

Drug Utilization Evaluation for Chlamydia and Gonorrhea Infections

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Background

- Chlamydia and gonorrhea infections are some of the most common that are treated at SIUE Health Service
- Sexually active people under 25 years of age are most at risk of contracting chlamydia and gonorrhea infections
- Long-term effects of chlamydia and gonorrhea infections can include pelvic inflammatory disease, ectopic pregnancy, and infertility
- According to the 2021 Center for Disease Control (CDC) guidelines, the preferred therapy for treatment of chlamydia infections is doxycycline 100 mg by mouth twice daily for seven days and the preferred therapy for treatment of gonorrhea infections is a single dose of ceftriaxone 500 mg IM

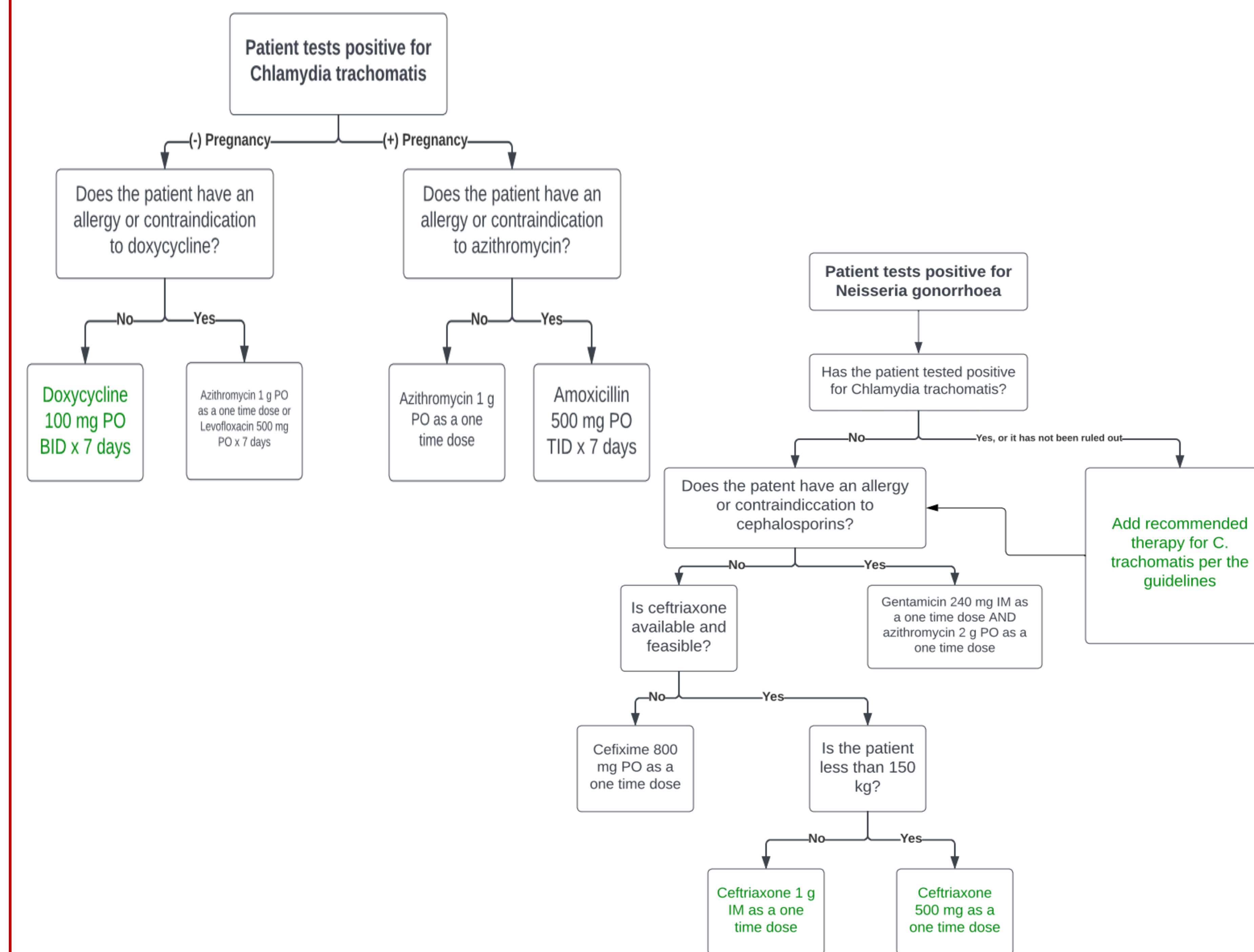
Objective

The objective of this study was to evaluate the antibiotic selection for cases of chlamydia and gonorrhea at SIUE Health Service to ensure the 2021 CDC guidelines were followed. This is imperative to prevent the spread of disease and long-term consequences that could severely affect the SIUE community and beyond.

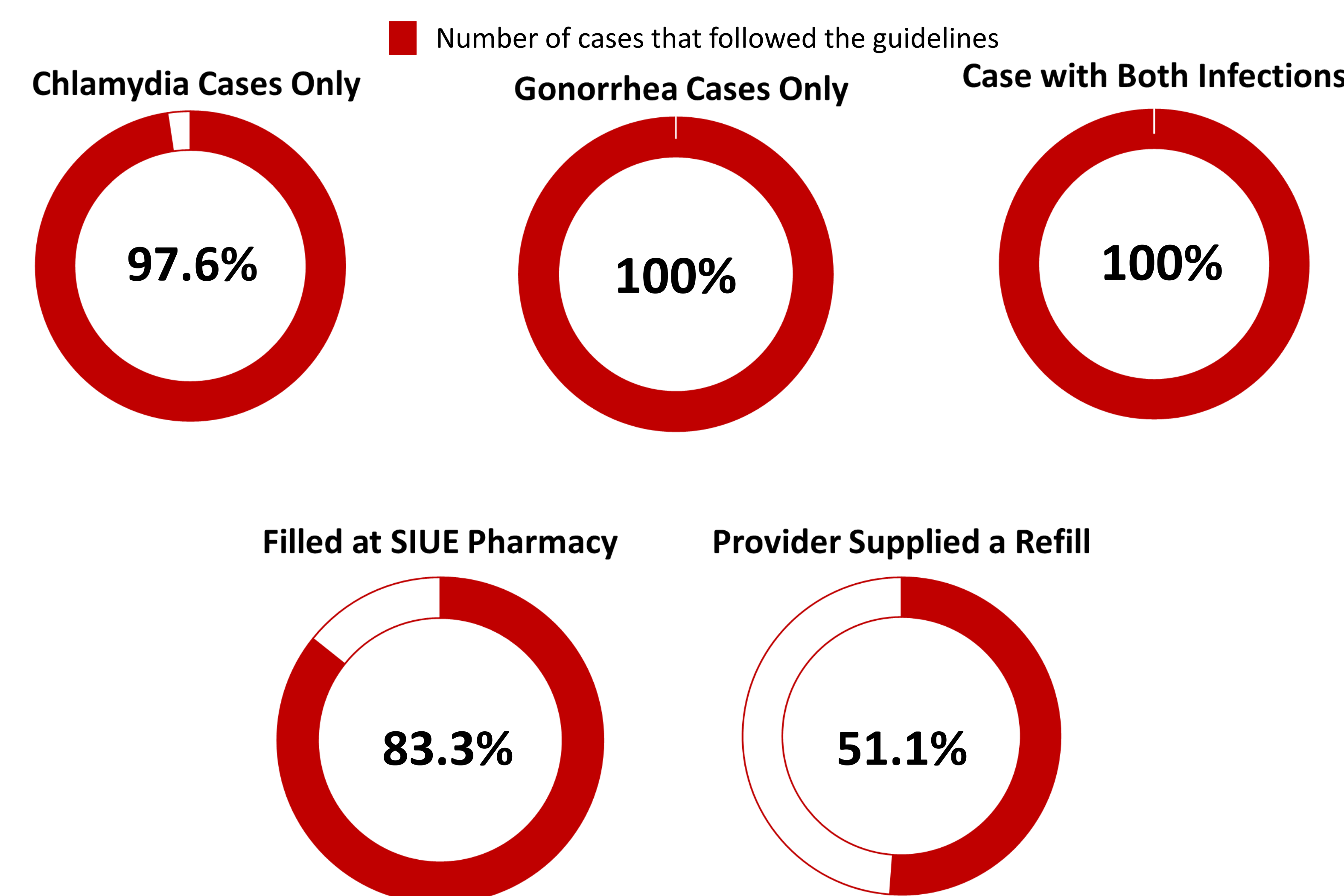
Methods

- Retrospective cohort study using data collected from the electronic health record (EHR) and pharmacy profiles at SIUE Health Service
- Patients were identified who tested positive for chlamydia or gonorrhea from July 1, 2022, through June 30, 2023
- Each patient health and pharmacy profile was reviewed via the flowchart to determine if the appropriate therapy was selected
- Information necessary to gather from each chart: allergies, weight, pregnancy status, if they used SIUE Health Service Pharmacy to fill their medication therapy, and if the provider supplied a refill to treat the partner

Methods



Results



Results

- 41/42 (97.6%) chlamydia cases were treated with the preferred therapy
- 4/4 (100%) gonorrhea-only cases were treated with the preferred therapy
- There was one case where a patient had both chlamydia and gonorrhea, and both were treated with the preferred therapies
- 40/48 cases of either chlamydia or gonorrhea were filled or administered in house
 - 85.7% of chlamydia cases used the SIUE Health Service Pharmacy
 - 100% of the gonorrhea cases received their therapy at SIUE Health Service
- 51.1% of prescriptions for chlamydia infections had a refill for the partner

Discussion

- In the single case of a provider not following the guidelines for a patient with chlamydia, the patient also tested positive for a beta-hemolytic streptococci UTI. The provider prescribed levofloxacin 500 mg by mouth daily for 7 days to cover for both infections. This is an alternative therapy according to the CDC, and it helps to reduce the risk of adverse effects from prescribing multiple therapies.
- There was also one case of a chlamydia patient not tolerating the initial 2 days of doxycycline therapy and being switched to azithromycin 1 g by mouth as a one-time dose. This is also an alternative agent according to the CDC, and is an appropriate response
- Most patients filled their chlamydia medication therapies at SIUE Health Service, and it is known that they picked up the therapy
- A limitation of this study is a lack of access to other pharmacy profiles which would allow us to determine if the patient picked up their prescriptions
- While the majority of chlamydia therapies were supplied with a refill for the partner, 50% of those refills went unfilled. A future study could investigate the reason for this lack of partners getting treated.
- Just under half of chlamydia cases did not receive a refill. Twenty percent of this population had documentation stating the partner had already been treated. The remaining 80% of cases that did not include a refill has unknown reasoning and could be investigated in a future study.

Conclusion

In most cases of chlamydia, and in all cases of gonorrhea, the 2021 CDC guidelines were followed. When the preferred therapy was not used, there was documentation to support the decision. All the gonorrhea cases were administered the preferred therapy in office, while most of the chlamydia medication therapies were filled at the SIUE Health Service Pharmacy. While most chlamydia therapies included refills, there is still room for improvement on the provider's side in treating the partners.