At A Glance

May 2009

Monthly highlights of ICES research findings for stakeholders

Highly educated Ontarians have better access to psychiatric care

Steele L, Glazier R. The gatekeeper system and disparities in use of psychiatric care by neighbourhood education levels: results of a nine-year cohort study in Toronto. *Healthc Policy*. 2009; 4(4): e129–e146.

Issue The Ontario Health Insurance Program supports a "gatekeeper" system for psychiatric care by paying psychiatrists more for consultations with patients who have been referred by a family doctor. Despite universal health coverage, are there inequities in the delivery of mental health services in Ontario?

Study Analyzed physician billing claims and census data from 1995 to 2004 of nearly 1.5 million Toronto residents aged 18 and older who had not had a mental health visit in the previous three years.

Key Findings

- People from higher-education neighbourhoods were 30% more likely, and waited less time, to be referred to a psychiatrist.
- More than one-third of people who saw a psychiatrist did so without a referral from a family doctor, thus bypassing the gatekeeper system. Highly educated Ontarians were more than twice as likely as those with less education to bypass the gatekeeper system, and saw psychiatrists three to six months faster than those with less education who had also bypassed the system.
- Those in the highest-education neighbourhoods who bypassed the gatekeeper system had their first mental health visit 10 months earlier than those in the lowest-education neighbourhoods who did not bypass the gatekeeper system.

Implications Unlimited fee-for-service mental health care, and financial incentives to specialists to see only referred patients are not enough to address socioeconomic disparities in mental health service use. Strengthening the gatekeeper function of the family doctor through regulation or incentives, targeting the family physician-patient interaction, and implementing more collaborative models of mental healthcare delivery could address these disparities.

Drug for enlarged prostate can cause complications after cataract surgery

Bell C, Hatch W, Fischer H, Cernat G, Peterson P, Gruneir A, Gill S, Bronskill S, Anderson G, Rochon P. Association between tamsulosin and serious ophthalmic adverse events in older men following cataract surgery. *JAMA*. 2009; 301(19): 1991–1996.

Issue Tamsulosin is commonly prescribed to treat enlarged prostate, a condition that affects three-quarters of men by age 70. While there is some suggestion that tamsulosin may complicate cataract surgery, no studies have documented whether its use increases the risk of postoperative adverse events.

Study Analyzed 96,128 men aged 66 or older who had cataract surgery in Ontario between April 2002 and June 2007. The risk of adverse events including retinal detachment, lost lens or lens fragment or endophthalmitis was compared between men treated with tamsulosin or other drugs of the same class (alpha-blockers) and men with no exposure to these medications in the year before cataract surgery.

Key Findings

- Overall, 3.7% of patients had exposure to tamsulosin and 7.7% had exposure to other alpha-blockers within two weeks of surgery.
- Among the entire cohort, 0.3% of all patients having surgery had a postoperative adverse event: 175 received treatment for lost lens or lens fragment while 35 were treated for retinal detachment. Another 26 patients received both, while 100 developed suspected endophthalmitis.
- Those who filled a prescription of tamsulosin within two weeks prior to surgery were significantly more likely to have a serious postoperative adverse event (7.5% vs. 2.7%).
- Those who had prescriptions for tamsulosin which ended prior to the two-week pre-surgery window (15–365 days before surgery), as well as those who were taking other alpha-blockers at any time, did not have an increased risk of complications.

Implications Because the combination of cataract surgery and tamsulosin exposure is relatively common, patients should be informed of the risks of drug therapy. Preoperatively, systems should focus on the identification of tamsulosin use by patients so that surgeons can prepare for a potentially more complicated procedure.

Serious adverse events linked to use of dementia drug in older adults

Gill S, Anderson G, Fischer H, Bell C, Li P, Normand S-L, Rochon P. Syncope and its consequences in patients with dementia receiving cholinesterase inhibitors. *Arch Intern Med*. 2009; 169(9): 867–873.

Issue Cholinesterase inhibitors (CIs) are a class of drugs commonly prescribed to treat symptoms of Alzheimer disease and dementia. Little attention has been paid to the drugs' adverse effects.

Study Identified all Ontario residents aged 66 or older with a prior diagnosis of dementia from April 2002 to March 2004, and from this population followed 19,803 adults who were newly prescribed a CI and 61,499 controls who had not received a CI prescription in the previous 12 months. The association between CI use and hospital visits for syncope (temporary loss of consciousness), bradycardia (slow heart rate), permanent pacemaker insertion and hip fracture was calculated for each group.

Key Findings Hospital visits measured in events per 1,000 person-years for people receiving CIs vs. controls, respectively, were as follows: syncope (31.5 vs. 18.6 events); bradycardia (6.9 vs. 4.4 events); permanent pacemaker insertion (4.7 vs. 3.3 events); and hip fracture (22.4 vs. 19.7 events).

Implications The risk of these previously under-recognized adverse events must be weighed carefully against the generally modest benefits ascribed to cholinesterase inhibitors.

Even mild blood sugar-level abnormalities during pregnancy increase type 2 diabetes risk

Retnakaran R, Shah B. Abnormal screening glucose challenge test in pregnancy and future risk of diabetes in young women. *Diabet Med*. 2009; 26(5): 474–477.

Issue In their second trimester, pregnant women commonly undergo screening for gestational diabetes using a glucose challenge test (GCT), followed by an oral glucose tolerance test (OGTT) if the GCT results are abnormal. Are women with even mildly abnormal GCT or OGTT results at increased risk for developing type 2 diabetes later in life?

Study Identified 15,381 women aged 20 to 49 who gave birth between April 1999 and March 2002 and who had an abnormal GCT but were not diagnosed with gestational diabetes. Women referred for an OGTT were matched to a control group of 61,237 pregnant women who did not have abnormal GCTs. All women were followed until March 31, 2007.

Key Findings The average age of both groups was 31 years and the average follow-up time was 6.4 years. In the women referred for an OGTT, there were 5.04 cases of diabetes per 1,000 person-years. In the group without OGTT, there were 1.74 cases of diabetes per 1,000 person-years. Those who had an abnormal GCT were 2.56 times more likely to develop type 2 diabetes than those who had not.

Implications These findings identify a previously unrecognized population of at-risk young women (those with only mild glucose abnormalities) who may benefit from increased post-pregnancy diabetes detection and prevention strategies.

Many patients who undergo incomplete colonoscopies receive suboptimal follow-up

Rizek R, Paszat L, Stukel T, Saskin R, Li C, Rabeneck L. Rates of complete colonic evaluation after incomplete colonoscopy and their associated failures: a population-based study. *Med Care*. 2009; 47(1): 48–52.

Issue With the increasing use of colonoscopy, there is growing concern about the quality of these procedures. Among those who have an incomplete colonoscopy, what proportion subsequently achieve complete evaluation by undergoing a repeat procedure?

Study Identified 20,166 Ontarians aged 50 and older who did not have a prior history of colorectal cancer, inflammatory bowel disease or colonic resection and who had received an incomplete colonoscopy between January 1997 and December 2002. Patients were followed for one year after their procedure, and their age and sex, physician and setting were assessed.

Key Findings General surgeons performed 54.1% of the procedures, and 86.5% were performed in hospitals. The probability of complete colonic evaluation was 22.1% at three months and 25.1% at six months. Only 29.4% underwent a complete colonic evaluation within one year. Women aged 80 and older and those who had their procedure in a private office or clinic were less likely to undergo a complete evaluation.

Implications For policy makers, the finding of suboptimal follow-up after colonoscopies done in a private office or clinic is important given the rapid growth of colonoscopy procedures in these settings. This association between clinical setting and suboptimal follow-up represents an important potentially modifiable risk factor. In particular, a systematic assessment of the nature and quality of office colonoscopy practice may be needed, given that office-based colonoscopy in Ontario is unregulated.