Background

- **Chlamydia**
  - A very small gram negative bacteria, not much larger than most viruses.
  - Operates as an intracellular parasite that tends to like columnar epithelial cells of the mucous membranes (commonly causing conjunctivitis, cervicitis, and pneumonia).
  - The most common cause of Non-gonococcal urethritis.

- **Stats**
  - 5 – 15% of sexually active women 14 to 24 years old have chlamydia
  - Approximately 75% of cases are asymptomatic
  - Women 14 to 24 years old represent 75% of all chlamydia infections.

- **Risks**
  - Chlamydia and gonorrhea are both causes of pelvic inflammatory disease, affecting the cervix and often spreading to the uterus, fallopian tubes, and ovaries.
  - If left untreated, infection can lead to scarring of the fallopian tubes and infertility.
  - If left untreated, asymptomatic infection can increase susceptibility to HIV (3-5 times) and pelvic inflammatory disease (15% of cases), with subsequent infertility (15%) and chronic pelvic pain (15%).

- **Screenings**
  - Randomized Control Trials show screening for chlamydia can prevent 56% PID in non-pregnant women
  - Annual chlamydia screening of asymptomatic sexually active women is recommended by AAFP, USPSTF, ACOG, AAP, and CDC.

AIM

Increase Chlamydia screening to 55% in all sexually active females 16-24 years old seen at Madsen December 2015 – March 2016

Methods

- **Using electronic medical record, acquired data:** All office, nurse, and lab visits with women 16 to 24 years old who were listed as sexually active in the EMR or who received a form of birth control, and were neither pregnant nor experiencing acute vaginal symptoms.

- **Compared chlamydia screening during CQI project to previous year:**
  - No formal intervention: July – December
  - First intervention, December 2015: Announcement to clinic staff and distribution of universal screening information sheet.
  - Second intervention, January 2016: Green dot reminder placed on printer.
  - Third intervention, February 2016: Reminder staff message to MAs and front desk staff.
  - Providers and staff were surveyed regarding which intervention they felt changed their screening behavior.

- **Front Desk Staff** will identify patients in the age range from 16-24 years old (male or female) and will place a green sticker (located at front desk) on the Patient Identification Stickers.

- **MAs** will see green sticker then:
  - Will collect First Catch Urine Sample (NOT a clean catch).
  - Will pend order for Chlamydia and N. Gonorrhoea by TMA (LAB2035), or will sign order if approved by provider.
  - Will tell provider that these steps have been taken.

- **Provider and Patient** will decide whether to order the test based on sexual risk factors, recent testing, and patient preference.

- **MAs and Providers** may consult the dot phrases. chlamydapositivesMA and .chlamydmadposivesProvider for treatment options and procedure

Discussion

By the end of our intervention period we showed screening over goal of 55%, though this was reached only during our last month of intervention (73.7%).

Several factors must be taken into consideration when looking at this data:

1. N of 19 during the last month of intervention
2. These numbers do not reflect increase in male screening, which should reduce disease burden on the community
3. Other interventions were taking place during comparison year

  - Chlamydia screening among asymptomatic women is an important public health issue
  - Instituting universal screening may improve clinician awareness of need to screen in particular age groups
  - Stream-lined clinic flow for chlamydia screening has yet to be instituted in our clinics
  - Additional quality improvement projects are needed to consistently keep our screening rates at national averages

Disclosures and Funding

- All authors have no relevant conflicts of interest to report

References

1. Take Action on HEDIS. Chlamydia Screening: A new HEDIS measure important to your members. CDC. http://www.cdc.gov/mmwr/preview/mmwrhtml/su6302a12.htm

Acknowledgements

Department of Family and Preventive Medicine providing time, funding for CQI projects

Kan Gundor and Nicole Edwards for data acquisition and Amanda Johnson, Jen Mair, Arthi Trattler for poster design.

Multidisciplinary team members: Julie Escobar; Poritita Ramirez; Molly Jensen; Tobi Thaller, MD; Sean McNamara, MD; Amy Beth Locke, MD; Ted Paisley, MD; Katherine Hastings, MD