

At A Glance

October 2009

Monthly highlights of ICES research findings for stakeholders

More educated patients have better access to specialist health care in Ontario

Glazier R, Agha M, Moineddin R, Sibley L. Universal health insurance and equity in primary care and specialist office visits: a population-based study. *Ann Fam Med*. 2009; 7(5): 396–405.

Issue	Is there an association between educational attainment and access to primary and specialist health care in Ontario?
Study	Analyzed responses of 25,558 Ontario residents aged 20 to 79 to Statistics Canada's 2000–2001 Canadian Community Health Survey and tracked their physician insurance claims for the following two years.
Key Findings	Approximately 83% of patients saw a primary care physician over the two-year study period and 53% saw a specialist. Universal health insurance appears to have reduced income inequities but not education-related disparities in physician visits. Patients with higher education were 20% more likely to have at least one consultation with a specialist, had 21% more specialist consultations, and were 23% more likely to bypass primary care to access specialists. Those with higher levels of education were 60% and 40% more likely than less-educated patients to see a dermatologist and ophthalmologist, respectively. Income level was not associated with inequities in physician contact or frequency of visits.
Implications	It may be difficult for any health system to completely eliminate preferential access to medical care among the well-educated, given their better health knowledge and opportunities for networking.

Antipsychotic dispensing rates linked to increased risk of death for nursing home residents

Bronskill S, Rochon P, Gill S, Herrmann N, Hillmer M, Bell C, Anderson G, Stukel T. The relationship between variations in antipsychotic prescribing across nursing homes and short-term mortality: quality of care implications. *Med Care*. 2009; 47(9): 1000–8.

Issue	Do nursing homes with higher dispensing rates of antipsychotics (major tranquilizers sometimes used for behavioural disturbances in dementia) have higher rates of short-term mortality among their residents?
Study	Identified 60,105 adults aged 66 and older newly admitted to 508 Ontario nursing homes between April 2000 and March 2004. The facilities were grouped into quintiles according to their rate of antipsychotic drug dispensing. Resident mortality was examined at 30 days and 120 days after admission.
Key Findings	Average antipsychotic dispensing ranged from 11.6% in the lowest quintile (Q1) to 30.0% in the highest quintile (Q5). Among residents with no recent hospitalization, all-cause mortality at 30 days was 2.5% in Q1 and 3.3% in Q5, and at 120 days was 9.3% in Q1 and 11.7% in Q5. Residents in Q5 were more likely than those in Q1 to live in facilities with more than 200 beds.
Implications	Residents were at increased risk of death simply by being admitted to a facility with a higher intensity of antipsychotic drug use, despite similar clinical characteristics at admission. Determining the extent to which variations in antipsychotic use are a symptom of facility-level quality problems as compared with a drug safety issue is important for selecting the correct interventions to effect change.

Patients with acute kidney injury more likely to need dialysis within five years

Wald R, Quinn R, Luo J, Li P, Scales D, Mamdani M, Ray J. Chronic dialysis and death among survivors of acute kidney injury requiring dialysis. *JAMA*. 2009; 302(11): 1179–85.

Issue	What is the risk of chronic dialysis and death for patients who survive a hospitalization complicated by acute kidney injury requiring dialysis?
Study	Identified 3,769 hospitalized patients in Ontario with acute kidney injury requiring short-term dialysis between July 1996 and December 2006 and who survived free of dialysis for at least 30 days after discharge. Their long-term risk of both chronic dialysis and all-cause mortality was compared with a control group of 13,598 hospitalized patients without acute kidney injury or dialysis.
Key Findings	Among patients with acute kidney injury, the incidence rate of chronic dialysis was 2.63 per 100 person-years compared with 0.91 among controls. Mortality risk was not significantly different between patients and controls.
Implications	Patients who survive acute kidney injury requiring dialysis may benefit from specialized post-discharge care to address complications of chronic kidney disease and efforts to prevent progression to chronic dialysis.

POWER Study: Fewer than half of women with abnormal Pap tests receive follow-up care

Krzyzanowska M, Barbera L, Elit L, Kwon J, Lofters A, Saskin R, Yeritsyan N, Bierman A. Cancer. In: Bierman A (editor). *Project for an Ontario Women's Health Evidence-based Report, Volume 1*. Toronto: St. Michael's Hospital and the Institute for Clinical Evaluative Sciences; 2009.

Issue	A comprehensive review of gender, socioeconomic and regional variations in cancer burden and health system performance across Ontario would serve to identify areas for intervention and improvement.
Study	Analyzed demographic, socioeconomic and health-related data drawn from routinely collected administrative healthcare databases, population health surveys and vital statistics datasets.
Key Findings	<ul style="list-style-type: none"> • Less than 50% of women who had a Pap test that showed a low-grade abnormality had the appropriate follow-up care within the recommended time frame, including either a repeat test or colposcopy (a medical procedure that examines a woman's cervix and vagina). • Screening rates in Ontario for both breast and cervical cancers remained below provincial targets, despite the existence of long-standing screening programs for both cancers. • Women from lower-income neighbourhoods had consistently lower rates of screening for breast, colorectal and cervical cancer than women living in higher-income neighbourhoods. While the overall rate of cervical cancer screening in Ontario women was 69%, only 61% of low-income women were screened compared to 75% of high-income women.
Implications	Policy makers and healthcare providers should strive to improve access to health promotion and cancer screening information. This will require an understanding of the barriers that limit participation in healthcare programs.

Study confirms sex bias in implantable cardioverter-defibrillator use

MacFadden D, Tu J, Chong A, Austin P, Lee D. Evaluating sex differences in population-based utilization of implantable cardioverter-defibrillators: role of cardiac conditions and noncardiac comorbidities. *Heart Rhythm*. 2009; 6(9): 1289–96.

Issue	Implantable cardioverter-defibrillators (ICDs)—surgically inserted devices that regulate heart rate—were initially placed in survivors of cardiac arrest, but ICD use has expanded to include primary prevention. Do age and co-existing diseases differently influence ICD use in men and women eligible for implantation?
Study	Assigned patients hospitalized in Ontario between April 1998 and March 2007 into one of three groups: those diagnosed with cardiac arrest (primary prevention) and those diagnosed with either myocardial infarction or heart failure (secondary prevention). The distribution of age, sex and comorbidities was compared across the prevention groups.
Key Findings	Men were more likely than women to receive an ICD for both primary and secondary prevention indications of cardiac disease. Age and co-existing diseases did not account for the observed sex differences. Among patients with myocardial infarction and heart failure, men were at least three times more likely to undergo ICD implantation. The odds of ICD implantation for <i>secondary prevention</i> increased by 21% in women and by 6% in men over time.
Implications	Although sex differences in secondary prevention are declining over time, disparities in primary prevention persist. Future studies should focus on identifying the source of the sex inequalities to enable correction of these disparities.