

Evaluation of a Pharmacist-Led Antimicrobial Stewardship Service in a Pediatric Emergency Department.

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Introduction

The IWK Health Centre in Halifax, Nova Scotia has recently implemented a pharmacist-led antimicrobial stewardship (AMS) service supported by a collaborative practice agreement (CPA) that includes review and follow-up of culture results for patients discharged from the pediatric emergency department (PED). The primary objective was to evaluate the impact of this service on rate of return visits to the PED within 96 hours. Secondary outcomes included return visits within 30 days and time to patient and/or caregiver notification of laboratory investigations.

Methods

This study was completed as a retrospective chart review 6 months prior to implementation (January 1st, 2016 to June 31st, 2016) and 6 months post-implementation (February 1st, 2017 to July 31st, 2017) of a pharmacist-managed AMS service. Data was extracted by a research assistant from electronic medical records using a standardized data collection form. All patients discharged from the PED with a suspected infection whose diagnostic tests fell under the CPA at the IWK were included in this study. Preliminary results were summarized descriptively.

Results

A total of 1076 patient encounters prior to implementation and 1058 patient encounters post-implementation of the AMS service were included in this study. Urine cultures were the most commonly reviewed diagnostic test (38.9%, 913/2349). The rate of return visits at 96 hours was 12.2% (131/1076) in the pre-intervention vs 10.1% (107/1058) in the post-intervention phase. Most patients and/or caregivers were notified about laboratory investigations within 24 hours (46.3% in pre-intervention phase and 64.2% in post-intervention phase). The rate of return visits at 30 days was 11.6% (125/1076) in the pre-intervention vs 13.5% (143/1058) in the post intervention phase.

Conclusions

These preliminary results describe the impact of pharmacist participation in an AMS intervention in the PED.