



Comprehensive Research Experience for Medical Students
Summer Research Program 2019

Supervisor/Project Information Form

Due February 20 2019 by email to crems.programs@utoronto.ca

Supervisor Name: Claire Jones

Project Title: Reducing Unnecessary Day 3 Bloodwork and Ultrasound for Intercourse and IUI Treatment Cycles

Hospital/Research Institution: Mount Sinai Fertility, Sinai Health System

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Field of Research (2 keywords): infertility; resource stewardship

Department: Obstetrics and Gynecology

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes/No: If YES, please name: _

Brief Project Description (< 300 words):

In the current tight fiscal environment for health care in Canada, it is important to identify ways of reducing unnecessary health care costs in order to maintain the appropriate resources for high value health care testing and treatment. Fertility clinics are well known to overuse testing, including monthly day 3 hormone bloodwork testing and transvaginal ultrasound.

The objectives of this study are to characterize the frequency and root causes of inappropriate day 3 bloodwork and ultrasound testing for infertility patients undergoing timed intercourse (IC) and intrauterine insemination (IUI) cycles at Mount Sinai Fertility and to implement a quality improvement strategy aimed at reducing these tests by 50% over 4 months to promote resource stewardship.

We will conduct a retrospective baseline analysis of all patients undergoing IC and IUI cycles at Mount Sinai Fertility to assess the appropriateness of day 3 bloodwork and ultrasound from 8 consecutive weeks pre-intervention. The total number of day 3 bloodwork and ultrasound tests performed will be counted at weekly intervals and graphed and the percentage of normal tests will be calculated. A cost analysis will be conducted based on the OHIP fee schedule.

The model for improvement framework for continuous QI will be used for project development and an Ishikawa diagram will be created to understand root causes for unnecessary testing followed by iterative plan-do-study act cycles to refine change ideas. We anticipate change ideas to be focused on physician and nursing education and to implement a default "no day 3 bloods and ultrasound" for IUI and IC cycles within the electronic medical record.

The primary outcome measure will be the total number of day 3 bloodwork and ultrasound tests from baseline until after QI intervention, and the associated monetary costs. Multiple process and balancing measures will be assessed through the QI process.