Variation exists in the number of doses prescribed for common pediatric surgeries and unused opioid doses could be reduced. Therefore our aim is to decrease the number of opioid doses prescribed by 50% over 9 months in patients undergoing umbilical hernia repair, inguinal hernia repairs, and laparoscopic cholecystectomies.

Methods

- A multidisciplinary QI team to include pediatric surgeons, nurse practitioners, pharmacist, pain management staff, nurse supervisors, and QI coordinator was formed.
- Surgical procedures were selected from case volume and variations in opioid prescribing by provider.
- Initial intervention focus was to increase individual provider education, training, and awareness of prescribing practice.
- Patients received scheduled acetaminophen and ibuprofen for the first 72 hours.
- A standard of <4 post-operative narcotic doses was recommended to providers.
- Opioid prescribing by provider was charted and reviewed monthly. Feedback was shared with all providers and reviewed at section meetings.
- Survey calls to patients provided pain management feedback and served as a balancing measure.

Key Drivers

- Provider Education/Training
- Family Education
- Standardization of Practice
- Multimodal Pain Control
- Feedback Loop for Doses Taken
- Decrease Post-Operative opioid use

Specific Aim

Reduce the average number of opioid pain medication doses per prescription at discharge to Pediatric Surgery patients undergoing laparoscopic cholecystectomy and hernia repair by 50% of established baseline by 1/2019 & sustain for one year

Discussion

- We were able to successfully reduce the number of opioid doses per prescription at discharge and the overall percentage of patients receiving opioids for all procedures tracked.
- Increased prescribing of scheduled NSAIDs for post-operative pain management was very effective.
- Interventions to increase education, training, and awareness to both provider and families proved most impactful on overall project results.
- In all three procedures tracked, no patient call backs were received requesting additional opioids.
- Ongoing efforts include monitoring patient satisfaction with pain control to determine the appropriate number of doses to prescribe.
- Additional procedures should be tracked and standard prescribing patterns determined.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Reduction in Doses</th>
<th>Reduction in Prescriptions</th>
<th>Months with No Opioids Prescribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laparoscopic Cholecystectomy</td>
<td>26%</td>
<td>42%</td>
<td>2</td>
</tr>
<tr>
<td>Umbilical Hernia Repair</td>
<td>43%</td>
<td>75%</td>
<td>5</td>
</tr>
<tr>
<td>Inguinal Hernia Repair</td>
<td>58%</td>
<td>93%</td>
<td>7</td>
</tr>
</tbody>
</table>