

MOC Part IV Project Approval Criteria

Project Number 2020148

Project Demographics

Project Review Status CREDIT REVIEW

Project Title Reducing Serious Safety events at Children's Hospital Colorado

Project Start Date Jan 2013

Project End Date (If ongoing, include anticipated end date) Dec 2030

Project Background

What is the identified problem(s) or gap in quality for which this project was developed? Please include any relevant research in this topic area; references are not required.

Serious safety events (SSE) are defined nationally as those occurrences where a patient is seriously harmed, or dies, as a result of a deviation from generally accepted standards of practice. As part of a national collaborative of initially 33 and now over 140 children's hospitals, CHCO launched an organization wide initiative called Target Zero with the aspirational goal of progressively eliminating preventable patient harm of all types, but especially these SSEs which so profoundly impact our patients and families.

What is the overall performance level(s) at baseline?

At baseline, a retrospective review identified 23 serious safety events during 2012. These events were a combination of severe hospital acquired conditions (adverse drug events, infections, etc) as well as other sorts of harm (diagnostic error, nasogastric tube misplacement, unplanned extubations, etc)
the rate of SSEs for 2012 was calculated as 1.20/ 10,0000 adjusted patient days.
Our goal was to reduce this rate by >75% over five years

What is the primary underlying cause(s) for the problem(s) that the project addresses (e.g., communications or behaviors of people, processes, information infrastructure, equipment, environment, etc.)?

There are many factors contributing to the occurrence of a serious safety event. They can result from, among other factors-
cognitive errors.
communication errors and delays
diagnostic error and delay
procedural occurrences
adverse medication events
equipment misuse
and many other factors.

What is the project aim(s) regarding the problem in quality? An aim should address HOW MUCH improvement will occur and by WHEN.

Our original global aim was to Reduce the rate of Serious safety events by 50-75% over a 3-5 year period. (by 12/31/2017)
we have set interval SSE goals each year since then.
for example, our 2019 goal was to achieve an SSE rate of <0.31 events /10,000 adjusted patient days

What patient population does this project address? What is the approximate sample size?

all inpatient and outpatients cared for at Children's Hospital Colorado.
We see over 500,000 outpatient visits, 175,000 Emergency and Urgent Care Visits, and 18,000 hospitalizations plus 3000 surgical procedures.

Performance Measurement

Metric Name/Description	serious safety event rate
Metric Type	Outcome
Metric Numerator/Denominator	# of SSEs
Metric Baseline & Target	1.2/10,000 APD....

Metric Type SELECT

Metric Type SELECT

Metric Type SELECT

Data Collection & Analysis

What is the source of data for the measure(s) (e.g., medical records, billings, patient surveys)?

Events are identified through a range of sources
Incident Reports
M and M referrals
Direct contact to safety team or leadership
Daily Brief report
among others

Denominator data is provided by finance and is a measure of all inpatient activity plus a factor of contribution from ambulatory activity. This is national metric among hospitals.

How frequently are data collected and analyzed (e.g., weekly, monthly, quarterly)?

we update our SSE chart monthly. Cases are continuously screened and a weekly meeting reviews potential SSEs to assess the presence of deviation and level of harm of the occurrence.

Project Improvements

Select the methodology that most closely represents the methodology being used in this quality improvement effort:

Plan-Do-Study-Act (PDSA)

Please provide a detailed description of the change(s) implemented to address the project aim(s). If provider education is given, who is the educator, how many sessions are offered, how are trainees assessed? Interventions of EDUCATION ALONE will NOT meet approval criteria. There MUST be evidence of a PROCESS CHANGE in order to earn MOC Part IV credit for this project.

There have been many progressive interventions over the seven years of this work.

1. organization wide error prevention training- all faculty and staff had two hours of training in individual and team methods to reduce the risk of error This took 18 months in 2013-14, and was followed by ongoing training for all newly hired employees and medical staff and ongoing reinforcement of error prevention practices over time
2. leadership training- all leaders were trained initially on three core concepts for them to support safety in their areas of responsibility- rounding to influence outcomes, just culture and effective feedback. This continues for new leaders in their year long orientation to all aspects of leadership
3. Many HAC teams were formed to reduce the risks of >10 hospital acquired conditions over time (infections, ADEs, pressure injuries, falls, etc.)
4. Diagnostic safety initiative launched in 2016 after an SSE in which a patient died of a misdiagnosis and we recognized that such errors contributed to a number of prior events.
5. Interval competitions to reduce harm and engage the organization in our overall safety agenda (germ crushers, march madness patient ID competition, 100 days of zero, etc.)
6. Monthly Target Zero Forum open to all faculty and staff where we review progress, key concepts and learnings from root cause analyses completed for prior events.
- 7 Robust cause analysis processes implemented to review SSEs, precursor events and HACs
8. Family engagement strategies from bedside to board and many other progressive interventions.

Please describe how each intervention is expected to impact patient care AND physician practice?

These interventions were designed to impact individual behavior, team work and organizational focus and transparency about safety. The curriculum was adopted and adapted from our national collaborative. the impact was on all teams and team members- faculty and hospital employees

Which of the Institute of Medicine (IOM) Quality Dimensions of Patient Care is addressed by the intervention(s) in this project? (Check all that apply, must check at least one)

Safety
Equity
Patient-centeredness

Which of the ACGME/ABMS competencies is addressed by the intervention(s) in this project? (Check all that apply, must check at least one)

Medical Knowledge
Patient Care
Systems-based Practice
Professionalism
Practice-based Learning
Communication/Interpersonal Skills

Select up to 5 additional relevant topics for this project: CLABSI
Hospital Acquired Infections (HAI)
Opioid Use
Patient Safety
Sepsis
Surgical Site Infections (SSI)
Teamwork

Please describe the improvement cycles (e.g., Plan-Do-Study-Act) in the project including the DATES for each cycle. There must be evidence of AT LEAST TWO improvement cycles to meet criteria for MOC Part IV credit. You may include a project timeline as an additional attachment. see list above
many started in 2013 (error prevention and leadership training and continue)
some started later e.g. Dx safety in 2016
interval competitions were periodic generally annual.
If the committee needs greater detail on the exact sequence I can find it but we did far more than two interventions over the past seven years.

Project Outcomes

Please describe the overall outcome of the quality improvement project. There must be evidence of AT LEAST THREE data points (e.g., Baseline, Post-Intervention 1, Post-Intervention 2) to meet criteria for MOC Part IV credit. You MUST include a run chart or some other visual representation of DATA OVER TIME to receive credit. As you can see from the powerpoint run chart. our SSE rate has fallen to 0.26/10,000 APD, a 78% reduction.
more importantly, the actual number of patients and families impacted by these occurrences has fallen from 23 in 2013 to between 6-10 each of the last four years.
We will never know the names of the >10 families each year not impacted and harmed because of our work, but we know there are kids who would have been permanently Harmed, or died absent the work done in this program.

What barriers were observed in this project and how were they resolved? What lessons were learned as a result? As with all projects time and distraction from other priorities are always a challenge. That said, the implementation of our target zero program has been highly successful both in terms of clinical outcomes and our organizational culture related to teamwork, collaboration and transparency.

What plans have been developed for future improvement cycles? Our work continues! we look for new and innovative strategies including incorporating human factors engineering and safety 2 into our ongoing work.

Upload additional documents <https://s3.amazonaws.com/files.formstack.com/uploads/3370707/75199690/589990352/CHCOSystemSeriousSafetyEventRateSSER.pdf>
