BACKGROUND

PSH goal is to add Value to Care
Scoliosis Surgery Costs $170,000 on average
Length of Stays from 3-9 days
Aim to retrospectively assess impact of Scoliosis Surgery QI initiative

METHODS

Inclusion Criteria: Adolescent idiopathic Scoliosis > 40kg
Between 2012 and 2015 pre-QI intervention LOS was assessed via EMR
Surveillance QI data was assessed from 2015-2017 after phased rollout (Meds/PT)
Phase 0 2012-2015 Pre-Interventional
Phase 1 2015-2016 Medication Intervention
Phase 2 2016-2017 Physical Therapy and Medication Intervention

QI Protocol

- Implementation originated from PubMed literature review and institutional survey and institutional queries
- Implemented with education spanning across specialties: Anesthesiology, Orthopaedics, Nursing, Physical Therapy, and Child Life.
- Phase 2 modifications contained in Physical Therapy Consultation

RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Gender</th>
<th>Mean</th>
<th>LOS Std</th>
<th>LOS Median</th>
<th>LOS IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age (Years)</td>
<td>14.5</td>
<td>52 Male</td>
<td>151 Female</td>
<td>59.7</td>
<td>7.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Mean Weight (kg)</td>
<td>63.1</td>
<td>13 Male</td>
<td>38 Female</td>
<td>59.8</td>
<td>4.0</td>
<td>1.2</td>
</tr>
</tbody>
</table>

T-test:
- LOS Phase 0>Phase 1 (P<.0001)
- LOS Phase 0>Phase 2 (P<.0001)
- LOS Phase 1>Phase 2 (P<.0001)
- MSO4 Meq Phase 1>Phase 2 (P<.1)

DISCUSSION

The perioperative surgical home initiative can have a significant impact when applied through a pediatric pain service. Here we demonstrated significant differences in LOS from pre-interventional years to each subsequent year. These changes remained significant when broken down by weight and gender. Morphine consumption per kilogram in the first 48hrs was also found to have a trend decrease in each phase of rollout. The estimated hospital savings from this endeavor was $20,000/patient. This demonstrates that an anesthesiologist-lead team of allied services can effectively create value in patient care.