

THETA Quarterly Newsletter

July 2016

Message from the Director

Inside this issue:

BRU Group 2
Grants Award 2,3

Announcement 3, 4

New Staff 4, 5

Welcome to our first newsletter of 2016.

We are once again bringing our THETA Newsletter back. We are pleased to share what's happening with everyone. We are thrilled to announce our new home. That's right! THETA has moved to a new location as of April 2016. We are now located at Toronto General Hospital under TGRI. Feel free to drop by for a visit.

We have exciting things happening at THETA:

New grants: Prostate Cancer Canada (PCC)

and the Canadian Centre for Applied Research in Cancer Control (ARCC); A new unit at UHN, The Biostatistics Research Unit (BRU) led by Dr. George Tomlinson. One of our staff received a tenure position at the University of Waterloo. Another staff received a Scientist position at the Hospital for Sick Children. Some of our staff members received the IHPME CLTA positions—Valeria Rac, Lusine Abrahamyan, Nicholas Mitsakakis. And we've had great THETA Rounds Speakers.

In September, we will teach our HTA Institute 3-day course. Check out our September newsletter for additional details.

THETA Rounds:

Many thanks to our 2015 -2016 presenters:

Dr. Harindra Wijeysundera

Dr. Mark Sculpher

Dr. Murray Krahn

Dr. Diarmuid Coughlan

Dr. Lauren Cipriano

Dr. Bruce Lee

Dr. Janel Hanmer

Dr. Tom Trikalinos

Dr. Eva Enns

Dr. Gianluca Baio

Dr. David Henry

We've moved!

We're thrilled to announce that we've moved to University Health Network, TGH Site, as of April 26, 2016.

As many of you will remember, we received a CFI infrastructure grant in 2013, and it's taken 3 years for this to finally happen. We've worked closely with architects, designers and hospital management team to plan out our space. Our new address is University Health Network, TGH Site, Eaton Building, 200 Elizabeth Street, 10EB- 230. Our phone number is 416-634-7245, and fax number is 416-340-3459. Our primary email address is still the same info@theta.utoronto.ca.

Stay tuned for our open house announcement.









Page 2 THETA Quarterly Newsletter

What is a BRU?



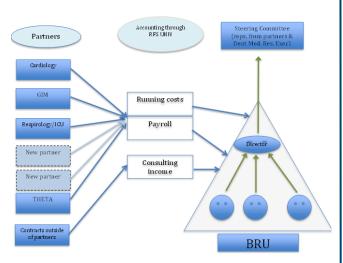


BRU stands for Biostatistics Research Unit. There is an unmet need at UHN for statistical collaboration and support such as statistical work

contracted out, analyses done by untrained personnel; statisticians who are hired are isolated, lack of continuity over time and development of productive working collaborations, low retention of statisticians, and no accumulation of in-house expertise.

It started in Dec 2015 that UHN division heads in Cardiology, Respirology, General Internal Medicine, and THETA Director declare support for a biostatistics "core" at UHN. Finally, a unit is created named BRU and is residing in THETA space.

BRU staff consists of Drs. George Tomlinson (Director), Nicholas Mitsakakis, and John Matelski.



Grants awarded

Granted on April 1, 2016, \$425,437 over 2 years

Non-Metastatic Castrate Resistant Prostate Cancer: Epidemiology, Clinical Pathways, and Health Care Costs

Team: Pls: Murray Krahn, Antonio Finelli; Investigators: Valeria Rac, Lusine Abrahamyan, William Wong, Alice Dragomir, Amen Aprikian, Stuart Peacock; Study Coordinator: Karen Bremner; Research Associate: Steven Carcone; Collaborator: Lisa Masucci

Prostate cancer (PC) is the most common cancer in Canadian men. In late stage disease, cancer no longer responds to hormonal therapy- it becomes castration resistant, either with clinically evident metastases (MCRPC) or without clinically evident metastases (NM-CRPC). Although the prognosis of CRPC is poor, treatment is rapidly evolving. Several new treatments for NM-CRCP, including immunotherapies, antiandrogens, bone-targeted agents, and androgen-receptor targeted agents are being tested.

Information regarding the epidemiology and cost of NM-CRPC and M-CRPC is very limited. This information is highly important for clinicians, patients, and policy makers facing reimbursement decisions for new drug and non-drug health technologies.

The aim of this study is to obtain comprehensive



epidemiologic data on patients with NM-CRPC (including incidence, prevalence, pathways leading to NM-CRPC, transition probabilities to more advanced stages, and costs), using information from provincial cancer registries, administrative healthcare databases, and patients in PC clinics in Ontario and Quebec. Our specific objectives are:

- Obtain current prevalence, incidence and survival probability estimates of PC stratified by age, year of diagnosis, and stage of diagnosis;
- ii) Identify pathways leading to and factors associated with developing NM-CRPC using information from medical charts at PC clinics;
- iii) Estimate annual incidence and prevalence of NM-CRPC, using administrative data;
- iv) Estimate stratified probability of developing NM-CRPC and transition probabilities that characterize the prognosis from NM-CRPC to metastasis and end-of-life;
- Estimate health care resource use and costs of PC recurrence from NM-CRPC to metastasis and death.

Page 3 THETA Quarterly Newsletter

Grants awarded cont'd



Granted on July 1, 2016, \$194,000 over 2 -year period

Comparisons of end-of-life care and costs in colorectal cancer patients in Ontario, Canada, and the United States

Team: Pls: Murray Krahn and Claire de Oliveira. Investigators: Diarmuid Coughlan, Anela Mariotto

The end-of-life is one of the most costly periods in the trajectory of cancer care. Our previous study compared resource use and costs at the end of life for advanced lung cancer patients in the United States and Ontario. The proposed study aims to continue the development of our cross-country comparisons methodology by describing end-of-life care and costs for patients with colorectal cancer (CRC).

Patients in Ontario will be identified from the Ontario Cancer Registry, and linked to health care administrative data at the Institute for Clinical Evaluative Sciences. Patients in the US will be identified from the National Cancer Institute's SEER- Medicare dataset. These data link approximately 94% of individuals aged 65 years or older in the population-based SEER cancer registries to Medicare's master enrollment and claims files.

We will include health care services that can be similarly defined in both systems: inpatient hospitalizations, emergency room visits, ambulatory procedures, outpatient infusion chemotherapy, physician services, radiation therapy, outpatient prescription drugs, and home care services. In addition, we will include hospice (US), complex continuing care (Ontario), and a composite palliative care variable (Ontario). The costs in Ontario will be estimated using standard costing methods for administrative data. Costs for the SEER-Medicare cohort can be obtained directly from the Medicare payments in the data.

Comparisons between and within countries over time will indicate how two different health care systems care for CRC patients at the end of life, and how much

this care costs. In addition, the methods used to identify and cost health care resources in the respective countries are valuable tools for future researchers.



Announcement



Dr. William W.L. Wong started his tenure-track position at the University of Waterloo

Dr. Wong, previous THETA's decision modeler, has joined School of Pharmacy, University of Waterloo as Assistant Professor since April 2016. Dr. Wong's research continuously focuses on infectious diseases modeling, health services and outcomes research, particularly in hepatitis B and C. His health services and outcomes research interests include quality of life research, costing and return on investment. Methodology research interests include advanced decision-analytic modeling techniques (such as discrete event simulation models and agent-based models) for health technology assessment, cost-effectiveness analysis, and pharmacoeconomics evaluation studies. Dr. Wong will continue collaborate with THETA on various on-going projects.







Dr. William W.L. Wong receives five-years discovery grant from the Natural Sciences and Engineering Research Council of Canada (NSERC)

Dr. Wong, THETA's Investigator, is a new recipient of a five-years NSERC discovery grant. His grant titled "Statistical and computational model for high dimensional data analysis". The proposed studies will develop effective and efficient statistical and computational methods for analyzing diverse types of high dimensional data in computational drug discovery, statistical genetics, and infectious diseases modeling areas.

CONGRATULATIONS William!

Page 4 THETA Quarterly Newsletter

Announcement cont'd



SickKids

Dr. Petros Pechlivanoglou, previous THETA's health economist, received a Scientist position at SickKids Hospital since January 2016. Dr. Pechlivanoglou's research focused on bridging network meta-analysis and decision-analytic modeling as well as on the application and extension of mixed-effects models in evidence synthesis. In addition, his interest expands to other econometrical and statistical applications in health economics and health policy.

He is working on methods for the extrapolation of health and cost outcomes from short-duration clinical trials to the lifetime of a patient. There are some clinical trials that may run for two or three years, which is very common in paediatrics. We then estimate how the results of the clinical trial will affect the patients in the long run. We are interested in how to do this for both costs and effects and how we can combine clinical trials with administrative databases, patient registries, life-tables and other sources of evidence to get better estimates of the intervention of the trials.

CONGRATULATIONS Petros!

CONGRATULATIONS to Drs. Valeria Rac, Lusine Abrahamyan and Nicholas Mitsakakis for a CLTA position at IHPME, University of Toronto.









THETA new staff members

Welcome Beena Vyas!



Beena has recently joined the THETA team. She is a results focused, client-oriented skilled professional with extensive experience working in a high volume critical thinking deadline-driven environment. Proven ability to work under pressure and remain focused. An accomplished self-starter professional with extensive experience in all analytical tasks. Well-rounded person with strong organization, time management and communication skills. Expertise in risk management, process improvement, documentation and adaptability across various areas of the business.

As Finance & Administrative Coordinator for THETA Collaborative, Beena is responsible for all aspects of administrative duties ranging from planning and scheduling to financial duties of budget monitoring, grant set-up, preparation of sub-grant, expense claims, invoice processing, invoicing for studies, recruitment and resignations, rounds announcements, assistance in HTA Institute, Theta quarterly newsletter.

Volume 1, Issue 1 Page 5

THETA new staff members

Welcome Farah Mawani!

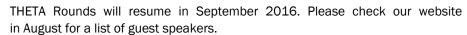


Farah is a Research Associate, leading the qualitative components of evaluations of 1. Value Demonstrating Initiative (VDI) on Chronic Obstructive Pulmonary Disorder (COPD) and 2. TeleHomecaRe InterVention Evaluation (THRIVE) Study.

Farah is in the final stages of completing her PhD at the Dalla Lana School of Public Health, University of Toronto. She has received a CIHR Institute of Gender and Health Canada Graduate Scholarship Doctoral Research Award, a two year Fellowship in the CIHR Strategic Training Program, Research in Addictions and Mental Health Policy & Services (RAMHPS), and a Statistics Canada Tom Symons Research Fellowship. She holds an MSc in Community Health and Epidemiology from Queen's University, and an Hon. Bachelors of Arts and Science from McMaster University.

THETA Rounds LECTURE SERIES

Since 2008 THETA has been hosting a lecture series THETA Rounds and inviting world experts to address various issues related to Health Technology Assessment, Clinical Research and Health Policy and Ethics fields. From January 2016 onwards THETA Rounds are available in the live webinar format. Recordings of most sessions can be accessed on the THETA Rounds Archive page.







More information, visit us at: www.theta.utoronto.ca

Follow us on Twitter @thetacollab



Share on Linked in.



Stay tuned for our next newsletter in September 2016

HIGHLIGHTS:

- HTA Institute Course
- THETA Rounds
- Project updates
- Conferences

