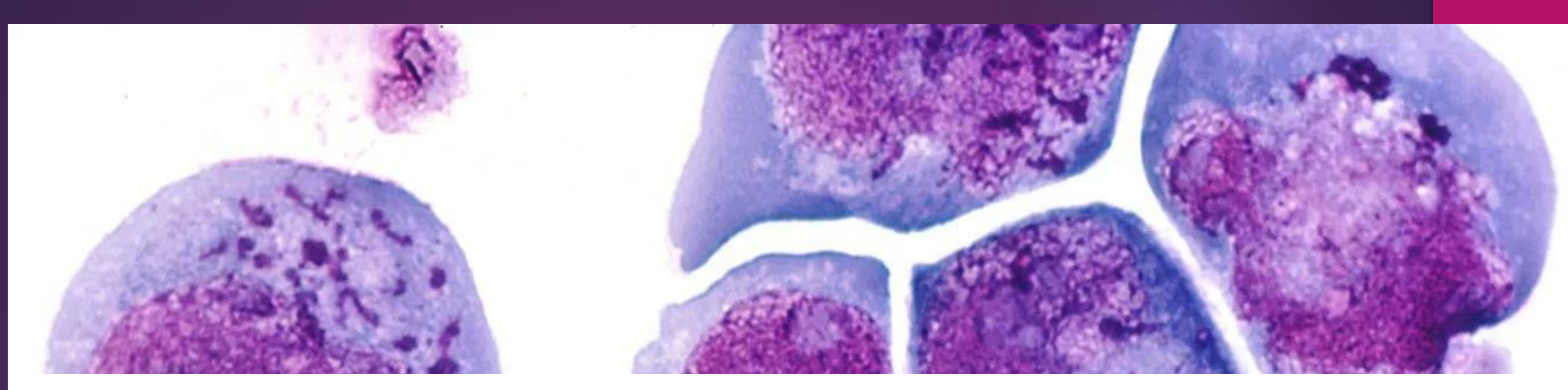

Prenatal Chlamydia & Gonorrhea Screening

SUNNYBROOK OBGYN PGY1S

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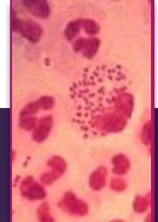
Current Guidelines

- Public Health Agency of Canada recommends:
  - All pregnant women should be screened for Chlamydia Trachomatis (CT) and Neisseria Gonorrhoeae (GC)
  - All pregnant women should be evaluated for STI risk factors prior to and during pregnancy
  - If an STI is diagnosed in pregnancy, treatment specific to the disease should be initiated
  - Follow-up after treatment of STIs for both the patient and her sexual partner(s) to ensure therapeutic success

Background



- STIs in pregnancy associated with adverse outcomes: (Aggarwal *et al.*, 2010)
  - Spontaneous abortion
  - Preterm labour
  - Congenital infections
  - Postpartum endometritis

- Suggested move away from Routine Neonatal Ocular Prophylaxsis (Poliquin *et al.*, 2016)

Background

- Suboptimal rates of testing in Canada (Poliquin *et al.*, 2016)
- Suboptimal rates of testing reported in Toronto (Vainder, Kives & Yudin, 2017):
  - 15% of women not tested for gonorrhea and chlamydia during pregnancy
  - 11 cases of Chlamydia
  - Testing rates by specialty:
    - Midwifery (93.8%)
    - Family Practice OB (91.4%)
    - General OB (88.5%)
    - MFM (64.9%)

Initial Aim Statement

- *Our aim is to improve the proportion of prenatal patients delivering at Sunnybrook Health Sciences Centre screened for chlamydia and gonorrhoea at or before 36 weeks gestational age from 50% to 80% by May 1, 2017.*

Pre-intervention data

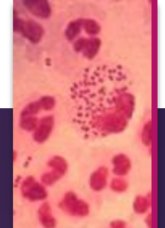
- Inclusion criteria:
  - ✓ Obstetrical patients who presented to SHSC L&D triage between March 1 and March 7, 2017
  - ✓ ≥ 36 weeks gestational age
  - ✓ Prenatal records available from office or through PRO
  - ✓ Followed by a OBGYN at Sunnybrook for prenatal care through low risk or high risk obstetrics clinics
- Sample of 125 patients analyzed

Pre-intervention analysis

Chlamydia (CT) screening rate: 73%

Gonorrhea (GC) screening rate: 72%

- A preliminary screen of antenatal records revealed a screening rate of 51%
- Of the sample analyzed, no patients were positive for GC/CT



Revised Aim Statement

- *Our aim is to improve the proportion of prenatal patients delivering at Sunnybrook Health Sciences Centre screened for chlamydia and gonorrhoea at or before 36 weeks gestational age from 72.5% to 90% by Dec 1, 2017.*

Intervention

- All obstetricians offering prenatal care through Sunnybrook were contacted in person to discuss our aim of a standardized time of testing for GC/CT

Initial outcomes

- Possible testing times discussed:
  - Initial visit with provider
  - 28 weeks at time of OGTT
  - 35-37 weeks at time of GBS testing
- Conclusions following discussion with staff:
  - First antenatal visit is the ideal time for GC/CT testing for most providers
    - Ensures testing for those who deliver prematurely
    - Later time points likely will cause duplicate orders and added cost to the system. Many physicians order urine CT/GC during the first trimester.

Initial Outcomes

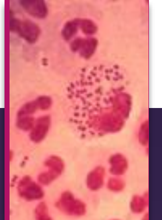
- We proposed adding GC/CT urine testing to first antenatal bloodwork requisition for all staff at Sunnybrook.
- 14/16 providers already had a standardized testing time point, and were supportive of this initiative
- Remaining 2 providers were agreeable to adding GC/CT urine testing to their initial antenatal bloodwork requisition
- We will also announce this QI change idea at Grand Rounds to consolidate dissemination and optimize buy-in.

Outcome follow up

- Women being screened for GC/CT at first prenatal visit will be reaching $\geq$ 36 weeks gestation in December 2017.
- We will perform another random sampling of triage patients over the span of one week in December 2017.
- Goal: Increase in GC/CT screening rate from 72% to >90%

Stewardship

- Importance of recording bloodwork results on antenatal records
- Cost-benefit



Benefits

- Fostering conversation amongst staff about the importance of EBM guidelines for prenatal screening

Limitations

- Small sample size
- No analysis of heterogeneity of sample

QI Reflections

- Routine reflection and re-evaluation required
- Change management requires diffuse buy-in

References

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The Clap!