

Abstract

Background: Antibiotic resistance is a problem in healthcare causing unwanted reactions, drug resistance, and increased healthcare costs. According to the Centers for Disease Control and Prevention (CDC) *Antibiotic Resistance & Patient Safety Portal*, 268 million antibiotic prescriptions were written in 2017. Additionally, each year, more than 2.8 million antibiotic-resistant infections occur in the United States, and more than 35,000 people die as a result (“Antibiotic Resistance”, 2019). Respiratory tract infections (RTIs) are some of the most common diagnoses for unwarranted antibiotics and ambulatory care settings overprescribe the most.

Method: This was a pre post quality improvement project held in an urgent care in the southeast United States that sought to increase provider knowledge and decrease antibiotic prescriptions written for adult patients with three specific RTIs. Providers at the site were given an educational intervention, and then asked to complete a pre and post participation exam. Three physicians and one physician assistant participated. Charts from Sept-Nov 2021 were compared retrospectively to charts from Sept-Nov 2020 with the diagnoses of sinusitis, bronchitis, and upper respiratory infection (URI).

Results: Data for both outcomes were analyzed using a Wilcoxon signed ranked test. Provider knowledge increased minimally after a provider directed educational intervention with no statistical or clinical significance. Compared to retrospective chart data, there was no statistical or clinical significance in the number of antibiotics prescribed.

Conclusion and Implications: Limitations included small sample size as well as data not representative of usual prescribing habits due to the Covid-19 pandemic. Findings will be utilized to recreate a multifactorial intervention for antibiotic stewardship and implement the project at the other urgent care centers within the organization.

Keyword: Urgent Care, RTIs, Antibiotic stewardship, Sinusitis, Bronchitis, Immediate Care

References

Centers for Disease Control and Prevention (2019). *Antibiotic Resistance and Patient Safety*

Portal. arpsp.cdc.gov/.