Pharmacy Driven Guidelines and Education on Acid Suppressive Therapy in Non-Intensive Care Units

The Studer Family Children’s Hospital at Sacred Heart
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Background
- The Studer Family Children’s Hospital is a 117-bed tertiary children’s hospital within a larger 566-bed acute care facility located in the Florida Panhandle
- Pediatric studies have demonstrated an increased risk of NEC and sepsis/bacteremia with the use of acid suppressive therapy (AST) in NICU and PICU populations
- The literature also showed an increased risk of pneumonia and Clostridium difficile infections in generally healthy pediatric patients

Objectives
- Primary: Assess the impact of pharmacy driven guidelines and education on appropriate AST prescribing in a children’s hospital
- Secondary: Examine the indications for use of AST in non-intensive care patients and evaluate discharge prescriptions for AST in this population

Methods
- Evaluated the prescribing of AST in non-intensive care units in a pediatric teaching hospital
- Included patients were admitted to the University of Florida Pediatric Medical Service
- Excluded patients were those admitted to PICU, NICU, and those with an admitting diagnosis of a GI bleed or H. pylori
- Data was collected from July 2017-October 2017 (pre-intervention) and January 2018-April 2018 (post-intervention)
- IRB approval was obtained and pharmacy driven guidelines were approved and implemented; medical resident education was provided on the associated risk of AST and inappropriate vs. appropriate use in December 2017

Interventions
- AST Stewardship: Pharmacist driven clinical practice guidelines based on ASHP and NASPGHAN recommendations
- Badge Buddies: Design shown provided to medical residents, pediatric pharmacists, and pharmacy residents
- Medical Resident Education: 20 minute morning report and 1 hour noon conference
- Pharmacy Surveillance System: Rule design shown

Results

<table>
<thead>
<tr>
<th>IMPROPER INDICATION FOR AST (P-VALUE &lt;0.001)</th>
<th>RECEIVED AST FOR SUP</th>
<th>RECEIVED AST FOR GER/GERD</th>
<th>RX FOR AST AT DISCHARGE (P-VALUE 0.05)</th>
<th>RX FOR AST AT DISCHARGE WITH IMPROPER INDICATION</th>
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<tbody>
<tr>
<td>Pre-Intervention (%)</td>
<td>Post-Intervention (%)</td>
<td></td>
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<td></td>
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<tr>
<td>51.2</td>
<td>56</td>
<td>47</td>
<td>8</td>
<td>5.2</td>
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Discussion
- Pharmacist driven guidelines and education improved the appropriateness of AST prescribing by pediatric resident physicians
- Pharmacy surveillance system and physician and pharmacist SUP badges are tools to assist with these types of interventions
- The pediatric pharmacist plays a vital role in transitioning patients from IV to PO, renal dose adjusting, and discontinuing inappropriate therapy in AST stewardship

Disclosures
- The authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities
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