OHTAC
ONTARIO HEALTH TECHNOLOGY ADVISORY COMMITTEE

e-BULLETIN

Evidence-based advice on health technology to advance health

Issue 7
Jan 2010

To receive this monthly e-bulletin, please send your request to OHTACinfo.moh@ontario.ca. We would appreciate your providing your contact details including your name, title and organization (not required). All details are kept confidential and will not be supplied to third parties.

To keep up-to-date with the draft releases and all new materials from MAS and OHTAC, be sure to visit to the "What's New" section of our websites.

We've also launched the **OHTAC/MAS RSS feed** to provide our users with automatic notifications of when our web pages are updated important new information. To find out more and how to subscribe to the feed, click on the RSS icon to the right or visit:
http://www.health.gov.on.ca/english/providers/program/mas/mas_ohtac_rss.html

NEW REPORTS FROM MAS & OHTAC

The following MAS reports have been recently completed and will soon be available for download at the Ontario Health Technology Assessment Series, along with the OHTAC recommendations concerning the use of the related technologies in health care facilities across Ontario.

1. ***Population-Based Smoking Cessation Strategies, OHTAS vol.10, no. 1 -*** This substantial report was commissioned by the Ministry of Health Promotion (MHP) to provide a summary of the existing evidence of the clinical effectiveness of nine population-based smoking cessation strategies including:

    1. Mass media interventions
    2. Telephone counselling
    3. Post-secondary smoking cessation programs in colleges and universities
    4. Community-wide stop-smoking contests (i.e. Quit and Win)
    5. Community interventions
    6. Physician advice to quit
    7. Nursing interventions for smoking cessation
    8. Hospital-based interventions for smoking cessation
    9. Pharmacotherapies for smoking cessation, specifically:
        a) Nicotine replacement therapies
        b) Antidepressants
        c) Anxiolytic drugs
        d) Opioid antagonists
        e) Clonidine
        f) Nicotine receptor partial agonists

    Among the report's finding were that the most effective strategies are varenicline, buproprion, and nicotine replacement therapies, followed by physician advice to quit and nursing interventions in non-hospitalized smokers without cardiovascular disease.

2. ***Clinical Utility of Vitamin D Testing, OHTAS vol.10, no.2 -*** A request to review the clinical utility of vitamin D testing came to MAS from the MOHLTC Health Services Branch as there are concerns that the current evidence of vitamin D's effects in non-bone health outcomes including cancer, all-cause mortality, and cardiovascular disease, has been inconsistent. Further, a consensus on what the 'optimal level' of serum vitamin D should be has not been established, though various targets have been proposed.

    Among the findings of the comprehensive review from MAS were that approximately 5% of Ontario's general population exhibits vitamin D deficiency and 10% to 25% have serum vitamin D levels below 40 to 50 nmol/L – a conservative threshold used as the minimum recommended level. The primary factors that were found to affect vitamin D status were darker skin pigmentation and seasonal variations. Based on this and other evidence found in the report, OHTAC has concluded that routine vitamin D testing in healthy individuals is unwarranted, although Canadians should be made aware of the guidelines for vitamin D intake made by Health Canada.

3. ***Solid Organ Transplantation for End Stage Organ Failure (ESOF) in persons with HIV -*** With the development of highly active anti-retroviral therapy (HAART) for the treatment of HIV infection, the survival rates of persons living with HIV infection have improved to the point that many will now experience end-stage organ failure well before they develop life-threatening conditions related to the HIV infection. MAS has completed a review of the available evidence concerning the effectiveness of solid organ transplantation in this population and OHTAC has prepared its recommendations on the subject – both of which will be shortly available from the MAS website.

4. ***OHTAC Recommendations for Patient Order Sets.*** Prepared by the Healthcare Human Factors Team (University Health Network, Toronto), this project set out to determine whether order sets are effective in improving guideline adherence, diagnosis and treatment outcomes, processes of care, efficiency, and/or cost structures in healthcare facilities. Through the study, three main approaches to the generation and propagation of order sets were found to be in use across Ontario:
   1) traditional paper forms developed by in-house clinicians,
   2) electronic, downloadable forms that are sometimes developed from input from a number of institutions, and
   3) electronic lists that are integrated into a computerized physician order entry (CPOE) system.

   The study found that most hospitals in Ontario are either not using order sets or are using paper order sets developed by in-house clinicians. Some are using shared, electronic forms, and still others are actively working toward order sets that are embedded in the CPOE system. Based on these and other findings in the report, OHTAC has recommended that order sets for diagnosis and/or treatment become an important focus for further development through a formal evaluation of existing models.

   OHTAC also recommended that any future commitment to order sets be developed from a common starting framework across Ontario for as many applications as possible. These should be overseen and coordinated by a third party include all end users in the formative process.

   Note: This report is not part of the regular OHTAS series but can be accessed directly from OHTAC by clicking here.

5. ***Endovascular Repair of Abdominal Aortic Aneurysms in Low Surgical Risk Patients, Rapid Review -*** In 2005, the Ontario Health Technology Advisory Committee (OHTAC) made a recommendation for increased access to endovascular aneurysm repair (EVAR) of abdominal aortic aneurysms (AAAs) to patients at high risk for surgical complications and mortality, based on a field evaluation and systematic literature review conducted by the Programs for Assessment of Technology in Health (PATH). At the time, OHTAC did not recommend EVAR for low and moderate surgical risk patients because of inadequate long-term evidence. This new 'Rapid Review' of EVAR examines the latest evidence for the clinical and cost-effectiveness of the procedure for low risk surgical patients. This rapid review can be accessed directly from OHTAC by clicking here.

COMING SOON

In the coming weeks, the following reports will be made available on the MAS website:

Endovascular **Laser Treatment for Varicose Veins.** Image-guided endovascular techniques involving lasers (ELT) are increasingly being offered as alternatives to surgery for the treatment of varicose veins (VV). Rather than surgically removing the vein, ELT works by destroying or ablating the damaged vein segment using heat energy delivered through a laser fibre. It's a minimally invasive treatment that can be performed in outpatient clinics by various medical specialties including surgeons (vascular or general), interventional radiologists and phlebologists. The MAS analysis of the available scientific published evidence examining the use of ELT for VV has concluded that ELT is as effective as surgery in the short term and leads to shorter recovery times.

Extracorporeal Lung Support Technologies: Bridge to Recovery and Bridge to Lung Transplantation in Adult Patients - This review will focus on the safety, effectiveness, and cost-effectiveness of pumpless extracorporeal lung assist devices.

Cardiac Diagnostic Imaging: Mega Analysis - The Medical Advisory Secretariat is examining the evidence of effectiveness and cost-effectiveness of non-invasive cardiac testing modalities to ensure that appropriate technologies are used in the treatment of patients with known or suspected coronary artery disease. Among the technologies examined in the review are SPECT, ECHO, CT Angiography, PET and Cardiac MRI.

Cardiac Diagnostic Imaging for the Assessment of Myocardial Viability: Mega-Analysis - The Medical Advisory Secretariat is examining the evidence of effectiveness and cost-effectiveness of non-invasive cardiac imaging modalities for the assessment of myocardial viability. This review includes Cardiac PET and MRI.

Smart Medication Infusion Pumps: Part II - The Healthcare Human Factors Laboratories at the University Health Network is working with the Medical Advisory Secretariat to investigate the safety, effectiveness, cost effectiveness, usability, and parameters surrounding the use of smart medication infusion pumps. This is the second part of this series.

Cancer Screening with Digital Mammography for Women at Average Risk of Breast Cancer or MRI for Women at High Risk - The purpose of this review is to determine the effectiveness of two separate technologies relative to film mammography in the screening of asymptomatic women for breast cancer: digital mammography will be examined for women at average risk and magnetic resonance imaging will be examined for women at high risk for breast cancer.

Clinical Utility of Laboratory Tests for Celiac Disease - This review will focus on the clinical utility of serologic tests for the diagnosis of Celiac Disease in adults and children.

As usual, OHTAC and MAS welcome your questions and comments. Please submit them to us at: OHTACinfo.moh@ontario.ca.

If you are unable to find the report you are looking for from the Medical Advisory Secretariat website or the Ontario Health Technology Advisory Committee website, please contact us directly at OHTACinfo.moh@ontario.ca to request a copy by email.