

At A Glance

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Monthly highlights of ICES research findings for stakeholders

Joint replacement surgery wait times impacted by patients' willingness to have procedure

Hawker G, Guan J, Croxford R, Coyte P, Glazier R, Harvey B, Wright J, Williams J, Badley E. A prospective population-based study of the predictors of undergoing total joint arthroplasty. *Arthritis Rheum.* 2006; 54 (10): 3212-3220.

Issue	Variations have been identified in the rates of total joint arthroplasty (TJA) surgery (a cost-effective procedure for the management of osteoarthritis) by region, gender, race, and socioeconomic status. However, factors which influence when patients receive TJA have not been examined.
Study	Examined approximately 2,100 individuals aged 55 years and older with disabling hip and/or knee arthritis and no prior TJA to assess factors which influence when patients receive their first TJA.
Key Findings	While more severe arthritis significantly impacted when patients received TJA, the strongest determinant was, by far, the individual's willingness to undergo surgery. Among individuals with similar arthritis severity and health status, the probability of receiving TJA was almost four times greater among those willing to consider TJA than among those who were unsure or unwilling to undergo surgery.
Implications	Given that willingness to have surgery is largely explained by perceptions of the need for and risks associated with TJA, rather than disease severity, this study highlights the importance of educating patients about arthritis treatments, including TJA.

Women newly-diagnosed with diabetes are more likely to have a history of breast cancer

Lipscombe L, Goodwin P, Zinman B, McLaughlin J, Hux J. Increased prevalence of prior breast cancer in women with newly-diagnosed diabetes. *Breast Cancer Res Treat.* 2006; 98 (3): 303-309.

Issue	There is growing evidence of a link between type 2 diabetes and breast cancer. However, no one has compared the likelihood of a history of breast cancer, prior to diabetes diagnosis, between women with newly-diagnosed diabetes and women without diabetes.
Study	Tracked women aged 55-79 years of age in Ontario who were newly-diagnosed with diabetes between 1994 and 2002. Prior history of breast cancer in this group was recorded from 1964 until their diabetes diagnosis, and was compared to a similarly-aged comparison group without diabetes.
Key Findings	The likelihood of a history of breast cancer remained significantly higher in women who were newly-diagnosed with diabetes.
Implications	These results may be important for women in the pre-diabetes stage, as interventions aimed at preventing diabetes progression may also impact the risk of developing breast cancer. The findings also raise the possibility that breast cancer and/or its treatment may promote diabetes, which may have implications for breast cancer survivors. Enhanced screening for diabetes in women who have had breast cancer may be warranted.

Analysis reveals important lessons about cross-provincial drug plan research

Paterson M, Laupacis A, Bassett K, Anderson G. Using pharmacoepidemiology to inform drug coverage policy: initial lessons from a two-province collaborative. *Health Aff.* 2006; 25 (5): 1436-1443.

Issue	Although some provinces promote collaboration between researchers and drug plan managers, formal cross-provincial links remain underdeveloped. These linkages are important to provide "real-world" evidence regarding the safety and effectiveness of drugs and drug coverage policies.
Study	Undertook a two-year project to establish and evaluate links between university-based research teams and drug plan managers in British Columbia and Ontario.
Key Findings	Demonstrated that it is possible for teams of researchers in two provinces to collaborate with their respective drug plan managers, agree upon issues of mutual importance, and undertake research using common methods.
Implications	Provinces will invest in administrative data research programs that serve their information needs; however, federal funding and foresight are needed to build and sustain the kinds of cross-program relationships that are necessary to make the most of these resources.

Initial, confidential CABG report cards had biggest impact on reducing mortality rates

Guru V, Fremes S, Naylor D, Austin P, Shrive F, Ghali W, Tu J. Public versus private institutional performance reporting: what is mandatory for quality improvement? *Am Heart J.* 2006; 152 (3): 573-578.

Issue	Since 1993, Ontario has generated hospital-level performance report cards on outcomes of coronary artery bypass graft (CABG) surgery. However, no study has examined the differences in patient characteristics and outcomes as the province moved from no reporting on CABG outcomes, to confidential reporting, and finally to public reporting.
Study	Assessed 30-day mortality rates after CABG surgery for 67,693 Ontario patients from September 1, 1991 to March 31, 2002. These findings were compared to the control outcome of 30-day all-cause hospital readmission to evaluate differences during the transition from no reporting to confidential reporting, and ultimately to public reporting on CABG outcomes. As well, in-hospital mortality trends were analyzed between 1992 and 1998 to compare Ontario with the rest of Canada.
Key Findings	The 30-day mortality rate decreased by 29% during the period between no reporting (1991-1993) and confidential reporting (1994-1998). There was no further decrease with public reporting (1999-2001). The control outcome of 30-day all-cause hospital readmission did not decrease over the study period. In-hospital mortality fell significantly faster in Ontario during the period of confidential reporting than in other parts of Canada.
Implications	Confidential disclosure of outcomes is sufficient to accelerate quality improvement in a public health care system where there is little competition between hospitals for patients.

ICES report examines the burden of asthma in the under 40 population

To T, Gershon A, Tassoudji M, Guan J, Wang C, Estrabillo E, Cicutto L. Asthma in Ontario. ICES Investigative Report. Toronto: Institute for Clinical Evaluative Sciences; 2006.

Issue	Although asthma accounts for 80% of chronic respiratory disease in Canada and affects 8.4% of the population, relatively little detail about the burden of asthma on individuals and society has been studied in Canada, in general, and in Ontario specifically.
Study	Involved a comprehensive review of asthma in Ontarians aged 0 to 39 years of age between 1994/95 and 2001/02 by investigating: <ul style="list-style-type: none"> • Who has asthma? • What is the risk of an individual developing asthma? • What health care resources are used by people with asthma? • Is asthma more or less common in some areas of the province?
Key Findings	<ul style="list-style-type: none"> • During the study period, the prevalence of asthma in Ontario decreased modestly from 6.3% to 5.8%. Individuals in Ontario have about a 40% risk of developing asthma before age 40. • Overall, people with asthma have a significantly higher number of outpatient visits and hospitalizations than people without asthma, with family physicians and pediatricians being the frontline care providers to people with asthma. • Expenditures for asthma-specific outpatient care decreased over the study period; however, overall outpatient expenditures for people with asthma were significantly greater than the outpatient expenditures for people without asthma. • An almost four-fold variation was found in asthma hospitalizations across the province, which was largely explained by high rates of asthma in Northwestern Ontario.
Implications	Initiatives that could improve asthma care include targeting primary care physicians for continuing education and optimizing the use of specialists. As well, interventions such as recognizing and reducing exposure to asthma triggers (such as pets, dust, and smoke), appropriate medication, medication adherence and the use of asthma action plans, follow-up asthma care appointments, and asthma education and self-management programs for patients are also important to improve asthma control and to reduce the burden on patients, families and the health care system.

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