Children's Hospitals' Solutions for Patient Safety
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OPERATIONAL DEFINITION

MEASUREMENT: Falls

I. Description and Rationale

This measure answers the question: How often do falls happen and how often is harm caused due to falls?

The current version of the National Database of Nursing Quality Indicators (NDNQI), will serve as the official reference guide for rules around defining the injury severity of falls.

II. Population Definition

The patient population for this measure is defined as follows:

Inclusion criteria

All patients who are defined as inpatient or under observation at the hospital.

Exclusion criteria
Outpatients, non-patient siblings, visitors, and/or employees.

III. Data Source(s)

Each hospital will report data using their own collection methods until specific high detection methods are prescribed by the network. Methods may include, but are not limited to, safety event report or medical record review, automated notifications, or other.

IV. Sampling and Data Collection Plan

Falls are assigned in the month the event occurred.

V. Calculation

Network Goal Calculation (Falls with injury moderate or greater)

Numerator: Number of falls with injury of moderate or greater severity as defined by NDNQI.

Denominator: Total number patient days

Number of falls with injury per number patient days per 1000 patients (Numerator/Denominator) * 1000

All Falls Calculation

Numerator: The total number of all inpatient and observation patient falls, excluding developmental falls without injury.

Clarification: All falls do include those with injury moderate or greater. In other words, Falls with injury moderate or greater are a subset of All Falls.
Example – In the month of June, your hospital has a total of 5 falls (2 of those with injury of moderate or greater severity) – The # reported for all falls would be 5, and the # reported for injury of moderate or greater severity would be 2.

Denominator: Total number of patient days

Total number of falls per number patient days per 1000 patients (Numerator/Denominator)*1000

VI. Data Quality Audit Procedures

Hospitals should develop their own procedures for auditing data quality until quality auditing procedures are suggested by the network.

VII. Notes

A. NDNQI Injury Definitions

None – resulted in no signs or symptoms of injury as determined by post-fall evaluation (which may include x-ray or CT scan)

Minor – resulted in application of ice or dressing, cleaning of a wound, limb elevation, topical medication, pain, bruise or abrasion

Moderate – resulted in suturing, application of steri-strips or skin glue, splinting, or muscle/joint strain

Major – resulted in surgery, casting, traction, required consultation for neurological (e.g., basilar skull fracture, small subdural hematoma) or internal injury (e.g., rib fracture, small liver laceration), or patients with any type of fracture regardless of treatment or patients with coagulopathy who receive blood products as a result of a fall

Death – the patient died as a result of injuries sustained from the fall (not from physiologic events causing the fall)."

B. Developmental Falls with injury should be included in the SPS reporting.

VIII. Experts/Resources

http://www.pressganey.com/solutions/clinical-quality/nursing-quality

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IX. Attachments

N/A

X. Revision History

Version	Primary Author(s)	Description of Version	Date Completed
Version 1	Karen Zieker	Version 1	30-Mar-2012
Revision	Sharyl Wooton	Addition to Op Definition of All Falls, and exclusion criteria	02-July-2012
Revision	Sharyl Wooton	1) Update to All Falls – clarify it includes falls with moderate or greater injury. 2) Removed words do not include under exclusion criteria 3) Removed () descriptors after exclusion and inclusion criteria (redundant) 4) Added NDNQI description of Moderate or Greater Falls 5) Clarified that Developmental Falls, and Assisted Falls are included	22-Aug-2012
Revision	Matt Short	Updated definition based on NDNQI changing Major falls to include "patients with any type of fracture regardless of treatment"	04–Aug-2015
Revision	Hila Collins Heidi Fields	Clarified exclusion of developmental falls without injury in All Falls.	25-Aug-2017

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SPS PREVENTION BUNDLE

Falls

Table of Contents

I. Background & Team

Falls is the 9th largest contributor to harm caused across the SPS network. In 2011, approximately 20 children were harmed each month as a result of Falls across the Phase I SPS hospitals (n=33). The Falls team formed in May of 2012 to develop strategies consistent with high reliability concepts to reduce harm caused by Falls, and released the first recommended bundle to the network. In 2013, Phase II hospitals (n=55) joined the network and the number of children harmed per month decrease to 12.

The network strategy has been successful with an 81% Falls reduction across the network as of May 2014. Using data obtained from the SPS network as well as external evidence in the medical literature, the Falls team has identified those bundle elements within the first recommended Falls bundle that when reliably implemented are highly likely to result in decreased harm to hospitalized children.

As a result, SPS is stratifying bundle elements based on their level of evidence to assist hospitals in prioritizing their efforts at designing and implementing evidence-based bundles for Falls and the other aviator HACs:

- *Standard Element:* Strong evidence suggests that implementation of this element is associated with significant decrease in patient harm; all SPS hospitals should implement and measure reliability of this element.
- *Recommended Element*: Preliminary data and clinical expert opinion support the implementation of this element; SPS hospitals should strongly consider implementing this element.

Falls Co-Leaders
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SPS Staff
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II. Prevention Bundle Elements – Overview

SPS Standard Elements

- Screen patients for risk of fall
- Identify and communicate patients at risk for falls & injury
- Ensure a safe environment
- Review of safety protocols with parents/guardians/family

SPS Recommended Elements

- Implement specific mitigation strategies for patients at risk of falls with injury.

III. Prevention Bundle Elements – Evidence Reviewed

Prevention Bundle Element	Level of Evidence SPS**	Evidence Cited (Numbers refer to Reference Section)
Standard Elements		
Screen patients for risk of fall	*Level 3/**Scenario 4	2, 3, 4, 5, 9
Identify and communicate patients at risk for falls & injury	*Level 3/**Scenario 2/4	1, 4, 10
Ensure a safe environment	*Level 4/**Scenario 4	6, 9
Review of safety protocols with parents/guardians/ family	*Level 3/Scenario 2	1, 7, 9, 10, 11
Recommended Elements		
Implement specific mitigation strategies for patients at risk of falls with injury.	*Level 5/N/A	6, 8, 9

*Muir Gray Classification Levels

- Level 1 – meta-analysis of a series of randomized controlled trials
- Level 2 – at least one well designed randomized controlled trial
- Level 3 – at least one controlled study without randomization
- Level 4 – non-experimental descriptive studies

- Level 5 – reports or opinions from respected authorities

**SPS Evidence

- Scenario 1: Reliably implementing element is associated with statistically significant improvement
- Scenario 2: Failing to implement element is associated with statistically significant failure to improve along with the system,
- Scenario 3: In cases where all hospitals implement, implementing an element without measuring reliability of the element is associated with statistically significant failure to improve along with the system,
- Scenario 4: Reliably implementing element is not associated with statistically significant improvement; however, literature supports adoption of element as an SPS Standard

IV. Prevention Bundle Elements Care Descriptions

Prevention Bundle Element - Maintenance	Care Descriptions
Standard Elements	
Screen patients for risk of fall	• Screen on admission and at interval(s) defined by the selected fall risk assessment tool. • Consider using a fall risk assessment tool that includes variables specific to the pediatric population.
Identify and communicate patients at risk for falls & injury	• Identify patients are risk for falls by signage, armbands , or other identifiers • Communicate fall risk at handoff: o At shift change (nurse to nurse) o At time of transfer in care (unit to unit) o Nurse to other (Child Life specialist, Radiology Technician, etc.)
Ensure a safe environment	• Ensure unused equipment is removed and pathways to door and bathroom are clear • Clutter in room is minimized • Non-skid footwear for ambulating patients • Call light is within reach; orient to use periodically • Use of appropriate sized clothing to prevent tripping • Bed in low position with brakes on • Appropriate sized bed is used (no co-bedding) • Evaluate for gaps in the bed railings that may allow the child to slip between the rails • Wheelchair and commode brakes are locked during transfers
Review of safety protocols with parents/guardians/family	• Parents/guardian/family members have an integral role in a falls risk prevention program • Parent/guardian/family education regarding fall risks of hospitalized children is important. • Educate parents/guardians/family on safe environment
Recommended Elements	
Implement specific mitigation strategies for patients at risk of falls with injury.	• Hourly rounds that include risk identification and prioritizing individualized risk reduction strategies helps to keep patients safe and comfortable by proactively meeting their needs. • Assisting when up and out of bed • 1:1 observation (only when appropriate)

V. Measurement – Prevention Bundle Reliability

Measurement	Formula	Standards	Reporting Period
Falls Prevention Bundle	Number of audits totally compliant with SPS Prevention Bundle Elements/ Number of audits completed* x 100	• Your bundle reliability data should include **all** the SPS Standard elements • SPS strongly encourages hospitals to also include the SPS Recommended Elements. • Hospitals can choose to include additional elements. Please note that including too many (>5) elements may confuse and overwhelm care providers so proceed with caution. • Measure your bundle as ALL or None. See Reference 12 for IHI description of All on None. • Minimum of 20 audits per month. If procedures are fewer than 20, then include all procedures.	Monthly

VI. Spotlight Tools

We have asked hospitals to share their spotlight tools, and have highlighted a few in this SharePoint folder (note: this folder is password protected and can only be accessed by SPS network member hospitals). The highlighted categories are: Bundle Measure Methodology, PDSAs and Interventions, Risk Assessment, Training, Patient & Family Engagement and Failure Analysis.

VII. Spotlight Hospitals

Please click here to view the Sharing Hospitals' Innovation for Network Engagement (SHINE) report.

VIII. References

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IX. Revision History

Version	Primary Author(s)	Description of Version	Date Completed
Version 1	Katie Hilbert	Initial Draft	Oct 2012
Version 2	Heidi Fields, Amy Hester	Addition of evidence levels, reliability, and references	Jan 2013
Version 3	Erin Goodman & Sharyl Wooton (on behalf of HAC Co-Leader team)	Format & Release of new SPS Prevention Bundle content	June 10, 2014
Version 4	SPS Staff	Contact information updated	April 5, 2017

Thank you to the following Falls Co-Leaders who contributed to this document:
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