# 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

### What are the Effects of Remuneration Schemes for Physicians in Ontario?

A recent survey of stakeholders across the Canadian health care system found that non-fee-for-service payment designs have succeeded in improving physician recruitment and retention. As with the other Canadian provinces, Ontario has experimented with different payment arrangements to replace fee-for-service payments with at least some element of salary or capitation payments. However, concerns with lower physician productivity under non-fee-for-service arrangements were also raised in the study. Echoing these concerns, a study published in *Health Economics* using 2004 data found that physicians in Ontario who were paid with a non-fee-for-service arrangement conducted 15-31% fewer patient visits per week after controlling for patient populations.

## Chronic Disease Prevention and Management

### Ontario's Chronic Disease Prevention and Management Framework

A study of 3,682 chronically ill adults in eight countries indicated that Canada was in the middle of the pack with 50% of a sample of Canadians hospitalized for chronic illness reporting one or more gaps in follow-up care. To help guide the redesign of the health system to improve the prevention and management of chronic disease, the MOHLTC has developed the Chronic Disease Prevention and Management Framework (CDPM). The framework identifies a cluster of practices and system changes that have been found to improve chronic care delivery and lower costs. Several successful chronic disease prevention management programs based on these practices are already in place across Ontario and are described on the ministry website.

## Mental Health and Addictions

### SEEI Releases Reports on Community Mental Health System Enhancements

The System Enhancement Evaluation Initiative (SEEI) is a research initiative designed to explore the impact of $142 million Ontario has invested since 2004 in community mental health systems. In January, the SEEI released two reports evaluating the success of funding enhancements in different Ontario programs. One report found that increasing staff at Ottawa's Court Outreach Program resulted in diminished severity of mental health symptoms, reduced homelessness, and more favourable legal outcomes for their clients as perceived by program staff. A second report evaluated the success of developing a transitional case management program. Researchers found that program changes resulted in greater service capacity, better accessibility to the community, improved mobile crisis services, and more appropriate patterns of service delivery.

## Public Health

### Recent Research on Obesity

Adding to a growing literature that shows obesity is associated with increased morbidity and mortality, a new study in *The Lancet* found that obese persons die at greater rates than their non-obese counterparts primarily due to vascular causes, such as heart failure and hypertensive disease. Another study found that diets emphasizing varying percentages of fat, protein, and carbohydrates could all lead to weight loss; the crucial element was calorie reduction. Obesity was also found to result in higher physician costs for Ontario, and obese workers take more sick leave from work, on average, than their non-obese counterparts.

Note: 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

## Institutional Care/Sectors

### Strategies to Curb Hospital Acquired Infections

The Robert Wood Johnson Foundation recently released a report on a pilot program to test positive deviance (PD), a new approach to addressing quality and patient safety problems. In particular, the program aimed to eradicate and prevent methicillin-resistant *Staphylococus aureus* (MRSA) transmission in six American hospitals. The report found the aggregate decline in hospital acquired MRSA infection rate in the pilot units was 73% between 2006 and 2008. Recent Canadian studies have also looked at strategies to control *Clostridium difficile* (CD) infection. One article found that a multi-pronged intervention strategy that included rapid testing and isolation, hand hygiene, and infection control practitioners improved the situation of an acute care hospital in Quebec. In addition, another study of 33 hospitals found that while contact precautions were uniform, there were variations between hospitals in terms of testing strategies, cleaning and disinfection protocols and products, and isolation practices.

Ontario

# World at a Glance

## Canada

### British Columbia Pay-for-Performance Pilot Project Reduces ER Congestion

A pilot study in four B.C. hospitals has been successful at reducing ER wait times and is being expanded to four more hospitals. Hospitals were offered incentives ranging from $100 to $600 for each patient discharged or allocated to a hospital bed within established timelines. The results, detailed in a report to the Vancouver Coastal Health Board, showed increases in the percentage of patients meeting targeted timelines. A total of $14 million was also earned by the hospitals to be reinvested in ER services. A recent review highlights how pay-for-performance models have the potential to also improve ICU care, but there remain concerns about cost-effectiveness.

## United States

### New Funding for Comparative Effectiveness Research

The recently passed American Recovery and Reinvestment Act (ARRA) allocates $1.1 billion for comparative effectiveness research (CER), defined by the Congressional Budget Office as "a rigorous evaluation of the impact of different options that are available for treating a given medical condition for a particular set of patients." A part of these funds will be used to establish the Federal Coordinating Council for Comparative Effectiveness Research. This new agency will make recommendations but will not have the authority to mandate policies for any public or private payer, unlike the National Institutes for Health and Clinical Effectiveness (NICE) in the UK.

## United Kingdom

### NHS Introducing Patient-Reported Outcome Measures (PROMs)

Starting in April 2009, UK patients undergoing certain surgeries will be asked to complete patient-reported outcome measures (PROMs). Patients will answer a set of questions on their quality of life (e.g., how mobile they are, their mental state, their overall health, etc.) both before and after an operation. A recent article by the King's Fund highlights how PROMs data can be used to evaluate treatments, identify best-performing providers, and influence changes to care. The NHS recently released guidelines on the collection of PROMs data.

## Latin America/Caribbean

### Cuba's System of Maternal Health and Early Childhood Development

International comparisons have shown Cuba's infant mortality rate (5.3 per 1000 live births in 2006) rivals Canada's, but at lower costs. A recent article published in the CMAJ described the Canadian Senate Subcommittee on Population Health's evaluation of Cuba's system of maternal health and early childhood development. The article identified three major elements contributing to Cuba's success: primary care through polyclinics, a collaborative approach at the community level and science with direct feedback to the community.

## European Union

### RAND Europe Study on Using RFID to Improve Health Care

RAND Europe recently released a report identifying how Radio Frequency Identification (RFID) tags can be used to improve healthcare delivery. RFID technology uses radio waves to automatically identify people or objects and the report summarizes the potential of the technology for tracking and identifying patients and medications to improve care. One potential application of RFID is to reduce drug errors. A recent research report in the *British Medical Journal* on 113 intensive care units in 27 countries noted that medication errors are a common safety problem with over 30% of patients in the sample experiencing medication errors.

# Focus on Health and Health Care Equity

## Highlight

### Measuring Disparities in Health Status and in Access and Use of Health Care in OECD Countries

A March 2009 report released by the Organization for Economic Cooperation and Development (OECD) assessed the availability and comparability of selected indicators of inequality in health status and in health care access and use across OECD countries. A goal of the report was to address the need for an evidence base in improving health disparities by supporting cross-national comparisons. Below are a number of indicators presented in the report, which focused on health/health care disparities among socioeconomic groups.

**Unmet care needs due to costs by income group:**

- Americans with below average income were twice as likely to report unmet needs compared to their above average counterparts (52% v. 25%).
- For Canadians, 18% of those with below average incomes reported an unmet need compared to 7% in the above average income group.
- The difference between the two groups in the UK was small with nine percent of those in the below average income group reporting unmet needs compared to eight percent for the above average group.

**Infant mortality rates by quintiles of wealth**

- In Canada, the rate ratio of the richest and poorest neighbourhoods declined from 2.0 in 1971 to 1.7 in 1996, although progress slowed after 1991.A similar trend was found in the US between 1966 and 1980 although relative inequalities widened thereafter.

**Health Adjusted Life Expectancy (HALE) by sex and income, Canada, 2001**

- At birth, males in the lowest income group had a HALE almost five years lower than that for males in the highest income group; among females, HALE was three years lower.

## Health and Health Care Equity: The Role of Socioeconomic Status (SES)

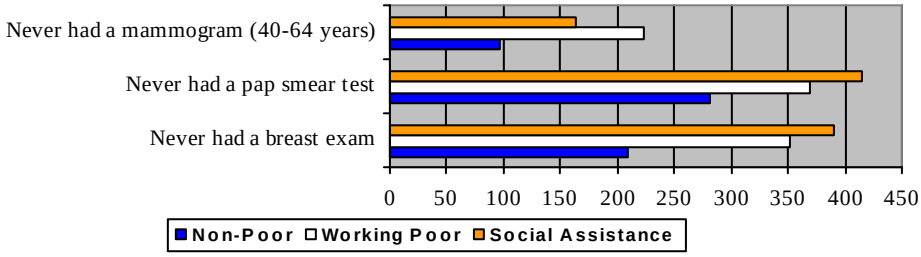
Reducing health and health care inequities have increasingly become key priorities at the national, regional and international level. According to the World Health Organization, equity is defined as "the absence of avoidable or remediable differences among populations or groups defined socially, economically, demographically, or geographically. Health inequities, therefore, involve more than inequality – whether in health determinants or outcomes, or in access to the resources needed to improve and maintain health. Health inequities also emphasize a failure to avoid or overcome such inequality that infringes human rights norms or is otherwise unfair."

The emphasis of this section is on current research on SES (measured by a combination of education, income, occupation, and sometimes wealth) as one of the determinants of health. Health inequities may also exist in groups identified, for example, by ethnicity/race, sexual orientation (i.e., lesbian, gay, bisexual, transgender, transsexual, Two-Spirit, intersex, and queer – LGBTTTIQ), and gender. More specifically, Ontario's POWER (Project for an Ontario Women's Health Evidence-Based Report Card) Study is analyzing the overall health, access and determinants of women's health and will be publishing its results soon. Recent research has suggested the important role of SES in terms of access to and/or utilization of health care services, health behaviour, and health status. Each of these may have implications for health care policy in Ontario.

## Access and Utilization

**Access:** Previous research has found that even though there is reasonably equitable access to primary health care by different socioeconomic groups, there is a "pro-rich" bias in the use of specialist hospital services. Similarly, a recent study found that Ontario's efforts to improve capacity for MRI scanning have been successful, with MRI utilization doubling over five years. However, the data indicated patients living in the richest neighbourhoods were 38% more likely to receive MRI scans than those in the poorest neighbourhoods. Similarly, findings from an article looking at the socioeconomic distribution of elective surgery from 1992 to 2003 in Finland suggested that procedure rates increased during the study period but rates for elective surgery for several common conditions varied by income.

**Figure 1: Preventative Health Care Service Use: Age-Adjusted Rates per Thousand Population, Ontario, Population 18-64 Years, 2005**




*Data from: Sick and Tired: The Compromised Health of Social Assistance Recipients and the Working Poor in Ontario, 2009*

**Utilization:** A report released by the Community Social Planning Council of Toronto found lower rates of preventive health care for women in the working poor and social assistance groups compared to the non-poor (see Figure 1). In addition, data from research conducted by the Canadian Institute for Health Information found that individuals living in the lowest SES neighbourhoods were almost twice as likely to have been hospitalized for depression compared to those living in the highest SES neighbourhoods. However, hospital length of stay or readmission rates did not differ.

## Health Behaviour

Current research has also suggested that, on average, different SES groups have different health behaviours such as lifestyle choices, health information seeking and preferences in health care.

Continued from page 3

In the United Kingdom, a study examining the association between health behaviours and SES in childhood and adult life of 3,523 women aged 60 to 79 found that healthy eating habits and physical activity were associated with both current and childhood SES. Also, 62% of women in the lowest SES group had smoked regularly at some point in their life (with 18% of them still smoking) compared to less than 50% of the women in all other SES groups. Data on 19,944 adults aged 45 and older in the United States found that while poverty was not associated with health information seeking, respondents with less than a high school education were 74% less likely to seek information compared to those with a college education and above. A survey of 1,000 Canadians in 2001 and 2004 to obtain their rating of ten performance priorities for primary care found that education was a strong variable in 2004 with less than secondary education positively associated with four priorities involving access to care and patient-physician interaction. Post-secondary education, on the other hand, had a negative association with these four same priorities.

## Is there a Correlation between SES and Health Outcomes?

The correlation between SES and health status has also been supported by three recent studies. For example, greater emotional distress and lower self-rated health were found to be associated with a perception of below average financial status among adolescents in Ontario. Similarly, lower-income adult men were 1.58 times more likely and lower-income women were 25% more likely to become distressed then their higher-income counterparts in Canada. Lastly, research in the United States suggested that excess body weight was inversely related to childhood SES and the disparity increases with age.

## Selected Jurisdictional Responses

Notably, there are increasing examples of intersectoral action to improve health and health equity around the world, ranging from small-scale programs to broad, policy-focused initiatives from national governments. Two are discussed below.

**Sure Start Local Programmes (SSLPs):** A recent article identified four examples of policies aimed at improving access to health care services for groups perceived as being under-served or served inappropriately by existing services in the UK. One response, SSLPs, are aimed at improving the health and well-being of young children living in disadvantaged neighbourhoods by improving access to services, creating new ones and ensuring services targeted at local needs. An evaluation of 14 outcomes in 2008 found those in SSLP areas compared to those in non-SSLP areas were positive for five of the outcomes. However, questions regarding the methodology of the study have also been raised.

**Health Equity Impact Assessment (HEIA):** The concept of HEIA emerged from more established Health Impact Assessments (HIA) as a way to help better identify the potential impacts a policy, program or project may have on the health of marginalized or disadvantaged populations. The assessor can then make adjustments to the initiative to mitigate negative impacts as well as maximize positive impacts on the health of vulnerable and disadvantaged groups. For example, an HEIA may help identify that the structure of a proposed policy to improve vaccination rates among children might have a negative impact on vaccination rates for low-income children and adjustments could be made accordingly. HEIA tools have been implemented in Australia, New Zealand, and the UK.

## Conclusions

In general, the current literature highlights the importance and complexity of addressing the role of SES in improving health inequities; with examples of jurisdictional responses in Ontario and around the world. Despite these challenges, a promising trend is the growing efforts to rigorously evaluate programs, develop sound methods, and obtain relevant data (see sidebar, page 3) to increase the evidence base to inform policy making for this particular health issue.

## Selection of recent Cochrane Reviews

School-Based Physical Activity: Has Benefits Even if it doesn't Help Lose Weight

Clinical Trials: Unfavourable Results Often Go Unpublished

Interventions for Preventing Weight Gain after Smoking Cessation

## Upcoming conferences/events

**Feature:**

***Training Session on Locating and Accessing Different Types of Research Evidence***

The Planning Unit of the Health System Strategy Division will offer two-hour training sessions on how to access and use different types of research evidence to support strategy development, policy development and planning. The session includes live search demonstrations of internal MOHLTC resources and external web sites, and can be held for any group of eight or more advisors/analysts.

For more information, please contact Andrea Hatvani, (416) 314-4668

## Interesting links

Clinician-Consumer Health Advisory Information Network

Second Opinion: Our Health Problems, Your Solutions

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