

## At A Glance

February 2005

### Monthly highlights of ICES research findings for stakeholders

#### Blueprint for children's health services needed in Ontario

Dick P, Kavanagh L. ICES Investigative Report. Ontario's Mosaic of Children's Treatment Services. Toronto: Institute for Clinical Evaluative Sciences; 2005.

<b>Issue</b>	Providing accessible and effective health services to children requires a macro perspective on current services and the development of a cohesive delivery strategy.
<b>Study</b>	Conducted focus groups with stakeholders, surveyed health service delivery organizations, and analyzed administrative data to assess distribution, delivery, utilization, and access to child ambulatory treatment services in Ontario.
<b>Key Findings</b>	Challenges that prevent seamless delivery of children's health services in Ontario include: <ul style="list-style-type: none"><li>• Fragmentation and variation;</li><li>• Limited availability of information;</li><li>• Problems with capacity and utilization of services;</li><li>• Difficulties with integration of care; and,</li><li>• Lack of an overall blueprint and inventory for children's treatment services.</li></ul>
<b>Implications</b>	Achieving a more equitable and efficient system of children's health services will require significant changes to existing policy. These include improving the availability of information for system monitoring, evaluation and policy development, as well as improving accountability, developing a clinical information and management system, and integrating service delivery.

#### SSRIs do not increase risk of digoxin toxicity

Juurink D, Mamdani M, Kopp A, Hermann N, Laupacis A. A population-based assessment of the potential interaction between serotonin-specific reuptake inhibitors and digoxin. *Br J Clin Pharmacol*. 2005; 59 (1): 102-107.

<b>Issue</b>	Selective serotonin-specific reuptake inhibitors (SSRIs) can cause multiple drug interactions. Recent evidence suggests that some SSRIs, but not others, might produce digoxin toxicity.
<b>Study</b>	Studied over 245,000 patients 66 years of age and older who were treated with digoxin between 1994 and 2001 to determine the relationship between the initiation of SSRI therapy and hospital admission for digoxin toxicity in the subsequent 30 days.
<b>Key Findings</b>	There was no significant difference in the risk of digoxin toxicity associated with the use of any of the various SSRIs tested (fluoxetine, fluvoxamine, sertraline, and paroxetine).
<b>Implications</b>	Although drug-drug interactions remain an important consideration when choosing an antidepressant, drug selection should not be influenced by concerns about digoxin toxicity.

#### Minorities under represented in clinical trials

Rochon P, Mashari A, Cohen A, Misra A, Laxer D, Streiner D, Clark J, Dergal J, Gold J. The inclusion of minority groups in clinical trials: problems of under representation and under reporting of data. *Accountability in Research*. 2004; 11 (3-4): 215-223.

<b>Issue</b>	Despite the growing recognition of the importance of including minority groups in research, a systematic examination of the representation of minorities and the reporting of racial or ethnic information in clinical trials has not been conducted.
<b>Study</b>	Collected data on the racial/ethnic composition of study samples from all randomized control trials (RCTs) published in six leading medical journals in 1999.
<b>Key Findings</b>	Of the 280 RCTs, 204 (71%) provided no information on the race/ethnicity of participants. Of the 89 U.S.-based RCTs, 50 (56%) reported the racial/ethnic distribution of participants. Relative to other trials, those funded by the National Institutes of Health (NIH) were more likely to report race/ethnicity data (56% vs. 24%).
<b>Implications</b>	Mandatory reporting policies of race/ethnicity data, such as those required by the NIH, may have a positive effect on reporting and representation, and could provide a model for other funding bodies to improve both the representation of minority groups in clinical trials and reporting of racial/ethnic information.

## Surgeon specialty and volume impacts outcomes in patients undergoing surgery for lung cancer

Goodney P, Lucas F, Stukel T, Birkmeyer J. Surgeon specialty and operative mortality with lung resection. *Ann Surg.* 2005; 241 (1): 179-184.

<b>Issue</b>	The impact of surgeon specialty on outcomes in patients undergoing surgery for lung cancer is uncertain.
<b>Study</b>	Used the national Medicare database in the U.S. from 1998 to 1999 to identify over 25,000 patients undergoing lung resection for lung cancer and compared their operative mortality rates by physician specialty (i.e. general surgeon, cardiothoracic surgeon, or noncardiac thoracic surgeon). The study then examined whether any observed specialty-related differences persisted in analysis restricted to high volume surgeons and hospitals.
<b>Key Findings</b>	Operative mortality rates were lowest for thoracic surgeons: <ul style="list-style-type: none"> <li>• In the overall analysis (5.6% cardiothoracic, 5.8% noncardiac thoracic, and 7.6% general surgeons);</li> <li>• In analyses restricted to high-volume surgeons (5.1% noncardiac thoracic, 5.2% cardiothoracic, and 6.1% general surgeons);</li> <li>• In analyses restricted to high-volume hospitals (5.0% noncardiac thoracic, 5.3% cardiothoracic, and 6.1% general surgeons).</li> </ul>
<b>Implications</b>	While thoracic surgeons on average had the lowest operative mortality rates for lung resection, high-volume surgeons, regardless of specialty, had excellent outcomes. Future quality improvement efforts in thoracic surgery should focus on what high-volume surgeons do differently to achieve better outcomes in lung resection to potentially improve patient care at all hospitals performing thoracic surgery.

## Single data source could help improve heart attack care in Canada

Jackevicius C, Alter D, Cox J, Daly P, Goodman S, Filate W, Newman A, Tu J. Acute treatment of myocardial infarction in Canada 1999-2002. *Can J Cardiol.* 2005; 21 (2): 145-152.

<b>Issue</b>	In order to encourage the use of evidence-based heart attack therapies, utilization patterns must be analyzed and reports published to provide practitioners with feedback.
<b>Study</b>	Used four Canadian registries to identify heart attack patients, and measured in-hospital reperfusion rates and medication utilization at hospital discharge.
<b>Key Findings</b>	Reperfusion rates in heart attack patients ranged from 60-70%. Overall, less than 50% of patients met the door-to-needle targets of less than 30 minutes. Medication utilization rates of aspirin, beta-blockers, angiotensin-converting enzyme inhibitors (ACEIs), statins, and calcium antagonists at discharge increased between 2000 and 2001.
<b>Implications</b>	Although the use of evidence-based therapies for heart attack treatment has increased, there remains room for improvement. Having a single, comprehensive data source would allow for better insights into heart attack management and quality care improvement across Canada.

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