

POSTER ABSTRACTS

11th Annual HMO Research Network Conference

April 4-6, 2005 Santa Fe, NM

TRIP
63

Evaluation of an Otitis Media Education Intervention in an Integrated Delivery System

Beaton SJ¹, Gunter MJ¹, Paez KA¹, Chilton L², and Dougherty D³

Background: The purpose of this study was to evaluate the effectiveness of a program aimed at changing physician behavior in accordance with evidence-based guidelines. The program goals were three-fold: (1) to improve accuracy of otitis diagnosis; (2) to prescribe antibiotics less frequently; and (3) to prescribe analgesic drops more frequently for pain relief. Specifically, the study examined differences in outcomes of otitis media patients who were treated by providers in intervention clinics vs. those treated by providers in control clinics.

Methods: Ten primary care clinics in a southwestern integrated delivery system were organized into matched pairs and assigned to either control status (mailed guidelines only) or intervention status (provider exposure to formal education, guideline tools, reinforcement messages, and feedback). The impact of the intervention on providers who participated in the intervention was measured using claims data for patients diagnosed with otitis media and a post-intervention provider survey. The outcome measures were: (1) percentage of episodes with a primary diagnosis of either acute otitis media (AOM), or otitis media with effusion (OME) and/or otalgia, (2) rate of antibiotic fills for the two diagnosis categories; and (3) analgesic drop fill rate.

Results: Claims data analysis showed significant improvement for intervention clinic providers over control group providers in decreased diagnosis of AOM (94.0% pre- vs. 91.2% post-intervention, $p=.0231$) and increased analgesic drop fills (7.6% pre- vs. 10.4% post-intervention for AOM, 2.4% to 11.5% for OME/otalgia, $p=.0250$), but no statistical significance for reduction in antibiotic fills. The provider survey showed statistically significant self-reported differences between the intervention and control clinic providers in the hypothesized direction for all three outcome measures. Significant differences in outcomes were seen by provider type (family practice, urgent care, or pediatrician).

Conclusions: Analyses of claims data showed a reduction in the diagnosis of AOM and increased fills of analgesic drops for pain, as hypothesized. Improvement was more marked in the self-reports than in the claims data. Outcome differences were mediated by provider specialty.

¹Lovelace Clinic Foundation, Albuquerque, NM

²Lovelace Sandia Health System, Albuquerque, NM

³Agency for Healthcare Research and Quality, Rockville, MD

Note: Dr. Margaret Gunter is submitting a companion abstract reporting the process evaluation of the guidelines implementation.

This project was supported by a grant from the Agency for Healthcare Research and Quality