**Background**

*Chlamydia trachomatis* and *Neisseria gonorrhoeae* (CT-NG)

- Two most common bacterial sexually transmitted infections (STIs)
- The Centers for Disease Control and Prevention (CDC) lists gonorrhea at a level of urgent threat for developing further antimicrobial resistance
- Recommend empirically treating patients with high suspicion for positive results with dual antimicrobial coverage
- Emergency Department (ED) use for CT/NG screening increased 37.7% between 1997 and 2007

**Methods**

**Rapid Diagnostic Testing (RDT)**

- **Traditional – Nucleic Acid Amplification Tests**
- **Preparation**
  - Patient tested in main campus ED
  - Tested for genital CT/NG
  - ≤ 15 years of age
- **Eligibility**
  - Patients tested at satellite sites
  - Diagnosis of pelvic inflammatory disease
  - Imminent admission following testing
  - Patients who left ED prior to examination
- **Data Collected**
  - Patient Characteristics
  - Screening Characteristics
- **Study Design**
  - Randomized, quasi-experimental study
- **Recruitment**
  - Eligible RDT patients
  - Randomized to Triage RN
- **Exclusions**
  - Patient tested at satellite sites
  - Diagnosis of pelvic inflammatory disease
  - Imminent admission following testing
  - Patients who left ED prior to examination

**Study Goal**

- **Primary**
  - Compare the percent of patients receiving appropriate antimicrobial treatment during their index ED visit using traditional testing versus RDT for CT/NG and RDT with audit and feedback
- **Secondary**
  - Assess time to patient notification of positive test results
  - Assess the impact of implementing a nursing triage order for CT/NG testing with audit and feedback

**Immunization of the Triage RN**

- **Administration**
  - Time of medication administration
- **Exclusion**
  - Treatment appropriateness
  - Time to notification
  - Results prior to discharge

**Analysis**

- **Sample size**
  - To detect 15% absolute difference: 167 patients in each group
  - α = 0.05
  - Power = 80%
- **Statistics**
  - p-value using SPSS v. 14
  - Nominal data – Chi-square test
  - Continuous data – Student’s t test or Mann Whitney U, as appropriate

**Results**

- **Patient Characteristics**
  - **Traditional**
  - **RDT**
  - **RDT w/ Feedback**
- **Patient Demographics**
  - **Age**
  - **Sex**
  - **Race**

**Secondary Outcomes**

- **Audit and Feedback Triage Nurse Report Card Data**
  - **RDT**
  - **RDT w/ Feedback**

**Conclusions & Future Directions**

- Implementation of a Nursing Triage Order to Improve Utilization of Rapid Diagnostic Testing for Chlamydia and Gonorrhea in the Emergency Department

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