

CASE STUDY

Community Health Systems' Ongoing Journey to Zero Preventable Harm

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Vol. 4 No. 12 | December 2023

DOI: 10.1056/CAT.23.0250

Community Health Systems (CHS) has established patient safety as a core value. Through the deployment of specific high-reliability leadership methods, human error prevention behaviors, and a structured approach to cause analysis, CHS has achieved an 89% serious safety event rate reduction since implementing these processes in 2013. Specifically, there have been reductions in serious harm events related to medication errors, patient falls, care management, health care-associated infections, and procedural events such as retained foreign objects. Early on, CHS developed a patient safety organization that oversees the high-reliability organization journey of the CHS. The process is an integrated approach that incorporates data standardization, technology, cause analysis, and other programs that effectively and consistently keep patient harm and safety efforts top of mind among staff, frontline leaders, and executive leaders.

KEY TAKEAWAYS

- » Leaders must consistently message the strategic imperative of safety and quality and that zero preventable patient harm is not only possible, but is the only acceptable target.
- » Institute a volume-adjusted, standardized classification system for event taxonomy and level of harm to measure baseline and safety progress.
- » Focus on consistency and repetitive training on how leaders lead by *doing* versus *trying* to change attitudes and beliefs.
- » Develop leader standard work and a playbook for *how to* create safety and to promote a common language around safety and reliability.

- » Learn, practice, and promote understanding and accountability for human error prevention behaviors to prevent deviation from generally accepted performance standards; human error is inevitable.
- » Accelerate learning from deviations in care by adopting a state-of-the-art cause analysis with standardized definitions for event taxonomy, key health care work activities and processes, human error types, and *how* the individual failed and *why* systems failed to defend against human error.
- » Root solutions and improvement tactics are only effective if they address the *true* root causes for deviations in care.
- » Pay attention to the deviations reaching patients causing no detectable to moderate levels of harm, because they are likely precursor deviations that, if uncorrected, will cause more serious harm to patients.
- » Be transparent and tell the story of learning from deviations adverse to safety and quality.

The Challenge

In response to emerging priorities in patient safety with the publication of *To Err Is Human: Building a Safer Health System*¹ and related studies and reports,^{2,3} in 2012, Community Health Systems (CHS) partnered with Healthcare Performance Improvement, a consulting company later acquired by Press Ganey, to develop a safety and high-reliability operating model that could be leveraged at scale across a diverse health care organization. CHS, headquartered in Franklin, Tennessee, is a for-profit, publicly traded health care delivery system with a 2022 net operating revenue of \$12.2 billion and more than 1,000 sites of care, including 76 hospitals across 15 states. In 2012, CHS developed a patient safety organization (CHS PSO, LLC) — which is listed with the Agency for Healthcare Research and Quality (AHRQ) — to oversee the CHS high-reliability organization journey. All CHS-affiliated health care service providers are members of the CHS PSO. (A designation by AHRQ as a [Listed PSO](#) indicates that the PSO's certifications have been accepted in accordance with [Section 3.104\(a\)](#) of the Patient Safety Rule.)

The catalyst in our journey to zero preventable harm was in analyzing baseline data for serious safety events and recognizing that preventable patient harm was occurring, similar to other health systems and consistent with reported trends.²⁻⁴

We recognized early on in planning the reliability journey (2012) that we needed to standardize safety measurements to know whether we achieved results and whether they were sustainable. Based in part on the National Quality Forum's serious reportable events⁵ and the Joint Commission's sentinel events,⁶ we first adopted a standard algorithm, harm scoring, and taxonomy for classifying events with a Safety Event Classification (SEC) and the Serious Safety Event Rate (SSER) system.⁷ By monitoring and analyzing SEC and cause-analysis data, we could then identify serious, preventable patient harm events and, more importantly, understand the human and system common causes of harm. We applied the standard algorithm (SEC and SSER) to current and historical significant events to establish a baseline in April 2013.

“*The catalyst in our journey to zero preventable harm was in analyzing baseline data for serious safety events and recognizing that preventable patient harm was occurring, similar to other health systems and consistent with reported trends.*”

The Goal

Zero preventable harm is possible and is the only acceptable target to align with our core value as a safe and highly reliable organization. Leadership of a zero-harm safety and quality strategic imperative is not only about adopting a safety *culture*, but also committing that safety must be a *core value* — one that is constant, unchanging, and unyielding in the face of the latest trends or competing priorities.

The Execution

Informed by the work of Weick and Sutcliffe,⁸ Reason,^{9,10} and others that it is harder to change attitudes and beliefs directly than it is to change acting and doing (which leads to changes in thinking and believing), we embraced the idea that highly reliable organizations must first *act* their way to what they become.⁸

The first set of *acts* to establish *safety* as our core value was to keep safety top of mind in all thinking and decision-making. Initiated in 2013, thousands of leaders across the organization began the routine process of starting each staff meeting, team meeting, committee meeting, or task force with a *safety moment*. A safety moment is a 2- to 4-minute pause at the start of the meeting to share, for example, a near miss, a personal story, a publication, a news brief, or SSER results among the team. The *safety first* leadership method is practiced today across the entire enterprise. Also in 2013, leaders were asked to begin each day (and each shift) with a safety huddle to identify potential issues or unsafe conditions that could put patients and staff at risk and threaten a safe day. The daily safety huddle is practiced at the organizational leader level and in departments that are responsible for direct patient care to raise situational awareness for any unsafe conditions identified in the past 24 hours and to help create a safe day for patients and staff for the next 24 hours. Patient experience, staff engagement, and worker safety are inextricably linked to overall safety; therefore, in 2015, teams began to incorporate comments from patients and families, worker safety tips, topical and timely worker safety huddles, and staff engagement in their daily safety huddle agendas. These processes of *safety first* and *daily safety huddle* were the cornerstones for leadership and communications during the Covid-19 pandemic, as well as other disasters such as hurricanes, tornadoes, and power or utility outages potentially threatening patient safety and hospital operations.

Consistency is paramount in highly reliable organizations. We focused on consistency in how leaders lead by *doing* versus *trying* to change attitudes and beliefs. Taking from Lean methodology principles, we developed leader standard work to set expectations for leaders regarding what they must *do* daily, weekly, monthly, and quarterly (Table 1).

Table 1. Leader Standard Work: Hospital

| Role | Daily | Weekly | Monthly | Quarterly |
|-------------------|---|---|---|--|
| Staff | <ul style="list-style-type: none"> Participate in unit daily safety huddle. Incorporate S.A.F.E. error prevention tools into daily practice. Immediately report error/safety issues. Practice AIDE with every encounter. Conduct clinical hourly rounding (nursing). Update patient communication boards (white boards) (nursing/support services). Conduct patient rounding (ED). Conduct bedside shift report (nursing). Complete postvisit outreach. Commit to sit (initial communication). 56 seconds to connect (can occur with other activities). Compassionate care notes on BSR patient safety assessment. | <ul style="list-style-type: none"> Reward and recognize colleagues. Review information listed on department pillar boards (as updated by leader). | <ul style="list-style-type: none"> Participate in S.A.F.E. education as assigned. Participate in facility safety coach meeting as scheduled (if a safety coach). Participate in safety coach champion coaching calls (if a safety coach champion). | <ul style="list-style-type: none"> Participate in hospital-wide S.A.F.E. education. Participate in department-based S.A.F.E. education. Understand department-specific HCAHPS survey results. Maintain/expand competencies. Participate in skills laboratories as required. |
| Frontline leaders | <ul style="list-style-type: none"> Start all meetings with a safety moment. Lead unit daily safety huddle. Participate in hospital-wide daily safety huddle. Model S.A.F.E. error prevention tools. Perform rapid response to safety critical issues. Complete nurse leader rounding on patients (clinical leaders). Verify/observe bedside shift report. Conduct support services verification patient rounds: 10–15% of daily census. Conduct ED leader rounds: 10–15% of admitted patients (ED leaders). Monitor results of postvisit outreach (clinical leaders). Role model Community Cares Culture Standards of Behavior. Compassionate care model: NLR with validation and feedback. Interview patients using the short questionnaire during rounding, at least once during stay (if possible). | <ul style="list-style-type: none"> Conduct rounding with purpose with a focus on safety. Reinforce performance expectations using 5:1 feedback (as needed). Reward and recognize. Complete nurse leader rounding log and submit to CNO (clinical leaders). Complete and submit scouting report. Disseminate information about safety priorities and activities. Participate in root-cause analyses and ensure timely completion of corrective actions to prevent recurrence (as needed). Evaluate an individual error or unsafe act utilizing the Fair Culture – Performance Management Decision Guide and confer with human resources (as needed). Compassionate care huddles (local decision on frequency). Review collected patient questionnaire data. Act on any validation tool finding. | <ul style="list-style-type: none"> Review accountability for S.A.F.E. with direct reports. Communicate performance across all goals. Complete/participate in monthly meeting model. Complete and post spotlight reports on department pillar boards. Update department pillar boards. Participate in internal customer rounds. Build physician relationships by sharing feedback/comments from rounding activities. Communicate department capital needs. | <ul style="list-style-type: none"> Participate in S.A.F.E. education. Deliver department-based S.A.F.E. Communicate performance across all goals. Complete action plans aligned to goals. Lead and complete skills laboratories as required. Review, communicate, and post HCAHPS survey results. Conduct highmiddlelow Performer Conversations with direct reports (twice annually). Develop employee satisfaction action plan. |

Table 1. Leader Standard Work: Hospital (cont.)

| Role | Daily | Weekly | Monthly | Quarterly |
|-------------------|---|---|--|--|
| Executive leaders | <ul style="list-style-type: none"> Start all meetings with a safety moment. Conduct daily safety huddle (CEO-led). Conduct daily flash meeting. Model S.A.F.E. error prevention tools in daily practice. Role model Community Cares Culture Standards of Behavior. | <ul style="list-style-type: none"> Conduct rounding with purpose with a focus on safety. Reinforce performance expectations using 5:1 feedback (as needed). Hold administrative team meeting. Reward and recognize. Collect nurse leader rounding logs and verify nurse leader rounds (CNO). Conduct rounding with purpose on physicians — address issues. Sponsor root-cause analyses in response to safety events; review and hold frontline leaders accountable for corrective actions to prevent recurrence, as needed. Physician engagement. Compassionate care model: evaluate results from validation of patient engagement findings. | <ul style="list-style-type: none"> Monitor organization's safety metrics. Prioritize, monitor, and update Top 10 List. Review accountability for S.A.F.E. with direct reports. Communicate performance across hospital goals and annual strategic plan. Utilize monthly meeting model and review frontline leader scouting reports. Review and share service recovery trends. Monitor postvisit outreach trends. Communicate capital needs. Monitor annual hospital and department budget. Communicate performance to Board, Medical Staff, and Leaders. (per local schedule) Hold High-Reliability Team meetings (first 18–24 months for new hospitals, then quarterly). | <ul style="list-style-type: none"> Participate in S.A.F.E. education. Review action plans aligned to goals. Communicate performance across hospital goals and annual strategic plan. Conduct highmiddlelow Performer Conversations with direct reports (twice annually). Hold town hall meetings; start with a safety moment and communicate Top 10 List. Develop and refine strategic plan. Ensure PFAC meetings are consistent and well-attended. |

The Leader Standard Work chart was developed in 2015. The particular items may be revised over time but remain focused on leadership reliability for safety and service. This is the 2023 version. S.A.F.E. = error prevention behaviors of Support the Team, Ask Questions, Focus on Task, and Effective Communication, AIDET = Acknowledge, introduce, Duration, Explanation, Thank You, BSR = Bedside Shift Report, HCAHPS = Hospital Consumer Assessment of Healthcare Providers and Systems, NLR = Nurse Leader Rounding, CNO = Chief Nursing Officer, PFAC = Patient and Family Advisory Councils. Source: The authors and Pamela Rudisill, DNP, RN, MSN, NEA-BC, FAAN, FAONL, Senior Vice President and Chief Nursing Officer, Community Health Systems

A year later, in 2016, the second *act* was learning the science of human error theory and that human error is inevitable. Based on Rasmussen’s skill-rule-knowledge classification¹¹ and Reason’s Generic Error Modeling system,¹² leaders and staff are trained on the three error modes of rule-, skill-, and knowledge-based errors (Table 2).

Without an understanding of what mode the brain was in at the time of the human error, root solutions or tactics will be ineffective at addressing the root cause. For example, with skill-based error, when the brain is in a familiar, routine task or process, education and training as a root solution will be ineffective, whereas prompts, alerts, and pausing (e.g., a *timeout*) compel the individual to stop and think before carrying out a task. We asked leaders to consistently message that unsafe conditions are not a *bad people* problem, but rather inherent defects in the design or system that are unable to defend against human error.¹³ Targeted at common causes to historical and current adverse events, frontline leaders, physicians, and staff developed a set of S.A.F.E. (Support the Team, Ask Questions, Focus on the Task, Effective Communication) error prevention behavior expectations for *what we believe in* and *what we do* to prevent errors and create safety (Table 3). A Leader Handbook was developed to provide the *what it is*, *why we do it*, and *how we do it* reference for our S.A.F.E. expectations across the organization.

In year 3, 2017, the next *act* was to learn and adopt a state-of-the-art *cause-analysis* methodology founded in highly reliable industries to accelerate learning from common causes of safety events. At the time, there were varying degrees of credible and reliable root-cause analysis methods in health care, often lengthy narratives to describe *who* caused the event and *what* happened, with little or no focus on how the individual failed or *why* the system failed to defend from error. By adopting a new approach to *cause-analysis* methodology, the CHS health care teams were able to analyze a safety event with a standardized method to identify key work processes and activities, human error types, and individual and system failures that contributed to deviations in care. We learned system failures according to Dekker,¹⁴ to look past the “bad apple,” and to focus on systems designed to defend against individual failures. To further guide health care leaders in addressing individual culpability of human error, we developed a decision guide for hospital and medical staff leadership to assess the individual’s intention and

Table 2. Human Error Classification

| | Skill Based | Rule Based | Knowledge Based |
|-------------------------|---|---|--|
| Activity type | Familiar, routine acts that can be performed smoothly in an automatic fashion | Problem solving in a known situation according to set of stored “rules” or learned principles | Problem solving in new, unfamiliar situation for which the individual knows no rules; requires a plan of action to be formulated |
| Error types | <ul style="list-style-type: none"> • Slips • Lapses • Fumbles | <ul style="list-style-type: none"> • Wrong rule • Misapplication of a rule • Noncompliance with rule | <ul style="list-style-type: none"> • Formulation of incorrect response |
| Error prevention themes | <ul style="list-style-type: none"> • Self-checking: stop and think before acting | <ul style="list-style-type: none"> • Educate if wrong rule • Think a second time if misapplication • Noncompliance: reduce burden, increase risk awareness, improve coaching culture | <ul style="list-style-type: none"> • Stop and find an expert |
| Error probability | 1:1,000 | 1:100 | 3:10 to 6:10 |

Source: Adapted for the CHS PSO, LLC by Healthcare Performance Improvement, LLC; informed by the Skill–Rule–Knowledge classification of Jens Rasmussen¹¹

Table 3. Safety Behaviors and Error Prevention Techniques — S.A.F.E. Toolbox

| What We Believe In ... | | What We Do ... |
|------------------------|------------------------------------|--|
| S | Support the team | • Practice Team Checking and Team Coaching |
| A | Ask questions | • Speak Up for Safety Using ARCC — Ask a question, Request change, voice a Concern, use the Chain of command • Practice with a questioning attitude: validate and verify |
| F | Focus on task | Use STAR — Stop, Think, Act, Review |
| E | Effective communication every time | • Use read and repeat backs • Ask clarifying questions • Effective handoffs • Notifications using SBAR — Situation, Background, Assessment, Recommendations/Request |

Source: The authors

understanding in departing from the policy, protocol, or procedure. Root solutions and tactics are only effective if they address the true root causes (system failures) that did not defend against human error. Analyzing human error types within cause analyses will guide preventive tactics. Education tactics are not effective if the human error was a skill-based slip or lapse, whereas alerts, reminders, prompts, and checklists help defend against skill-based human error.

“ *Leadership of a zero-harm safety and quality strategic imperative is not only about adopting a safety culture, but also committing that safety must be a core value — one that is constant, unchanging, and unyielding in the face of the latest trends or competing priorities.*”

CHS, with guidance from the CHS PSO, has deployed systemwide safety initiatives across the enterprise in response to transportable system failures identified from even one adverse event. Systemwide *hard-stop* safety initiatives are based on learning from system failures, for example:

- implementing a minimum 5-digit search in all automated medication-dispensing systems to reduce the likelihood of medication-dispensing errors from searching look-alike medications,¹⁵
- redundant counting of surgical sponges to prevent retained surgical sponges,
- implementing a standardized drug library on all smart intravenous pumps consistent with computerized provider order entry to prevent wrong dose and wrong drug infusions, and
- making surgical site and side mandatory fields in surgical order entry in electronic health records.

By using these high-reliability tools, CHS was primed to expand its zero harm journey beyond *safety* and included *all-cause* patient suffering in the definition of *patient harm*. Inspired by the

work and guidance of Dempsey around the concept of compassionate connected care,¹⁶ the organization became aware that while *safety* was improving, patient suffering in the form of service failures still existed. In July 2021, during the Covid-19 pandemic, we were compelled to include *service failures* in our reliability work. To first measure patient suffering or harm from service failures, we again adopted a standardized algorithm, taxonomy, and patient harm classification for what a patient or family does/says/manifests (Table 4).

Metrics

Throughout the foundational work to become a highly reliable organization, safety performance was measured with the standardized SEC and SSER system. We standardized the definitions of *deviation* and *harm* across the enterprise to measure safety performance. The algorithm begins with determining whether deviation from generally accepted performance standards exists — not the outcome itself — and then determining whether the deviation reached the patient. Voluntarily reported safety events classified as a serious harm include events where, to resolve the condition, the person experiences a return to the operating room, transfer to higher level of care, life-threatening harm, severe impact to activities of daily living, or permanent loss of life, organ, limb, or physiological or neurologic function. A precursor safety event involves minor harm lasting for a limited time and requiring little or no intervention, such as bedside procedures, consults, and diagnostic imaging. Because precursors and near misses can be early warning indicators for serious harm, it is important to focus on them. However, typically in health care, there may be limited or no investigations of these lesser-harm events, because regulators and quality and safety experts are preoccupied with serious harm (Figure 1).

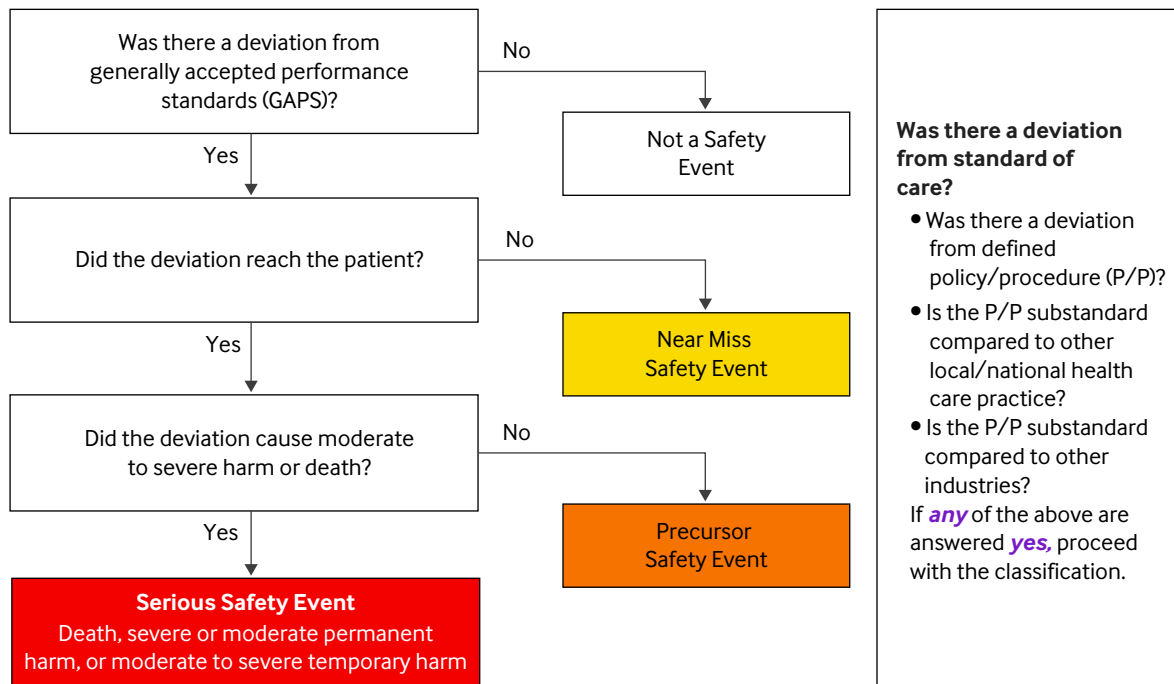
Table 4. Including *Service Failures* in Reliability Work

| Level | What Patient/Family Does/Says/Manifests | Additional Factors to Consider |
|------------------------------------|--|---|
| Serious Service Event — Harm SSE | <ul style="list-style-type: none"> • Claim or lawsuit filed (or expression of intent to sue or retain lawyer) • Regulatory complaint • Formal grievance • Patient/family states never to return or recommend • Discrimination, privacy, confidentiality | <ul style="list-style-type: none"> • Impact is expected to be permanent or long-lasting (e.g., patient diagnosed with PTSD from anesthesia awareness) • Caregiver's behavior was reckless, egregious, and/or intentional to cause harm or there is a pattern of behavior • Patient did not get care/treatment to address life-threatening or serious issue(s) |
| Precursor Service Event — Harm PSE | <ul style="list-style-type: none"> • Formal complaint • Service recovery and/or supervisory intervention is requested/required • Patient, family, or staff describes harm in terms of loss of dignity, respect, and/or trust | <ul style="list-style-type: none"> • Evidence of prolonged (but not permanent) impact • Multiple concerns/complaints and/or multiple impacts (e.g., physical, emotional, financial) • Patient did not get care requested/needed (but not life-threatening) • Concern/complaint cannot be resolved (e.g., loss of family heirloom) • Patient has difficulty self-advocating (older adult, disabled, language/cultural barriers) |
| Minor Service Event — Harm MSE | <ul style="list-style-type: none"> • Expression of concern or issue (e.g., identified during rounds, patient/family conversations, in survey comments) • Patient/family describes issue as minimal or minor | <ul style="list-style-type: none"> • Apology suffices to resolve • Temporary, resolved timely (same day) • Issue is related to nonclinical, nonbehavioral inconveniences (e.g., wayfinding, minor cleanliness) |

PTSD = posttraumatic stress disorder. Source: The authors and Pamela Rudisill, DNP, RN, MSN, NEA-BC, FAAN, FAONL, Senior Vice President and Chief Nursing Officer, Community Health Systems. Adapted with permission from Healthcare Performance Improvement/Press Ganey.

FIGURE 1

Safety Event Classification Flowchart and Guide



Note: A known complication is defined as an adverse outcome, supported in the literature as a potential risk related to care, and is not present at the time of admission or outpatient encounter. If the event is perceived to be a known complication, there are questions to confirm the event is a complication and to help determine if providers did everything possible to prevent the negative outcome.

Source: Healthcare Performance Improvement/Press Ganey Cause Analysis Field Guide

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“ We asked leaders to consistently message that unsafe conditions are not a bad people problem, but rather inherent defects in the design or system that are unable to defend against human error.”

Reliance on voluntary safety event reporting to track an ongoing journey to zero patient harm can be flawed; therefore, the CHS PSO reconciles serious safety event reporting with cases meeting publicly reported, AHRQ Patient Safety Indicators and potentially compensable events to ensure inclusion.

Initially in 2012 and the first half of 2013, there was an anticipated increase in our SSER (calculated on rolling 12-month SSEs per 10,000 adjusted patient days) as we focused on our core value of safety with enhancing the reporting of unsafe conditions and events. From late 2013 to 2017, we continually improved safety performance and SSER reduction through the leadership methods and S.A.F.E. error prevention behaviors. By 2017, a significant milestone was achieved, with a more than 80% reduction in our SSER. During the early years of the Covid-19

pandemic, however, the organization experienced a decline in the overall SSER improvement trend as health care operations worldwide were burdened with unprecedented staffing shortages, interim labor solutions, and disrupted supply chains (Figure 2).¹⁷

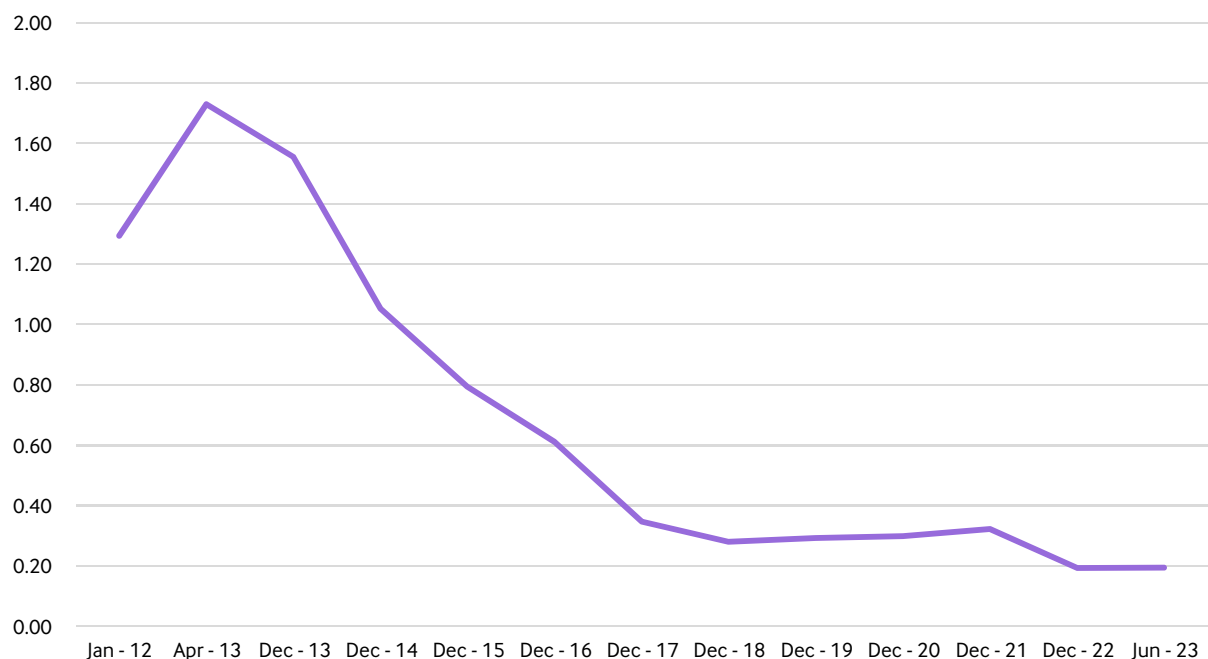
Despite some disruption to the downward trend at the start of the Covid-19 pandemic, by 2022 an SSER reduction of 89% was achieved through a shift in focus on targeting deviations that were *precursors* to serious harm. Deviations in care reaching the patient but that do not cause serious harm may be due to an inherent clinical resilience or by happenstance. In July 2022, we included the Precursor Safety Event Rate in an enterprise-wide clinical scorecard to promote transparency and attention to deviations causing lesser levels of preventable harm but that, if left uncorrected, would potentially result in more serious patient harm events (Figure 3).

Likewise, in our reliability journey to eliminate patient suffering, in 2021, we again applied a standardized algorithm and classification for level of patient suffering and taxonomy for service failures (Table 5) to measure our progress in 2021.

FIGURE 2

Serious Safety Event Rate by Year

Hospitals are compared versus an April 2013 baseline, based only on the existing owned and operated health care facilities of the Community Health Systems as of May 1, 2023; data for previously owned or operated hospitals are not included. Of note, when we removed data from the hospitals that were spun off or divested, the improvement curve over these years was largely unchanged, suggesting consistent volume-adjusted results. The monthly rates are calculated by the number of self-reported Serious Safety Events for the previous 12 months per 10,000 adjusted patient days for the same time.

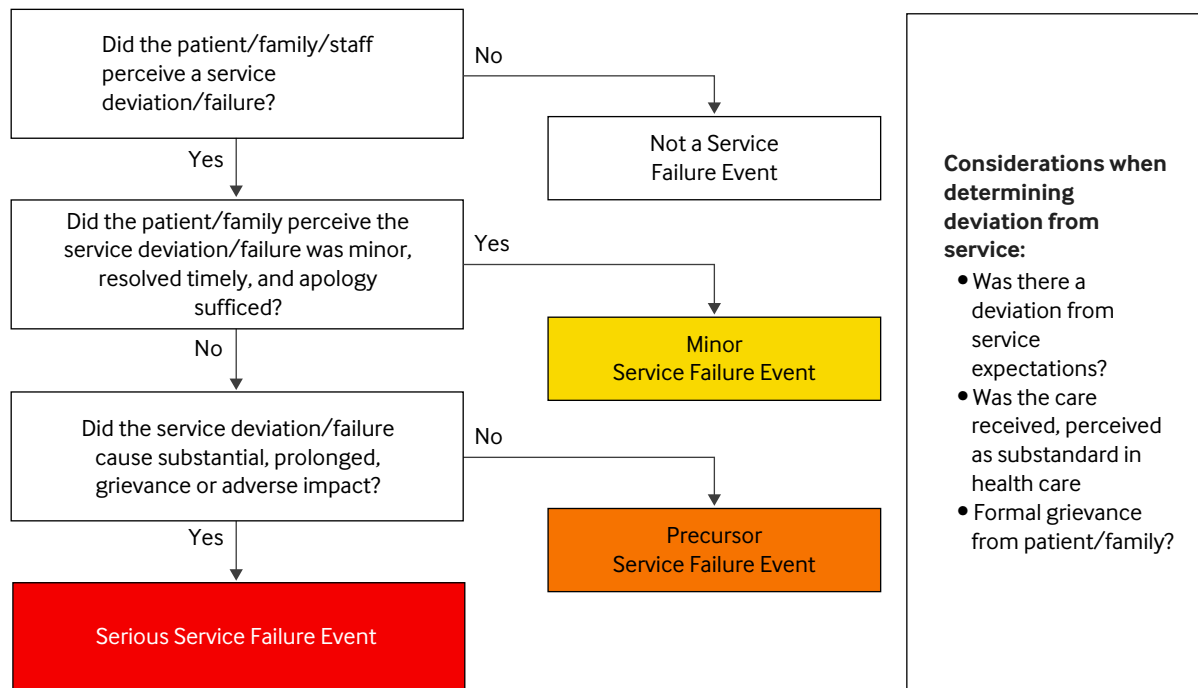


Source: The authors

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FIGURE 3

Service Failure Event Classification Process Algorithm



Source: Adapted with permission from Healthcare Performance Improvement/Press Ganey; Pamela Rudisill, DNP, RN, MSN, NEA-BC, FAAN, FAONL, Senior Vice President and Chief Nursing Officer, Community Health Systems
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Hurdles

Early in our ongoing journey to zero preventable patient harm, promoting transparency and the sharing of lessons learned were significant hurdles to overcome. The CHS PSO worked to educate and spread understanding of the legal protections for patient safety work product that protects incident investigations and the identity of the providers involved in a patient safety event reported to a PSO. With these protections, a PSO offers a safe space for both reporting and the sharing of lessons learned.¹⁸ When a significant safety event occurs, the CHS PSO participates in reviewing cause analyses with health care teams and shares lessons learned with its members with safety alerts and case reviews. The safety alerts are in an SBAR (Situation, Background, Assessment, Recommendations/Request) format, highlighting the safety situation, the background for what happened, the assessment for “how” and “why” it happened, and — more importantly — recommendations for preventing the same situation at another hospital.

We are aware of the early warning signs for losing the gains in our safety performance. The CHS operating model, including a bias for standardization, has been the key to our consistency in driving safety reliability. Leadership for safety and reliability can become lost or siloed in the many competing priorities in health care. In addition, a potential threat to sustainability — leader turnover — could result in drift from safety practices.

Table 5. Service Failure Taxonomy (Select One Most Applicable)

| Clinical Excellence/Care Process Deviation (CED) | Compassionate Care Behavior Deviation (CBD) | Operational Process Deviation (OPD) |
|--|---|--|
| Involvement in care planning: CP1 | Offensive/rude/language behavior: CC1 | Delays/waiting times: OP1 |
| Care team coordination: CP2 | Active listening: CC2 | Access: OP2 |
| Conflicting care team communication: CP3 | Courtesy/respect: CC3 | Noise/care environment: OP3 |
| Inadequate communication/instruction/explanations: CP4 | Empathy/support/family/visitation: CC4 | Facility/equipment/security, Physical plant: OP4 |
| Follow-up/follow-through: CP5 | Unprofessional conduct: CC5 | Lost/damaged/inaccessible belongings: OP5 |
| Safety/quality/proficiency of caregivers: CP6 | Rushed conduct/communication: CC6 | Billing/collections: OP6 |
| Pain/comfort/hygiene/food management: CP7 | Confidentiality/privacy/HIPAA: CC7 | Other operational process: OP7 |
| Adverse/unanticipated outcome (not due to error): CP8 | Inattentiveness/responsiveness: CC8 | |
| Wrong/omitted care: CP9 | Discriminatory language behavior: CC9 | |
| Other care process: CP10 | Other compassionate care: CC10 | |

HIPAA = Health Insurance Portability and Accountability Act of 1996. Source: Adapted with permission from Healthcare Performance Improvement/Press Ganey; Pamela Rudisill, DNP, RN, MSN, NEA-BC, FAAN, FAONL, Senior Vice President & Chief Nursing Officer, Community Health Systems

“*By adopting a new approach to cause-analysis methodology, the CHS health care teams were able to analyze a safety event with a standardized method to identify key work processes and activities, human error types, and individual and system failures that contributed to deviations in care.*”

Leader Turnover

Leader turnover, particularly senior leader turnover, continues to be a challenging hurdle. Reflecting on the work of Ebbinghaus, known for his *forgetting curve* — which suggests that people can halve their memory of newly learned knowledge in a matter of days or weeks unless actively reinforced — spurred the organization to focus on new leader onboarding to help sustain our reliability progress.¹⁹ This initially began with a quarterly Leadership Development Institute (LDI) that promoted consistent messaging across the organization that continued over many years. Once the foundational elements were *hardwired* across the organization, the LDI function transitioned to a standardized hospital executive leader onboarding series with live training sessions conducted by senior leaders and the CHS PSO staff. This set the expectation for their local market/hospital leadership for reliability. Distribution of the Leader Handbooks and the autoassignment of required online educational videos are also used to orient new employees and reinforce the practice of our S.A.F.E. error prevention behaviors for incumbent employees.

However, sustainability with leadership and staff turnover remains a challenge. The effects of the pandemic and what has been named the Great Healthcare Resignation have affected the health care workforce and contributed to the difficulty of sustainability in safety work.^{20,21}

The Team

Over the course of the more than 10 years of this collaborative effort, numerous individuals have contributed at the staff, frontline, and executive levels. The structures for reliability and safety across a large health care organization were designed by the President of Healthcare Innovation and Chief Medical Officer; the Vice President, Patient Safety Officer; and the CHS PSO. Clinical reliability mentors aided in implementing leadership methods and error prevention tools and provided onsite train-the-trainer sessions. Reliability mentors provided standardization, structure, and consistency to the effort. Hospitals designated their own High-Reliability Teams with chief executive officers, chief nursing officers, chief medical officers, medical staff presidents, physician mentors, and quality and risk leaders to implement standardized leadership methods, monitor SSEs and their SSER, recruit safety coaches, celebrate successes, and to reward and recognize safety performance.

Where to Start

Through a continuous systemwide commitment and focus on patient safety, organizations can adopt a reliability framework and initiate a journey to zero preventable patient harm. This will require consistent messaging and repetitive training on how to lead by *doing* rather than *trying* to change attitudes and beliefs. In addition, the deployment of a standardized classification system for event taxonomy and level of harm is essential to measure baseline and safety progress. It is also important to recognize that human error is inevitable and that transparency and prompt cause analysis can enhance learning and reinforce safety and quality outcomes.

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Disclosures: Lynn T. Simon, Terrie Van Buren, and Pamela Rudisill have nothing to disclose.

References

1. Institute of Medicine. To err is human: building a safer health system. Washington, DC: The National Academies Press, 2000.

2. Stelfox HT, Palmisani S, Scurlock C, Orav EJ, Bates DW. The “To Err is Human” report and the patient safety literature. *Qual Saf Health Care* 2006;15:174-8 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2464859/> <https://doi.org/10.1136/qshc.2006.017947>.
3. Chassin MR, Loeb JM. The ongoing quality improvement journey: next stop, high reliability. *Health Aff (Millwood)* 2011;30:559-68 <https://www.healthaffairs.org/doi/10.1377/hlthaff.2011.0076> <https://doi.org/10.1377/hlthaff.2011.0076>.
4. Leape LL. The hidden epidemic: The Harvard Medical Practice Study. In: *Making healthcare safe*. Cham, Switzerland: Springer, 2021:3-16. https://doi.org/10.1007/978-3-030-71123-8_1.
5. National Quality Forum. List of Serious Reportable Events (aka SRE or “Never Events”). Accessed October 30, 2023. https://www.qualityforum.org/Topics/SREs/List_of_SREs.aspx.
6. Chang A, Schyve PM, Croteau RJ, O’Leary DS, Loeb JM. The JCAHO patient safety event taxonomy: a standardized terminology and classification schema for near misses and adverse events. *Int J Qual Health Care* 2005;17:95-105 <https://academic.oup.com/intqhc/article/17/2/95/1794432> <https://doi.org/10.1093/intqhc/mzi021>.
7. Press Ganey. The HPI SEC & SSER Patient Safety Measurement Guide. March 5, 2021. Accessed October 30, 2023. <https://info.pressganey.com/e-books-research/the-hpi-sec-sser-patient-safety-measurement-system-for-healthcare#main-content>.
8. Weick KE, Sutcliffe KM. *Managing the unexpected: resilient performance in an age of uncertainty*. 2nd ed. San Francisco: Jossey-Bass, 2007:114.
9. Reason JT. *Human error*. Cambridge, England: Cambridge University Press, 1991. <https://www.cambridge.org/highereducation/books/human-error/281486994DE4704203A514F7B7D826Co#overview>
10. Reason JT. *Managing the risks of organizational accidents*. London: Routledge, 1997. <https://www.taylorfrancis.com/books/mono/10.4324/9781315543543/managing-risks-organizational-accidents-james-reason>
11. Rasmussen J. Skills, rules, and knowledge; signals, signs, and symbols, and other distinctions in human performance models. *IEEE Trans Syst Man Cybern* 1983;13:257-66 <https://www.iwolm.com/wp-content/downloads/SkillsRulesAndKnowledge-Rasmussen.pdf>.
12. Yeow JA, Ng PK, Ng YJ. Preliminary study in rationalizing the need for the Goldilocks principle in manufacturing SMEs. *J Sys Manag Sci* 2022;12:267-80 <http://www.aasmr.org/jsms/Vol12/JSMS%20august%202022/Vol.12.No.04.17.pdf> <https://doi.org/10.33168/JSMS.2022.0417>.
13. Leape LL. It’s not bad people: error in medicine. In: *Making healthcare safe*. Cham, Switzerland: Springer, 2021:17-30. https://doi.org/10.1007/978-3-030-71123-8_2.
14. Dekker SWA. *The field guide to understanding ‘human error.’* 3rd ed. Boca Raton, Florida: CRC Press, 2014.

15. McGaffigan PA. Avoiding “drift” into harm. *Healthc Exec* 2022;38:46-9 <https://healthcareexecutive.org/archives/september-october-2022>.
16. Dempsey C. *The antidote to suffering: how compassionate connected care can improve safety, quality, and experience*. New York: McGraw-Hill, 2017.
17. Press Ganey. *Healing Without Harm: Safety Culture Trends in Healthcare 2023*. Accessed October 30, 2023. <https://info.pressganey.com/e-books-research/safety-culture-trends-2023>.
18. Agency for Healthcare Research and Quality. *How PSOs Help Health Care Organizations Improve Patient Safety Culture*. Rockville, MD: Agency for Healthcare Research and Quality. AHRQ Publication No. 16-0026-EF. April 2016. Accessed October 30, 2023. <https://www.ahrq.gov/sites/default/files/wysiwyg/npsd/npsd-patient-safety-culture-brief.pdf>.
19. Ebbinghaus H. Memory: a contribution to experimental psychology. *Ann Neurosci* 2013;20:155-6 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4117135/pdf/ANSO972-7531-20-155.pdf> <https://doi.org/10.5214/ans.0972.7531.200408>.
20. Linzer M, Griffiths EP, Feldman MD. Responding to the Great Resignation: detoxify and rebuild the culture. *J Gen Intern Med* 2022;37:4276-7 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9243774/> <https://doi.org/10.1007/s11606-022-07703-1>.
21. Abbasi J. Pushed to their limits, 1 in 5 physicians intends to leave practice. *JAMA* 2022;327:1435-7 <https://jamanetwork.com/journals/jama/fullarticle/2790791> <https://doi.org/10.1001/jama.2022.5074>.