Supervisor/Project Information Form

Due February 24, 2021 by email to crems.programs@utoronto.ca

Supervisor Name: Dr. Rachel Walsh

Project Title: Patterns of iron-deficiency screening for children in family practice

Hospital/Research Institution: Sunnybrook Health Sciences Centre

Email: Rachel.walsh@sunnybrook.ca

Field of Research (2 keywords): Family medicine, screening

Department: Family and community medicine

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes/No: No

If YES, please name:
Iron-deficiency in infancy is associated with long-term neurocognitive and functional outcomes. There are currently no Canadian recommendations for iron-deficiency screening in children. However, the American Academy of Pediatrics recommends universal hemoglobin testing for anemia at 12 months of age. The Rourke Baby Record, often used by Canadian family physicians to guide well baby/child care, recommends testing hemoglobin and serum ferritin in children from high-risk groups (e.g. low socioeconomic status, children from Indigenous communities, newly arrived refugees, immigrant children from resource-poor countries, low birthweight or premature babies, etc.). A 2019 Canadian cost-utility analysis found benefit for universal serum ferritin testing for iron-deficiency at 18 months of age. With these varying guidelines, primary care providers may be unsure how to proceed. We aim to determine the current iron-deficiency anemia screening in children practice patterns of family physicians within the Sunnybrook Academic Family Health Team.

This study will involve a chart review to identify iron-deficiency screening tests (hemoglobin, serum ferritin, C-reactive protein) performed in children <2 years old within the Sunnybrook Academic Family Health Team. We will exclude tests performed after February 29, 2020 due to changes that may have occurred due to the COVID-19 pandemic. Using this data, we will determine the proportion of children screened for iron-deficiency anemia, the proportion of positive screening results, the age distribution at which screening occurs, and family physician characteristics that might contribute to screening rates. We will also look to see whether screening rates differ in high risk groups, e.g. low socioeconomic status, Indigenous, refugee, adopted, immigrant, premature, and low birth weight children.

The CREMS student will have remote access to the charts for data abstraction and analysis.