the time to supply appropriate services to all the patients in the area. In rural and remote areas, burn-out of practitioners is a significant issue. Moving to a capitated system will not alleviate this problem.

Moreover, the salaries of physicians in an IDS are not solely based on a straight proportion of the capitation funding. Many systems also provide incentives that are "above and beyond a base salary contingent on meeting productivity and patient satisfaction objectives" (Shortell et al. 1996:121). Leatt, Pink and Guerriere cite the work of Coddington et al. (1997) when they say a characteristic of a successful integrated health system is that "primary care physicians are economically integrated. A top priority with many integrated health systems is recruitment and retention of primary care physicians through generous compensation, financial incentives, continuing education opportunities and other ways of improving their quality of professional life." The effectiveness of the financial incentives that Leatt et al. refer to as recruitment and retention tools is based on the assumption that the input of the physician will have an impact on the revenue-generating potential of the IDS. As we have stated earlier, in most cases in Canada IDSs would be functioning in markets that do not have a population size necessary for physician activity to attract or keep clients, thereby mitigating the potential for generating revenue. Without this potential, it is not clear that physicians who have shown a high degree of reluctance to practise under anything but a fee-for-service basis, as is the case throughout most of Canada, would willingly move to a capitated system of payments. An RHA is a legislated monopoly for the provision of care. The RHA is able to guarantee physicians that no other system that could attract patients and revenues away from the RHA would be functioning in that jurisdiction.

Beyond the economics of how incentives would work in controlling costs and providing access to care, there are also moral and legal questions surrounding the issue of physician-led managed care organizations and incentive-based contracts. On February 23 2000, the U.S. Supreme Court was to hear oral arguments in the case of Pegram et al. v. *Herdrich.* This case raises interesting questions about physician incentives within healthcare maintenance organizations. The case speaks to the conflict of interest that is created by having the same physicians, who use their discretionary authority in determining the nature of treatment, being linked to the system by an incentive contract that may reward them for limiting treatment. The decision

rendered in this case could have a significant impact on the degree to which physicians are linked to the IDS, which Shortell et al. (1996) state is a vital component to the success of the IDS.

Information Integration and Primary Healthcare Reform

In the above section we questioned the value that would be obtained from implementing an IDS versus what could be achieved through RHAs. We do not mean to suggest, however, that we do not see merit in some of the strategies that Leatt, Pink and Guerriere propose as the next steps for Canada. In particular, we see real benefit from the increased integration of information in the Canadian healthcare sector and a focus on primary healthcare reform.

The benefit of increased information integration was apparent in 1998 when the federal Minister of Health's Advisory Council on Health Infostructure, the Canadian Institute for Health Information (CIHI) and Statistics Canada brought together health administrators, researchers, caregivers, advocacy groups, government officials and others to talk about modernizing health information in Canada. This group recognized the need to:

- foster harmonized data and technical standards to ensure the consistent and comparable collection, exchange and interpretation of health data; and
- address priority gaps in health services and related costs, outcomes, health status, and non-medical determinants of health (Canadian Institute for Health Information 1998).

In a report submitted to the National Forum on Health in Canada, Black

(1998) noted that there was a substantial investment in the development and implementation of information systems across Canada. Initiatives in Canada, such as the Health Evidence and Application Network (HEALNet), the Canadian Telehealth Initiatives (CANARIE) and the Health Infostructure Support Program (HISP), all recognize the importance of information and the application of technology in the healthcare system.

Shortell et al. (1993:461) note that developing information linkages is one of seven "underlying core capabilities that Organized Delivery Systems will need to acquire requisite levels of integration." They add that "electronic linkages of clinical and financial data need to be developed that tie patient and providers together across the continuum of care from the patient's home to the work setting, to the many possible sites of contact within the delivery system." This last statement is applicable to what Canadian governments, administrators and researchers are currently seeking to achieve in an effort to create a more efficient and effective healthcare system. There can be no doubt that the integrated information network is vital to an IDS, but decision-makers in Canada have recognized that it is vital to any system, integrated or not. For this reason, we believe that there is benefit in pursuing these initiatives even before questions about the design, structure and applicability of IDSs in Canada are answered.

Leatt, Pink and Guerriere also suggest that primary healthcare is a building block for an IDS. We would carry this one step further and suggest that it is a building block for improving the health of Canadians, and therefore primary healthcare reform should be the focus of Canadians for the next decade. Whether an IDS is necessary for primary healthcare reform depends in part on how primary healthcare is defined. Is the primary healthcare reference to the mode of care, or is it to the approach of care? Does it refer to a gatekeeper model with a generalist as the gatekeeper? These and other questions formed part of the stimulating exchange in the initial volume of Healthcare *Papers* [Vol.1 No.1] and rather than delve into the debate here, we will defer to the previous issue.

Briefly, however we would like to state our agreement that primary healthcare in the form proposed by Leatt, Pink and Guerriere is necessary to move the centre of healthcare from acute facilities into community settings. But the evolution to primary healthcare will have significant impacts on the different healthcare practitioners in Canada. Before implementing primary healthcare reform we must be confident that appropriate numbers of health professionals exist, and are properly trained, to effectively function under a primary healthcare system. There is sufficient evidence in the literature to support a primary healthcare model that integrates the role of nurse practitioners in the practice of primary healthcare. Gottlieb and Gottlieb (1998) note that an integrated care system that incorporates primary healthcare is particularly suited to the role of nurses since "nurses have traditionally subscribed to an integrated view of the patient." Whether or not an integrated delivery system built on primary healthcare will expand the role of nurses is not addressed in the paper by Leatt et al. In fact, the authors

do not address the topic of organizational structure and the role of the healthcare professional in the context of an RHA or an IDS. We now turn our attention to this issue.

Organizational Structure and the Role of Healthcare Professionals

The 1990s produced significant change in healthcare, in both the area of organizational structure and the role of healthcare professionals. It is important to examine the role of professionals from both the clinical and the organizational management and structure perspectives. The role of healthcare providers in an IDS as it relates to clinical services needs to be described and articulated for each segment of the delivery system and for the system as a whole. Throughout the 1990s, we witnessed a broadening of opportunities for nurses as nurse practitioners, case managers and in other roles. Other professionals also have experienced clinical roles that are different and diversified.

In the area of management, we saw a pull-back of professional administration. Nursing management at the corporate levels almost totally disappeared and many of the other professionals such as social workers and physiotherapists have lost their professional leaders. The regionalization and restructuring of healthcare shifted the decision-making framework from professional administrators in favour of management and physicians. In an attempt to restructure healthcare services, both organizations and RHAs introduced clinical programs, better known as program management. Most forms of program management in Canada have a physician at the helm who is empowered

to make decisions in both financial and clinical arenas.

Leatt, Pink and Guerriere do not define the role of the physician or the nurse within the IDS. Although the full integration of the physician into the system is defined by Shortell and others as being essential to the development of an IDS, Leatt et al. are surprisingly silent on this point in their paper. Physiciansystem integration is the "extent to which physicians identify with a system, use the system, and actively participate in its planning, management, and governance" (Shortell, Gillies and Anderson 1994). Shortell et al. (1996) continue this theme by stating that "systems require a nucleus of physician leadership at the board level, within the senior management team, and within affiliated physician group practices." Furthermore, the same authors go on to state that "systems must identify those physician champions who can lead the charge, provide them with the necessary authority and support to succeed, and adequately reward them for their contributions."

In an earlier paper, Leatt, Pink and Naylor (1996) are not silent on the topic of physicians in IDSs. In that article, they state: "Primary care practitioners and all physician affiliates of a CIDS (Canadian Integrated Delivery System) would have a more explicit gate-keeping role than they do in the current fee-for-service system. A CIDS would, accordingly, develop a close business relationship with a large base of physicians and other practitioners. Physicians would have to feel comfortable with the management practices and priorities of the CIDS, otherwise they would join another CIDS or return to the feefor-service sector." The question needs to

be asked if the omission in Leatt, Pink and Guerriere's paper is related to a shift in thinking of the authors or a difference in the target audience.

The role of physicians in an IDS is widely discussed in the American healthcare literature. There are numerous models where physicians alone or physicians and management groups form business units that provide various services including an IDS. The concern often expressed by Canadian policy-makers is that physicians are sorely lacking as partners in the discussion of IDSs in Canada. Physicians and their organizations continue to argue for the protection of the fee-for-service structure and for being independent practitioners. At this time there is little debate about what it would take to get physicians into the system under a different model. In the American literature, articles that describe the structure, function and services often have extensive discussions regarding how to attract physicians and retain them within the fold of the IDS. It is uncommon, however, to find similar discussion regarding other healthcare professionals such as nurses.

If we are truly interested in building IDSs or RHAs, then it is essential to understand how professional systems should be managed. It is our opinion that part of the negative fallout of the restructuring in the 1990s can be directly linked to the misfit of management structures and professional management perspectives. Mintzberg as early as 1979 discussed the issues of organizational structures of professional organizations. Mintzberg describes professional organizations as organs that employ primarily professionals whose knowledge

and skills come from a high level of educational preparation. This means that professionals work relatively independently of their colleagues and closely with the clients they serve. The coordination is handled by standardization of knowledge. The system works because everyone knows what is likely to happen next. Mintzberg cites clinical situations to illustrate the notion of professional autonomy and independence of practice and thought. In determining the administrative structure, Mintzberg (1979: 358) states: "Not only do the professionals control their own work, but they also seek collective control of the administrative decisions that affect them." The exclusion of nurses and other healthcare providers from the IDS management structure is incongruent with principles of managing professionals. As we examine the next phase of healthcare system revitalization, and as we review the six strategies proposed by Leatt, Pink and Guerriere, it is imperative to consider a seventh strategy, which will examine the desired management structures of IDSs.

The industrial model type restructuring and downsizing we have experienced in the 1990s left healthcare professionals frustrated and feeling devalued. Nurses, physicians and others describe their dissatisfaction with the changes in the system and criticize the lack of involvement of healthcare providers in making decisions that impact their practice (Southon and Braithwaite 1998). Furthermore, the regionalization, restructuring and downsizing of the 1990s left us with the serious crisis of a highly dissatisfied nursing workforce, a nursing exodus and a growing nurse shortage. National studies (Ryten 1997)

and provincial findings (Ontario Nursing Task Force 1999) both point towards a growing shortage of nurses in the coming two decades.

It would appear that issues of retention are more serious than recruitment. A recent report commissioned by the Canadian Nurses Association (Canadian Council on Social Development 2000) found that three out of 10 registered nurses who graduated in 1995 had either left the profession or immigrated to the United States within three years of graduation. Nurses report dissatisfaction with their work and burn-out due to workload, lack of valuing and leadership and an inability to participate in organizational decision-making.

Studies and essays by Aiken and Salmon (1994), Aiken, Sochalski and Lake (1997), Mintzberg (1979, 1991, 1997), Covey (1989) and Kanter (1993) can offer some guiding principles in shaping organizational structures and management roles and responsibilities. The work on magnet hospitals that originated in the 1980s and examines nurse retention, satisfaction and clinical contribution sheds light, although only in the hospital sector, on the relationship of independent, collaborative clinical practice and nurses' satisfaction with their work. Furthermore, the original study and others following point to a clear relationship between corporate valuing of nursing and nurses' satisfaction. At a later date, using the magnet hospital concept, Aiken and Salmon (1994) showed the difference in clinical outcome (mortality) of institutions that have the magnet hospital characteristics. Findings suggest that magnet hospitals have lower mortality rates than others.

Covey's (1989) contribution to this thinking comes from his essay on "The 7 Habits of Highly Effective People." His proposition is that in order to reach a highly effective structure that houses highly effective people, individuals have to go through three main developments. The first stage is a dependent stage where individuals are supported in developing their knowledge, skills and desires. This phase is followed by independence, which allows individuals to gain confidence and competence and mastery of their knowledge, skills and desires. Following the independence phase, individuals are ready to engage in an interdependence phase. Transferring his propositions to nursing and organizational structures, Aiken, Sochalski and Lake (1997) suggest that nurses have to be in a position where they feel their knowledge, skills and desires are understood, valued and integrated in the system. If that is apparent in the organizational structure, organizational behaviour and management practices, nurses will have the confidence to engage in a collaborative, interdependent partnership, which will lead to better clinical outcomes.

Kanter's (1993) theory of structural organizational power has been tested extensively in the nursing domain. Dr. Heather Laschinger of the University of Western Ontario has been involved in over 25 studies testing Kanter's theory (Laschinger 1996; Laschinger and Shamian 1994). One of the key findings drawn from these studies as it relates to organizational structure, behaviour and management is that formal and informal power and structural opportunities can lead to increased organizational commitment among nurses, decreased occupational stress and increased job

satisfaction. This finding supports the need for a clear, organizational nursing structure, with nurses holding management positions of influence, both formal and informal. Access to resources, both financial and otherwise, is also a factor that nurses observe and use to determine the nature of their empowerment in the system (Laschinger and Shamian 1994).

In summary, these studies and others (for example, Henry and Gilkey 1999) lead to the clear message that in both an RHA and an IDS it is crucial to explicitly and deliberately describe and outline the clinical role, organizational structure, behaviour and management practices of professionals. It is important to keep the balance between organizational administration and professional administration (Halverson 1999). Furthermore, it is paramount to understand that each professional group – physicians, nurses and others - has its own culture and sociology. Assuming that one can represent all would continue to sustain the current problems in the system.

Conclusion

In deciding whether or not we should put resources towards building IDSs in Canada, we must ask whether IDSs would improve our Canadian healthcare system, and if there is the professional, organizational, political, and consumer readiness for them. It is our view that the time has come to develop vertical and horizontal information system integration, build a comprehensive primary healthcare system and reform the management structure of the current system to provide a better balance between professionals and administrators. Once we have accomplished these three

significant reforms we need to take stock of the remaining gaps in the system. It will then be timely to revisit the notion of an IDS and its relevance to the Canadian healthcare system.

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Integrated Health Organizations in Canada: Developing the Ideal Model



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WE ARE PLEASED THAT HEALTHCARE INTEGRATION is the focus of this issue of Healthcare Papers and appreciative of the opportunity to focus on Canadian experience. Expanding awareness of Canadian work in this area has never been more important as the health system repositions itself towards the path of integration. As long-term participants in design, policy, research and advocacy for the development of integrated health organizations in Canada and elsewhere, we are more than sympathetic to the important themes presented by Leatt, Pink and Guerriere to improve understanding of integrated health organizations, examine model performance and provide thoughts on how to proceed in Canada.

To round out the discussion, and to provide, perhaps, a more complete picture of integration in Canada, it is important to shift the time horizon presented by Leatt et al. Their work echoes and reinforces a considerable body of knowledge that has been under exploration and development in Canada since the 1980s by a wide variety of players – at local, provincial and national levels – but that is not yet cohesively or widely documented. Nevertheless, this work has encompassed extensive, internal government and "ground-up" community-based efforts to develop programs, policies, systems, funding strategies, quality and evaluation frameworks, and to which considerable exploration and development time,

funding and other resources have been dedicated. This is important because Canadian leaders and managers can benefit perhaps more directly from our own development work, in addition to that of other countries.

Our approach will be to first highlight particular experiences in other countries to complement the predominantly U.S. experience that forms a major part of the Leatt, Pink and Guerriere paper; and next, to highlight and expand on some additional Canadian background and experience in this area. We will then reinforce a number of important topics presented by Leatt et al. related to a better understanding of integrated health organizations and provide additional perspectives on this subject as it relates to Canada.

Other Countries

Other countries that have developed forms of integrated health organizations include the United Kingdom, the United States, New Zealand, the Netherlands and Israel. Leatt, Pink and Guerriere present a number of reasons why countries moved in this direction, and a number of themes in particular that are U.S.-based. We disagree with the suggestion of "reluctance" in looking at the United States, as Canadian exploration did consider U.S. experience. What is interesting when examining other jurisdictions that have moved in this direction is just how consistent many of the features of integrated health organizations are across other countries, as well as with the thinking and design promoted in Canada (Marriott and Mable 1998). Elements that have been part of this on-going reform and refinement in other countries

include: rostering; integration of responsibility for all services in the continuum in one form or another; funding through a combination of capitation and other funding mechanisms; emphasis on primary care; and recognition of the need to develop sophisticated information systems to support management, planning and clinical decision-making.

As well, many of these countries have had experience with regionalization, containing lessons relevant for Canada. In some cases they did away with or transformed regions, as in the Netherlands, which transformed geographic monopolies into a roster-based system of regulated, competitive, integrated organizations. In other cases, such as the United Kingdom and New Zealand, they dramatically modified the structure, responsibility and functions of regions in order to support integrated health organizations within, and even across, areas. There were many reasons why countries modified the role of regions, including the need to counteract a lack of responsiveness, long waiting lists, limited choice and the tendency of the administrative systems "to become bureaucratic and insensitive to the public," which leads to consumer dissatisfaction (Chernichovsky 1995). Similar observations were made in government reports and studies within these countries (Upton 1991; Borren and Maynard 1994; OECD 1992, 1994, 1995; Glennerster et al. 1994; Klein 1995; Hatcher 1996). Chernichovsky (1995) observed the emerging dominance of integrated models and reforms as promoting "system efficiency and consumer satisfaction rather than a particular doctrine. Consequently it denotes efforts to combine the

comparative advantages of public systems (equity and social [macro] efficiency) with the comparative advantages of competitive, usually private systems (consumer satisfaction and internal [micro] efficiency) in the provision of care."

Changes in government have not necessarily resulted in a move away from this direction. For example, the new U.K. Labour government initially made some public pronouncements that sounded as if the entire GP fundholder initiative was over. While there has been refinement in how planning takes place and how input to commissioning occurs on a regional basis, the ultimate objective of building effective integrated health organizations through clear statements defining the model, and with incentives to move forward, is still clearly in place. The plan supports the evolution of fundholders to join together to form larger primary care groups of physicians and nurses, and then to encourage these groups to assume more and more responsibility for providing and commissioning services for the population they serve.

The ultimate objective is for primary care groups to evolve into primary care trusts. At this point, all financial responsibility for commissioning work from hospitals, for prescribing and for community services would devolve from the Health Authority. Savings would remain with the primary care trust. As well, policy expressed in the U.K. White Paper provides the option beyond commissioning for the primary care trusts to "employ all relevant community health staff and run community hospitals and other community facilities, ensuring these work effectively as part of an integrated

system. The precise arrangements will, however, depend on local circumstances" (U.K. White Paper 1997; Wright 1998). While authors still refer to purchaser/provider split in these jurisdictions, the reality is that the integrated organizations can purchase all services, or provide some and purchase others, or provide all, depending on the jurisdiction and local circumstances.

Canadian Background

"Regionalization" characterizes the overt direction taken to date by most provinces in Canada except Ontario. Leatt, Pink and Guerriere have pointed out correctly that the regional structures put in place by most provinces do not include such important elements as integrating physicians or rostering of populations. Without physicians, there is no direct medical influence over primary care and a reduced potential to engage specialist physicians as full partners and supporters. Without rostering, the regional "organization" is bound to responsibility for both the providers and the population within its designated boundaries. This presents very real challenges for policy when it is understood that the boundaries seldom represent natural population flows within health systems. Population in one region will naturally flow into another, not just for secondary care if it is closer, but for primary care if the physician resides "across the line." This imposes continual adjustments for these factors, challenging the introduction and refinement of more equitable means of funding such as capitation funding for "regions" in a given area, particularly if physicians become part of the regional authority's responsibility (Marriott 1992).

A system of integrated health organizations would eliminate the imposed boundaries of "regions" and focus instead on flowing population-based funding to organizations with rostered populations and associated primary care physicians or groups. In metropolitan areas, population density would allow for evolution of multiple organizations and rosters, which could include both heavily populated areas as well as population in surrounding areas, according to citizens' and providers' choices. In some rural and northern areas, integrated organizations might evolve to encompass 100% or a major portion of the rostered population, establishing a self-selected, locally created "monopoly" in a geographic area, if expedient to community needs, with the flexibility to change over time.

In addition to regionalization, there has been considerable "hands-on" investigation, planning and design in the area of integrated health organizations since the 1980s in Canada, although much of this work is not widely disseminated or published at this time. The Leatt, Pink and Guerriere paper introduces its integration background as though beginning in the mid-1990s, born of concepts, definitions, characteristics, methods and types of integration based on Shortell's work in the United States. In fact, Canadian governments, health policy-makers, academics and practitioners began earlier to look at notions of integrating the healthcare system in response to pressures and problems in the system and concerns of consumers and providers alike about access, quality and sustainability. Indeed, a model for a not-for-profit integrated model for healthcare began development in Ontario in the mid-1980s.

Individuals inside and outside of government were independently exploring Canadian-based modeling of integrated health organizations and examining what was happening in other countries. As a result, the Ontario Ministry of Health moved on two fronts simultaneously. Within the Ministry, a number of individuals with policy and design interest in this area were identified. These individuals reflected various routes pursued in exploration of integration at that point. Some had worked in or studied HMOs in the United States. Marriott had examined the potential to "grow" HSOs in Ontario into fully integrated health organizations by adding capitation funding and service responsibility for their rostered populations (Marriott 1985). A broader Ministry committee evolved and was formed in 1987 to review examples and prepare an initial program foundation. The result was the Comprehensive Health Organization (CHO) program, launched in the fall of 1988. The CHO model was defined as "A fully-integrated, not-for-profit, health corporation, which assumes responsibility for providing or purchasing the delivery of a full range of vertically integrated health and health-related services to a defined population" (Marriott and Mable 1994).

A second development track involved community individuals who were pursuing their interest in this area parallel to the internal Ministry initiative. An Ontario Ministry grant to the Toronto Hospital in 1986 resulted in the research and exploration of integrated health organization concepts, including a review of HMOs in the United States by Vytas Mickevicius. This led to the first proposal

for a CHO submitted to the Ministry CHO program in the fall of 1988 (Mickevicius and Stoughton 1988; CHO Bulletin 1991). By this time, other initiatives had emerged around the province, often led by individuals who had been thinking along the same lines or had explicitly studied and pursued them. In Fort Frances, Ken White (then CEO of the Rainy River Hospitals) and subsequently Dave Murray led teams of interested physicians, community representatives and others in the exploration of this concept.

Similar teams of physicians, hospital staff, community representatives and others investigated or pursued developments in integrated healthcare, including several initiatives in Toronto and in communities such as Wawa, Hamilton, Ottawa and at Queen's University in Kingston. Pre-dating this, Sault Ste Marie was pioneering aspects of this concept prior to medicare. The Group Health Centre (GHC), a partnership of the Group Health Association, as the fundholder, and the Algoma District Medical Association (ADMA), demonstrates some of the most advanced integration thinking in practice in Canada. The GHC was on track originally to become a "Canadian HMO," with a significant rostered population and full financial responsibility for all services. The introduction of medicare and the establishment of separate hospital and other program budgets by the Ministry disrupted a trajectory that still is viable today.

By 1990, several communities had been selected to explore feasibility more intensively. An extensive plan of interactions had taken place around the province involving stakeholders at all levels, such as the focus group comprising professional associations, colleges and other groups held at the Westbury Hotel in Toronto in 1988, and the OHA Symposium on CHOs in April 1989, including the Minister of Health (Caplan 1989). Linkages were explored from the perspective of stakeholders. Remarks by Gerald P. Turner, president and CEO of Mount Sinai Hospital, reflect some of the thinking at a Conference on Hospitals in the Future, October 10, 1990: "The aim of CHOs is to provide greater flexibility to deal with local health priorities. Projects like this are helping to make the breakthrough in the management of our health care resource ... a broadly-based partnership of hospitals, physicians and other providers who negotiate their various roles at the outset and then collaborate to provide the best possible service to patients" (Turner 1990; Marriott and Mable 1994b).

At this point, due to the combined efforts within government and throughout the province, key attributes of the model were considered in great detail. A rigorous framework for policy and program was developed in such critical areas as feasibility, public involvement, administrative and fiduciary responsibilities, in addition to organizational structure, minimum parameters for management, operations, information system development, evaluation, roles of stakeholders and flexibility of the model. By 1993, even a company-based model was explored by Magna International through an extensive feasibility study. The CHO model was summed up in 1993 by Dr. Eugene Vayda of the University of Toronto: "With CHOs, you have an opportunity to pull it all together. A system which integrates funding authority and delivery has a chance" (Marriott and Mable 1994a).

By the mid-1990s, with successive changes in government, the program and its development work continued (supported by all three parties), including additional approvals to develop an Integrated Management Information System to monitor and manage roster, financial and encounter data on an interactive basis with communities; a financial system – a model of capitation as the basis for funding; authority to establish a CHO Program Vote or operational budget; and a Quality and Evaluation Framework (Anderson et al. 1994; Marriott and Mable 1994a). The program and model were renamed as Integrated Health Systems (IHS), to encompass examination of both partial as well as fully vertically integrated models. Additional communities developed proposals reflecting varying degrees of integration, including extensive efforts in Windsor, northeastern Ontario and Toronto, spurred by District Health Councils.

The IHS program updated its review of international experience in this area, with countries experiencing regionalization and the introduction and evolution of roster-based, vertically integrated health organizations being particularly relevant to Canada; and continued to explore implications for particular stakeholder groups, involving a widening group of participants and debate (Marriott and Mable 1997a, 1997b). Papers and effort emerged from professional associations and others, notable among which were a proposal put forth by the Ontario Nurses Association for a fully integrated model and the integration work of the

University of Toronto, which brought with it the U.S. work of Shortell and greater focus to integrated delivery systems (IDS) and concepts of provider integration. The model also emerged at the national level by the mid-1990s, where it drew the endorsement of the Government and Competitiveness Project in Ottawa (Purchase and Hirshhorn 1994). The National Forum on Health issued a paper in 1996 that reviewed international experiences in integration tailored to the Canadian environment and policy and emphasized the importance of a primary care base (Marriott and Mable 1998a).

Not well known or documented is that there had been integration activity in other provinces during the late 1980s to early 1990s. Quebec had been investigating a model that was very similar to the CHO, called OSIS. Subsequent to visits and examination of Ontario's Ministry initiative, British Columbia created a CHO program, and the B.C. Medical Association was prepared to negotiate the CHO concept. Saskatchewan also convened a small internal policy group to examine Ontario's work and was developing a CHO concept to be called a THC or Total Health Centre. In different ways, these initiatives were impacted on by decisions in the early 1990s to move towards devolution and regionalization. This plus the election of a new government further impacted on Saskatchewan's initiative.

Meanwhile, other countries have moved more quickly to implement the kinds of integration reforms that have been explored in Canada. While we follow their progress with interest, the bases of their efforts – consumer and provider implications, concerns about quality, lessons and potential directions – have been under consideration here for some time. We believe that, in particular, Ontario is uniquely positioned towards success in integration, given the wideranging groundwork already covered across the province – with or without a mandate. Its leadership could make a difference for other provinces. The outstanding element at present is public confirmation of a Ministry mandate to proceed.

Why is this important? Because Canada has considerable experience and expertise to draw upon. Because virtually everything that was written in the late 1980s and early 1990s about CHOs (then IHSs) – including rostering, responsibility for the full continuum, notions of integration, community and consumercentric sensitivity and responsive orientation, health teams, electronic records and evidence-based measurement and quality evaluation, capitation funding and more – was part of public policy and model design. What has been written since is in agreement with these features and direction. The point is not so much the history lesson as the significance of recognizing that independent thinkers in Canada in the 1980s reached the same set of essential conclusions about an "ideal" set of responsibilities, features and options for the design of integrated organizations in Canada. We have much to learn from each other. And it is notable that these same features have emerged in other countries around the world, in many cases subsequent or parallel to the initial thinking here. Despite following different routes within different countries, all have reached similar conclusions about organizational modeling, policy and behaviour.

Key Features of Integrated Health Organizations

Leatt, Pink and Guerriere summarize common characteristics and types or forms of integration with functional, physician and clinical perspectives, and they identify elements of a potential model of Canadian integrated care. As the characteristics match those of an IHS, we heartily support them. But the paper omitted mention of the model framework that had been developed, which helps to explain what the model "looks like" and its flexibility. It is useful to review the key elements of integrated health organizations, to emphasize their scope and, more practically speaking, to explain what the organization does and is responsible for. These features or elements of responsibility bear review here, as they embody characteristics that interrelate to form a set of natural incentives for behaviour and internal dynamics, to motivate and compel higher performance, while allowing for variations in healthcare organizations (Marriott and Mable 1998). The features are:

• Autonomous not-for-profit organization: an organization independent of government and accountable to its rostered members, providers and government; includes members' input to planning and operations, a mission to support wellness and respond effectively to illness; accountable to government for the management of funds and services, and committed to quality and evaluation as a means of reinforcing mission goals and obligations of the organization. Its legitimacy is based on being selected by members/citizens and its viability in delivering appropriate and satisfactory services to them.

- Benefits or core services: responsibility to plan for, and to provide or purchase, all centrally defined benefits or core services along the full continuum of health, for the population served. Emphasis is on wellness and primary care with the GP as "gatekeeper" to secondary services and accessible multidisciplinary providers. Core services include the spectrum from wellness (promotion, prevention) to primary care, acute care, secondary, tertiary and quaternary care, long-term care and home care.
- *Roster:* responsibility for and accountability to an explicitly identified registered population, the aggregate of individuals rostered with the (one) organization of their choice, with the right to choose to "exit"; whose specific characteristics and healthcare needs are entered into the organization's database; and an organizational obligation to assess and respond to the needs of its individual members and the rostered population as a whole. The inherent right to choose is also extended through the integrated health organization to the consumer's right to align or roster with an associated physician or physician group.
- "Weighted" Capitation: the organization receives a per-person amount of funding which is adjusted to reflect the characteristics of the organization's rostered membership (e.g., a minimum of age and gender; areas of cost or need), to pay for all health services, no matter where provided or accessed in a province. In a public environment, funding comes from government to the organization, from a single pot of healthcare funds. It represents a cash

- flow to the organization and does not define funding for any element, whether program, institutional, physician or other provider. This is an internal matter left to the organization to work out (discussed below). Capitation transfers with the rostered member who chooses to "exit" or roster with another organization that better serves his or her needs.
- *Information system:* an obligation to build an information system to collect, track and report all roster and provider encounters (e.g., roster population information, provider profiles, satisfaction surveys, etc.); to maintain other appropriate health records and data; to incorporate health service activity with environment and financial data, as well as the capacity to blend in other information such as self-reporting, demographics, needs assessment, utilization and care-mapping; a responsibility to report necessary information to government, and to use this information in planning for population and individual needs, and as a tool to support and monitor quality and evaluation.
- Full responsibility to determine organizational and financial arrangements with providers: freedom of the organization to make decisions regarding critical matters "internal" to operations to best serve its population, including: distribution of funding to support care, decisions to provide and/or purchase (contract for) appropriate services, the development of appropriate organizational and financial relationships with providers and others throughout the system, determination of an optimum environment for all participants and a commitment to planning and

evaluation, to determine the most appropriate resources to meet the assessed population needs (Marriott and Mable 1994, 1997, 1998).

The features express a set of fixed areas of responsibility that tend to define an integrated health organization, but none of them predetermines a particular organizational construct. It is this organizational flexibility that bears a distinct contrast with regional structures or provider integration models. The organization can choose to fund all services or provide some services and fund others, and in special circumstances it could elect through local processes and agreement to include all provider services through enfolding them as divisions, or by achieving dedicated partnerships. Hospitals, then, could maintain their independence as contractors to the organization, or participate as a sub-area of the organization.

Similarly, physicians could elect to be contractors or partners or even employees of such an organization, as long as a mutually satisfactory relationship is achieved. They could negotiate the transfer of all physician dollars to their control and elect their own form of remuneration within the physician group. Options here include salary, fee for service or approaches that blend base funding with prorated fee for service, with other financial recognition for such things as educational attainment, extent of participation in continuing education, years of experience, coverage of nights and weekends, locating in particular geographic areas or special competencies (Marriott and Mable 1997).

The aggregate effect of integrating autonomy and full responsibility for all services, with per-capita funding for a

precisely defined and involved population, monitored and served by an integrated information system, empowers integrated organizations to more effectively mobilize and shift resources to areas of need. This flexibility to innovate or develop new standards harnesses the potential to respond more effectively to improve the health of populations served. The full model of integration provides a consistent set of parameters, commitments and responsibilities, while allowing for perpetual innovation and variation at the community level. It is not "one way" to do things, but rather a skeletal template upon which operations can be tailored to fit communities' needs while upholding consistent standards and fulfilling critical fiduciary and administrative responsibilities - to patients, to providers, to communities and to governments.

Lessons

Besides broadening understanding of Canadian background to benefit from our own hands-on experience in integration, it is useful to consider more closely what has evolved in the recent absence of Ontario Ministry policy in this area. Leatt et al. discuss networks as an appropriate model of transition. Networks or notions of "virtual" integration emphasize alliances between provider organizations that maintain their separate authority and funding. While they explore various forms of collaborative behaviour, there are concerns about the implications for resource efficiency, decision-making and overall performance effectiveness in carrying out their collective goals to benefit consumers. Such potential problems have been reinforced by "off the record" answers in interviews carried out by

Marriott and Mable in 1998 surveying a number of integration initiatives in Ontario – including networks.

When asked about issues of central accountability, or moving beyond small co-funded programs to real integration of the system, the answers were quite consistent: that any major reduction of the autonomy and power of participating agencies, institutions and providers would not happen, including any major transferal of responsibility to a central network governance, or authority or administration; nor would there be any move to transfer most or all of their respective budgets to support a central authority for the network to assume major financial responsibility for major components or "all" of the health services the participants represent. What this means is that some improvement is possible in the areas of collaboration and functional integration over what we have had. However, it is evident that one of the driving forces behind networks was to find ways to preserve the autonomy, integrity and power of participants, rather than to support the development of integrated health organizations or serve population health. There is a real risk of stalling at this level, or expending resources in ways that do not significantly approach the goals of integration.

Leatt, Pink and Guerriere review lessons learned, presenting a series of insights from international experience, leading to six interrelated strategies that in essence embody priorities already embedded in the CHO/IHS design – with a major exception. Leatt et al. fall short by recommending a focus on virtual networks, where much more is possible. This recommendation appears to contra-

dict important elements summarized in subsequent tables, such as consumer choice, money following consumers or incentives for performance. While organizational collaboration is always to be applauded (and we would hope it would be a hallmark of the present system), it simply does not go far enough. Not addressing important areas such as asset sharing stops short of obvious areas of potentially more effective resource management strategy. Most important, it does not fulfill the public trust – to find the most responsible, efficient and effective ways to use public healthcare dollars.

Strategies

Implementation may be done all at once or in a series of steps. Our observation after review of other countries is that most redefined their goals and directions and implemented new models on a national scale. There was little attitude of waiting for others to do it first. Reform was introduced systematically and comprehensively rather than as tentative pilots somewhat isolated from the rest of the system. In Canada, however, circumstances would suggest looking at transitional approaches while encouraging decisive leadership and watching for opportunities. Leatt et al. have pointed out that one can build from primary care organizations. We certainly advocate this, and have considered optional tracks to develop integrated health organizations from primary care organizations.

For example, levels of funding can parallel the development of increased service responsibility. Physician-owned primary care organizations might not have direct access at first to funding for hospitals, specialists, drugs and other services, but would hold the authority to negotiate arrangements with all those parties, who would then be funded by the government or health authority. If primary care organizations develop more representative governance and administration, with viable rosters of patients, they could evolve into the key features of full responsibility and could be eligible to receive full health system capitation (Marriott and Mable 1998).

Also consistent with Canadian tolerance for pluralism should be the option to recognize those who are "ready to go the distance" and are positioned to develop and implement fully integrated health organizations. Despite concerns about system-wide restructuring, Leatt, Pink and Guerriere acknowledge that "the creation of corporate governance models may in the long run prove to be the most efficient and effective type of integrated care." Government can reactivate its support for the development of fully integrated health organizations, and facilitate ways for them to operate in parallel with "partial" integration models such as primary care reform (and its evolution) and with the rest of the health system. There is room for these options. And despite an absence of policy mandate, there are still citizens and providers who want to support integrated health organizations. The ultimate objective is to have the total population served by integrated health organizations designed to serve them.

Conclusion

Canadian work in integration has been second to none for some time. Perhaps continuous, repetitive review should be curtailed in favour of better consolidation and documentation of our own experience. Perhaps we should learn from other countries' willingness to trust their design work and move forward, rather than watching others benefit from improvements Canadians might now enjoy. An environment that defaults to no action rewards the proponents of status quo and no change. Let's not confuse endless review or consensus efforts as the Canadian way of doing things – our own history of major achievements in healthcare does not prove this out. Leadership and implementation in a forthright fashion gave birth to medicare in Canada. Tommy Douglas moved forward with the conviction that what he was doing was right, in the face of enormous opposition at the time from citizens and providers alike. But once it was established, Canadians would not do without their publicly funded system. Early on, it was also Tommy Douglas who recognized that the work to complete fundamental structural reform of our delivery system was not ended. We need leadership with vision and fortitude to finish this job.

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The Capital Health Region's Early Experiences: Moving Towards Integrated Healthcare



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IN "TOWARDS A CANADIAN MODEL OF INTEGRATED HEALTHCARE," Leatt, Pink and Guerriere conclude that "although [the move to regional health authorities] may have reduced some of the problems of uncoordinated care among organizations, it is not clear whether it has improved integration of many patient-care processes." The authors provide a variety of frameworks to assess the extent to which "integration" has been achieved. They also propose strategies for moving forward to achieve integrated care.

This paper provides an "on the ground" perspective by the CEO of one regional health authority, the Capital Health Region, regarding its early experi-

ences in moving towards integration as described in the authors' paper. It also provides a commentary regarding the authors' proposed strategies for achieving integrated care. The Capital Health Region (CHR) provides hospital, community, home, environmental and public health services to approximately 350,000 people living in a geographic area of approximately 2,300 square kilometers centred in Victoria, British Columbia. The CHR also provides referral services for an additional 380,000 people who live throughout the rest of Vancouver Island. The CHR is an amalgamation of seven organizations, which occurred in April 1997.

Frameworks

Several frameworks are provided by the authors to assess health systems including those by Shortell et al. (1996), Coddington et al. (1997) and Enthoven and Vorhaus (1997). I have chosen for this commentary to use the Shortell framework to assess the progress made by the CHR.

Focuses on meeting the community's health needs

The CHR has established its vision to be "Healthy People in a Healthy Community." In pursuit of its vision, the mission of the Capital Health Region is to achieve positive outcomes in the following areas, which are essentially the Health Goals of British Columbia (British Columbia 1997):

- Positive and supportive living and working conditions exist in all our communities.
- Individuals develop and maintain the capabilities and skills needed to thrive and meet life's challenges and to make choices to enhance health.
- A diverse and sustainable physical environment with clean, healthy and safe, air, water and land.
- An effective, efficient, innovative and respectful health service system that provides equitable access to appropriate services.
- Improved health for aboriginal peoples.
- Preventable illnesses, injuries, disabilities and premature deaths are reduced.

The roles of the CHR in achieving each of these outcomes vary. For some outcomes the role is simply advocacy, while for others they include public policy development, service delivery and/or the enforcement of regulations.

Extensive work has been undertaken by the CHR to measure the health status of the Region's population and the performance of the Region's delivery systems compared to other jurisdictions. Based upon this analysis and community input, the CHR Board of Directors has established priorities to meet the population's health needs including, for example, "effective early childhood nurturing and parenting." These priorities guide the operational plans and resource allocation of the Region.

2. Matches service capacity to meet the community's needs

The CHR is in the process of developing a 15-year plan to project the volume and configuration of many of the services that will be required in its various communities in the years 2005, 2010 and 2015. This plan will provide directions aimed at achieving the appropriate capacities and mix of facilities and community and home-based services required for these three planning horizons. The projections, where possible, are based upon best practices in other jurisdictions. These best practices and other performance targets are applied to the demographic projections for the Region. Twenty advisory panels comprising more than 500 providers, advocacy group representatives and consumers offered advice on, and reaction to, service delivery best practices and benchmark performance targets. This and further community consultation will enable the CHR to set directions to match its service capacity to community needs.

3. Coordinates and integrates care across the continuum

Coordination and integration are the essence of the purpose of regionalization and the focus of the paper prepared by Leatt, Pink and Guerriere. As they suggest in their paper, this is the area where we will likely "move ahead with the Canadian tradition of incremental change."

The CHR has a budget of approximately \$550 million to serve its local community and Vancouver Island referrals. It provides services directly from approximately 30 sites and in people's homes, and it funds over 150 other agencies to provide direct services. Services include public health, acute care and rehabilitation, long-term care in facilities and in homes and a variety of community-based services including those for people with mental illness. Noticeably absent in this list of services, as the authors suggest, is pharmacare and non-hospital medical services.

Despite not directly providing or even funding all health services in the Region, the critical mass and breadth of services that CHR provides creates a solid platform to initiate strategies to coordinate and integrate care. In these early years of regionalization in the CHR, major strides have been made in areas such as mental health and child and youth services to better coordinate and integrate services. For example, in mental health we now have a centralized intake process that ensures clients are connected with the appropriate service, and a clinical database is now used on inpatient units as well as in outpatient and community services. In child and youth services, children in the Special Care

Nursery (SCN) often require follow-up services, many of which are provided through our paediatric rehabilitation team at the Queen Alexandra Centre for Children's Health (QACCH). The SCN and QACCH staff have worked together since regionalization to ensure a seamless transition from one service to the other. In another example, children who are exhibiting severe behavioural and emotional distress are often admitted through the Victoria General Hospital (VGH) Emergency to VGH inpatient. There is no other community alternative, hence the use of Emergency. These children will often be referred to mental health services at QACCH. Through effective teamwork across both sites, this transition has been greatly improved, with reduced length of stay on the inpatient VGH unit. Other areas will follow in time as all the Region's providers gain more experience in working together in this new model.

The biggest challenge that the CHR will have with integration is to develop effective partnerships and linkages with the approximately 400 family physicians in the Region. These physicians operate in a highly autonomous manner, mostly in solo practice or small groups. Nevertheless, many of these family physicians admit patients to our four acute care hospitals. To receive admitting privileges they must participate in the Region's continuing medical education and quality improvement processes. The CHR is beginning to work on strategies to provide value-added services to these physicians to help strengthen the processes for clinical integration.

4. Has information systems to link consumers, providers and payers across the continuum of care

Progress in implementing information systems in health regions in British Columbia has been impaired during the 1990s by a significant reduction in provincial funding for capital projects (CIHI 1999). Comparative statistics from a national survey (HayGroup 1999) suggest that B.C. regions such as Simon Fraser and the Capital Health Region spend less on information systems as a percentage of operating budget, 1% to 2% versus 2% to 3%, compared to other communities across Canada. Moreover, there has been limited progress in implementing electronic health records on a large scale across sectors anywhere in Canada (Closson 2000) due to barriers such as:

- Lack of a clear business case.
- Lack of common standards.
- Fear of loss of personal privacy.
- Inadequate incentives and training for providers to participate.
- Poor technology solutions.
- Ineffective leadership.

In spite of these barriers, there are examples of information initiatives in the CHR that flow out of the formation of the Region. The first is a self-care, patient education initiative that combines a self-care manual, a nurse call line and access to materials on the Internet. The evaluation of this initiative suggests that a population's behaviour can be modified positively by information strategies linking provider agencies and consumers (B.C. Health Research Foundation 1999). A second initiative is a diabetes information strategy. Using physician billing claims, the CHR has identified the people in the

Region who have a confirmed diagnosis of diabetes. Working closely with approximately 30 family physicians and their diabetic patients, we are helping patients better manage their disease. The results have been remarkable, with 95% following national guidelines for diabetic management versus less than 50% for diabetics generally throughout the Region.

Provides information on costs, quality, outcomes and consumer satisfaction to multiple stakeholders

Regionalization is quite new to British Columbia. Individual regions, including the CHR, and the Ministry of Health have done considerable work to develop performance indicators, particularly in the areas of health status, costs, utilization, quality and outcome. Benchmarking is also occurring, allowing comparison of regions to each other and to other jurisdictions throughout Canada. To this point, very little information has been made publicly available by the province or the regions comparing health status and system performance across regions. Recent Ministry documents (British Columbia 1999) suggest that these regional "report cards" will be made available soon.

Uses financial incentives and organizational structure to align governance, management, physicians, and other providers to achieve objectives

As a Region, the CHR focuses on the health of the populations it serves. While we must serve a very wide range of needs, we are attempting to achieve alignment by organizing ourselves to address the most significant health needs of the

population in the most effective and efficient manner. Building upon an analysis of regional healthcare utilization and outcome data and the health literature, the CHR has carried out a process to obtain provider and agency input to define a program structure centred around each of the major healthcare needs of people living in the Region. This process led us to organize into nine programs, including Cancer Care, Child/Youth and Maternal Health, Community Health, Digestive Health, Health Restoration, Heart Health, Lung Health, Mental Health and Seniors' Health. This program management model will help the CHR to focus its energies through strategic planning, performance measurement and resource allocation to achieve the alignment necessary to be successful.

7. Is able to continuously improve the care it provides

All health organizations should be able to continuously improve the care they provide. This is facilitated in health regions such as the CHR because of critical mass and breadth. Critical mass and breadth provide a base for regions to initiate and implement strategies to coordinate and integrate care across multiple sectors. This is much more difficult in a province such as Ontario where service governance is fragmented by sector (e.g., hospitals, continuing care and public health).

8. Is willing and able to work with others to ensure objectives are met

The situation here is similar to that referred to under point 7 above.

Strategies for Achieving Integrated Care

In their paper, the authors propose six strategies for achieving integrated care. I will comment on each of these strategies based upon my experience to date in the CHR.

1. Focus on the individual

Focusing on the individual is a key strategy for successful clinical integration. In the old world of greater fragmentation of providers, prior to regionalization, the focus of each provider tended to be on episodic care rather than the health of the individual or the management of chronic illness. I have provided examples in this paper of how regionalization has placed a focus on the individual. Some of these are: the self-care initiative, which provides individuals with access to knowledge about their health and how to maintain or improve it; the development of a 15year regional service plan to enable the Region to provide health services in the home or as close to home in the community as possible; and regional health goals that focus on keeping people healthy as well as treating disease.

2. Start with primary health care

In all provinces, except possibly Quebec, health system reform did not start with primary healthcare. Ontario started with hospital amalgamation and the linking of home care with residential long-term care. The remaining provinces formed regions and initially excluded primary health care from the regional responsibilities. There are reasons for this, some of which are referred to by Dr. Roger Thomas in a paper on primary healthcare (Thomas 1999). They include:

- Physicians not wanting to have their actions controlled through complex planning.
- Physicians currently working primarily in solo practice and small groups.
- Inadequate computer system support.
- Physicians questioning whether 24hour access to primary care service is really necessary or advisable.
- The concern about the lack of patient accountability for remaining with one primary care physician, which could lead to economic negation of the physician.

In spite of the many barriers to address primary healthcare, it deserves high priority as a strategy for achieving clinical integration. The health system will be strengthened considerably by creating a better capacity for health promotion, the management of chronic disease and coordination of care in the primary care setting.

3. Share information and exploit technology

I have commented on this as a key strategy for clinical integration and self-care in my discussion using the Shortell framework, point 4. We will never achieve full clinical integration without the implementation of information system tools. This is particularly true in relation to maximizing the potential benefits of primary healthcare.

4. Create virtual coordination networks at local level

The creation of virtual coordination networks is already happening in the CHR and other health regions across Canada. In the CHR we currently provide services directly in over 30 sites in addition to

people's homes. We also fund over 150 other agencies to provide services, including such diverse services as residential long-term care, mental health housing, home support and the "Best Babies" program, for example. In addition, because our roles to achieve our goals include advocacy, we work in virtual networks with organizations that we do not even fund, such as municipal governments, the Social Planning Council and school boards.

Develop practical needs-based funding methods

The British Columbia Ministry of Health has been working for years to develop needs-based funding methods to allocate funding to its regions. As the authors point out, this is a very contentious area. Strict adherence to the formulas that have been developed in British Columbia would cause a significant reallocation of funds among regions. This has been politically unappealing for the provincial government during the late 1990s when there was limited growth in money going into healthcare delivery and there were systems pressures almost everywhere.

I suggest that the matter of equitable funding be broken into two components: base funding and growth funding. Population growth and rates of aging vary widely by region in British Columbia, as in other provinces. I believe it would be easier in the short run to gain acceptance of funding methodologies to address demographic growth while the methodologies to address reallocation of the base funding levels by region can be further researched.

Implement mechanisms to monitor and evaluate

I have commented on this as a key strategy in my discussion of the Shortell framework, point 5. System accountability requires much better reporting to our stakeholders about how we are doing in improving health status and health system performance. We have many useful regional measures, which we can be reporting on today, that will show how we are doing as a region compared to other regions and compared to ourselves over time.

I agree with the authors that there is a question about who should perform the monitoring and evaluation. A recent report on hospitals in Ontario (OHA 1999) was done in partnership with the University of Toronto to ensure rigour in methodology and objectivity. There is also a national organization in Canada, the Canadian Institute for Health Information (CIHI), which has as its mandate to develop standards for data and performance indicators to enable interagency comparisons of health status and health system performance. CIHI has a major role to play in Canada-wide monitoring and evaluation.

Conclusion

I believe Leatt, Pink and Guerriere are overly critical of the progress and potential of regional health authorities. The authors say that "fundamental system problems have either not been addressed or have been dealt with at the margin only, usually by throwing money at them." Major system change in healthcare services is never made quickly or easily. The CHR is less than three years old, and already significant progress is being

made, including the following:

- The Regional Health Board has adopted the broad determinants of population health in its goals.
- The Region directly operates and funds a critical mass and breadth of services, which provides a solid platform to initiate strategies to coordinate and integrate care.
- A program management structure has been implemented to focus the energies of the CHR on major population healthcare needs through strategic planning, performance measurement and resource allocation.
- Virtual coordination networks are being developed at the local level with agencies such as municipalities, the Social Planning Council and school boards.
- A 15-year regional service plan is being established to project the appropriate mix of facility, community and homebased services for the Region.
- A self-care, patient education initiative has been implemented and evaluated to demonstrate its effectiveness.
- The Region is working closely with family physicians and their diabetic patients to help patients better manage their disease with remarkable results.

There are, of course, major opportunities to improve clinical integration in the CHR. This is particularly true in relation to primary healthcare. Health services would be strengthened considerably in the CHR by creating a better capacity for health promotion, the management of chronic disease and the coordination of care in the primary care setting.

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A Healthy Community through Health System Partnerships: The Approach of Markham Stouffville Hospital



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THE STRUCTURE OF THE CANADIAN HEALTHCARE SYSTEM, particularly in Ontario, has remained remarkably stable over the past 25 years. No other private sector industry employing hundreds of thousands of people, spending tens of billions of dollars annually and serving millions of consumers every day has survived for 30 years without the need to reinvent itself in quite fundamental ways. How then has the healthcare sector in Canada avoided the pressure to "reinvent itself?"

The answer, of course, is that changes

have occurred in many elements of health-care. Clinically, treatment modalities have made tremendous strides. Training of professionals is very different than it was three decades ago. Funding has shifted in subtle, but important ways. But, in Canada, as in healthcare systems around the world, the quest for the almost mythical organization for the delivery of health services that can provide accessible, efficient and cost-effective care remains illusive. For the most part, the basic delivery structures remain much the same – in uncoordinated silos.

With all the changes that have occurred, one critical element remains fairly much intact – the patient's experience. As boomers reach middle age and take on the role of caregivers to their parents, the frustration level with the current system increases. Service gaps and lack of coordination and information challenge the families to put together the services they need.

In the mid-1990s, the Canadian ongoing search for the "right" system focused on regionalization. In all provinces except Ontario, some level of regionalization has occurred. The theory behind the move to regional authorities is simple and powerful:

- 1. Decisions about resource allocation are better closer to the populations being served.
- 2. Fragmentation can be reduced if the number of corporate entities is reduced.

Together, these conditions can provide the foundation for achieving a health system:

- that is rooted in population health;
- that is driven by a common vision; with a unified management to operationalize the vision; and
- that has an accountability framework to the people (via the regional board).

However, the theory, as yet, has not been proven in the field. The results of regionalization, though evaluation is sparse, appear to be less than spectacular. Certainly some positive benefits have been achieved. However, the stresses and strains on healthcare services have remained largely unchanged.

The Ontario Experience

In Ontario, a different path was taken. In the mid-1990s, three paradigms were beginning to emerge:

- The integrated health system (IHS), as an alternative to regionalization, was gaining considerable momentum as the model of choice among providers.
- Hospital restructuring as a precursor to total system reform was in full swing in almost every Ontario community.
- The Ministry of Health was contemplating a move to a decentralized regional office structure as an alternative to regional authorities.

One of the three paths came to a dead end. The negotiated agreement between the government and the Ontario Medical Association (OMA) included certain conditions that were perceived, by champions of the IHS movement, as being the final chime of the death knell for integration. Restrictions on innovative use of the physicians' "fee-for-service pot" meant that introducing alternative payment plans (for example, capitated payments) became highly unlikely. Since rostering and capitation were considered the backbone of an IHS (HMRU 1996), the agreement was like a pail of cold water being thrown on those pressing for new, population-health-based initiatives.

Following the signing of the OMA agreement, the Ministry of Health quietly began disbanding the policy group that was researching integrated health systems. Community Care Access Centres were established as a new stand-alone entity. Hospital restructuring and decentralization continued but the fundamental relationships between health providers in the healthcare delivery system remained impervious to change.

Has the IHS Ship Come In or Sailed into the Sunset?

Leatt, Pink and Guerriere take Shortell's notion of an "organized delivery system" and break it down into several fundamental elements. Components include:

- focusing on community health needs and the capacity to meet these needs;
- coordination of a continuum of care;
- information linkages; and
- using incentives to align governance, management, physicians and other providers.

Again referring to Shortell, the authors note that today's delivery is more akin to multiple, independent structures built around the provider rather than the consumer.

Analyzing the gap and the possibilities for moving forward, the authors provide some insightful findings from their review of international experience. Of significant importance are the six interrelated strategies for moving ahead:

- Focus on the individual.
- Start with primary healthcare.
- Share information/exploit technology.
- Create virtual coordination networks at the local level.
- Develop practical needs-based funding models.
- Implement mechanisms to monitor and evaluate.

Ontario's providers have promoted a top-down approach to system reform. They have advocated for legislation and policy to create the framework, incentives and funding models to allow an IHS to develop and flourish (TDHC 1996). Given the lack of provincial action to date, is there an alternative? Can local

initiatives be implemented without government support or intervention? In the following paragraphs the efforts of Markham Stouffville Hospital (MSH) will be examined against the six points that are contained in "Towards a Canadian Model of Integrated Healthcare." MSH's plans and actions will be used to determine the viability of a bottom-up approach to building an integrated health system.

Markham Stouffville Hospital's Approach

MSH has supported and promoted the IHS concept for several years. The application of the approach to a local health system was first outlined in a 1995 acute care study carried out by the York Region District Health Council (1995). It was further refined in a subsequent report entitled "Southeast York Region Integrated Health System: Creating Canada's Healthiest Community" (Avrich et al. 1997). Like most of the initiatives of that time, its implementation model required Ministry agreement, support and participation. To date, none of these conditions has been achieved.

In its review of York Region, the Health Services Restructuring Commission (HSRC 1997) supported the move to integrated health system development in York Region as recommended by the DHC and supported by the hospitals. In 1999, MSH decided that a locally led initiative was the only option for immediate action. The hospital believes that change is possible, and that by taking a visionary, perhaps risky, leadership role in creating a virtual IHS, the benefits will encourage government and other healthcare providers to move forward.

The MSH vision, approved in January 2000, will provide the guidepost for action:

"Achieving a healthy community through health system partnerships."

The vision builds on the previous work of the hospital and its partners, but emphasizes the foundation of partnership rather than new corporate structures. An examination of the current and proposed strategies against the six lessons outlined above is provided here.

Focus on the Individual

York Region, where Markham Stouffville Hospital is located, is experiencing one of the fastest growth rates in Canada receiving 66 new residents each day. As well, the historically homogeneous population is becoming quite multicultural. As in all of Ontario's communities, the population is also aging. To better understand and serve individuals and families requiring service, the hospital has begun to work closely with the Simcoe-York District Health Council to utilize its recently completed comprehensive community profiles. This work is complemented by the preparation of stakeholder dossiers that will highlight the needs, wants and expectations of key groups that utilize and support the hospital.

The rapidly changing demographics of the population have challenged Markham Stouffville Hospital and other local health providers' abilities to provide needed services. Partnerships provide a real and viable means of addressing these challenges. For example, to better serve the Chinese community, the hospital is developing a strategic partnership with the Yee Hong Centre for Geriatric Care. This innovative, long-term care centre

can provide the hospital with improved capacity to respond to individual cultural needs. In return, the hospital can provide necessary secondary services to the centre's residents and community clients. A further strategy is aimed at helping individuals who live in the area with health education and health promotion information. In addition to the many ambulatory clinics that provide individuals with counselling, the hospital is redesigning its website to directly provide or link individuals seeking information to reliable and up-to-date sources.

Start with primary healthcare

Rosser and Kasperski (1999) reiterate the position of the Ontario College of Family Physicians that family practice is based on four principles:

- 1. The patient-physician relationship.
- 2. The family physician as a skilled clinician.
- 3. The family physician as a resource to a defined practice population.
- 4. Family medicine as a community-based discipline.

They go on to note that "current healthcare systems do not provide incentives or any support for family physicians to practise according to these four principles." If, as often noted, the development of an IHS is rooted in primary care, and if primary care requires appropriate incentives to bring change about, then what can be done without government intervention? MSH believes that some incentives are possible within existing legislation, although fundamental change will require a more enabling OMA/ Government agreement and changes

to fiscal policy. The family physicians in Ontario have supported changes to fee for service for several years (OCFP 1995).

The mutual benefits derived from closer linkages between a hospital and its primary care physicians have been studied by a number of groups. The Toronto District Health Council (TDHC) held an invitational conference for family physicians in March 1999. The conference proceedings (TDHC 1999) documented a significant frustration by doctors regarding the number of hours spent each week trying to find community services for patients. These efforts were unpaid, undervalued and took away from the physicians' capacity for one-on-one care. Providing what is often termed case management is a primary care responsibility. But is this service best undertaken by a family physician? The Ontario College of Family Physicians (OCFP 1999) points out that solo practice or small group practice cannot provide the infrastructure to undertake these responsibilities.

MSH has been working with two physician practices (comprising 17 family physicians) on integrating health records and providing technology links. This innovative approach will be described in more detail below. Several other types of hospital/physician partnerships will also be undertaken to assist in establishing a primary care base for integrated health delivery.

In the absence of regional or provincial structures, a local hospital may be the only provider with a sufficient resource base to provide the resources needed for case management to support primary care physicians using other types of health professionals. MSH is looking at several

strategies, in addition to technology, to support local groups of family physicians. The hospital is considering ways to provide financial incentives to physicians to contribute to providing non-fee-for-service benefits to clients and by involving them in a virtual, multidisciplinary team including nurse practitioners, social workers, pharmacists and other healthcare professionals. The hospital is also researching the potential of offering its sophisticated management support to physician groups to improve their operational efficiency.

Share information and exploit technology

In 1996 the Ontario Ministry of Health held a series of focus groups on integrated healthcare systems. "The overwhelming advice in most of the focus groups was that the design and funding of affordable, accessible and appropriate information systems is pivotal to IHS implementation" (Quigley 1996). MSH has invested considerable efforts and its own funding in developing technological links to its physicians inside and outside the hospital. Two physician practices have entered into a pilot project with the hospital to link patient records and improve information flow. If successful, this model can be expanded to other physician groups, both primary and specialist. The current investment by MSH with its physician partners will pay considerable dividends in reduced duplication of tests and better and faster communication between specialists, Community Care Access Centres and the family physician. Greater coordination and continuity of care should improve health outcomes and lead to higher levels of patient satisfaction.

Create virtual coordination networks at the local level

Goldsmith (1998), a leading healthcare futurist, notes that a virtual IHS can produce the same if not greater benefits than the single corporation model. Virtual IHSs build on the strengths of each partner. Markham Stouffville Hospital is advocating a multitiered strategy to build a virtual integrated health system for its community. Central to the strategy is a local, vertically integrated network of agencies that will address the primary and secondary care needs of the community. As a starting point in building the network, the emphasis for the next year will be on long-term care and rehabilitation (in addition to primary care reform discussed above).

In the area of long-term care, the hospital has initiated discussions with local long-term care facilities and the York Region Community Care Access Centre. The hospital will be working with the agencies to design and implement a specialized geriatric service to address current and emerging population health needs and build on the strengths and capacities of the community providers. As several of the agencies are planning major capital redevelopment, joint clinical space and program planning will be encouraged.

Rehabilitation is another area for action. A local physiotherapist coalition and MSH have been developing a rehabilitation network agreement. The network will provide one-stop information and referral service to residents seeking care, joint needs-based planning and program development, and standard setting and monitoring. This private/not-for-profit arrangement is a potential model for other service developments.

The second tier of the strategy is directed towards horizontal integration. Markham Stouffville Hospital is a medium-size, suburban community hospital providing a comprehensive range of secondary care. The geographic location of Markham Stouffville Hospital results in travel patterns that lead southward from the Uxbridge site of the Lakeridge Hospital System to Markham Stouffville Hospital and for more regional/specialized care to the Rouge Valley Health System (a large, multisite community hospital). Considerable synergy exists to develop a comprehensive range of hospital-based primary, secondary and (non-teaching) tertiary-based care through horizontally integrated partnerships among the three hospitals. As one of the three hospitals in York Region, MSH has also developed joint programs with the other two hospitals in the region. A shared MRI service is one development that has been a successful collaborative undertaking.

The third tier in our integration strategy links all the local hospitals serving northeast Toronto, southeast York Region and Durham Region with a full-service teaching centre for educational and highly specialized care. This academic network includes the Sunnybrook and Women's College Health Science Centre (three sites), Markham Stouffville Hospital, York Central Hospital, North York General Hospital (two sites), Rouge Valley Health System (two sites) and Lakeridge Health System (five sites). Together, this horizontal network serves over 1.5 million people. The network can provide a wide variety of educational and training opportunities for the physicians and hospital staff of all participating

member institutions. A second specialty-based academic and program partnership is being discussed with the St. John's Rehabilitation Hospital. St. John's has been designated by the Health Services Restructuring Commission as a regional (physical) rehabilitation referral centre.

Develop practical needs-based funding models

Of the six lessons learned, this is beyond the scope of our hospital alone to embrace. What can be done is to begin to develop with the Simcoe York DHC and others a needs-based planning and monitoring capacity. The information collected will inform Ministry action when changes in funding are required due to developments related to care needs or population growth.

Implement mechanisms to monitor and evaluate

Accountability frameworks, report cards and integrated information systems are necessary and expected in today's healthcare environment. MSH is taking an "educated" risk in moving ahead with its strategies without explicit Ministry commitment and support. It is essential that the initiatives are carefully monitored and evaluated by a third party so that the successes and failures can be analyzed and understood. MSH will work with the Simcoe York District Health Council and evaluation experts to design and collect ongoing information so that an appropriate evaluation of the projects can be done and lessons can be disseminated to the Ministry of Health and Long-Term Care as well as others contemplating similar projects.

Where Do We Go from Here?

As MSH embarks on this path to local integration one question remains unanswered: Why now? The experience to date with changes is not particularly encouraging. Several factors are coming together to lend support to our efforts:

- The rising curve of the aging population and the much more modest rise in health expenditures means changes must take place and reasonably soon.
- Information technologies have become more sophisticated, and linkages of various platforms to establish an integrated clinical record are now available.
- Public expectations continue to grow.
- In Ontario, a driving force will be balanced budget legislation. If better delivery methods are not found, financial pressures will outstrip the government's ability to raise revenues.
- Finally, provincial and federal policy musings are increasingly supportive of reform.

Leatt, Pink and Guerriere state that there is no one answer to building successful integrated health systems. Rather, they conclude that "a variety of strategies must be tried in different communities." The results of the experiment underway in the Markham Stouffville area will help provide some pieces of the puzzle in how to develop an integrated health system that truly functions in the interests of its community. MSH is hopeful that the findings will be transferable to other communities. However, we realize that some of MSH's community, institutional and cultural characteristics may limit applicability elsewhere. For example, the MSH community is growing, resources are limited and competition among

healthcare agencies is relatively minor. Of equal importance is the hospital's will-ingness to use its capital reserves to seed the process of change. These attributes may not be universally present in other communities.

Incentives must ultimately address the basic issue of dollars and cents. The Health Services Restructuring Commission investigated the barriers to implementing integrated health systems in Ontario (HSRC 1999). The HSRC concludes that although much can be done with "goodwill" fundamental change will require legislative levers. In fact, there is no legal basis for an IHS to exist.

Many communities, including Markham Stouffville, have decided that it is better to move ahead a few steps than have the opportunities for change and leadership pass by. The actions and strategies being pursued can be effective. They can improve care and consumer satisfaction. They can help utilize increasingly scarce resources more effectively. An IHS offers a model of delivery that can move us from myth to reality. It provides improved accessibility, a population-health-based focus, cost-effective solutions and a better coordinated continuum of care.

In recent months, Minister's speeches have begun to use the language of integrated systems again. The Premier and others are promoting the concept of primary care. Movement towards integrated health systems may slowly be starting to take root. As was once said, "Considering the direction things are going, it's impossible to predict in which direction they'll be going next" (Brilliant 1994).

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The Authors Respond

In a country as large and diverse as Canada, it is appropriate and probably inevitable that integrated healthcare will be achieved in different ways.



COMMENTS FROM THE AUTHORS ABOUT THE SEVEN COMMENTARIES

Peggy Leatt, George H. Pink and Michael Guerriere

~

ONE OF THE MOST REWARDING
ASPECTS of writing a paper is reviewing the comments made by one's peers. The responses to our paper were thoughtful and insightful; in fact, they stimulated us to clarify the concepts and to better explain our analyses of the health system. We have learned a great deal from this work, and continue to learn from our observations of how the healthcare system is changing, and developing in response to consumer expectations and providers' drive of excellence in quality of care.

Leggat and Walsh provide insights about the integrated healthcare experience in Australia and New Zealand. They describe three valuable lessons. First, not everyone needs integrated healthcare. A particular episode of care may be a onetime-only event and therefore not require follow-up. We agree with this lesson but, as a population ages and the prevalence of chronic illness increases, it is likely that more people will need more services more often, and from *more* than one provider. In other words, we think the proportion of the population who will require integrated healthcare is going nowhere but up, at least in the foreseeable future. In their second lesson, the authors discuss financial and market incentives. Although the vast majority of Canadians live in

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urban and suburban communities where consumer choice is real, this is not the case for people in rural areas. We agree

that one size does not fit all, and that different models will be required for different populations. A highly regulated environment has always characterized the Canadian healthcare system and we agree that meaningful incentives to provide appropriate services are necessary to realize change. The third and final lesson offered by Leggat and Walsh suggests that the implementation of integrated health services should be a bottom-up process. In fact, this is the approach

that we have always advocated. No one knows the needs of local communities better than local providers. Rather than imposing a centrally determined model, government should remove the pervasive and formidable barriers that currently prevent local providers from creating innovative, local models of integrated healthcare. This is particularly important for new models of primary care and integrated information management, the key building blocks of integrated healthcare.

Rogers and Sheaff describe some of the British experience in moving towards greater healthcare integration. For several years, the National Health Service has promoted the organization of primary healthcare as its central focus. The GP fundholding model is illustrative of an attempt (albeit an accidental one, according to the authors) to improve the coordination of all levels of healthcare in the United Kingdom. We are encouraged by the Primary Care Groups and Trusts described by the authors because they

> seem to have the potential to increase real integration of primary care services. A help line operated by nurse practitioners is a good idea that Canada has been slow to adopt. Similarly, we were impressed by the importance placed on the involvement of local communities, lay people and users. Although real influence is not yet evident, we agree with the authors that it is important to engage users and community resources. The authors describe the relevance of an

in-depth understanding of the use of services and we concur. Only through such understanding will a system be able to design and provide the "right service at the right time in the right place by the right provider." Finally, Rogers and Sheaff argue that self-care and informal care are significant and often hidden aspects of healthcare. An important goal of integrated healthcare is giving patients and their families the self-care information and skills that they want and need. We agree that formal primary caregivers will have to involve informal caregivers to a greater extent and that mixed models of care may be appropriate to meet the diversity and complexity of needed health services.

Marriott and Mable recount the origins of integrated healthcare in Canada and elsewhere and, in so doing, give us a rich and valuable perspective on the

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usefulness of current models of integration. We strongly agree with the authors' own survey finding that vested interests of providers are serious inhibitors of greater integration. The healthcare silos are big and strong but must be dismantled if true

integration is to take place. In addition to providers, we would also add various professional associations, provincial ministries and departments of health to the list of vested interests who oppose change. The authors take exception to our suggestion of virtual networks and instead argue

for common ownership of assets. We agree that there can be economic and other gains from common ownership of assets in many circumstances. However, U.S. and other experience has shown that a great deal can be achieved through joint

contracts and strategic alliances. In our opinion, virtual integration has greater appeal and comfort to providers who are reluctant to relinquish ownership to provide coordinated services. The authors indicate that a transition period and gradual implementation of coordinated systems is a preferred approach and we concur with their view.

Shamian and Leclair raise some important challenges to the idea of integrated health systems as the next logical step in healthcare reform in Canada. They point out that each province has chosen its own distinct path of achieving

higher quality of care at an acceptable level of cost. As the culture and character of each province varies, so do the needs and acceptability of approaches to reforming healthcare. The authors comment that the role of the physician or

nurse is not defined in the article. We believe that rigid role definitions work against integration of healthcare. Instead, we argue that health services "should be provided by the health professional who can best meet the individual's needs. For example, nurse practitioners, registered

nurses, chiropractors, naturopaths, midwives, optometrists, pharmacists and others (assisted by comprehensive clinical practice guidelines) should be used to provide the right services for the population. Use of these clinicians leaves the

> physicians' time and skills for the more complex cases needing medical treatment."

Closson and
MacLean/Zon present
two excellent case studies
of strategies to improve
coordination and integration of care. Closson
assesses the Capital
Health Region (CHR)
against the principles of

integrated care identified by Shortell as well as against the major recommendations that we outline and points out that the CHR has made considerable progress towards greater integration of care. He concludes that we are overly critical of the progress and potential of regional health

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authorities. We agree that regional health authorities have made substantial and laudable achievements in rationalizing healthcare, and the Capital Health Authority is probably one of the best examples. However, we maintain that the exclusion of physicians, drugs, and other essential health services from the jurisdiction of regional health authorities, the lack of integrated information systems, and so on, means, by definition,

they have not achieved integrated healthcare. We agree with Closson that the major opportunity to improve clinical integration is in the domain of primary care. MacLean and Zon describe the progress made by Markham Stouffville Hospital in improving integration of care for their patients. This case demonstrates that, despite

an absence of Ministry policy and a legislative framework, it is still possible for local providers to improve the coordination of care. The authors provide insightful comments on the challenges of moving forward in this area in Ontario.

Finally, Hernandez identifies some important findings from the U.S. experience with integrated care that we believe are relevant to Canada. First, management of processes between hospitals and physicians, and shared information systems are critical for integration to occur. Second, excess capacity and duplication must be removed if system efficiencies are to be achieved. Third, integration is really about fundamental work redesign versus diversification and

other organizational strategies. Hernandez concludes with a very important question: "Will integrated care be achieved in Canada by control mechanisms of an integrated organization or market mechanisms that prescribe outcomes to be achieved by individual system components?"

At the extreme, we believe neither of these options is viable in Canada. In the future, we think it is unlikely that all or

> most Canadian healthcare providers will be owned by, or employees of, an integrated health system. Conversely, we also think it is unlikely that all or most healthcare providers will be independent agents who contract with a fundholding integrated health system. Rather we think that a quintessentially Canadian, middle-of-theroad approach will likely

prevail. Greater integration of care will be authorities and rural areas may have more be achieved in different ways.

Looking Back, Looking Forward

... building on the vision and legacy

Three Point Mandate, March 1996

The Health Service Restructuring Commission was an independent body established by the Ontario Government in March 1996 to:

- 1. Make decisions about restructuring Ontario's public hospitals
- 2. Provide advice to the Minister of Health about which health services would need reinvestment as a result of changes to the hospital system and changing needs of the population
- 3. Make recommendations to the Minister on restructuring other components of the health care system to improve quality of care, outcomes and efficiency and help create a genuine, integrated health services system

Seven Point Plan, March 2000

The Commission recommends that the government:

- 1. Build on the implementation of hospital restructuring and reinvestment in health facilities and community and other services
- 2. Articulate and communicate a vision and goals for the future health services system
- 3. Clarify and define the role of government
- 4. Implement a comprehensive health information management system
- 5. Implement a strategy for primary health care reform
- 6. Support greater integration in the system by building on community efforts to strengthen integration and strengthen academic health science centre networks
- 7. Develop and implement a strategy for improving health system accountability and performance measurement and improvement systems

One Point Access: the full report-free of charge

Effective April 1, 2000, hard copies of the full report can be obtained free of charge from the Canadian Health Services Research Foundation. The executive summary can be found on the foundation's website at http://www.chsrf.ca/english/document-library/index.html (library series).

À compter du 1 avril 2000, une version imprimée de ce document pourra être obtenue gratuitement de la Fondation canadienne de la recherche sur les services de santé. Le résumé se trouve sur le site Internet de la Fondation, à l'adresse http://www.chsrf.ca/francais/document-library/index.html (documents d'appoint).



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Notes from the Associate Editor

NORMALLY THE EDITOR-IN-CHIEF WOULD INTRODUCE THIS ISSUE of Healthcare *Papers* at the front using the first available leaf. This journal, however, departs from the norm in many ways. First, it presents an important perspective without advocating the point of view of any particular interest group. The authors are experts whose authority comes from careful analysis and study of an issue or from deep personal experience, and who demonstrate a mastery of the material presented. Independently, they offer new ideas and original thinking to help establish an agenda for discussion. They report on cutting-edge research by academics, consultants, and management analysts. They give firsthand insight into how the system works, and how managers, the public and patients alike respond to demanding challenges faced on a daily basis. They provide best-practice models and hands-on techniques from healthcare providers around the world.

They receive little in the way of editorial guidance. The result is an open and candid discussion reflecting the curried thoughts of authors steeped in the development, administration and delivery of healthcare policy and programs.

Second, Peggy Leatt, the editor-in-chief, is one of three authors of the lead paper and removed herself from the role of editor for this issue. It was edited by the associate editor with valuable support from members of the editorial advisory board listed on the next page, and Dianne Foster Kent, our managing editor.

Third, one of the responding authors, Michael Decter, departed from the traditional format and penned a letter purportedly from a deputy minister of health to the premier of a province. We could not resist placing it before the lead paper. This, despite Decter's preference to be "part of the larger group of reactions to the excellent Leatt et al. piece."

Decter calls for bold actions to implement health system changes that place the patient first, and would restore public confidence at the same time. Fortunately, he provides a bold action plan. The plan is hard to ignore coming from a former deputy minister who is now a highly respected healthcare advisor, author and analyst, and chair of the Canadian Institute for Health Information.

We will look for a response from deputies, ministers and premiers and all our readers as they consider their policy options cognizant of the need to build professional, organizational, political and consumer readiness (see Shamian et al.) to put these policies in place. And that may be the toughest task of all.

In the process of making policy decisions readers may want to refer to our last issue which elegantly presents all sides of primary care reform, and they can look forward to our review of the sustainability of a publicly funded system – for release in June, 2000.

We would be pleased to publish comments in our next issue – even if the ministers are presented pseudonymously.

Tina Smith Associate Editor

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