

# Serious Experience Events: Applying Patient Safety Concepts to Improve Patient Experience

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## Abstract

Pediatric healthcare systems have successfully decreased patient harm and improved patient safety by adopting standardized definitions, processes, and infrastructure for serious safety events (SSEs). We have adopted those patient safety concepts and used that infrastructure to identify and create action plans to mitigate events in which patient experience is severely compromised. We define those events as serious experience events (SEEs). The purpose of this research brief is to describe SEE definitions, infrastructure used to evaluate potential SEEs, and creation of action plans as well as share our preliminary experiences with the approach.

## Keywords

patient experience, patient safety, serious experience events

## Introduction

Children's hospitals across the United States have collaborated to use definitions and algorithms defined by Healthcare Performance Improvement (HPI)(1) to create shared understanding and approaches to serious safety events (SSEs). HPI defines an SSE as an event in which there is a deviation from standards of care that results in significant patient harm or death (1–4). Identifying SSEs and using rigorous improvement methodology to find and fix proximate and root causes contributing to the errors has led both individual children's hospitals as well as children's hospitals collectively to systematically reduce patient harm by reducing the rate of SSEs (2–11). The same approach to systematically identify and address errors is now also being used to improve healthcare worker safety (12).

We are unaware of such an approach being used for patient experience. At our organization, we have adopted this patient safety approach and the associated infrastructure to also evaluate events in which patient experience is extremely compromised. We propose that such events are categorized as serious experience events (SEEs). The purpose of this research brief is to define SEEs, describe an infrastructure used to evaluate potential SEEs, and create action plans for their remediation. This brief will also share our preliminary experiences with the approach.

## Methods

Retrospective review of the information discussed in this brief was culled from our institutional quality assurance processes. The project was evaluated using the criteria established by our Center for Improvement and the Internal Review Board. This project met the criteria for a quality improvement project, was not considered human subjects research, and therefore, did not require our Institutional Review Board's approval. Because this was not considered human subjects research, informed consent for the discussion of the de-identified information was not required.

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We carried out this project at a pediatric health system that includes quaternary services in pediatrics and obstetrics with 397 licensed inpatient beds, 11,600 annual patient discharges; primary and subspecialty pediatric ambulatory services; and is associated with a large research university. The study was conducted during our fiscal year 2021 (from September 2020 to August 2021).

### ***SSE Process and Infrastructure***

The organization already has a robust quality, safety, and service incident reporting system internally configured and based on a commercially available product (RLDatix, Toronto, ON, Canada). There is a robust use of that system with over 8000 incident reports filed within our health system annually. Incident reports can be filed by anyone in the organization including physicians, staff, and patients and families. Information is typically entered into the system directly by frontline staff. In addition if information comes to the attention of the quality, safety, and service teams through mechanisms other than an incident report, including patient and family complaints or grievances, an incident report is created by the quality, safety, or service teams.

All quality and safety-related incident reports are reviewed by patient safety advisors and are routed to the appropriate operational department leaders for evaluation, action plan creation, and closure. For incidents that might meet the criteria for an SSE or which demonstrate significant system issues, interviews and record reviews are conducted by the patient safety advisors, and their findings are brought to a weekly event review meeting(4). Attendees of the weekly event review meeting include the Chief Quality Officer, Chief Operating Officer, Chief Medical Officer, Chief Nursing Executive, other essential nursing and physician leaders, and patient safety and experience leaders. For each event discussed, 2 independent tasks are undertaken: (1) Categorization of the event based on HPI taxonomy as an SSE, precursor event, or other. (2) Determination of what type of analysis and actions need to be put in place(1). Types of actions include a full root cause analysis and action plan formation, a more abbreviated process review using lean methodology, a common cause analysis (for multiple similar events), or referral to professional practice evaluation committees. Our root cause analysis process uses a two-meeting model adapted from HPI recommendations (1). The teams assembled for the root cause analysis involves frontline employees and leaders from the areas and services involved in the event, organizational leaders, and patient family representation. Action plans arising from such investigations are then reviewed at our monthly Executive Value Committee meeting, attended by our hospital Chief Executive Officer and other clinical and administrative leaders, on a recurring basis until those plans are completed and closed.

### ***SEEs***

We applied the concepts and infrastructure used for patient safety events to patient experience events. Incidents involving patient and family experiences, including complaints and grievances, are also entered through the incident reporting system. Patient experience-related events are documented by patient experience navigators and routed to the appropriate leaders. All incidents which are defined as grievances and rising to the level that may be considered a SEE are also reviewed weekly by our Grievance Committee to determine the best approach and appropriate investigation and communication. The Grievance Committee is attended by Risk, Patient Safety, Patient Experience, and Regulatory Compliance.

Modeled after the HPI definitions for SSEs(1–10), we have created a definition for SEEs. We define an SEE as an event in which there is a deviation from our standard practices or an identified system issue related to our current standard practices that have caused significant compromise of the patient and/or family experience. Significant compromise is defined subjectively as an event that would be seen as egregious by reasonable public standards and that is also likely to leave a lasting life-long impression on the family.

Any event that is considered a potential SEE is investigated and presented at the weekly SSE/SEE Event Review meeting by a member of the patient experience team. As with potential SSEs, the 2 tasks to be determined are whether the event meets the definition of an SEE and what potential actions need to be taken. Potential actions considered are the same as those considered for SSEs. Also, as for SSEs, SEEs action plans are reviewed at our Executive Value Committee meeting on a recurring basis until those plans are completed and closed.

### ***Results***

Over our first year, we have had 2 cases brought for review and determined to be SEEs. Those 2 cases are described here.

#### ***Case 1***

The patient was a newborn with a very long stay admission with the need for intensive care. During the hospital admission, there were over 55 incident reports filed in relation to the care of this patient and family. Thirty six of those incident reports were related to clinical or operational issues or errors. Many of the issues were determined to be accurate and actionable but none were associated with harm to the degree that they met the criteria for an SSE. Nine of the incident reports were related to parent behavior issues that resulted in consultation of both security as well as our Strengthening Alliances with Families Team (SAFTeam) which is a team of psychologists and social workers who support both the family and staff during difficult interactions. In addition to the incident reports, the family of the patient had filed 11 complaints and grievances related to how they

had been treated, that they had not been listened to, the quality of their child's medical care, and claimed incidents of discrimination.

This series of events was identified as a potential SEE and brought to event review. Our investigation revealed that interactions between the clinical staff and the patient's family which had resulted in security needing to be consulted on multiple occasions had resulted in care team members spending less time in the patient's room, wanting to avoid contentious interactions with the patient's family, and that this resulted in an increased frequency of errors as well as compromised communication between the care team and the family. We determined that the series of events constituted an SEE. Our system had failed to provide the extra support needed to optimize this patient's care and the experience of the family, as is our expected standard. The series of events was likely to leave a lifelong impression on this patient and their family.

A root cause analysis of the SEE series of events was performed, including a team of operational staff and leaders involved in the care and patient experience staff. Gaps were identified in our system response to family's needs and perhaps exacerbating their experience. Our organizations' ability to accommodate and de-escalate situations requiring extra support (situations leading to high information seeking, high anxiety, low trust, hostile, or aggressive behavior) needed improvement. Identified actions items to improve our system approach for families in situations requiring extra support included (1) Creating a process to identify cases in which there are multiple incident reports, complaints, or grievances coming from or involving the same patient and family. (2). Designing standards for communication from staff to families in situations requiring extra support as well as a defined escalation and support process (including the Patient Experience team, Diversity Equity and Inclusion Committee, SAFTeam, Nursing Leadership, and Workplace Violence Committee) to both the family and frontline staff. (3) Roll out of unconscious bias training to all institutional leaders and all staff. (4) Additional training for leaders in navigating and optimizing complex and potential discriminatory situations.

## Case 2

Two patients with the same last name, similar first names (first 3 letters the same), and similar dates of birth (several days different, same month and year) were inadvertently considered the same patient and their encounters were mixed together under the same medical record number. This was identified by the parents of the patient and reported to the health system. The encounters were separated and the two patients appropriately give two separate medical record numbers and the issue was believed to be solved.

Approximately a year later, the parents were meeting with healthcare team members and expected an email as a result of that meeting but never received the email. Upon

investigation, it was identified that when the 2 different patient's medical records were separated, the email address of the parent of the other child was inadvertently left as contact information in the newly created medical record for the child in question. As a result, the information had inadvertently been emailed to the wrong parents. As in this case, there was a deviation from our standard practices, system issues identified, significant compromise of the family experience, and failure to meet public expectations—the case was determined to be an SEE. The parents of the patient had lost trust in the health system. As there was no harm to the patient, the event did not meet the definitions of an SSE.

Approximately a year prior to this event, members from our Performance Improvement team, Information Services, and Clinical Operations had undergone an improvement initiative to decrease the number of events in which there were duplicate or overlay events with medical records. A duplicate is when 1 patient has two separate medical record numbers and 2 different electronic medical records. An overlay is when 2 different patients are being charted under one medical record—as was the issue in this case. That improvement initiative focused on redefining our naming convention policies and procedures and creating training. This initiative did result in a dramatic decrease in the number of medical record number duplicates and overlays when compared to the historic baseline.

As a result of this SEE, the team was reconvened and a root cause analysis was performed. It was determined the original overlay situation occurred as an outdated search methodology was employed at a clinic visit (using the first 3 letters of the first and last name) and the difference in date of birth was not recognized. The issue related to the persistence of the incurred email address remaining in the patient's account had resulted from a lack of clarity for certain aspects of the overlay correction process. The action plan included the following items: changes in patient search increasing the weight of the email field; implementation of a trigger alert when adjusting demographic fields requiring a second confirmation of newly imputed data; a stop alert added prior to changing patient information requiring a second search and correct patient confirmation; and mandatory retraining on the updated policy changes for all pertinent staff.

## Discussion

We believe that the use of the same framework and infrastructure that has positioned pediatric healthcare systems to improve patient safety can be used to contribute to organizations improving the patient experience by systematically identifying, prioritizing, and creating corrective action plans for the root causes of SEEs. When an event is classified as an SSE, it may bring additional attention and visibility to drive the action plan to fruition. We have found this approach has helped our organization prioritize our most egregious experience events, analyze the contributing factors and identify systemic root causes, and create corrective action plans to

decrease the likelihood of future events in which patient experience is severely compromised. Using the same infrastructure as is used for patient safety, including incident reporting software programs, processes, and review meetings have enabled the institution to concentrate on these SEEs with minimal additional resources.

In conclusion, using a standard system to identify and address the root causes of SEEs, modeled after extant systems used for SSEs, shows promise as a useful tool for patient experience improvement.

## Limitations

There are several limitations to this project. First, we are still in our preliminary experience in using this process, only having been doing it for just over 1 year. During that first year, we identified and analyzed only two SEEs. We do not know whether this is the optimal number of SEEs identified but one might wonder if the number should not be greater. Perhaps more effort and emphasis on identifying possible SEEs should occur and such efforts may even accelerate the adoption of the SSE concept and maximize the impact on the improvement of the patient and family experience at our institution.

Our other challenge has been with creating an objective standard definition for SEEs. Patient experiences are more subjective than issues related to lapses in patient safety. However, our committee members have found less debate at our Event Review meetings in regards to SEE as opposed to SSE determination. In fact, for the 2 cases categorized as SEEs, the decisions as to whether they met the definition of an SEE were unanimous among the Event Review Committee members. In addition, the standards for care and practice are much more defined for clinical care than it is for experience and service interactions, not only within a health system but across health systems.

The introduction of creating an SEE definition and using the patient safety infrastructure to identify root causes and create action plans is just one part of our strategy to improve patient experience. Our institutional-level measure of success in improving patient experience is improvement on our top box (5/5) percentile regarding “likelihood to recommend” practice(13). Continued improvement or not in this measure will be an indication as to whether our strategy and execution are working. However, one limitation will be that it will be difficult to tell the degree to which of our many actions, including SEE introduction, are contributing to the improvement.

## Declaration of Conflicting Interests

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## Ethical Approval, Statement of Human and Animal Rights, and Statement of Informed Consent

Retrospective review of the information discussed in this brief was culled from our institutional quality assurance processes. The project was evaluated using the criteria established by our Center for Improvement and the Internal Review Board. This project met the criteria for a quality improvement project, was not considered human subjects research, and therefore, did not require our Institutional Review Board’s approval. Because this was not considered human subjects research, informed consent for the discussion of the de-identified information was not required.

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## References

1. Throop C, Stockmeier C. SEC & SSER Patient safety measurement system for Healthcare, rev. 2 (2011), Virginia Beach VA. Healthcare Performance Improvement (HPI) white paper series.
2. Muething SE, Goodie A, Donnelly LF, Schoettker PJ, Bracke TM, Brady PW, et al. Quality improvement initiative to reduce serious safety events and improve patient safety culture. *Pediatrics*. 2012; 130(2): e423-31.
3. Hilliard MA, Sczudlo R, Scafidi L, Cady R, Villard A, Shah R. Our journey to zero: reducing serious safety events by over 70% through high-reliability techniques and workforce engagement. *J Healthc Risk Manag*. 2012; 32(2): 4-18.
4. Donnelly LF, Palangyo T, Bargmann-Losche J, Rogers K, Wood M, Shin AY. Creating a defined process to improve the timeliness of serious safety event determination and root cause analysis. *Pediatr Qual Saf*. 2019; 4(5): e200.
5. Brillli RJ, McClead RE, Crandall WV, Stoverock L, Berry JC, Wheeler TA, et al. A comprehensive patient safety program can significantly reduce preventable harm, associated costs, and hospital mortality. *J Pediatr*. 2013; 163(6): 1638-45.
6. Lyren A, Brillli R, Bird M, Lashutka N, Muething S. Ohio children’s hospitals’ solutions for patient safety: a framework for pediatric patient safety improvement. *J Healthc Qual*. 2016; 38(4): 213-22.
7. Lyren A, Brillli RJ, Zieker K, Marino M, Muething S, Sharek PJ. Children’s hospitals’ solutions for patient safety collaborative impact on hospital-acquired harm. *Pediatrics*. 2017; 140(3): e20163494.
8. Lyren A, Coffey M, Shepherd M, Lashutka N, Muething S. SPS Leadership group. We will not compete on safety: how children’s hospitals have come together to hasten harm reduction. *Jt Comm J Qual Patient Saf*. 2018 Jul; 44(7): 377-88.
9. Donnelly LF, Dickerson JM, Goodfriend MA, Muething SE. Improving patient safety: effects of a safety program on performance and culture in a department of radiology. *Am J Roentgenol*. 2009; 193(1): 165-71.
10. Donnelly LF, Dickerson JM, Goodfriend MA, Muething SE. Improving patient safety in radiology. *Am J Roentgenol*. 2010; 194(5): 1183-7.
11. Cropper DP, Harb NH, Said PA, Lemke JH, Shammam NW. Implementation of a patient safety program at a tertiary

- health system: a longitudinal analysis of interventions and serious safety events. *J Healthc Risk Manag.* 2018; 37(4): 17-24.
12. Foster C, Doud L, Palangyo T, Wood M, Majzun R, Bargmann-Losche J, et al. Healthcare worker serious safety events: applying concepts from patient safety to improve healthcare worker safety. *Pediatr Qual Saf.* 2021; 6(4): e434.
  13. Bomher ST, Wood M, Uhlhorn E, Kwiatkowski L, Tekic N, Narques S, et al. Comparing patient experience survey scores between telehealth and in-person ambulatory pediatric subspecialty visits. *Patient Experience Journal.* 2021; 8(3): 100-8.