## Evaluation of low value prenatal TSH testing in Alberta







Aaron Peterson<sup>1,2,</sup> Dr. Norma Spence<sup>3</sup>, Dr. Monica Sargious<sup>3</sup>, Christopher Rice<sup>1,2</sup>, Dr. Katrina Nicholson<sup>1,2</sup>, Dr. Antonia Stang<sup>2</sup>
<sup>1</sup>Physician Learning Program; <sup>2</sup> University of Calgary; <sup>3</sup> Alberta Health Services

#### Has a lack of a clear guideline led to the over ordering of low value prenatal TSH tests?

#### **TOP Practice Point**

April 2014 Subclinical hypothyroidism in the mother may lead to cognitive impairment in the infant. Achieving euthyroidism prior to pregnancy is ideal.

#### **ACOG Recommendation Change**

April 2015 The American College of Obstetrics and Gynecology moved their recommendation to not perform routine screening for thyroid disease in pregnancy from a Level C recommendation to a Level A recommendation

#### **Objectives**

- 1. Evaluate the value of prenatal TSH tests performed in Alberta on women who have no prior personal history of thyroid disease.
- 2. Support physicians to identify unperceived learning needs by providing personalized data reports on current TSH testing practice in this population with a suitable peer comparator.
- 3. Development of facilitated group learning sessions utilizing the Calgary Audit and Feedback Framework (CAFF) model to embed current best evidence and promote a reduction in low value TSH testing through informed practice change.

#### Level A recommendation. Preliminary data shows that low value testing finds positive results 0.2% of the time High-Value vs Low-Value tests low-value test (-ve result) low-value test (+ve result) high-value test 20% 100% 2015 73% 0.25% 27% 0.19% 72% 2016 28% 0.16% 2017 73% 27% 2018 75% 0.16% 25%

#### Study Design

**Distribution of Tests** 

in Alberta Pregnancies

Practice evaluation of any Alberta physician who ordered a prenatal TSH test after November 2014 for a woman who delivered between August 2015 and March 2018.

2015

Low value tests were defined as tests ordered for women who had never had a TSH test outside the normal range, never been prescribed a thyroid related medication, or had never been diagnosed with a thyroid related illness. These low value tests were then split into positive and negative results.

Data was collected from administrative datasets by analysts embedded within the Alberta Health Services' Analytics unit.

Timing of Tests

10k

in Alberta Pregnancies

(Aug 2015 - Mar 2018)

#### Intervention

2017



#### Pre-Intervention Consenting physicians

2018

Consenting physicians will receive their individualized practice report detailing TSH testing rates of pregnant women.

2019

They will also receive education materials on best practices for prenatal TSH testing

### Who can help with this? This may work

#### During

The one-hour facilitated intervention will move the group through five phases of self-reflection and learning:

- 1. reaction to the data
- 2. reflection on the data
- 3. discussion of barriers & facilitators to change
- 4. coaching to develop a plan for practice change
- 5. commitment to change



#### Post-Intervention

Participants will implement their action plan and evaluate the usefulness of receiving their data and comparator data to inform practice change.

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## high-value test low-value test (+ve result) low-value test (-ve result) 60k 11,977 50k 213 40k 30k 7,181 20k 43,218 25,714

2016

weeks into patient pregnancy

Timing of testing in Alberta pregnancies
suggests the majority of tests are done in
primary care, before 20 weeks

12,802

weeks

18,880

12-20

5,191

weeks

1,301

#### Outcome Measures & Anticipated Results

A qualitative survey of the report will measure the participant's comfort level with data to inform practice, their ability to review data objectively, and ability to identify areas for change.

A qualitative survey will also measure the increased clarity on the utility of TSH testing in this population, the time spent reflecting on improving identification of the at risk population for testing, and action planning for change gained from the facilitated education session.

Based on prior PLP interventions an anticipated >90% of participants will find the use of data to inform practice change useful and an increased comfort level with data to inform practice change. Participants will also have an increased clarity over decision making around testing.

6 and 12 month data pulls post-intervention are anticipated to show a substantial reduction in low value testing.