theta Quarterly
Spring 2010

Academic Rounds

Many thanks to past presenters:

Colin Vicente

Konrad Fassbender

Marc Brisson

Stephanie Van Bebber

Eyal Cohen

Martin Brown

Rounds will resume September 10, 2010

Project Updates

Completed Reports

Relative Cost-effectiveness of Five Non-invasive Cardiac Imaging Technologies for Diagnosing Coronary Artery Disease in Ontario

The report can be accessed here.

Ongoing Research

Risk Assessment and Alternative Foam Mattresses to Prevent Pressure Ulcers in Long-Stay Clients of Ontario Community Care Access Centres: Cost Effectiveness and Budget Impact Analysis
A final report will be published in early 2010.

***T*urning for *U*lcer *R*eductio*N* (*TURN*) Study**
Participant recruitment is almost complete for Ontario. Currently, 435 of 650 participants have been recruited from 8 long-term care homes in the GTA.

Using Mathematical and Economic Models to Guide Screening Policy in Cervical Cancer
The parameterizations of both the natural history of HPV infection and cervical cancer and the sexual network model have been completed. With data from ICES, age-specific real-world costs have been attributed to the most significant events along the disease history pathway. Currently, the models are being calibrated to a number of targets using observed Canadian data.

New Projects

***P*ressure *U*lcer *M*ulti-Disciplinary *T*eams via *T*elemedicine (*PUMTT*): A Cluster Pragmatic Randomised Controlled Trial**
The purpose is to evaluate the clinical effectiveness and cost-effectiveness of 'enhanced' multi-disciplinary wound care teams vs. 'usual' care teams in LTC homes in Ontario for the treatment of pressure ulcers.
Data collection is scheduled to begin this summer.

Specialized Multidisciplinary Community-Based Care for Chronic Wounds: A Field Evaluation
The purpose of this project is to determine the effectiveness and cost-effectiveness of specialized multidisciplinary wound care clinics for community based patients with chronic wounds in Ontario, in contrast to standard care.
The Protocol has recently been submitted to the MOHLTC and the University of Toronto Ethics board for review.

Effectiveness and Cost-Effectiveness Assessment of Heart Failure Clinics in Ontario
The project has recently received REB approval.

You can read more about THETA's projects here.

Research Grants

Canadian Centre for Applied Research in Cancer Control

Canadian Cancer Society Research Institute

$3,600,000; 2009 – 2014

PIs: Peacock S, Hoch J.

Co-Investigators: Babera L, Barer M, Berry S, Browman G, Culyer A, Dobrow M, Doll R, Elwood M, Evans R, Fassbender K, Gallagher R, Gibson J, Hagen N, Harvey B, Henry D, Hodgson D, Krahn M, Lemieux-Charles L, McBride M, Mittmann N, Morgan S, O'Reilly S, Ringash J, Sawka C, Sullivan T, Sutcliffe S, Upshur R.

The Canadian Centre for Applied Research in Cancer Control (ARCC) is a pan-Canadian research centre specializing in health economics, services, policy and ethics applied to cancer control; ARCC aims to pursue research, establish a network and build capacity in these disciplines. The centre is a unique collaboration between researchers and decision-makers at the BC Cancer Agency, Cancer Care Ontario, University of British Columbia and University of Toronto. For more information please click here.

The Economic Burden of Patient Safety

Canadian Patient Safety Institute

$166,030; 2010 – 2011

PI: Etchells E.

Co-Investigators: Baker M, Shojania K, Krahn M, McDonald A, Taggar R, Matlow A, Daneman N.

Modeling and Economic Evaluation of Hepatitis C Epidemic Mitigation Strategies in Australia

National Health and Medical Research Council

$448,550; 2010 – 2012

PIs: Wilson D, Thein H, Krahn M.

Co-Investigators: Dore G, Maher L, Kaldor J .

Health Care, Technology and Place: A Strategic Training Initiative

Canadian Institutes of Health Research
$1,950,000; 2009 – 2015

PI: Coyte P.

Co-Investigators: Andrews G, Baecker R, Bayoumi A, Boydell K, Cameron J, Carter M, Clifford T, Colantonio A, Culyer A, Dunn J, Fernie G, Gignac M, Hoch J, Holmes D, Jadad A, Krahn M, Laporte A, Levin L, Maki B, Mihailidis A, Miller F, Mykhalovskiy E, O'Brien-Pallas L, Rosenberg M, Upshur R.

Real-world Effects of Bisphosphonates: Using Innovation to Link Datasets (REBUILD) – Phase I

Canadian Institutes of Health Research
$100,000; 2010-2011

PI: Cadarette S.

Co-Investigators: Dormuth C, Hawker G, Juurlink D, Mamdani M, Paterson J.

In the Media

Two papers have received considerable media coverage over the past few months:

Beate Sander's paper titled, "Economic Appraisal of Ontario's Universal Influenza Immunization Program: A Cost-Utility Analysis"

Offering free flu shots to all prevents cases, saves lives and money: study – Canadian Press

It pays to give everyone the flu shot, study says – Globe & Mail

Universal flu vaccine program cost-effective: Study – Global News

Ontario's $40 million flu campaign good value: study – healthzone.ca

Ontario's universal flu vaccination plan – e! Science News

Harindra Wijeysundera's paper titled, "Association of temporal trends in risk factors and treatment uptake with coronary heart disease mortality, 1994 – 2005"

Heart disease deaths fall 35% in Ont.: study – CBC

Behavior change Is key to lower heart risk– WebMD

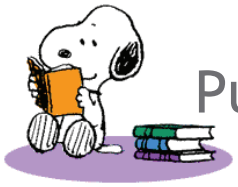
Heart disease deaths decline due to better prevention and treatment: study – The Vancouver Sun

Prevention gets credit for fewer heart deaths – Bloomberg Businessweek

Fewer Ontarians dying of heart disease, study finds – CTV

THETA Staff

Welcome Nicholas Mitsakakis to the THETA team! Nicholas was hired as a Biostatistician at THETA. He has recently completed his PhD in Biostatistics from the Dalla Lana School of Public Health, University of Toronto, where he focused on Bayesian methods for Gaussian graphical models. He also holds undergraduate and graduate degrees in Mathematics (University of Athens, Greece) and a Masters degree in Artificial Intelligence (University of Edinburgh, UK). His research interests among others include Gaussian graphical models, Bayesian methods and statistical data mining.



Publications

Journals

Alibhai S, Mahmoud S, Hussain F, Naglie G, Tannock I, Tomlinson G, Fleshner N, Krahn M, Warde P, Klotz L, Breunis H, Leach M, Canning S (2010). Levels of sex hormones have limited effect on cognition in older men with or without prostate cancer. *Critical Reviews in* Onoclogy/Hematology, 73(2), 167-175.

Claxton K, Paulden M, Gravelle H, Brouwer W, Culyer A. Discounting and decision making in the economic evaluation of health care technologies. *Forthcoming in Health Economics*.

Hancock-Howard R, Connolly B, McMahon M, Menon A, Woo G, Wales P, Aziza A, Laporte A, Nauenberg E, Ungar W (2010). Cost-effectiveness analysis of implantable venous access device insertion using interventional radiologic versus conventional operating room methods in pediatric patients with cancer. *Journal of Vascular and Interventional Radiology, 2*1(5), 677-84.

Krahn M (2010). 'New' evidence for clinical practice guidelines: should we search for 'preference evidence'? *The Patient: Patient-Centred Outcomes Research*, 3(2), 1-7.

Mah C, Guttmann A, Deber R, Krahn M, McGeer A (2010). Compulsory school entry vaccination laws and exemptions: Who is opting out in Ontario and why does it matter? *Healthcare Policy*, 5(4): 37-46.

Wan M, Krahn M, Ungar W, Caku E, Sung L, Medina S, Doria A (2009). Acute appendicitis in young children: cost-effectiveness of US versus CT in diagnosis--a Markov decision analytic model. *Radiology*, 250(2), 378-386.

Wijeysundera H, Machado M, Farahati F, Wang X, Witteman W, van der Velde G, Tu J, Lee D, Goodman S, Petrella R, O'Flaherty M, Krahn M, Capewell S (2010). Association of temporal trends in risk factors and treatment uptake with coronary heart disease mortality, 1994 – 2005. *The Journal of the American Medical Association*, 303(18), 1841-1847.

Wilke D, Krahn M, Tomlinson G, Bezjak A, Rutledge R, Warde P (2010). Sex or survival: Short versus long-term androgen deprivation in patients with locally advanced prostate cancer treated with radiotherapy. *Cancer*, 116(8), 1909-1917.

Yong J, Schuh S, Rashidi R, Vanderby S, Lau R Laporte A, Nauenberg E, Ungar W (2009). A cost-effectiveness analysis of omitting radiography in diagnosis of acute bronchiolitis. *Pediatric Pulmonology*, 44(2), 122-127.

Reports

Donnan J, Ungar W, Mathews M, Hancock-Howard R. Health technology assessment of thiopurine methyltransferase genetic testing for guiding 6-mercaptopurine doses in pediatric patients with acute lymphoblastic leukemia. TASK Report No. 2010-02.

Costa V, Ungar W, Hancock-Howard R, Feldman B, Laxer R. The use of biologic response modifiers in polyarticular-course juvenile idiopathic arthritis. TASK Report No. 2010-01.

Social Networking

On the first Friday of each month at 4pm, THETA staff, students and collaborators congregate at a selected pub in downtown Toronto. We will circulate an e-mail approximately 1 week prior to inform you of the selected venue. If you have any suggestions, please feel free to let Karen Liu know. We look forward to seeing you there!

Have a fun & safe summer!

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