

MARCH 2023 TASK NEWSLETTER

Dear friends and colleagues,

This past year exerted pressure on our healthcare systems serving children on a scale that has not been seen before. Unsurpassed rates of serious RSV and influenzae infections, in addition to COVID, led to overcapacity in ICUs and pediatric wards. Healthcare professionals in quarantine due to COVID meant more pressure on remaining staff, creating conditions for burnout and personnel shortages. Ultimately, the persons that pay the greatest price for these problems are children in need of urgent and critical care. When we perform health economic evaluation and health technology assessment, our focus is on interventions: drugs, devices, medical procedures, and other services directed at children and families. We count and monetize health professional services but we don't consider the consequences of inadequate supplies of or under-supported healthcare professionals. The most efficacious treatments for childhood conditions are irrelevant if there is insufficient staff to deliver them. In the conduct of HTA, it's time to place more attention on the healthcare practitioners needed to implement and deliver new treatments and services.



Special event - Art Gallery of Ontario, shot by - A. Vijayarajam, Toronto, Ontario, Canada, 2022

Without them, we have no healthcare system.

We wish all of our friends and colleagues a healthy and safe 2023!

Wendy

News

We welcome our new TASK Project Manager, **Vercancy WU**, M.A. who joined us in May 2022. Vercancy holds a Master's degree in Economics with a Health Economics concentration from McMaster University, Ontario, Canada. His main research interests are Health Technology Assessment and Economic Evaluation.

We are also pleased to welcome Ms. **Dhayo Khangsar** as our new administrative assistant, joining us in January 2023. Dhayo is a Tibetan Canadian with an educational background in health management & informatics from York University and she joins us from SickKids Foundation with 3 years of administrative, fundraising and project experience.

Ramesh Lamsal, TASK trainee, successfully defended his doctoral dissertation on [theory and methods to incorporate family spillover costs and health consequences](#) in the cost-effectiveness analysis of child health interventions and is currently a post-doctoral fellow at the U.S. Centers for Disease Control and Prevention. Visit the ever growing compilation of papers included in a special collection in Children on [Assessing Value in Child Health](#) edited by Dr. Wendy Ungar.

Awards

TASK MSc trainees **Roaa Shoukry** and **Aranie Vijayaratnam** were each awarded a prestigious Canadian Institutes of Health Research Canada Graduate Scholarship-Master's Award for 2022-23. Roaa and Aranie are conducting economic evaluations of promising interventions for children with neurodevelopmental disorders in collaboration with clinician-scientists in [The CHILD-BRIGHT Network](#).

TASK was named a 2022 Paper of the Year Finalist by the U.S. Center for the Evaluation of Value and Risk in Health, CEA Registry, for: Hughes A, Marshall J, Moretti M, Ungar WJ. [A cost-utility analysis of switching from biosimilar infliximab compared to maintaining reference infliximab in adult patients with Crohn's Disease](#). Journal of the Canadian Association of Gastroenterology, 2021; 4(1):48-59. The paper describes the thesis research of former TASK MSc trainee **Avery Hughes**.

In 2022, **Liana Giacoboni** was supported by a CHILD-BRIGHT summer studentship award to conduct a cost analysis under the supervision of TASK faculty, **Dr. Myla Moretti**, on the CCENT CHILD-BRIGHT study examining transition-to-home support for parents of high-risk infants.

TASK was pleased to collaborate with Health Quality Ontario on their health technology assessment, [Genome-Wide Sequencing for Unexplained Developmental Disabilities or Multiple Congenital Anomalies](#) which was awarded the 2022 David Hailey Award for Best Impact Story by the International Network of Agencies for Health Technology Assessment (INAHTA).

Study Updates

Cost-effectiveness of genome sequencing in pediatric populations

TASK continues to study the costs associated with genome-wide sequencing (GWS) in different pediatric patient populations: Jegathisawaran J, Tsiplova K, Hayeems R, Marshall CR, Stavropoulos DJ, Pereira SL, Thiruvahindrapuram B, Liston E, Reuter MS, Manshaei R, Cohn I, Jobling R, Kim RH, Mital S, Ungar WJ.

[Trio genome sequencing for developmental delay and pediatric heart conditions: A comparative microcost analysis.](#) *Genetics in Medicine*, 24(5):1027-1036, 2022.

In 2022, former MSc TASK trainee **Alex Cernat** published: Cernat A, Bashir NS, Ungar WJ. [Considerations for developing regulations for direct-to-consumer genetic testing: a scoping review using the 3-I Framework.](#) *Journal of Community Genetics*, 13(2):155-170, 2022.

A team at TASK led by **Dr. Robin Hayeems** and **Dr. Wendy Ungar** is studying the [Ontario-wide implementation of clinical GWS](#) through the collection of process and outcomes data and estimation of diagnostic yield for diverse patient groups. The study protocol was published in 2022 in the [Canadian Medical Association Journal](#). The incremental cost-effectiveness of GWS is being examined in patients randomly assigned to receive whole genome or exome sequencing. A sub-study is examining the costs and effects of disclosure of secondary findings. The study is currently enrolling families of children with rare diseases at SickKids and the Children's Hospital of Eastern Ontario (CHEO).



American shorthair – Misa, first time seeing snow, by R. Shoukry, Oakville, Ontario, Canada, 2022

Neurodevelopment disorders: services, costs and economic evaluation

Few studies have examined the relationship between pre-school service use and outcomes in later years. TASK conducted an analysis of these data as part of the [Pathways in ASD](#) cohort study. Our recent publication points out the methodologic challenges in studying service use – outcome associations in this patient population and makes recommendations for future research: Tsiplova K, Ungar WJ, Szatmari P, Cost K, Pullenayegum E, Duku E, Volden J, Smith IM, Waddell C, Zwaigenbaum L, Bennett T, Elsabbagh M, Georgiades S, Zaidman-Zait A. [Measuring the association between behavioural services and outcomes in young children](#)

[with autism spectrum disorder](#). In press, *Research in Developmental Disabilities*, 2023.

TASK completed and published a cost analysis for the B.C.-based PACE randomized controlled trial of a parent coaching intervention for toddlers with suspected autism: Tsiplova K, Jegathisawaran J, Mirenda P, Kalynchuk K, Colozzo P, Smith V, Ungar WJ. [Parent coaching intervention for children with suspected autism spectrum disorder: Cost analysis](#). In press, *Research in Autism Spectrum Disorders*, 93:2023.

The CHILD-BRIGHT NETWORK

[The CHILD-BRIGHT Network](#) is a pan-Canadian collaboration between children's hospitals across Canada to study novel interventions in children with lifelong brain-based developmental disabilities. TASK, in collaboration with **Dr. Jennifer Zwicker** at University of Calgary and **Dr. Myla Moretti** at the SickKids-based Ontario Child Health Support Unit, are conducting cost-effectiveness analyses using patient-level data from multiple randomized controlled trials.

This includes the work of **Aranie Vijayaratham**, a TASK MSc student whose interested in looking at the cost-effectiveness of a parent-training program for caregivers with children with neurodevelopmental disabilities. The findings from this research will provide a better understanding of the cost-effectiveness of parent-focused programs in autism. **Roaa Shoukry**, is a TASK MSc student is analyzing the cost-effectiveness of a cognitive rehabilitation intervention for executive functioning, "Mega Team," in children with *attention-deficit/hyperactivity disorder* (ADHD) and autism spectrum disorder (ASD).

Pediatric Inflammatory Bowel Disease

Naaz Bashir, PhD, completed her post-doctoral fellowship at TASK in 2022, publishing a series of articles examining, economic, pharmaceutical policy and methodologic issues affecting research in pediatric inflammatory bowel disease.

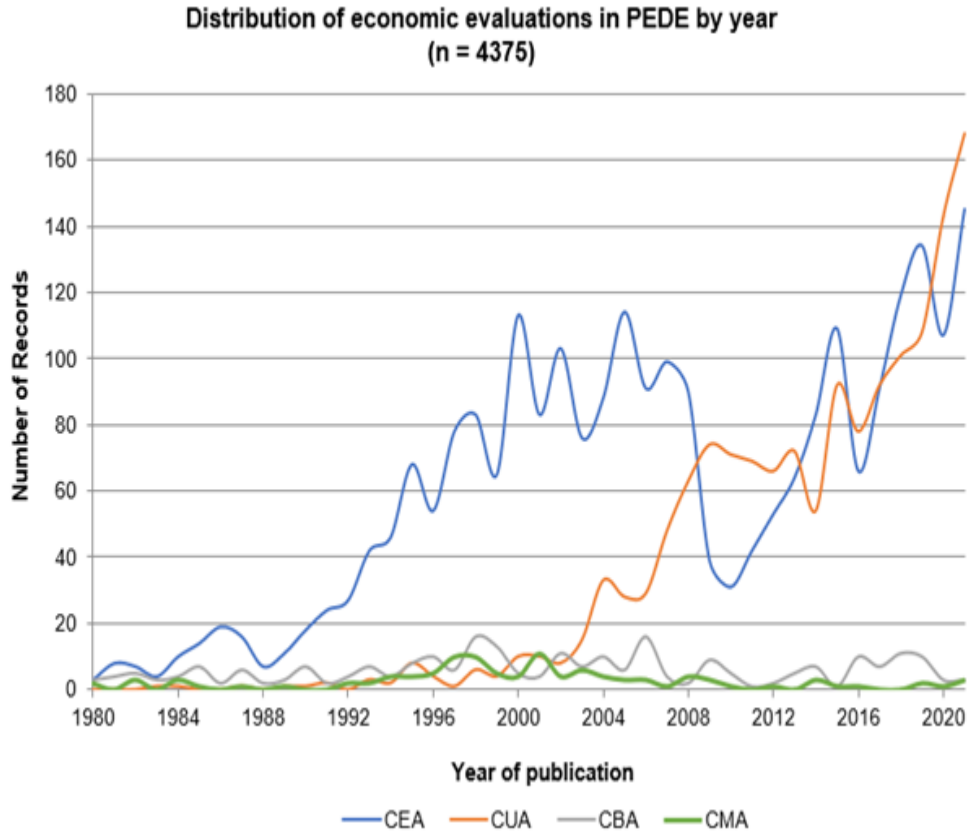
Bashir NS, Walters TD, Griffiths AM, Ito S, Ungar WJ. [Imputing missing patient-level data and propensity score matching in cost-effectiveness analysis](#). *Expert Review of Pharmacoeconomics & Outcomes Research*, 22(3): 445-454, 2022.

Bashir NS, Walters TD, Griffiths AM, Otley A, Critch J, Ungar WJ. [A comparison of preference-based, generic and disease-specific health-related quality of life in pediatric inflammatory bowel disease](#). *Journal of the Canadian Association of Gastroenterology*, 2023.

Bashir NS, Hughes A, Ungar WJ. [Infliximab pricing in international economic evaluations in inflammatory bowel disease to inform biologic and biosimilar access policies: A systematic review](#). *Medical Decision Making Policy & Practice*, 2023.

PEDE Update

The [PEDE Project](#) is a database maintained by TASK of pediatric economic evaluations published since 1980. The database has recently been updated with 2021 publications and now contains 4375 studies, including 4146 health utility weights. Access to the on-line [database](#) is free and the database is easily searchable. Please contact us if you are interested in collaborating on a study using the PEDE database by scanning the barcode below.



Invited and Conference Presentations

Dr. Wendy Ungar was an invited speaker for a 2022 Health Technology Assessment International (HTAi) webinar entitled, "[HTA in Childhood Diseases: Methodologic challenges in conducting cost-effectiveness analysis.](#)" and for the International Society for Quality of Life Research *Measuring What Matters* Symposium where she delivered to talk on "New approaches to derive utilities for pediatric health nurses." An interview with Dr. Wendy Ungar on "Addressing



Silver Lake bog laurel, W. Ungar. Finalist, ADK Centennial Photography Contest, Adirondac Magazine, Jul-Aug 2022 issue.

the Evidence Gap in Evaluating the Health of Children" was featured in the September/October 2022 issue of [Value & Outcomes](#)

[Spotlight, International Society for Pharmacoeconomics and Outcomes Research.](#) Dr. Ungar delivered the keynote

address for the 2022 Annual Meeting of the Alberta Health Economics Study Group, on,

"Economic Evaluation in Child Health: Playing Outside of the Sandbox." In January 2022, **Dr. Wendy Ungar, Dr. Myla Moretti and Ms. Kate**

Tsiplova presented a workshop on Economic Evaluation in Child Health for the Canadian Agency for Drugs and Technologies in Health.

In 2022, TASK staff, trainees and collaborators presented 37 oral and posters presentations at international and national meetings including much welcomed in person appearances at the 2022 Annual Meeting of the Society for Medical Decision Making (SMDM).

For more information about TASK research activities, HTA reports and publications, please visit us at our [TASK website](#) or scan the barcode below.



[TASK WEBSITE](#)

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