

Abstract

Background and Purpose: This quality improvement project sought to evaluate the effectiveness of integrating evidence-based practice guidelines on improving healthcare provider knowledge and antibiotic prescribing habits when treating children who have been diagnosed with either acute pharyngitis, acute sinusitis, or an upper respiratory tract infection in the pediatric primary care setting.

Methods: This project utilized a 1 group pretest-posttest design comparing current practice habits against guideline recommendations for acute pharyngitis, acute sinusitis, or acute upper respiratory tract infections at baseline and after the intervention. The intervention was implementation of practice guidelines when treating patients presenting with the interventions of focus. There was a post-implementation provider satisfaction survey on guideline implementation.

Results: A total of 3 physicians were recruited as project participants from pediatric primary care clinics totaling 508 charts for review. This project did not meet the minimum number of participants recommended to achieve statistical significance. However, clinically significant results were achieved. Post-implementation provider knowledge scores revealed a 10% increase following guideline implementation. There was an overall decrease in the number of inappropriate antibiotics prescribed given the greater number of patient charts following guideline implementation. Finally, the project results revealed a high probability of provider acceptance of guideline use in the clinical setting.

Conclusions and implications: This project found that integrating evidence-based guidelines into daily practice will help to reduce inappropriate antibiotic prescribing habits while ensuring healthcare providers are up-to-date on current information. Acceptance and integration of up-to-date guidelines will help to ensure high quality patient care is delivered as healthcare evolves.

Keywords: Antibiotic stewardship, AAP treatment guidelines, acute pharyngitis, sinusitis, upper respiratory tract infection