

At A Glance

April 2005

Monthly highlights of ICES research findings for stakeholders

ICES report identifies how long Ontarians are waiting for key health services

Tu J, Pinfold P, McColgan P, Laupacis A. (editors). *Access to Health Services in Ontario: ICES Atlas*. Toronto: Institute for Clinical Evaluative Sciences; 2005.

Issue	As the Ontario Wait Time Strategy moves forward, it is essential that there be baseline information on wait times against which to measure the impact of efforts to reduce waiting lists.
Study	Examined rates of service provision and associated wait times for cancer and cataract surgery, cardiac procedures, and hip/knee total joint replacements. The report also examined the volume of CT and MRI scans performed in different regions across the province.
Key Findings	<ul style="list-style-type: none">• During the past decade there were significant increases in the volumes of procedures provided to Ontarians for all of the services studied, with the greatest increases seen in: MRI scans (6-fold); CT scans (3-fold); coronary angioplasty (3.5-fold); and knee replacements and cataract surgeries (doubled).• Many wait times have not decreased, and in some cases have actually increased.• There were considerable differences across regions of the province, both in terms of the volume of services provided and the wait times for these services.
Implications	Solutions for improving access to these services require a combination of funding coupled with strategies to better manage waiting lists. The Atlas contains 14 recommendations, including the need for a new electronic provincial wait time registry to capture timely information to manage wait times, as well as the need to establish wait time benchmarks for each of the key services in Ontario.

Drug therapy as good as costly invasive cardiac procedures for elderly heart attack patients

Stukel T, Lucas F, Wennberg D. Long-term outcomes of regional variations in intensity of invasive vs. medical management of Medicare patients with acute myocardial infarction. *JAMA*. 2005; 293 (11): 1329-1337.

Issue	While there are marked regional variations in the use of invasive vs. non-invasive (drug) management of heart attack patients, the health and health policy implications of these variations are unknown.
Study	Followed over 158,000 elderly U.S. Medicare patients hospitalized with a heart attack in 1994–1995. Regions were characterized according to the percentages of heart attack patients that received invasive cardiac procedures vs. drug therapy. Patients were followed for up to seven years to assess the impact of the different cardiac management practices on long-term mortality.
Key Findings	Higher rates of drug therapy were associated with improved survival, regardless of invasive cardiac treatment. However, there was little or no improved survival benefit with invasive cardiac treatment in regions with high rates of drug therapy.
Implications	An evidence-based approach to drug therapy for all suitable heart attack patients should be implemented in Ontario. Because rates of drug therapy are higher and rates of invasive treatment are lower in Ontario than in any U.S. region studied, a similar study should be undertaken in Ontario to inform decisions about the expansion of invasive cardiac capacity.

Hospital admissions in Ontario show consistency and predictability

Upshur R, Moineddin R, Crighton E, Kiefer L, Mamdani M. Simplicity within complexity: seasonality and predictability of hospital admissions in the province of Ontario 1988-2001, a population-based analysis. *BMC Health Serv Res*. 2005; 5 (1): 13.

Issue	The overall effect of seasonal fluctuations for non-communicable diseases on hospital admissions has not been systematically evaluated.
Study	Assessed temporal patterns in hospitalizations between 1988 and 2001 for the 52 most common causes of hospital admissions in Ontario.
Key Findings	Of the 52 most common causes of hospital admissions, 33 were moderately or strongly seasonal in occurrence.
Implications	Many hospital admissions have systematic patterns that can be understood and predicted with reasonable accuracy, enabling more effective planning and resource allocation.

Pediatric hernia surgeries best done by pediatric surgeons or high volume general surgeons

Borenstein S, To T, Wajja A, Langer J. Effect of subspecialty training and volume on outcome after pediatric inguinal hernia repair. *J Pediatr Surg.* 2005; 40 (1): 75-80.

Issue	Increasingly, research is being undertaken to examine the impact of surgeon specialty on patient outcomes for various procedures. Such studies have not examined the effect of subspecialty training on outcomes of pediatric inguinal hernia repair.
Study	Tracked pediatric inguinal hernia repairs done in Ontario between 1993 and 2000 to study differences in patient outcomes (early surgical complications, 30-day hospital readmission rates, and rates of inguinal hernia recurrence) when surgery was performed by a pediatric surgeon vs. a general surgeon.
Key Findings	Early surgical complications and 30-day hospital readmission rates were similar between the two groups. The risk of developing a recurrent hernia was 2.4 times higher if a general surgeon rather than a pediatric surgeon performed the surgery. However, with increasing hernia surgery volumes, the risk of recurrence among general surgeons approached that of pediatric surgeons.
Implications	An effort should be made to develop a program to allow a limited number of general surgeons to obtain additional training in the area of community pediatric surgery. Further specialized training will allow consolidation of pediatric inguinal hernia repairs in individual communities so that sufficiently high surgical volumes are maintained to achieve outcomes similar to those achieved by pediatric surgeons.

Diabetes-related dialysis needs are growing in Ontario

Lok C, Oliver M, Rothwell D, Hux J. The growing volume of diabetes-related dialysis: a population-based study. *Nephrol Dial Transplant.* 2004; 19 (12): 3098-3103.

Issue	Accurate data on trends in dialysis requirements are essential to assess the capacity for dialysis therapy in the system.
Study	Ontario dialysis patients with and without diabetes were tracked between 1994 and 2001 to determine the incidence, prevalence and mortality while on dialysis between the two groups.
Key Findings	The average annual incidence rate of dialysis was 12 times greater in persons with diabetes vs. those without diabetes. By 2000, patients with diabetes comprised 51% of new dialysis cases. The average annual prevalence rate was 10 times greater in people with diabetes, as were co-morbidities at the start of dialysis (55%) and poorer three-year survival (68%).
Implications	These trends will need to be monitored on an ongoing basis to assist in planning and resource allocation for the required dialysis capacity. As well, the high rates of dialysis among diabetes patients serve as a strong reminder of the importance of aggressive primary management of diabetes, its complications, and the associated risk factors for renal impairment.

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