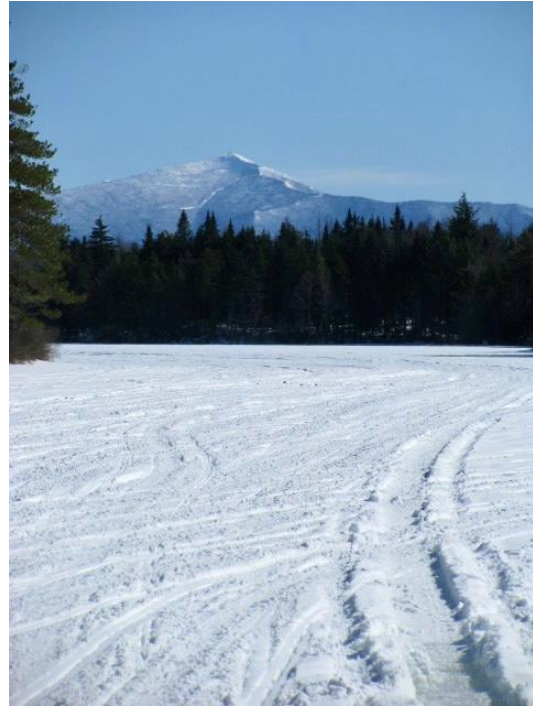


TASK Technology Assessment at SickKids

Dear friends,

The field of health technology assessment continues to evolve with an increasing emphasis on defining value. In child health, we consider value to be important not only in terms of children's health improvements that result from investment in health interventions, but also in terms of preferences of patients, parents, and health care providers for those interventions. At TASK we are studying how to define value, and how to incorporate preferences, health effects and costs of multiple family members into HTA. Never was this more important than in the COVID-19 period, with the pandemic expected to exert enormous effects on so many aspects of our research. I invite you to [submit a paper](#) on this topic to the special issue I will be editing for *Children*. We expect 2021 to bring increased clarity in our vision of the future of child health technology assessment!



Wendy

Microcosting of genome sequencing in pediatric populations

Genome sequencing is at the cusp of translation with the potential to bring significant changes to the screening and diagnosis of pediatric disorders. TASK is continuing to generate evidence regarding the [economic value of whole genome sequencing \(WGS\)](#). The team recently completed microcosting of WGS for heterogeneous pediatric cardiac population ([report](#) available). A comparative analysis of the processes and costs of WGS in cardiac and autism spectrum disorder (ASD) populations is underway as are close collaborations with Dr. Robin Hayeems to examine indicators of implementation as genome wide sequencing is translated into clinical practice in Ontario.

Neurodevelopment disorders: services, costs and economic evaluation

Although COVID-19 presented challenges with respect to data collection, TASK is continuing to work with various partners ([PACE Coaching Project](#), [Pathways in ASD](#), [CHILD-BRIGHT SPOR Network](#)) on health services research and economic evaluations in neurodevelopmental disorders in children to ensure that policies are evidence-based. TASK measured service use and costs of autism services for preschoolers in New Brunswick and Nova Scotia, as part of the [Preschool Autism Treatment Impact \(PATI\) study](#), the first large-scale comparative study of autism services within Canada. Our research highlighted how differences in service delivery of government funded early intervention services can affect patterns of use of other services, costs to families and public sector (links to PATI analyses: [cost](#), [policy](#) and [effectiveness](#))

Cost-effectiveness of early intervention with biologics in Crohn's disease

Naaz Bashir, a post-doctoral fellow at TASK found that the early use of biological treatment was both more effective and more costly and highly sensitive to drug prices for treatment of Crohn's disease in children ([paper](#) and [report](#) available). As part of her post-doctoral work, Naaz is comparing the performance of pediatric preference-based quality of life measures in pediatric Crohn's disease. Avery Hughes, recent MSc graduate with TASK, conducted a [cost-utility analysis of biologics](#) in adult patients with Crohn's disease.

Caregiver

effects

Ramesh Lamsal, TASK PhD candidate, has been working on developing theory and methods to incorporate family spillover costs and health consequences in the cost-effectiveness analysis of child health interventions. Ramesh found that there is a substantial research gap in terms of measuring [quality of life in unaffected siblings of children with neurodevelopmental disorders](#). Carol Oliveira published a [conceptual framework](#) for understanding spillover effects of health-related quality of life in neonates and infants.

Watch Wendy Ungar speak on incorporating [caregiver spillover effects in health technology assessment of genetic testing](#).

PEDE

Update

As part of the [PEDE Project](#), TASK maintains a database of pediatric economic evaluations published since 1980. The database has been recently updated with 2019 publications and

now contains detailed information on over 3,800 studies, including an inventory of utility weights. In December 2018, PEDE was chosen as the Website of the Month by the Health Economics and Decision Science Group of School of Health and Related Research (SchHARR) at the University of Sheffield, UK. Access to the on-line [database](#) is free and the database easily searchable. Please contact us if you are interested in collaborating on a study using the PEDE database.

Announcements

Awards

- In November 2020, the Canadian Agency for Drugs and Technologies in Health (CADTH) presented Wendy Ungar with the Dr. Jill M. Sanders Award of Excellence, which honours individuals whose outstanding achievements have significantly advanced HTA in Canada. Read more about the [award](#).
- In June 2019 Wendy Ungar was awarded a Tier 1 Canada Research Chair in Economic Evaluation and Technology Assessment in Child Health.
- In January 2020, TASK was awarded a PhRMA Foundation Value Assessment Initiative Research grant for “Family Matters: Expanding the economic value paradigm for precision medicine diagnostics to include the costs and health consequences of family members.”
- In 2019 Naaz Bashir, PhD was awarded an Ontario Student Opportunity Trust Fund – Hospital for Sick Children Foundation Post-Doctoral Fellowship Program with TASK.
- Afua Asare, PhD candidate, received the William C. Ezell Fellowship awarded by the American Academy of Optometry Foundation in 2019 and 2020.
- Alexandra Cernat, MSc graduate, received the Frederick Banting and Charles Best Canada Graduate Scholarship-Master’s Award from the Canadian Institutes of Health Research in 2019.

Students

Alexandra Cernat and Avery Hughes successfully completed their MSc programs in Health Services research at the Institute of Health Policy, Management and Evaluation, University of Toronto.

Conference and invited presentations

Wendy Ungar presented “Economic evaluation of exome and genome sequencing in child health,” to the US Centers for Disease Control and Prevention in October 2020. Read her CDC blog post [here](#).

TASK team members presented their projects at the 2020 virtual meetings for the Society for Medical Decision Making and the Canadian Agency for Drugs and Technologies in Health Technology. These included:

- Bashir NS, Hughes A, Ungar WJ. In an era of biosimilars, can originator infliximab pricing remain competitive in treating inflammatory bowel disease? Watch Video:



Examining the Price
of Infliximab in
Economic Evaluations
for Inflammatory
Bowel Disease

Naazish Bashir, PhD
Avery Hughes, MSc
Wendy Ungar, PhD

TASK Technology Assessment at SickKids **SMDM 2020**

- Cernat A, Bashir NS, Ungar WJ. The 3-I framework: Considerations for developing regulations for direct-to-consumer genetic testing in Canada. Watch Video:

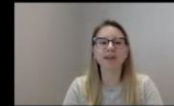
THE 3-1 FRAMEWORK: CONSIDERATIONS FOR DEVELOPING REGULATIONS FOR DIRECT-TO-CONSUMER GENETIC TESTING IN CANADA

Alexandra Cernat, MSc, Naazish S. Bashir, PhD, and
Wendy J. Ungar, MSc, PhD

Society of Medical Decision Making 42nd Annual Meeting
October 2020



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- Cernat A, Hayeems R, Venkataramanan V, Jegathisawaran J, Mital S, Ungar WJ. Cascade genetic testing and health service use in families of children with cardiomyopathy: Implications for health technology assessment.

Wendy Ungar, Myla Moretti and Kate Tsiplova will be presenting a workshop on conducting economic evaluations in child health as part of the 2020 Virtual CADTH symposium on February 3rd, 2021. Please find registration details [here](#).

[TASK WEBSITE](#)

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