Health Horizon

Global trends and evidence to support stewardship

Health System Planning and Research Branch, Health System Strategy Division, MOHLTC

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Primary Health Care

The "Top 5" lists in primary care: Improving care with limited resources

"Promoting Good Stewardship in Clinical Practice" is a project of the <u>US National Physicians Alliance</u> that aims to develop evidence-based lists consisting of "top five" recommendations for primary care doctors to improve care in their practice while appropriately conserving resources. The working group recently published a <u>description of the process</u> used to develop the lists, as well as a list for each of the three primary care specialties (<u>family medicine</u>, <u>internal medicine</u> and <u>pediatrics</u>). For example,

recommendations for family medicine include <u>not</u> ordering imaging for low back pain within the first six weeks unless red flags (e.g., severe or progressive neurological deficits) are present and <u>not</u> ordering annual echocardiograms or any other cardiac screening for asymptomatic, low-risk patients.

Chronic Disease Prevention and Management

Self-management in chronic diseases

The <u>US Agency for Health Care Research and Quality Innovations Exchange</u> recently highlighted "innovation profiles" in self-management for chronic diseases including <u>brief</u> educational video modules; a <u>pharmacist-led intervention</u>; and a <u>health educator component</u> in a comprehensive asthma management program. Preliminary evidence for each program suggests that they have enhanced patient knowledge, increased physical activity, or reduced asthma-related hospitalization. Additionally, a recent systematic review found that <u>disease management</u> that included self-management support was associated with lower healthcare expenditures in over half (13/21) of the studies that evaluated incremental health care costs per patient per year.

Mental Health and Addictions

New Canadian data for mental health

The <u>Canadian Institute for Health Information</u> and <u>Statistics Canada</u>'s annual "Health Indicators 2011" report now includes <u>three new indicators focused on mental health</u> (i.e., self-injury

hospitalization rates, 30-day mental illness readmission rates and repeat hospitalization for mental illness). Some of the key findings from the report include: ~ 70% of hospitalizations for self-injury also include a mental diagnosis; over half of 30-day readmissions occurred within 14 days; and ~ 11% of patients hospitalized for mental illness were readmitted two or more times within a one-year period.

Public Health

An evaluation of Canada's tax incentives to promote physical activity

There currently exist a number of tax incentive programs in Canada to promote physical activity. These include <u>Nova Scotia's</u> <u>Healthy Living Tax Credit</u> and the federal government's <u>Children Fitness Tax Credit</u>. Critically analyzing these Canadian initiatives, a recent article argues that <u>tax-based measures are costly</u> (e.g., from lost tax revenue) and have inherent limitations (e.g., may exclude lower-income groups; may focus on changing behaviour without addressing environmental or systemic factors). The authors suggest the need to consider other strategies involving direct funding as well.

Institutional Care/Sectors

The role of culture in improving hospital care

Previous research comparing US hospitals found high-performing and low-performing hospitals were differentiated by cultural factors such as <u>organizational values and goals</u>, <u>communication and coordination among groups and problem solving and learning</u>. Recent work in Ontario has also addressed the importance of culture in improving team-based care. Responding to cultural barriers that inhibit organizational learning and change, the <u>University Health Network's Toronto General Hospital</u> implemented and piloted <u>Rypple</u>, a web-based tool to allow team members to provide anonymous feedback on team processes and performances. A recent article describing this project notes that some <u>health care professionals perceived improvements</u> in communication, collaboration, leadership, and overall team atmosphere and dynamics.



Note: The Health Horizon newsletter draws on current research from peer-reviewed journals. You may need to obtain some of the articles referenced in Health Horizon through the MOHLTC Journal Access Centre or by purchasing them. For assistance with obtaining articles, please contact the Health Horizon Staff Lead, Uyen Quach at uyen.quach@ontario.ca, tel. (416) 327-7657. Please note that Health Horizon is a summary of information from other sources, not a representation of the policy position or goals of the Ministry of Health and Long-Term Care. If material in the newsletter is to be referenced, please cite the original, primary source, rather than the newsletter itself.

World at a Glance











Canada

The Canadian Open Data Pilot Project

Similar to the <u>US Community Health Data Initiative</u>, which involves the provision of health data at no cost and with no intellectual property constraints to innovators (including private firms) to improve community health performance, the <u>Government of Canada</u> recently launched the <u>Open Data Pilot Project</u>. The project provides a "single-window" to data (~780 datasets) already published by individual federal departments and agencies, including some health data from Statistics Canada. A key objective is to improve the ability of the public to find, download and use government managed data.

United States

Initiatives for the Patient Protection and Affordable Care (PPAC) Act Responding to provisions in the <u>PPAC Act</u>, the <u>US Department of Health and Human</u> <u>Services</u> has made two recent announcements. The first is the <u>National Prevention</u> <u>Strategy</u>, which aims to improve health and wellness through four broad strategic directions (e.g., building healthy and safe community environments) and seven priorities (e.g., tobacco free living). The strategy also includes evidence-based recommendations and indicators. Second, <u>a rule banning Medicaid reimbursements to hospitals for specific</u> <u>"never events"</u> (i.e., preventable conditions such as surgery on the wrong patient) has been announced with an expected cost savings of <u>\$35 million over five years</u>. A similar regulation for Medicare has been in place since 2008.

United Kingdom

Reducing violence-related injuries through information sharing?

The <u>Cardiff Violence Prevention Programme</u> is a novel community violence prevention program based on a partnership between health services, police and local government. The program uses anonymized data derived from emergency departments and the police to update maps of violence "hotspots" and summaries of weapon use and violence type for targeted prevention. Evidence suggests the program has reduced violence-related injuries. For example, a study found that in Cardiff, Wales <u>rates of violence-related hospital admissions fell from seven to five a month</u> per 100,000 compared to an increase from five to eight in comparison cities.

European Union

What are the economic costs of health inequalities in the EU? In an effort to support inter-sectoral cooperation to address health inequalities, an initial attempt at quantifying the economic costs of health inequalities in the EU was recently published. The analysis estimated 20% of the total costs of health care and 15% of the total costs of social security benefits were due to health inequalities. The EU also supports and funds several research projects on social determinants and health inequalities through the <u>EU Public Health Program</u> and the <u>Seventh Framework</u> <u>Programme for Research</u>.

Other

An international comparison of self-reported medication/medical errors

Using <u>2007 Commonwealth Fund International Health Policy Survey data</u>, a recent study compared predictors of self-reported medication /medical errors for seven countries (Australia, Canada, New Zealand, the UK, the US, Germany and the Netherlands). It found 11% of all respondents had experienced errors and <u>poor coordination and cost-related barriers</u> contributed to errors in all or most countries. In Canada, the following factors were associated with errors: diabetes, cancer, having two or more chronic illnesses, respondents of young age (18-29 years) and seeing two or more specialists.

Focus on Alzheimer's Disease Research

Highlight

The Alzheimer Society of Ontario (ASO)

The ASO is the province's leading care and research charity committed to helping people with Alzheimer's disease and other dementias by:

Providing care, support, information and education

With 39 Alzheimer Society chapters across Ontario, the ASO provides support programs for both the person living with the disease and their caregiver. The Alzheimer Knowledge Exchange Resource Centre (AKE) is a network of people dedicated to improving the quality of life for people with Alzheimer's disease and other dementias. The AKE promotes and supports a knowledge exchange interface amongst researchers, educators, care providers (paid and non-paid), policy makers and stakeholder organizations working in dementia-related research, policy or care. First Link[®] (see pg. 4) is a referral service for those living with the disease and their caregivers.

Funding research

ASO is a co-founder and lead funder of the <u>Tanz Centre for Research in</u> <u>Neurodegenerative Diseases (Tanz</u> <u>CRND)</u> at the University of Toronto. In addition, for over two decades, the <u>Alzheimer Society Research</u> <u>Program</u>, a collaboration between the <u>Alzheimer Society of Canada (ASC)</u>, its provincial affiliates, partners and donors, has contributed <u>over \$30</u> <u>million</u> in grants and training programs in support of Canadian researchers in the field of biomedical and psychosocial research.

Advocacy

A recent example of ASO's advocacy activities is seen in its <u>10 by 20:</u> <u>Ontario action plan for dementia</u> report. Notably, it suggests 10 action steps by 2020 to reduce the economic and social toll of dementia.

Increasing awareness

Besides mounting public education campaigns, ASO maintains a website of up-to-date news and information about dementia.

Why is Alzheimer's disease and related dementias (ADRD) research important?

- 3 -

Dementia is a term to describe the loss of brain function occurring with certain diseases and is marked by the development of cognitive defects (e.g., memory loss, confusion and problems with speech, changes in mood and behaviour). While there are over 100 different types of dementia, Alzheimer's disease is the most common form. It is a progressive, degenerative disease and was the seventh leading cause of death for Canadians in 2007. Alzheimer's disease and related dementias (ADRD) have wide-ranging health, system, and societal effects. For example, a 2010 report commissioned by the Alzheimer Society of Canada, *Rising Tide: The Impact of Dementia* on Canadian Society, estimates the incidence (i.e., new cases) of ADRD in Canada will more than double by 2038 from over 103,000 to over 257,000 new cases per year. Prevalence (i.e., total number of cases) will almost double from 1.5% to 2.8% of Canada's population by 2038. The estimated worldwide costs of dementia were US\$604 billion for 2010, highlighting the effects of ADRD globally. Given both the current and projected burdens of ADRD, research is critical. Key policies/strategies of other jurisdictions in response to ADRD are identified below. Following that, three key themes relevant to health services, with recent Ontario/Canada research highlighted, are discussed. Finally, an overview of future directions in selected ADRD research is outlined.

International and Canadian strategies/policies targeting ADRD

A 2010 special issue on international services and strategies for dementia published by the *International Journal of Geriatric Psychiatry* highlights ADRD-specific government responses from international jurisdictions including the <u>UK</u>, <u>Australia</u> and <u>Norway</u>. Responses range from funding for research, caregiver support, improving care and addressing workforce needs. For example, about AUD\$177 million was allocated in 2010-2011 for Australia's <u>Dementia</u> <u>Initiative</u>, which targeted services for people with dementia in their homes, improved care initiatives, early intervention programs, training to care for people with dementia and research. In Canada, a number of provinces have also implemented dementia-specific strategies/policies including <u>Ontario</u>, <u>British Columbia</u>, <u>Alberta</u>, <u>Saskatchewan</u>, <u>Quebec</u> (available in French only), and <u>Newfoundland & Labrador</u>. Currently, there is <u>no national strategy in Canada</u>.

The implications of ADRD for Ontario's health care system

ADRD may affect key MOHLTC priorities and commitments in wait times, healthy aging, and chronic disease prevention and management. A 2011 systematic review found that communitydwelling patients with dementia used <u>medical services (e.g., outpatient, inpatient and emergency)</u> more frequently than community services (e.g., adult day care). A key aspect of <u>Ontario's</u> <u>Emergency Wait Time Strategy</u> is faster discharges for Alternate Level of Care (ALC) patients (i.e., people in acute care who would be better served in other care settings). However, a previous Canadian Institute of Health Information (CIHI) report found that dementia accounted for almost one-quarter of ALC hospitalizations and more than one-third of ALC days. In terms of <u>Ontario's</u> <u>Aging at Home Strategy</u>, dementia was identified as a key driver of long-term care admission in the <u>Medical Advisory Secretariat's (MAS)</u> 2008 <u>Aging in the Community</u> series. Recent evidence confirming this includes a Canadian study that found <u>one in five seniors</u> receiving publicly funded long-term home care had ADRD. Finally, a review in the <u>Lancet</u> identified research indicating the possible links between <u>chronic diseases and ADRD</u>. The <u>Rising Tide</u> report also recommends adopting an integrated "chronic care model" for dementia, which is aligned with <u>Ontario's commitment to addressing chronic diseases</u> (beginning with <u>diabetes</u>).

Early diagnosis: Innovations in diagnostic testing and the primary care setting

At present, there are no cures for most forms of dementia, making early diagnosis critical. Recent clinical research from <u>McGill University</u> demonstrated the success of <u>a specific blood test for the early diagnosis of AD</u>. Additionally, two innovative programs in Ontario responding to the importance of early diagnosis, and targeted at the primary care level, are discussed below.

First Link®: Developed to support individuals with ADRD and their caregivers, this program is a collaboration between the Alzheimer Society of Canada, primary care providers and other health professionals to enhance linkages with health workers and community services, improve coordination of care and provide education and support. In particular, a <u>2008 article describing</u> <u>First Link</u> notes the program introduced a novel referral process. Where the health professional previously suggested the patient contact the local Alzheimer Society (AS) once a diagnosis was made, now, with permission from the patient, a First Link Coordinator from the AS contacts the

Continued from page 3

person. According to a recent evaluation of a 24-month demonstration project in four Ontario sites, <u>at least 3,600 caregivers representing over 3,600 persons with dementia were</u> <u>served by AS</u>. The program is a <u>recommended practice</u> of the *Third Canadian Consensus Conference on Diagnosis and Treatment of Dementia* guidelines.

Kitchener's Centre for Family Medicine (CFFM) Memory Clinic: Generally found in tertiary and related care settings, multidisciplinary <u>memory clinics</u> aim to improve the identification, investigation and treatment of memory disorders, including dementia. Partly in response to the limited specialist resources in Canada, the CFFM Family Health Team established a <u>memory clinic within a primary care setting</u>. A recent study presenting preliminary evidence for CFFM's memory clinic suggests that patients and caregivers were satisfied with the services, family physicians reported improved knowledge of dementia, and the clinic may have contributed to reducing unnecessary specialist referrals. For example, <u>only 7.8% of patients required specialist referral</u>, with the majority of patients managed appropriately through other means (e.g., social worker outreach, home safety assessments).

Informal caregivers

Informal caregivers face a number of burdens including <u>social</u>, <u>physical</u>, <u>psychological</u> and <u>financial pressures</u>. In one Canadian analysis, the odds of caregiver distress were <u>three times</u> <u>higher</u> for those providing care for an individual with cognitive impairment (most often related to AD or another dementia) than those caring for an individual without cognitive impairment. A 2008 review conducted by MAS on caregiver and patient-directed interventions for dementia found moderate- to high-quality evidence that <u>individual</u> <u>behavioural (e.g., skills training)</u> and multi-component (e.g., <u>involving provision of information</u>, <u>role playing</u>, <u>problem solving</u>, <u>telephone support</u>, etc.) interventions for caregivers improve psychosocial health in dementia caregivers and that multi-component interventions may affect rates of institutionalization of dementia patients. Recent reviews of caregiver-directed interventions include <u>case management</u>, <u>home care interventions</u> (e.g., respite care) and <u>culturally sensitive caregiver interventions</u>. However, all three of these reviews noted either a limited evidence base or limited effects.

Future directions: Health promotion & prevention, non-pharmacological treatments and culture change in dementia care

A 2011 review identified a number of modifiable risk factors associated with ADRD, including midlife obesity and smoking that implies the importance of a healthy lifestyle in preventing ADRD. However, a previous report conducted by the US Agency for Healthcare Research and Quality concluded that recommendations for prevention could not be made because the existing evidence was not robust, highlighting the need for further research in this area. In Ontario, researchers at Baycrest are currently using brain imaging technology to explore the link between diet and brief cognitive decline to identify food strategies that might minimize this decline. Second, partly in response to the potential harms associated with pharmacological interventions, the Evidence-based Synthesis Program of the US Department of Veteran Affairs released a review looking at non-pharmacological therapies (e.g., massage/touch therapy) to treat behavioural symptoms of dementia (e.g., agitation) and found limited evidence to support these interventions. Multi-component therapies in particular were recommended for future research in light of the multiple needs of patients with dementia. Third, research to study cultural change in dementia care is being carried out in Ontario. Partnerships in Dementia Care Alliance is a collaboration between researchers from five universities and 50 partners representing key stakeholder groups in dementia care. The project is being led by Dr. Sherry Dupuis and Dr. Carrie McAiney and is funded by SSHRC. The aim is to facilitate and assess a shift towards relationship-centred approaches (i.e., where all persons involved in care are valued and involved in decision making) in longterm care and community settings. The Murray Alzheimer Research and Education Program provides a number of educational tools supporting this culture change, including *I'm Still* Here, a research-based drama developed from the experiences of persons living with dementia and their family care partners. An evaluation of the play found that the drama had the potential to engage, awaken and expand understandings of dementia.

Recent reviews on ADRD

Rapid appraisal of barriers to the diagnosis and management of patients with dementia in primary care: A systematic review

A systematic review to assess the policymaking relevance of dementia cost-ofillness studies in the US and Canada

A systematic review of ethnicity and pathways to care in dementia

Dementia care in rural and remote settings: A systematic review of informal/family caregiving

<u>Psychosocial interventions for dementia</u> <u>patients in long-term care</u>

Effects of educational interventions on primary dementia care: A systematic review

Interesting ADRD links

Canadian Dementia Knowledge Translation Network: Life and Minds

Baycrest: Enriching Care, Enhancing Knowledge, Enlightening Minds

Seniors Health Research Transfer Network (SHRTN): A Network of Networks on Seniors' Health

<u>Turning the Tide</u>, a discussion paper from the Canadian Institutes of Health Research's International Collaborative Research Strategy for Alzheimer's Disease

Health Horizon contacts

Health System Planning and Research Branch:

Director (A) – <u>Alison Paprica, PhD</u> (416) 327-0951

Manager (A) – <u>Catia Creatura-Amelio</u> (416) 327-7948

Staff Lead – <u>Uyen Quach</u> (416) 327-7657



- 4 -