

Developing an Evidence-based Practice Protocol for Incorporating Antibiotic Stewardship Principles within Pediatric Telehealth: A Feasibility Project

Ashlee T. Mattutini, APRN, DNP-c, School of Nursing, University of Connecticut, Storrs, CT

Introduction: Since the Covid-19 pandemic, pediatric primary care practices have steadily integrated telehealth (TH) visits into their schedules. Acute upper respiratory infections (URIs) are the most common diagnosis for pediatric visits, both in-person and via TH. TH visits have been associated with larger amounts of inappropriate antibiotic prescribing than in-person visits, specifically in pediatric patients presenting with symptoms of URI. Antibiotic stewardship (AS) protocols are necessary to ensure that care delivered via TH is of equal or greater quality than care given in-person. The Centers for Disease Control (CDC) *Core Elements of Outpatient Antibiotic Stewardship* are thought to be applicable for TH use within the pediatric population.

Methods: Eleven providers from a mid-sized suburban pediatric practice were recruited via email to complete a questionnaire related to their TH prescribing practices and the types of antibiotic stewardship they would most likely support when delivering TH. Utilizing both the findings and the Core Elements, ideas for an antibiotic stewardship protocol for TH were introduced via an in-person PowerPoint presentation. Providers then participated in a focus group discussion and completed a post-presentation questionnaire to further assess the usefulness and workability of the protocol contents. Descriptive statistics and qualitative data were analyzed. The University of Connecticut IRB considers this project non-exempt and is approved for research study #H23-0362.

Preliminary Results: Providers indicated low confidence when prescribing antibiotics for upper respiratory symptoms via TH. Justification was found to be the most preferred way to implement an AS protocol. Focus group discussion further revealed that justification both for and against the use of antibiotics would be helpful, with defined follow-up plans placed within the chart note. Facilitators of the protocol included providing prompts within the chart templates, consistent commitment from providers, and having regular access to updated professional guidelines. Time was seen as the biggest barrier to implementing such a protocol. Uncertainty and lack of standard follow-up plans were also seen as barriers.

Discussion: The use of TH necessitates new approaches to optimize antibiotic prescribing for pediatric patients with upper respiratory symptoms. Providers at a private primary care pediatric practice indicated that justification for or against antibiotics is feasible to integrate into an AS protocol. Such findings help to establish evidence-based standards for pediatric virtual visits and have important implications within behavioral science with respect to antibiotic prescribing within TH.

Keywords: telehealth, antibiotic stewardship, pediatrics, justification, upper respiratory infection