

At A Glance

November 2006

Monthly highlights of ICES research findings for stakeholders

ICES study shows ED waiting times and crowding not affected by patients with minor ailments

Schull M, Kiss A, Szalai J-P. The effect of low-complexity patients on emergency department waiting times. *Ann Emerg Med.* 2006 Aug. 25; [Epub ahead of print].

Issue	The extent to which patients who visit emergency departments (EDs) with minor conditions contribute to delays and crowding is a topic of debate.
Study	Tracked 4.1 million ED visits to 110 Ontario hospitals between April 2002 and March 2003. Investigators then analyzed the degree to which low-complexity ED patients impacted the average ED length-of-stay and time to first-physician-contact for ED patients with more serious conditions.
Key Findings	Every 10 patients with minor ailments arriving per eight-hour period added only 5.4 minutes to the mean length-of-stay and only 2.1 minutes, on average, to the time spent waiting to see a physician, for patients with more serious medical problems. These results were similar regardless of the ED volume or whether the institution was a teaching hospital or not.
Implications	Reducing the number of low-complexity patients in EDs is unlikely to lessen crowding or to improve waiting times for sicker patients. To address the complex issue of ED crowding, some initiatives that hospitals could focus on include increasing the number of inpatient beds and moving patients efficiently through tests, such as X-rays.

Addition of diagnostic imaging equipment in rural areas improves local health care

Merkens B, Mowbray D, Creeden L, Engels P, Rothwell, D, Chan B, Tu K. A rural CT scanner: evaluating the effect on local health care. *Can Assoc Radiol J.* 2006; 57 (4): 39-46.

Issue	People living in rural areas in Ontario have greater difficulty accessing health care, relative to people living in urban areas. The gap between rural and urban levels of access to diagnostic imaging is particularly frustrating to rural patients and physicians alike.
Study	Assessed how the introduction of a 'pilot' computerized tomography (CT) scanner in Walkerton, Ontario impacted physicians' and patients' perceptions of care, as well as local scanning rates.
Key Findings	Physicians reported that the local CT scanner allowed them to diagnose and treat patients sooner, closer to home, and with greater confidence. On average, 75% of patients ranked faster and closer access as very important. Scanning rates in the area rose following the introduction of the CT scanner, although rates were still below those of urban areas.
Implications	The study confirms that the rural scanner changed the area's health care in significant ways and that it helped to narrow the gap between rural and urban service levels. It is recommended that CT scanners be introduced in rural settings with a demonstrated need for this diagnostic equipment and the resources to implement and maintain it.

PPIs do not raise risk of hospitalization for *C. difficile* in elderly patients taking antibiotics

Lowe D, Mamdani M, Kopp A, Low D, Juurlink D. Proton pump inhibitors and hospitalization for *Clostridium difficile*-associated disease: a population-based study. *Clin Infect Dis.* 2006 Oct. 13; [Epub ahead of print].

Issue	No published studies have examined the association between proton pump inhibitor (PPI) use and the risk of hospital admission for <i>Clostridium difficile</i> -associated disease (CDAD), which is a clinically important outcome given the recent increased morbidity and mortality attributable to CDAD.
Study	Tracked Ontarians 66 years of age and older who were hospitalized for CDAD within 60 days of receiving outpatient antibiotic therapy. The study focused on patients taking antibiotics because this is the main risk factor for CDAD. Each patient hospitalized for CDAD was randomly matched to control patients who were treated with antibiotics, but not hospitalized for CDAD.
Key Findings	Of the 1,389 cases and 12,303 matched controls, the results showed that patients hospitalized for CDAD following outpatient antibiotic therapy were no more likely than the control group to have been dispensed a prescription for a PPI in the preceding 90 days. There was also no association between hospitalization for CDAD and more remote PPI use.
Implications	Given the recent outbreaks of CDAD in North America and Europe, and the public concern surrounding them, these findings should be reassuring to both patients and health care providers.

Many elderly diabetes patients not receiving recommended drugs

Shah B, Hux J, Laupacis A, Zinman B, Booth G. Use of vascular risk-modifying medications for diabetic patients differs between physician specialties. *Diabet Med.* 2006; 23 (10): 1117-1123.

- Issue** Although it has been proposed that physician specialty influences the likelihood of diabetes patients receiving vascular risk-modifying medications, there have been no large population-based studies on this issue that have been able to detect prescribing differences between physician groups.
- Study** Between 1994 and 2001, tracked over 105,000 Ontarians aged 65 years and older with newly-diagnosed diabetes. Compared the receipt of anti-hypertensive and lipid-lowering drugs between patients who had regular care from endocrinologists, internists/geriatricians and family physicians.
- Key Findings** Only two-thirds of elderly diabetes patients received anti-hypertensive drugs and about one-quarter received lipid-lowering drugs, despite the known benefits of these medications.
- Compared to patients of family physicians, those seeing internists or geriatricians were 27% more likely to receive anti-hypertensive drugs and those seeing endocrinologists were 58% more likely to receive lipid-lowering drugs. However, anti-hypertensive drug use among patients seeing endocrinologists versus family physicians did not differ, even though hypertension control is the component of diabetes management that has the greatest evidence of benefit to patients, and also has been shown to reduce costs to the health care system.
- Implications** Diabetes management goes beyond controlling blood sugar levels. Blood pressure and cholesterol management are an integral part of care to diabetes patients and critical to reducing morbidity and mortality. Greater emphasis on risk factor management is needed through educational interventions and patient care tools for clinicians.

Study compares treatment outcomes for achalasia patients

Lopushinsky S, Urbach D. Pneumatic dilatation and surgical myotomy for achalasia. *JAMA.* 2006; 296 (18): 2227-2233.

- Issue** Achalasia is a rare disorder of the esophagus which can cause difficulty swallowing, regurgitation, and chest pain. There are no published studies on the effectiveness of two common treatments for achalasia, which makes it difficult for clinicians to make treatment recommendations to patients.
- Study** Between July 1991 and December 2002, tracked 1,461 Ontarians aged 18 years and older who received pneumatic dilatation or surgical myotomy to treat achalasia, to compare the need for subsequent achalasia interventions following the first treatment.
- Key Findings** Although many patients required subsequent interventions after either pneumatic dilatation or surgical myotomy, less than 40% of patients treated initially by surgical myotomy received subsequent interventions, as compared with more than 60% of patients treated initially by pneumatic dilatation.
- Implications** Persons with achalasia should be aware of the long-term effectiveness of pneumatic dilatation and surgical myotomy. Considerations affecting the treatment choice should include patients' attitudes towards surgical procedures and the desire to avoid subsequent interventions.

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