Creating Strategic Change In Canadian Healthcare

CONFERENCE WHITE PAPER WORKING DRAFTS



MoniesonHealth.com

Funded with generous support from the Joseph S. Stauffer Foundation.

Integrating Care for Persons With Chronic Health and Social Needs

WHITE PAPER - WORKING DRAFT

Walter P. Wodchis, A. Paul Williams & Gustavo Mery

Institute for Health Policy Management and Evaluation Health System Performance Research Network

ACKNOWLEDGEMENTS

This work is supported by the Health System Performance Research Network, which is funded by the Ontario Ministry of Health and Long Term Care Health Services Research Fund. We also draw on a summary of case studies funded by HSPRN, The King's Fund, and The Commonwealth Fund. The views expressed in this paper are the views of the authors and do not necessarily reflect those of funding organizations.

INTRODUCTION

Decision-makers in Canada and across the industrialized world face the dual challenges of meeting the needs of growing numbers of persons with multiple chronic health and social needs, while sustaining already stretched healthcare systems. There is a compelling need to transform the health system by restructuring the provision of care to deliver integrated patient-centred care for individuals with complex care needs. Integrating the many care services provided by a diverse array of providers has been identified as a key pillar of a Canadian healthcare strategy (Monieson Centre, 2013). This paper provides evidence-based recommendations for action by government, providers, and patients to better integrate care.

Internationally, a growing number of models of integrated care are being implemented to improve the quality and outcomes, particularly for individuals with complex needs who are high volume users of the healthcare system. Some of these programs have the potential to improve patients' experience of care and the health of populations, and reduce system costs, by minimizing the occurrence of adverse events and by creating efficiency through reducing fragmentation and duplication of services.

On the demand side, people are living longer. While aging is strongly associated with the rise of multiple chronic conditions, recent data from the Canadian Institute for Health Information (CIHI) show that utilization is increasing across all age groups (2011a). Most costs are related to people with multiple and complex needs that are higher among older persons, particularly amongst those over 85 years of age (Commonwealth Fund, 2012). This oldest-old population group is also now increasing very quickly in absolute numbers, driving most projections of very high future healthcare spending rates. Less remarked though is the fact that there are also growing numbers of children with complex medical conditions who, due to advances in medical technology, will live into adulthood outside of hospitals, requiring a range of community-based health and social supports. Similarly, more persons with disabilities, who would have previously lived all of their lives in institutions, are now aging in the community.

On the supply side, it is increasingly understood that fragmented "non-systems" of hospital-centred acute care are poorly equipped to support persons of any age with multiple chronic health and social needs in an appropriate, cost-effective manner. A series of recent policy reports and statements in Ontario have highlighted a number of persistent system problems, such as the high number of alternate level of care (ALC) beds in hospitals (Born & Laupacis, 2011; Access to Care, 2014). ALC beds are defined as those occupied by individuals who no longer require hospital care, but who cannot be discharged because of a lack of appropriate community-based discharge options. In his insightful analysis of the ALC problem in Ontario, Walker observed that a lack of coordinated community-based care options too often results in hospitalization and long-term residential care, as costly and often inappropriate "default" options for older persons (Walker, 2011); this impacts negatively on older persons themselves, and on the health system opportunity costs of providing care at too high of an intensity.

Such challenges are not unique to Canadian provinces. A recent EU study, funded by the European Commission, and conducted across 12 EU countries (Austria, Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Slovakia, Spain, Sweden, the United Kingdom, and Switzerland), clarified that in addition to the challenges of encouraging joint working between formal care providers within and across sectors (e.g., hospitals, home care, community agencies), all countries continue to experience challenges in bridging the gap between formal and informal caregivers - the families, friends, and neighbours, who provide the bulk of the supports required to maintain the health, wellbeing, functional independence, and quality of life of growing numbers of individuals of all ages who cannot manage on their own. In addition to providing a range of physical and emotional supports, informal caregivers serve as the main interface with the formal care system, accessing and coordinating services on behalf of cared-for persons (Neuman et al., 2007; Hollander et al., 2009). Without informal caregivers, community care plans are rarely viable for growing numbers of older persons experiencing Alzheimer's disease and related dementias who require 24/7 monitoring and support. Reflecting this, the OECD has estimated that a continuing decline in informal caregiving could increase formal system costs by 5% to 20%, thus eroding system financial sustainability (Colombo, Llena-Nozal, Mercier, & Tjadens, 2011).

In response, there is a growing consensus that integrating care, particularly for populations with multiple chronic health and social needs, is where we want to go. However, there is less agreement on how to get there, and what approaches work best for whom in which context. Whereas in countries such as Denmark, integrating mechanisms have been embedded firmly within the mainstream of their care system, in others, integrating efforts have taken place more at the margins. Nevertheless, researchers have identified a range of integrating mechanisms (e.g., multi-professional teams, joint working, and service flexibility and adaptability) that can be implemented alone or "bundled" in combination in different care settings (including nursing homes, assisted living, home and community care, transitory care facilities, and hospitals) to improve the planning and delivery of services for high needs populations. A common feature of integrating approaches is that they seek to improve the quality of care for individual patients, service users, and informal caregivers by ensuring that services are what people need, rather than what providers currently provide.

integrated care with published evidence in randomized controlled trials, all from Canada and the United States (though this was not a restriction in our search). In the latter, we undertook in-depth case studies of exemplar programs of integrated care in seven countries, including Canada, the United States, Australia, New Zealand, the United Kingdom, Sweden, and the Netherlands.

We then consider three key design dimensions to inform integrating initiatives in Ontario:

- The first dimension has to do with whom to target for integrating care. The literature is clear that not everyone needs extensive care coordination or related integrating mechanisms. Most individuals have relatively little contact with the health or social care and integrated care models that have generally been implemented for more complex patient populations, often older adults. Complex patient populations who could most benefit from integrated care are those who have many different health and social care providers caring for their needs. Their needs arise from multiple medical and functional impairments, and these individuals require a system of care that allows them efficient access to integrated community supports and medical care.
- The second design dimension has to do with "what" to integrate: the
 scope of the services covered. While some integrating initiatives may
 target particular conditions (e.g., diabetes care) or particular care
 transitions (e.g., discharge from hospital), others may extend across
 multiple providers and sectors, including, but not limited to, primary
 care, home care, community-supports, and mental health.
- The third design dimension considers "how" to integrate: which
 integrating mechanisms, whether individually or in combinations
 (e.g., inter-disciplinary teams, single plan of care), appear to work best
 and under what conditions.

We conclude by reflecting on barriers to and facilitators of achieving more integrated care, and on the advantages and disadvantages of strategies that attempt to achieve integration from the "top-down" or from the "ground-up."

Overview

In this paper, we begin by reviewing the aims and achievements of ongoing, integrating initiatives in Ontario and other jurisdictions. We draw here on two reviews that we have completed – a summary of evidence for the management of older adults with multiple chronic conditions (Mery et al., 2013) and a summary of seven international case studies of integrated care conducted in partnership with The Kings Fund and The Commonwealth Fund (Goodwin et al., 2013). In the former, we undertook a careful review of five programs of

Integrating Care

Design Dimension 1: Who is integrated care needed for?

Most individuals in the population do not have complex health needs. Most visit physicians only occasionally, and only on rare occasions do they rely on the emergency department for urgent care needs, or are they deemed to benefit from elective medical or surgical procedures. Though any coordination among providers should be leveraged to ensure efficient and effective care

provision, these individuals do not generally require intensive coordination of care. Integrated care is particularly valuable for individuals with complex care needs, who benefit from services from a wide array of service providers. Most individuals who would benefit most from integrated care have numerous and/or very severe chronic conditions.

The problem of chronic conditions and their impact on the healthcare system is a worldwide concern (Yach, Hawkes, Gould, & Hofman, 2004; Bloom et al., 2011). In western societies, as the baby boomer cohort ages and chronic disease risk factors, such as sedentary lifestyle and obesity, increase in prevalence, an increasing number of individuals experience multiple chronic conditions (Wolff, Starfield, & Anderson, 2002; OMA, 2009; Cornell, Pugh, Williams, Kazis, & Parchman, 2007; Soubhi et al., 2010). Most OECD countries have developed comprehensive health systems to provide high quality and increasingly highly specialized care for a vast number of medical conditions. Life expectancy and survival after the incidence of medical conditions such as cancers or cardiovascular disease continue to increase due in large part to the success of these medical care systems. As a result, more and more people are living longer and longer with multiple chronic conditions and with concomitant functional impairment.

Most older adults have multiple chronic conditions. The Chief Public Health Officer's report in Canada reported that more than 88% of adults aged 65 and over had at least one chronic condition. Twenty-five percent of adults between the ages of 65 and 79 had four or more conditions, and nearly 40% of adults aged 80 or over had four or more (Chief Public Health Officer, 2010). Studies in the United States also show that about half the population over 75 has three or more chronic conditions, and that individuals 85 years and older are six times more likely to have multiple functional impairments than individuals aged 65 to 69 years old (Anderson, 2011).

The evidence in Canada mirrors the experience of other jurisdictions. According to the Ontario Medical Association (OMA), chronic conditions affect 81% of Ontario adults aged 65 or over, of which 56% have more than one condition (OMA, 2009). An analysis of the British Columbia Linked Health Database found that, in 2000/01, 36% of adults of 18+ years had at least one confirmed chronic condition, and further, that 18% had at least one possible chronic condition – numbers that were 68% and 15% respectively for seniors of 65+ years (Bromeling et al., 2005. p. 7).

System Impact

Canadian and international studies demonstrate that persons with multimorbidities and symptoms that impact their daily living use health services disproportionately more than persons with single conditions (CIHI, 2011b), experience poor care coordination (Burgers, Voerman, Grol, Faber, & Schneider, 2010), generate high costs to the healthcare system (Marengoni et al., 2011), and are at risk of poor health outcomes (Marengoni et al., 2011; Bayliss et al., 2007). Estimates from the United States indicate that 75% of all government healthcare expenditures are for individuals with chronic disease (Chief Public Health Officer, 2010). Most of these expenditures are related to frequent admissions for ambulatory conditions and higher rates of preventable complications (Menotti et al., 2001; CIHI, 2011b). In a recent study using data at the Institute for Clinical Evaluative Sciences (ICES), Iron et al. (2011) found that, compared with individuals with one condition, those with three or more diagnoses had 56% more primary care visits, 76% more specialist visits, 256% more inpatient hospital stays, 11% more emergency department visits, and 68% more prescriptions. Research from the Health System Performance Research Network (HSPRN) has shown that about 86% of individual patient costs in Ontario are associated with one of 16 chronic conditions, and nearly half of healthcare spending is for individuals with these chronic conditions (HSPRN, 2013).

There is also evidence that the number of older people who are living alone is increasing at the same time as the availability of informal care by spouses or family members is declining (Coyte, Goodwin, & Laporte, 2008). These trends mean a growing demand for healthcare services to treat multiple chronic medical conditions, as well as services to help individuals cope with activities such as dressing, bathing, shopping, or food preparation. The latter, commonly referred to as social care services, are often provided by family members or informal caregivers, but can be provided by formal service providers, either as home care services or as part of residential long-term care. Often these formal social care services are organized and funded separately from healthcare or medical services, and this can result in fragmented care for people who need both types of services.

The challenges that this situation creates are multiple and complex (OMA, 2009; Boyd et al., 2005). The way healthcare services are currently structured, focusing on management of single diseases with an orientation toward managing acute events, including exacerbations of chronic diseases, fails to meet the ongoing needs of patients. Quality and outcomes of care for these people are often suboptimal.

Design Dimension 2: What is integrated care?

Integrated care can mean different things in different contexts. A common feature of integrated care is that it is an approach that seeks to improve the quality of care for individual patients, service users, and carers, by ensuring that services are well-coordinated around their needs. The essence of integrated care is that it completes the value chain by connecting the points of active care provision. There are three essential components to effective integrated care:

 intentional collaboration among care providers who share the care and responsibility for patients in team-based care

- 2. coordination or active management of care for individuals across care providers who jointly care for patients
- 3. adherence to a common care plan that is shared among providers and patients and their caregivers.

There are many approaches to describing integration. We rely in this paper on characteristics of integrated care, including (after Nolte & McKee, 2008, and Valentijn et al., 2013):

Figure 1 presented summarizes these perspectives.

A fully integrated healthcare system would fully encompass all of the levels, dimensions, and degrees of integration suggested in Figure 1. However, in reality, integrated care has not fully matured in any health system in a way that fully encompasses an entire population of providers and patients. Instead, we see varying approaches to integrating care.

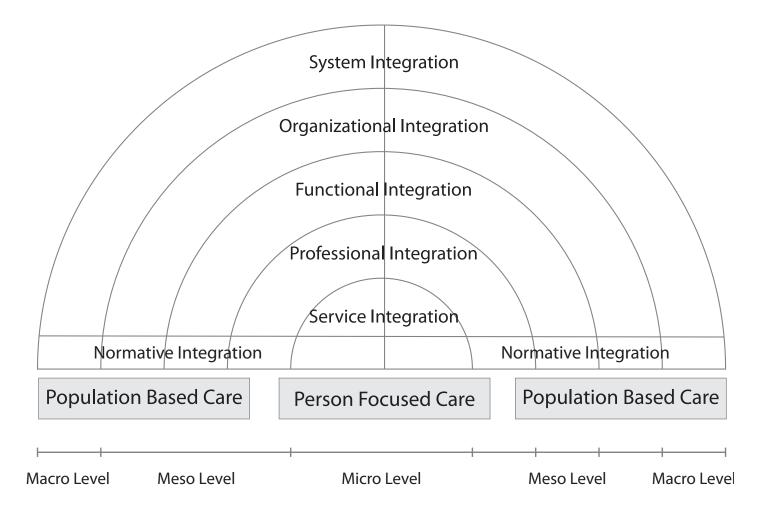


Figure 1 - Characteristics of Integrated Care

- types of integration (service, professional, functional, organizational, and system);
- breadth of integration (vertical and horizontal);
- level of integration (macro- (system), meso- (organizational, professional), and micro-level (service and personal));
- degree of integration (from linkage to full integration); and
- processes of integration (bottom-up clinical, cultural, and social or topdown structural and systemic).

Integration rarely happens at the macro system and policy level. The best system integration example is likely Denmark, where it is compulsory for each region to establish a health-coordination board with representatives from the region (responsible for medical care) and the municipalities (responsible for social care) within the region. The purpose of the board is to coordinate regional and municipal health efforts and to create coherence between the health sector and adjacent sectors. This system integration initiative also connects to organizational and clinical integration. Danish municipalities'

granting of care services is based on an assessment of the applicant's overall situation, and all types of healthcare, personal care, and housing are considered. In the case of people with complex needs, several providers may deliver the services, but it is the responsibility of the assessment team to coordinate the care provision through "purchasing" the services, and the team is obliged to monitor the situation on a regular basis (Hansen, 2009). Other examples of system integration for specific populations are health insurance and provider organizations in the United States, such as the Veterans Administration and Kaiser Permanente, or the Program for All-inclusive Care for the Elderly (PACE) – a model of strong organizational integration that supports functional and service integration, which has also spread in specific localities for some population groups across the United States with varying success (McCarthy, Mueller, & Wrenn, 2009; Klein, 2011). However, the literature on integrated care suggests that organizational integration does not necessarily lead to integrated care as experienced by the patient (Curry & Ham, 2010). While there are clearly some advantages of having a unified organization with a common structure, for example, single budgets and accountability, the evidence from international examples suggests that a great deal of time and effort is required to merge and establish these organizations.

Even functional integration, such as that enabled by the sharing of patient health records, is insufficient on its own to cause professional or service integration. This raises the issue of whether the successful development of integrated care is possible only if it comes from the "bottom up" through the development of specific "micro-level" interventions. Professional, functional, organizational, and system integration would then come as a consequence rather than a cause, but might not occur at all.

Successful models of integrated care require service integration. Integrating care means that each individual with complex care needs receives a coordinated care experience at the clinical interface. System organization and functional integration are enablers that can sustain otherwise fragile integrated care initiatives. Strong models of clinical integration have surfaced without "higher" levels of integration at the system, organization, or even functional levels. A general conclusion is that integration is a "bottom-up" undertaking, but that systematic supports, such as the implementation of shared electronic health records, and financial supports for integrating activities (such as case conferencing) and roles (such as care coordinators) are "top-down" factors that enable the sustainability and spread of integrated care models.

Design Dimension 3: How is integration achieved?

In the international field, we find very different types of integration across the cases, ranging from "highly-integrated" health and social care providers to approaches that have instead sought to build alliances between professionals and providers to co-ordinate care, often based on contractual relationships

between otherwise separate partners (Goodwin, Dixon, Anderson, & Wodchis, 2013). The Program of Research to Integrate the Services for the Maintenance of Autonomy (PRISMA) in Quebec is one example of a complex alliance with service coordination based in community care, but also extending to primary and acute care. On the other end of the spectrum, in the Norrtalje Local Authority in the County of Stockholm, Sweden, a new organization was created to merge the purchasing and provision of health and social care, which was otherwise split between municipalities and county councils. It appears, however, that the focus on organizational integration took up a lot of time and energy and that the changes to services have been slower. There are also examples that combine different types of integration, for example, in the Netherlands where the Geriant program is fully integrated horizontally (i.e., a single organization spanning health and social care), care is coordinated vertically (i.e., with hospitals and care homes) (Goodwin et al., 2013).

Most successful integrated care programs originate at the micro level and focus on coordinating services for individual patients/users. Many programs started with a patient vignette to engage providers in coming together to jointly develop a common care plan. In Torbay, a well-known example of joined-up medical and social care in the UK, patient pathways were developed based on a vignette for a "Mrs. Smith." This followed the more famous Esther Project in Jönköping County Council, Sweden that was profiled by the Institute for Healthcare Improvement (n.d.). These programs represent important ways to engage front line providers in redesigning care. Across all programs it is evident that patient-centred care that enables coordinated care management across providers and care settings is a foundation for integrated care programs to ensure service integration. It is important though to distinguish that these approaches, while being patient-centred, did not clearly engage the patients in the care plan. Direct engagement of patients offers opportunities to increase self-management as patients are empowered to focus on their selfidentified priorities.

Higher level integration (in contrast to service integration) becomes increasingly complex to implement. Integrated care models exhibit differing degrees of professional integration with many being based around multidisciplinary teams. Case conferencing among multidisciplinary professionals is essentially the most developed approach to professional integration. Surprisingly few examples of integrated care have much functional integration facilitated through fully accessible integrated information and communication technologies (ICT) systems, though many have attempted to implement linked or shared information systems. Some programs have achieved significant organizational integration, but for most cases, the organizational structures have been preserved and other joint governance or accountability arrangements have been created to oversee the specific service/ program. For example, PRISMA in Quebec provides a systematic approach to their strategic, operational, and clinical governance structure. It is clear that among approaches to support better-integrated care to older people with complex needs, there is never a "single model" that can be applied universally

(e.g., Curry & Ham, 2010).

What do integrated care programs do?

A 2005 analysis by Ouwens et al. of 13 systematic reviews of programs of integrated care for chronically ill patients identified reducing fragmentation and improving continuity of care and coordination of care as the main objectives of these programs (Ouwens, Wollersheim, Hermens, Hulscher, & Grol, 2005). The six most common components identified were: 1) self-management support and patient education; 2) structural clinical follow-up and case management; 3) multidisciplinary teams; 4) multidisciplinary evidence-based clinical pathways; 5) feedback and reminders; and 6) education for professionals. Other important elements mentioned were: a supportive clinical information system; a shared mission, and leaders with a clear vision of the importance of integrated care; finances for implementation and maintenance; management commitment and support; and a culture of quality improvement.

Our international study of seven exemplar models of integrated care found most of these factors to be in place in spite of considerable differences in the focus and implementation of models. In particular, the target populations varied from wide population-based management, such as in the PRISMA program in Quebec, to high cost patients in the Massachusetts General Care Management Program, to dementia patients in the Geriant, Noord-Holland province, the Netherlands, to respiratory disease in the Te Whiringa Ora (TWO) program in Eastern Bay of Plenty, New Zealand. One distinction across interventions was the use of care-coordinators, ranging from a provider who would connect with patients and arrange for care visits with other providers to a more intensive care management approach, where a care-coordinator would also directly provide services and train patients in self-care, such as diet, exercise, and medication management (Goodwin et al., 2013).

Integration is largely the product of improved care co-ordination and management across existing healthcare providers. Care co-ordination to people with complex health and social care needs usually comprises a number of core elements including:

- · a single point of entry;
- · a single and holistic care assessment;
- a care plan;
- eligibility criteria for receiving a care-coordinator and or care manager;
- and support from a multi-disciplinary team of care professionals.

These elements are almost universally applied across integrated care models suggesting that these core features of care co-ordination are indeed key features in successful approaches to older people's care, regardless of the specific client group or care focus involved (Nies, 2009; Mery et al., 2013). Of all the care processes used, the most homogenous is the development of single

care assessments and subsequent care planning supported by an individual with the power to provide and/or co-ordinate care on behalf of service users.

ASSESSMENT AND CARE PLANNING

Because not all chronic patients need multidisciplinary teams, targeting this resource to high risk and high cost patients is particularly important to ensure cost-effectiveness. The best evaluations of community based integrated care have found better outcomes for equal cost, but not yet any cost savings to the health system. However, RCTs of the System of Integrated care for Older Persons (SIPA) in Quebec and the GRACE program in the United States noted that the programs were cost saving among their high-risk patients (Beland et al., 2006; Counsell et al., 2009). This supports the use of comprehensive assessments, not only for care planning, but also for triaging the level of supports that should be made available to clients.

ENGAGING PATIENTS AND CAREGIVERS

Internationally, exemplar models have sought to promote engagement of service users and their informal carers or family members to some extent. In New Zealand, Te Whiringa Ora places the most emphasis on engaging service users and family members as the key to achieving its program's goals, which are defined by the client rather than relying on professional clinical goals. This has even caused some challenges for physicians when patients choose goals that are not directly "healthcare" related. Greater self-determination may create challenges for healthcare providers, who may not feel that they have a direct role that will allow them to assist patients in achieving goals that are not "healthcare" related. In other programs, such as Geriant in the Nethelands, GRACE in the United States, or PRISMA in Quebec, care managers, clients, and informal caregivers jointly make a plan for care treatment each year. In some regions, PRISMA patients may also choose a direct payment option where they are given funds to purchase their own care services, an option mostly applied in retirement home settings where in-house services are already available (Goodwin et al., 2013).

CARE COORDINATORS

One of the distinguishing features of integrated care is the presence of a named care coordinator or care manager who takes personal and direct responsibility for supporting service users and usually informal carers/family members. These individuals work to update providers on changes in the individual's status and treatment, and are in direct contact with the clients to ensure they attend appointments, adhere to their medications, and have access to the appropriate services. In many interventions, care coordinators have face-to-face contact with patients, often in physician offices, and also undertake home visits and telephone encounters. These vary in frequency and type of contact according to the level of need of the individual client. This highly personalized and flexible approach is a common feature of integrated care models. Whereas care coordinators tend to be non-clinicians (e.g., healthcare assistants or social care staff), whose role is to facilitate access to care services as well as provide a key point of contact, care managers generally have specific training and expertise

in caring for older people with complex needs. Hence, care managers not only undertake the care co-ordination function, but also provide much of the care directly. In the GRACE program, a registered nurse and social worker function as a coordination team. The nurses are especially important in multidisciplinary team coordination and in addressing medical needs, whereas the social worker is especially important in connecting the multidisciplinary team within the social context of the patients and their families and available community supports.

PRIMARY CARE PHYSICIANS

The literature on care coordination for older people with complex medical problems and/or multimorbidity places high importance on the role of primary care, with many studies suggesting that the more effective approaches have a General Practitioner (GP) or primary care physician at the centre of a team-based approach (Bodenheimer, 2008; Coleman et al., 2006; Ham, 2010; Hofmarcher, Oxley, & Rusticelli, 2007). However, international case studies have suggested that primary care physicians are rarely part of the "core" team that provides the care coordination function with service users (Goodwin et al., 2013). In Canada and other jurisdictions, it has often been difficult to engage primary care physicians to share data about their patients and to play a proactive role in care delivery, thus providing a barrier to driving primary- and community-care led integration. A number of reasons might be put forward to explain this. For example, many primary care physicians prefer to operate as independent practitioners (indeed, often have both professional and business motives to protect this status), and are not natural partners in collaborative initiatives even where they might agree with the principle involved. As many primary care physician practices have intensive workloads, the time to get involved in activities such as care planning or case reviews has also been cited as a common problem. In addition, payment for the work of physicians often sits outside of the wider health and social care system, making it problematic to integrate their services more formally with other providers.

INFORMATION AND COMMUNICATION TECHNOLOGIES

A common central tenet of integrated care programs is the use of a single integrated health record. In practice, however, this is often very difficult to achieve unless all providers are already part of a single organization that relies on a central health information system and consolidated technology infrastructure. In the case studies presented in Dixon et al. (see Goodwin et al., 2013), we did not find any universal application of fully shared electronic patient records accessible by all professionals involved in care. The managed care organization in Massachusetts had a partially integrated information system that was more extensive than other cases. In particular, many of the sites had found it difficult to fully integrate data across organizational and professional boundaries with primary care physicians. Most case sites either had partial data sharing capabilities electronically, or had ambitions to develop and/or improve such capabilities. PRISMA (Quebec) had the most developed, fully accessible electronic client chart, although even in this case there were a few non-affiliated doctors who could not access the information. Moreover, one of the key obstacles being

faced in the spread of PRISMA beyond the initial regional implementation has been implementing the electronic client chart in other localities. While integrated exemplars did not always have integrated information systems (it is not a necessary condition), all agreed that it was a key enabling factor.

FUNDING

Integrated care programs nearly universally begin with a developmental or piloting process, often using specially allocated funds (e.g., research grants, growth monies, or pilot and demonstration projects). This aligns with the fact that the programs tend to be bottom-up processes. Programs often get underway with funding for specific initiatives. The way in which integrated care is funded has therefore necessarily differed according to pre-existing national, regional, and local health and social care funding arrangements. In locations where care funding is highly fragmented, such as the United States and Australia, approaches to integrated care have been supported by specific state or federal funding. In less fragmented funding systems, most have sought to create pooled budgets to purchase health and social care collectively, often supported by the creation of a "prime contractor" model, in which provider networks are given capitation-based funding to create "fully integrated" purchaser-providers (e.g., Sweden, New Zealand, and England). In the Netherlands, funding from multiple sources was pooled to get the Geriant program started, with different providers who received funding from insurers agreeing to flow funds to the program. In its mature state, a specialist independent provider of dementia services receives all funding for mental health patients from the public insurer, and then operates a range of contracts through which to provide integrated services in different communities. In Quebec, the PRISMA program has done little to consolidate funding, which may contribute to a lack of shared accountability for patients. It seems that a central pool of funding is highly useful in enabling shared clinical and financial accountability (Goodwin et al., 2013).

To What End? Evidence of impact, sustainability, and spread

It is difficult to provide an overall comparative assessment of integrated care based on the literature or on our experience with international case studies. This is entirely because of the variation in the types of evaluations that have been conducted and the data collected and reported. There is no common approach to evaluating or measuring outcomes across published results of integrated care programs. Indeed, the degree to which impact measures to evaluate performance and/or care quality are used is highly variable and rarely robust. Nearly universally, integrated care programs report positive results in terms of improved end user satisfaction and reductions in the utilization of hospital facilities and/or care homes, though some of these results depend on pre- and post- utilization, which is problematic due to regression towards the

mean. Because exacerbations requiring hospitalization are sporadic, comparing hospitalization or costs among patients who have just had a hospitalization to their utilization in the period after hospitalization is likely to result in lower observed hospitalization rates in the post-utilization period. Most initiatives we observed also lacked any governance imperative or funding imperatives to collect data and demonstrate performance. The lack of evaluations or standardized monitoring of performance can reduce the opportunities for learning and improvement, as well as for ensuring the sustainability and spread of programs. It remains unclear in many cases whether care outcomes have been improved from the users' perspective, while little formal work has been done to examine cost-effectiveness.

Sustainability is based on an ability to make an ongoing "business case" for value. Sustainable models appear to require a stable policy context, i.e., a clear business case or proven track record, demonstrated through robust evaluation. The most successful evaluations (Beland, Bergman, Lebel, & Clarfield, 2006; Hebert et al., 2010; Mukamel et al., 2006; Counsell et al., 2009) have shown equivalent total costs, generally with a shift of costs from acute to community care interventions. Where hospitalizations were reduced, costs were roughly equivalent in value to the cost of increased community-based supports. The PACE and PRISMA programs have also shown that cost results begin to show after the third year of operation (which was longer than the demonstration period for the SIPA and GRACE interventions, for example).

Summary

The generalizable lessons from the literature and international examples point to a number of key findings relevant for Canada to move toward integrating care. The first of these is that most successful integrated care models represent a "bottom-up" initiative, rather than a "top-down" structural change. However, these initiatives are only sustained if integrated care is a core top-down priority for all complex patients with stimulus and encouragement for local engagement, and if it is without highly prescriptive top-down organizational or clinical rules.

The second is that integrated care is not a unified or static concept. Integrating care can be achieved through a number of different organizational models and the starting point should be on the clinical/service model, rather than on structural design. Differences across local initiatives may include:

- the target population, from specific diagnoses (e.g., dementia) to a wide array of conditions that occur among targeted high cost or otherwise complex patients;
- what types of services are integrated, including medical, social, and housing, for example; and
- how integration takes place stemming from system, organizational,

professional, or clinical origins.

Without a doubt, success is achieved with good communication and relationships among and between those delivering and those receiving care. But it takes time to build social capital and foster trust among providers, effectively identify and enroll patients, organize services, and to begin to see demonstrable changes in distal outcomes such as readmissions and cost savings. The achievement of more integrated service provision is the culmination of a complex range of influences and processes that occur simultaneously at different levels over time.

What should we do? *Implementation Recommendations*

As observed in the international experience, in general, the implementation of integrated care starts from local groups of providers, brought together through strong local leadership and trusting relationships. Some of these initiatives have then developed over time, conditional to the policy context providing topdown support through funding and infrastructure, which also enables the scale and spread of these models. This is, for example, the case of PRISMA in Quebec, now implemented provincially as RSIPA. However, we should not be mistaken and think that one-size-fits-all in integrated care; instead, we should try to directly transfer successful models. The approach that the US Patient Protection and Affordable Care Act has taken through the Accountable Care Organizations is to prioritize local integration, encouraging bottom-up innovation and collaboration and allowing Medicare to reward healthcare organizations with a share of the savings that would result from improving care quality and reducing the cost of care. Similarly, Ontario's Community Health Links rely on local organization and innovation to develop models of integrated care that suit the local context of specific population needs and existing healthcare resources. Important roles for government and regional planning agencies (such as Local Health Integration Networks in Ontario, or the Ministère de la Santé et des Services Sociaux in Quebec) are guaranteeing adequate funding to facilitate processes of integration and to manage organizational change, ensuring that existing resources, such as for care coordinators, can be assigned to integrated care projects as well as resources to assist with the implementation of the shared clinical information available. In this light, we make three recommendations for Canadian provinces to move toward integrated care:

Establish a "top-down" mandate to innovate from the "ground-up."
 Lessons from EU jurisdictions suggest the importance of sending a
 clear policy message that ground-up innovation and risk-taking will
 be supported. The provincial ministries of health and regional health
 authorities should articulate a clear vision focusing on person-centred
 care, with more emphasis on prevention to avoid exacerbations

with resultant healthcare costs. Within this vision, community-based organizations should be given greater freedom to innovate, and to build strong connections within and across sectors. However, when local leadership or initiative is not sufficient to generate "ground-up" integration, a more pro-active and directive provincial or regional involvement may be required to ensure that complex patients across the whole province receive the benefits of integrated health and social care.

- Encourage joint working. Providers should support service level integration by implementing:
 - inter-disciplinary and inter-organizational teams around the care of complex needs individuals, with a central role for care coordinators in the articulations of the healthcare team itself and of the healthcare team with the users.
 - common assessment, shared goal setting and care planning among providers of social and medical care, patients, and caregivers. Such assessments should include diagnoses and treatment goals, including physical, mental, and social conditions, and specific self-care components.
 - patient engagement in care planning. If patients and caregivers
 are not on board with the program, success will be extremely
 difficult to achieve. Providers themselves also have to support
 the patient's goals, even if these goals may not be directly related
 to the care that a particular health professional is best suited to
 provide. Common assessments should be used to titrate the host
 of available services to meet individual needs, so that services
 that are not needed are not provided, and services that are
 needed are identified and provided to the patient and caregiver.
- 3. Payer support for integrating care functions:
 - Capitation-based budgets
 - for integrating care services, including resources that are shared by multiple providers for high risk patients
 - to ensure/provide/purchase services that are not currently provided (e.g., for adult day programs or housing)
 - Implement sharing of electronic health information for the same
 patients from multiple providers. The province could generate or
 purchase one technology that achieves the required functionality
 of accepting information from multiple sources into a standard
 template, and requiring local software vendors to be able to
 retrieve information from the standard template. (The province
 also needs to support regulation to ensure that privacy rules
 facilitate the sharing of patient information across providers
 included in the circle of care.)

How will we know when we're successful?

Successful organizations never arrive. They are constantly and continuously reorganizing and re-invigorating themselves to better meet the evolving needs of their customers. So it is true with integrated care. While accomplishments need to be achieved and success celebrated, the ongoing desire for improvements must not have a clear and delineated point. Nonetheless, some key stages of accomplishment can be envisioned.

When provincial initiatives, such as RSIPA or Community Health Links, have an efficient means of enrolling, coordinating the care management of, and even discharging stable complex patients from their integrated care efforts, they will have put in place effective local programs that have achieved their goals. When every complex patient who needs integrated care across the province has access to high value integrated care, we can consider the spread of integrated practice to be adequate. When costs for patients with complex needs across the province are declining and health status is improving and freeing up resources to meet the new and evolving demands in the health system, we should celebrate that success. When patients report that they participated to the extent that they wished in setting their own care goals and in developing their care plans, we will have succeeded in implanting a patient-centred healthcare system for the segment of patients that we are working to better manage.

References

- Access to Care. (2014, February). Alternate level of care (ALC). Ontario Hospital Association (OHA).
- Anderson G. (2010). Chronic care: Making the case for ongoing care. (2nd ed.).

 Robert Wood Johnson Foundation. Available from http://www.rwjf.org/content/dam/farm/reports/reports/2010/rwjf54583
- Anderson G. (2011). The challenge of financing care for individuals with multimorbidities. In *Health reform: Meeting the challenge of ageing and multiple morbidities*. Paris: OECD. Available from http://dx.doi.org/10.1787/9789264122314-6-en
- Bayliss E.A., Bosworth H.B., Noel P.H., Wolff J.L., Damush T.M., & McIver L. (2007, June). Supporting self-management for patients with complex medical needs: recommendations of a working group. *Chronic Illn.* 3(2), 167–175.
- Béland F., Bergman H., Lebel P., Clarfield, A.M., Tousignant, P. Contandriopoulos, A.P., & Dallaire, L. (2006). A system of integrated care for older persons with disabilities in Canada: Results from a randomized controlled trial. *J Gerontol A Biol Sci Med Sci*, *61*, 367–373.
- Béland F., Bergman H., Lebel P., Dallaire L., Fletcher, J., Tousignant, P. & Contandriopoulos, A.P. (2006). Integrated services for frail elders (SIPA): A trial of a model for Canada. *Canadian Journal on Aging*, *25*(1), 25–42.
- Bloom D.E., Cafiero E.T., Jane-Llopis E., Abrahams-Gessel S., Bloom L.R., Fathima S., ... Weinstein, C. (2011). *The global economic burden of noncommunicable diseases*. Geneva, World Economic Forum.

- Bodenheimer, T. (2008, November 13). Transforming practice. *New England Journal of Medicine*, *359*, 2086–2089.
- Born, K. & Laupacis, A. (2011, February 9). Gridlock in Ontario's hospitals. Healthy Debate. Available from http://healthydebate.ca/2011/02/_mailpress_mailing_list_healthydebate-news/hospital-gridlock
- Boult C., Green A.F., Boult L.B., Pacala J.T., Snyder C., & Leff B. (2009). Successful models of comprehensive care for older adults with chronic conditions: evidence for the Institute of Medicine's "retooling for an aging America" report. J Am Geriatr Soc, 57, 2328–2337.
- Boyd C.M., Darer J., Boult C., Fried L.P., Boult L., & Wu A.W. (2005). Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. *JAMA*, 294, 716–724.
- Broemeling A.M., Watson D., & Black C. (2005). Chronic conditions and comorbidity among residents of British Columbia. Vancouver BC: Centre for Health Services and Policy Research, University of British Columbia. Available from http://www.chspr.ubc.ca./pubs/report/chronic-conditionsand-co-morbidity-among-residents-british-columbia
- Burgers J.S., Voerman G.E., Grol R., Faber M.J., & Schneider E.C. (2010, September). Quality and coordination of care for patients with multiple conditions: results from an international survey of patient experience. *Eval Health Prof*, 33(3), 343–364.
- Canadian Institute for Health Information (CIHI). (2011a). Health care cost drivers: The facts. Available from https://secure.cihi.ca/free_products/health_care_cost_drivers_the_facts_en.pdf
- Canadian Institute for Health Information (CIHI). (2011b). Seniors and the health care system: What is the impact of multiple chronic conditions.
- Chief Public Health Officer. (2010). *Growing older Adding life to years*. Annual Report on the State of Public Health in Canada. Public Health Agency of Canada. Available from http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2010/fr-rc/index-eng.php
- Coleman, E.A., Parry, C., Chalmers, S., & Min, S.J. (2006). The care transitions intervention: results of a randomized controlled trial. *Arch Intern Med*, 166, 1822–1828.
- Colombo F., Llena-Nozal A., Mercier J., & Tjadens F. (2011, June). Help wanted? Providing and paying for long-term care. Paris: OECD. Available from http://www.oecd.org/health/health-systems/helpwantedprovidingandpayingforlong-termcare.htm
- Commonwealth Fund, The. (2012a, April). The performance improvement imperative: Utilizing a coordinated, community-based approach to enhance care and lower costs for chronically ill patients. The Commonwealth Fund Commission on a High Performance Health System. Available from http://www.commonwealthfund.org/~/media/Files/Publications/Fund%20Report/2012/Apr/1596_Blumenthal_performance_improvement_commission_report.pdf
- Commonwealth Fund, The. (2012b). Commonwealth fund international survey of primary care doctors. Retrieved from http://www.commonwealthfund.org/Surveys/2012/Nov/2012-International-Survey.aspx
- Cornell J.E., Pugh J.A., Williams J.W., Kazis L., & Parchman M.L. (2007). Multimorbidity clusters: Clustering binary data from multimorbidity clusters: Clustering binary data from a large administrative medical database. *Applied Multivariate Research*, 12, 163–182.

- Counsell S.R., Callahan C.M., Tu W., Stump T.E., & Arling G.W. (2009). Cost analysis of the geriatric resources for assessment and care of elders care management intervention. *J Am Geriatr Soc*, *57*, 1420–1426.
- Coyte P., Goodwin N., & Laporte A. (2008). How can the settings used to provide care to older people be balanced? Denmark: WHO Regional Office for Europe. Available from http://www.euro.who.int/__data/assets/pdf_file/0006/73284/E93418.pdf
- Curry N., & Ham C. (2010). *Clinical and service integration: The route to improved outcomes*. London: The King's Fund. Available from http://www.kingsfund.org.uk/publications/clinical-and-service-integration
- Goodwin N., Dixon A., Anderson G., & Wodchis W. (2013). *Providing integrated care for older people with complex needs: Lessons from seven international case studies*. London: The King's Fund.
- Ham, C. (2010). The ten characteristics of the high-performing chronic care system. *Health Economics, Policy and Law, 5,* 71–90.
- Hansen E.B. (2009, December). Integrated care for vulnerable older people in Denmark. *HealthcarePapers*, 10(1), 29–33.
- Health System Performance Research Network (HSPRN). (2013, October 22). Current multimorbidity research from the health system performance research network. HSPRN Symposium. Caring for people with multiple chronic conditions: A necessary intervention for Ontario. Retrieved from http://www.hsprn.ca/activities/conf_2013_11_22.html
- Hebert R., Raiche M., Dubois M.F., Gueye N.R., Dubuc N., & Tousignant M. (2010). Impact of PRISMA, a coordination-type integrated service delivery system for frail older people in Quebec (Canada): A quasi-experimental study. *J Gerontol B Psychol Sci Soc Sci, 65B*, 107–118.
- Hofmarcher, M.M., Oxley, H., Rusticelli, E. (2007, December 12). Improved health system performance through better care coordination. OECD Health Working Papers. Available from http://www.oecd.org/els/health-systems/39791610.pdf
- Institute for Healthcare Improvement. (n.d.) Improving patient flow: The Esther project in Sweden. Available from http://www.ihi.org/resources/Pages/ImprovementStories/ImprovingPatientFlowTheEstherProjectinSweden. aspx
- Iron K., Lu H., Manuel D., Henry D., & Gershon A. (2011). Using linked health administrative data to assess the clinical and healthcare system impact of chronic diseases in Ontario. *Healthc Q*, 14, 23–27.
- Klein, S. (2011, September). The veterans health administration: Implementing patient-centered medical homes in the nation's largest integrated delivery system. Commonwealth Fund Case Study, High-Performing Health Care Organization. Available from http://www.commonwealthfund.org/~/media/Files/Publications/Case%20Study/2011/Sep/1537_Klein_veterans_hlt_admin_case%20study.pdf
- Marengoni A., Angleman S., Melis R., Mangialasche F., Karp A., Garmen A., ... Fratiglioni L. (2011, September). Aging with multimorbidity: a systematic review of the literature. *Ageing Res Rev.* 10(4), 430–439.
- McCarthy, D., Mueller, K., Wrenn, J. (2009, June). Kaiser permanente: Bridging the quality divide with integrated practice, group accountability, and health information technology. Commonwealth Fund Case Study, Organized Health Care Delivery System. Available from http://www.commonwealthfund.org/~/media/Files/Publications/Case%20 Study/2009/Jun/1278_McCarthy_Kaiser_case_study_624_update.pdf

- Menotti A., Mulder I., Nissinen A., Giampaoli S., Feskens E.J., & Kromhout D. (2001). Prevalence of morbidity and multimorbidity in elderly male populations and their impact on 10-year all-cause mortality: The FINE study (Finland, Italy, Netherlands, Elderly). *J Clin Epidemiol*, *54*, 680–686.
- Mery G., Wodchis W.P., Bierman A., & Laberge M. (2013). Caring for people with multiple chronic conditions: A necessary intervention in Ontario. (Vol. 2, Working Paper Series). Toronto: Health System Performance Research Network.
- Monieson Centre, The. (2013). Toward a Canadian healthcare strategy – Workshop report Kingston, ON: Queen's University. Available from http://www.moniesonhealth.com/resources/ QueensHealthPolicyChangeConference2013Overview.pdf
- Mukamel D.B., Temkin-Greener H., Delavan R., Peterson, D.R., Gross, D., Kunitz, S., & Williams, T.F. (2006). Team performance and risk-adjusted health outcomes in the Program of All-Inclusive Care for the Elderly (PACE). *Gerontologist*, 46(2), 227–237.
- Nies H. (2009). Key elements in effective partnership working. In J. Glasby & H. Dickinson H (Eds.), *International perspectives on health and social care: Partnership working in action* (pp. 56–67). Oxford: Blackwell.
- Nolte E., & McKee M. (2008). Integration and chronic care: a review. In E. Nolte & M. McKee (Eds.), *Caring for people with chronic conditions. A health system perspective* (pp. 64–91). Maidenhead: Open University Press.
- Ontario Medical Association (OMA). (2009, October). *Policy on chronic disease management*. Available from https://www.oma.org/Resources/Document s/2009ChronicDiseaseManagement.pdf
- Organisation for Economic Co-operation and Development (OECD). (2009).

 Ageing societies. In *OECD Factbook 2009: Economic, Environmental and Social Statistics*. Available from http://dx.doi.org/10.1787/factbook-2009-3-en
- Ouwens M., Wollersheim H., Hermens R., Hulscher M., & Grol R. (2005). Integrated care programmes for chronically ill patients: a review of systematic reviews. *Int J Qual Health Care*, *17*, 141–146.
- Valentijn P., Schepman S., Opheij W., & Bruijnzeels M. (2013). Understanding integrated care: a comprehensive conceptual framework based on the integrative functions of primary care. *International Journal of Integrated Care*, 13. Retrieved from http://www.ijic.org/index.php/ijic/article/view/886/1979
- Walker, D. (2011, June 30). Caring for our aging population and addressing alternate level of care. Report submitted to the Minister of Health and Long-Term Care. Retrieved from http://www.homecareontario.ca/documanager/files/news/report--walker_2011--ontario.pdf
- Wolff J.L., Starfield B., & Anderson G. (2002). Prevalence, expenditures, and complications of multiple chronic conditions in the elderly. *Arch Intern Med*, 162, 2269–2276.
- World Health Organization (WHO). (2013). European observatory on health systems and policies: Health systems in transition. Retrieved from http://www.euro.who.int/en/who-we-are/partners/observatory/health-systems-in-transition-hit-series
- Yach D., Hawkes C., Gould C.L., & Hofman K.J. (2004). The global burden of chronic diseases: overcoming impediments to prevention and control. JAMA, 291, 2616–2622.

Queen's Health Policy Change **CONFERENCE SERIES**

JUNE 2013

TOWARD A CANADIAN HEALTHCARE STRATEGY



Over two days in June 2013, Canadian leaders from healthcare, business, policy and research interacted with twenty-five speakers from across Canada and six other nations to test the potential elements of a Canadian healthcare strategy. By reflecting on lessons learned from a broad set of international perspectives, as well as the unique nature of the Canadian context, the first conference laid the groundwork for shared action on major healthcare challenges.

MAY 2014

CREATING STRATEGIC CHANGE IN CANADIAN HEALTHCARE



Creating Strategic Change in Canadian Healthcare

Building on the high-level consensus identified at the June 2013 conference, this second event will address three vital questions:

- 1. What form could a Canadian healthcare strategy take?
- 2. What would be the substance of that strategy, particularly in areas of health human resources, integrated care, electronic health records, and pharmacare?
- 3. What is a viable process for change?

MAY 2015

MANAGING STRATEGIC CHANGE IN CANADIAN HEALTHCARE



Managing a Canadian Healthcare Strategy

A third and final event, scheduled for May 2015, takes the next step by considering the performance measures of a successful strategy. What targets should we set that would make us a leader on the international stage?

CONFERENCE SPONSORS

PLATINUM SPONSORS GOLD SPONSORS SILVER SPONSORS **KPMG** ScotiaBank GlaxoSmithKline Microsoft **AT Kearney CPA Ontario** Sun Life Financial **Borden Ladner Gervais Shoppers Drug Mart**





Walter Wodchis

Dr. Walter Wodchis is Associate Professor at the Institute of Health Policy, Management and Evaluation at the University of Toronto. He is also a Research Scientist at the Toronto Rehabilitation Institute and an Adjunct Scientist at the Institute for Clinical Evaluative Sciences. His main research interests are health economics and financing, healthcare policy evaluation, and long-term care. Dr. Wodchis is the Principal Investigator for the Health System Performance Research Network. In this program, he leads a team engaged in research focused on evaluating health system performance for complex populations across multiple healthcare sectors.