For 60 children’s hospitals, zero harm is the only acceptable patient safety goal, and participation in Child Health PSO further demonstrates their commitment to this aim. Over the last decade, children’s hospitals have learned from each other, trained and inspired thousands of health care workers and leaders, and improved the delivery system’s safety. But preventable, serious harm still occurs, and we have more work to do.

The Patient Safety and Quality Improvement Act of 2005 was established to support providers with federal privilege protections in their collaborative efforts to fix the system, and children’s hospitals are working together to do just that. Child Health PSO enables children’s hospitals’ safety leaders to receive early notification of safety concerns. Participants not only gain knowledge from the experiences of others, but they gain a trusted network for sharing so harm is not repeated elsewhere.

The Agency for Healthcare Research and Quality (AHRQ) requires PSOs to be certified. Child Health PSO was recertified this year through October 2020. AHRQ and the Office of Civil Rights determined our Safe Table processes satisfy the regulatory requirements and preserve confidential learning.
DATA

Could this harm happen in your hospital? The answers have been a resounding “yes.”

Learning from small numbers

Are children’s hospitals’ efforts to improve safety focused on the right problems? The Patient Safety Team has aspired to generate actionable results on themes and trends from case analysis performed on voluntarily reported serious safety events (SSEs). Using what was learned from methods training and available through Common Formats, the categorization of reported cases during analysis has been refined to identify common causes. As SSEs continue to be reported, there is increasing urgency to share learning from cases. The 2017 analysis points to our top vulnerabilities for children’s hospitals, which can be used to set organizational priorities for action. We remind ourselves not to let perfection be the enemy of progress, as serious preventable harm repeats and we rely upon an evolving reporting and analysis process.

2017 Causes of Most Serious Harm (SSE 1-3)

Cases classified with the next level of serious harm share similar vulnerabilities to the most serious harm events with additional themes in process failures, missing rules or standards, insufficient care coordination, and failure to communicate.

2017 Causes of Moderate Harm (SSE 4-5)

More tactics are needed to address the most serious harm from failure to recognize or lack of situational awareness. Additional vulnerabilities: errors in medical decision making, missed diagnosis, and failure to escalate, or insufficient access to experts.

Reported events are rare. But they have catastrophic results and will continue to repeat without addressing root causes. Child Health PSO performs common cause analysis by combining pediatric harm events from multiple hospitals to expand an individual hospital’s detection system.

2017 Case Reviews

PSO participants are asked to submit cases that have been investigated, starting with SSEs. In 2017, 85 cases reported were either Precursor Safety Events or Near Miss Events, which will become more important for learning as SSEs are eliminated.

Children’s hospitals in Child Health PSO use Healthcare Performance Improvement (HPI) Harm Scale.

<table>
<thead>
<tr>
<th>SSE</th>
<th>Description</th>
<th>2017 Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSE 1</td>
<td>Death</td>
<td>29</td>
</tr>
<tr>
<td>SSE 2</td>
<td>Severe Permanent</td>
<td>11</td>
</tr>
<tr>
<td>SSE 3</td>
<td>Moderate Permanent</td>
<td>7</td>
</tr>
<tr>
<td>SSE 4</td>
<td>Severe Temporary</td>
<td>55</td>
</tr>
<tr>
<td>SSE 5</td>
<td>Moderate Temporary</td>
<td>79</td>
</tr>
</tbody>
</table>
SAFETY
Detecting and addressing risks as a safety community

Harm reduction cannot be done alone. From aggregating rare events in a common cause analysis, the Patient Safety Team can identify themes leading to actionable tools.

PSO tools are strengthened by experts outside the PSO as we look for channels that support and spread the mission. Here are two themes developed in 2017.

HIGH-RISK PEDIATRIC POPULATIONS
Diabetes Care Management

ENDORSEMENT. The High-risk Pediatric Populations: Improving Safety and Reliability in Diabetes Care Management Alert and Risk Assessment Tool were reviewed and endorsed by the Pediatric Endocrine Society, marking our first industry endorsement. It was also reviewed by the Executive Committee of the Section on Endocrinology, American Academy of Pediatrics.

ALERT. Managing patients with diabetes is an issue that can be a low-frequency, high-risk activity for pediatric providers. This concern was identified in the Child Health PSO database and drove the development of a Patient Safety Alert. The alert brings awareness to the issue as more children are diagnosed with diabetes. Their care is challenging as the disease process can be complex and lead to other co-morbidities. If symptoms of diabetes complications are not recognized early, it can be life threatening.

RISK ASSESSMENT. The tool was designed to assess diabetes care management risks while offering mitigating strategies for top vulnerabilities. It contains six categories of risk: patient presentation, assessment, plan of care, care processes, discharge process and home care. Hospitals identify internal needs in each category. A scoring structure helps hospitals rank actions and develop action plans.

SURGICAL PROCEDURES
Retained Foreign Objects

COUNT POLICY COLLABORATION. After performing a common cause analysis on Retained Foreign Objects (RFO) events in the Child Health PSO database, representatives from the PSO, including surgeons, and leaders from CHAs Operating Room Directors Forum collaborated to update the 2012 OR Count Policy, expanding the settings and objects addressed. Recent concerns included: objects brought in during procedures, guidewires and items found in surgical kits.

GOAL. Once the policy is updated and vetted, an RFO alert and risk assessment tool will be aligned with the policy and disseminated in early 2018.

Top 3 causes of harm

| Failure to communicate effectively | 20 |
| Insufficient coordination of care | 15 |
| Failure to recognize or lack of situational awareness | 15 |
| Team culture | 25 |
| Process failure | 25 |

Diabetes Management
Retained Foreign Objects

ALERT
Reinforcing disinfection

A Patient Safety Alert released in April raises the issue of clinician practices for disinfecting personal medical devices. Reviewed by the AAP Section on Infectious Diseases, it outlines how inconsistent disinfection can lead to the spread of organisms that cause infection outbreaks. Recommendations to determine appropriate disinfection classification for each device and to follow manufacturer instructions were included. The full alert with mitigating interventions is available at childrenshospitals.org/alerts.
PRODUCTS AND DEVICES

Thermal Injuries

FRAMEWORK. The first theme explored by the Patient Safety Team enabled Child Health PSO to establish a framework for future efforts. With the alert and risk assessment, Safe Tables allowed for extended learning and sharing about action taken.

ALERT. The alert aims to educate health care professionals on the resultant harm (e.g., severe burns, pressure ulcers, blisters, scarring and wounds) and fundamental issues associated with thermal injuries. Thermal devices are used in various clinical settings and can cause serious harm when hospitals misuse products for patient care. Common risks include manipulating use to care for children, disregarding manufacturer guidelines, using products and devices for unintended purposes, and creating workarounds when thermal devices are unavailable. The alert is intended to start critical conversations in hospitals and highlights the thermal risk assessment tool as a recommendation to mitigate thermal injuries.

RISK ASSESSMENT. This tool provides an opportunity for hospitals to identify their thermal risks and delivers mitigating strategies for top causes of patient harm. It outlines possible scenarios of harm and aids hospitals in determining their vulnerabilities. A scoring method helps hospitals prioritize actions needed.

SAFE TABLE. Safe Tables allow for confidential transparency to learn so a hospital doesn’t have to experience harm to learn from it. The culmination of the thermal injuries work in a Safe Table provided further learning on this topic and highlighted the journey of the project and stories of how children have been harmed, as well as actions to mitigate thermal injuries to patients. Six weeks after the alert and risk assessment were disseminated, PSO participants were asked to share their lessons learned and how the risk assessment was adapted for their needs.

TAKING ACTION. One hospital translated the assessment into a survey to glean unit-specific information. This made it easier for them to focus on specific elements of the risk assessment that needed immediate attention. They communicated the unit-specific survey results to develop actions to close gaps where needed. Job aides developed included a list to cue hospital employees to consider patient risks (e.g., age, sensation). The risk assessment enabled them to identify risks that manufacturers overlook in the hospital environment (e.g., don’t place a heat pad against something a patient is leaning on or a use heat pack while taking medications that make a patient sleepy).

By sharing stories of homemade heat packs during hospital safety meetings, one hospital increased situational awareness and identified gaps that illustrated the need for action. All devices for thermal therapies were inventoried and safe use job aids were developed for employees. They discovered their thermal risk assessment, in full-circle, uncovered what is risky for the patient, even if the product itself is safe.

"After hearing about a bottle warming issue, I wondered if something like that could happen in my organization. We found that we weren’t following our own process. It’s important to ask, do we have these risky behaviors? Do we make it difficult to be safe?"
Call to Action

- Understand safety themes by submitting lower-frequency, high-harm events in hospitalized children for aggregation among peer hospitals—no single hospital sees enough of the events to know they are a recurring issue.
- Learn where children’s hospitals are most vulnerable—use PSO tools to proactively identify what can go wrong in your hospital and implement risk-mitigation solutions.
- Receive early warning from peer hospitals to assess safety concerns quickly without experiencing it.
- Strengthen safety for the pediatric industry by reporting cases. Pediatric collaboratives aimed to improve safety can benefit from the discoveries in Child Health PSO.

A look forward

Medication reconciliation has emerged as a new theme for 2018 and connections with other experts will begin soon. We plan to continue discussions on cognitive bias during Safe Tables, an encore to the 2017 annual meeting, and escalate safety concerns via published Patient Safety Alerts. While we continue providing opportunities to improve safety from Safe Tables, alerts and risk assessments, the Patient Safety Team will refine a consensus process in case categorization so our harm detection improves, our top priorities for action are clear, and our collective effort to eliminate preventable serious harm to children is achieved.

Eliminating preventable serious harm begins with reported data that ultimately allows detection nationally before harm occurs elsewhere.
It takes a team of patient safety experts to advance this work.

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