Vermont Patient Safety Surveillance & Improvement System

2023 Report

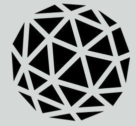
Vermont Program for Quality in Health Care, Inc.
Vermont Department of Health

Introduction

Serious Reportable Events (SREs), as defined by the National Quality Forum (NQF), are largely preventable clinical events that result in serious harm to the patient. While these events are rare, the impact to patients, families, providers, and the healthcare community can be devastating. Vermont is one of 26 states and the District of Columbia that have enacted reporting systems requiring facilities to report on all 28 of the National Quality Forum's Serious Reportable Events, as specified under the Vermont Patient Safety Surveillance and Improvement System (PSSIS).[1] There remains some inconsistency among states in reporting requirements of all elements of the NQF SRE list.

When an SRE occurs at a Vermont hospital or Ambulatory Surgery Center (ASC), the event must be reported to the PSSIS. For each event, the Vermont PSSIS requires that the hospital or ASC conduct an analysis to get to the root of why the event occurred and create and implement a corrective action plan to prevent the same event from reoccurring in the future. The Vermont Department of Health (VDH) and The Vermont Program for Quality in Health Care (VPQHC) support Vermont hospitals and ASCs through the PSSIS in their commitment to creating safer care environments.

[1] National Quality Forum. Improving Patient Safety through State-Based Reporting in Healthcare. Retrieved from State-Based Reporting in Healthcare: https://www.qualityforum.org/Projects/State_Based_Reporting/State-Based_Reporting_in_Healthcare.aspx. , accessed March 8, 2024

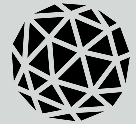


I. Vermont Serious Reportable Event Process and Patient Safety Oversight

The Vermont Department of Health (VDH) contracts with The Vermont Program for Quality in Health Care, Inc. (VPQHC) to administer the Patient Safety Surveillance and Improvement System (PSSIS) program. If a Serious Reportable Event (SRE) occurs at a facility, the hospital or Ambulatory Surgery Center (ASC) must report the event to the PSSIS within seven days of the discovery of the event. For each event, the Vermont hospital or ASC conducts an analysis of the event to identify causes and contributing factors and analyze underlying systemic issues that led to the event, or that could result in a future event if not addressed properly. The most important component of this analysis is a focus on the larger systemic issues rather than assigning blame to the individuals or facilities involved. Following the analysis and identification of system or process issues, the hospital or ASC must develop a comprehensive corrective action plan (CAP) that addresses the findings identified during the event analysis to prevent a similar event from occurring in the future.

A summary of the event, the supporting documentation, and the CAP must be submitted to VPQHC for review within 60 days of the initial event report. Once a comprehensive review is completed to ensure that the root cause or causes that led to the event are appropriately addressed, and all the required elements are included, the documents are submitted to VDH by VPQHC.

VPQHC supports VDH by conducting routine periodic site visits at each hospital and ASC at least once every three years. During the site visit, the VPQHC patient safety representative reviews the hospital and/or ASC's policies, procedures, and education provided for event reporting and disclosures. VPQHC staff review the hospital and ASCs SREs and the follow through with corrective action plans. Staff from multiple departments at the hospital and ASCs are interviewed to assess their knowledge of the patient safety program, event-reporting procedure, and the culture of reporting within the facility.



II. Vermont Patient Safety Landscape 2023

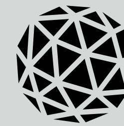
VPQHC completed six patient safety routine periodic site visits and three follow up reviews in 2023. Follow up reviews focus on strengthening patient safety practices through continued support and guidance regarding just culture, event reporting, analyzing root causes, and developing corrective action plans.

In 2023, with the end of the COVID-19 Public Health Emergency, hospitals and ASCs experienced an uptick in healthcare utilization resulting in increased volumes of patients seeking access to medical treatment. These increased volumes together with persistent healthcare workforce shortages have the potential to impact patient safety. In response to these challenges, Vermont hospitals focused on creating flexible recruitment and retention approaches, filling vacancies with temporary clinical staffing alternatives, supporting collaboration with nursing schools to train and prepare future nurses and addressing mental health wellness for all employees. In healthcare, where patient interaction is constant and critical, a stable workforce with cohesive teams is an essential patient safety priority alongside an organizational commitment to a just safety culture encouraging reporting of near miss and actual events to prevent future harm. In 2022, the ECRI Institute (Emergency Care Research Institute), a trusted patient safety data source, cited staffing shortages as the number one challenge on the list of “Top 10 Patient Safey Concerns”. In 2023, the report states staffing shortages continue to “influence many of the concerns on this year’s list.” [2]

VDH and VPQHC introduced demographic data capture to the PSSIS reporting system in June 2023 to collect patient age, sex, gender, race, ethnicity, preferred language(s), and disability status, bringing an equity lens to analysis of serious reportable events.[3] Enough age data were collected in the second half of 2023 to see that patients aged 70 and older experienced the majority of SRE’s. Sex and gender distributions were consistent with the Vermont population. Disability status could not be evaluated due to the large percentage of “unknown” reported. This is a limitation of the source data (hospital electronic health records), which is largely a retrieval challenge for reporters currently. Race, ethnicity, and preferred language(s) could not be stratified due to small numbers. It is hoped that with more years of data collection, we will be able to better understand differences (if any) in the prevalence of SREs among different populations in Vermont.

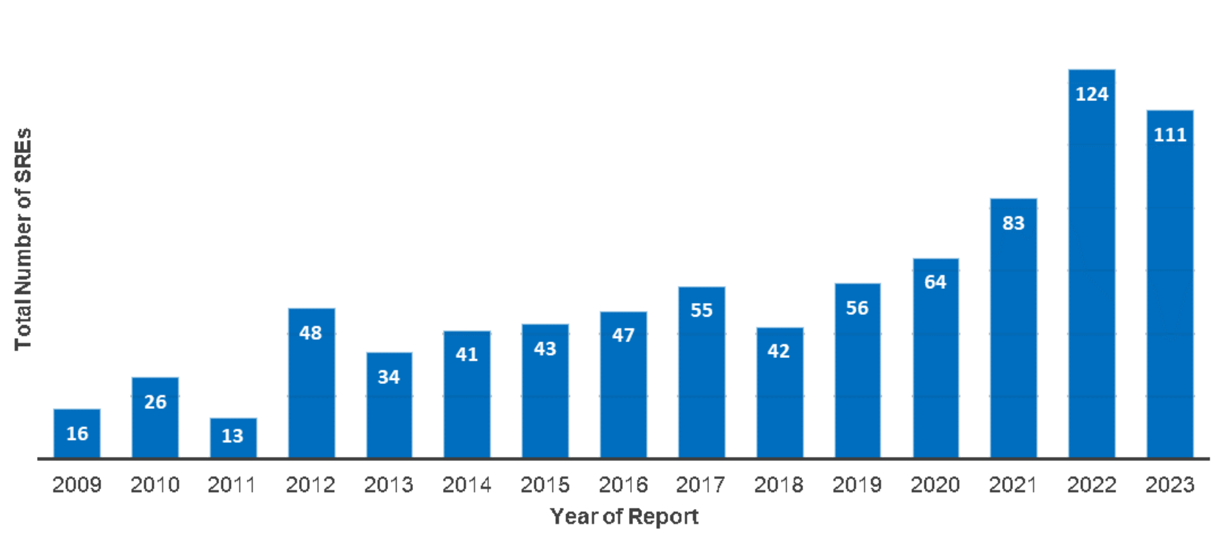
VPQHC staff supported hospitals through transitions in quality and patient safety staff by facilitating informational meetings, orienting new staff to the PSSIS program, providing assistance with policy and process review, and strengthening root cause analysis methodology.

[2] ECRI. Special Report, Top 10 Patient Safety Concerns 2023, https://www.ecri.org/top-10-patient-safety-concerns-2023-special-report , accessed March 8, 2024.
[3] IHI. Accepting the Challenge to Embed Equity into Patient Safety Work, February 09, 2024, Institute for Healthcare Improvement, www.ihi.org, accessed February 13, 2024.



III. Vermont Serious Reportable Events 2023

In 2023, VPQHC reviewed 111 SREs submitted by Vermont hospitals and ASCs (Figure 1), which is a decrease of approximately 10% from 2022.



The following themes emerged from causal analysis and corrective action plans for events submitted in 2023:

Staffing:

- Increases in clinical staffing shortages and turnover.
- Variation in training, education, and transfer of knowledge due to an increase in the number of temporary clinical staffing roles receiving limited orientation to hospital workflows.
- New clinicians with limited clinical practice experience.

Communication:

- Inadequate flow of information impacting coordination of care among clinicians

Patient Characteristics:

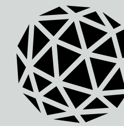
- Older adults with complex medical needs and competing priorities for patient care.
- Challenges associated with complex social needs and barriers to patient engagement in care plans.

Rules, Policies and Procedures:

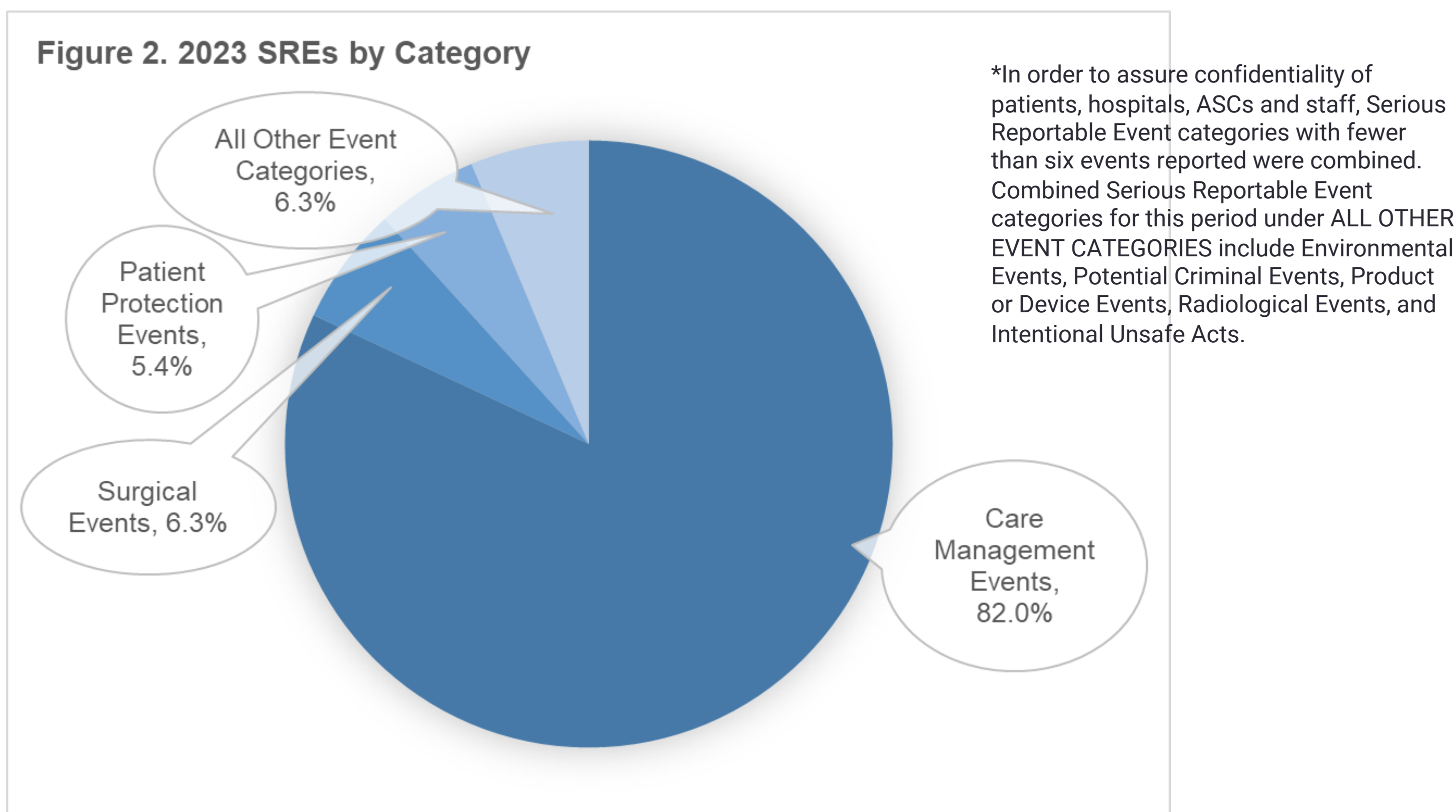
- Variation in adherence to established standards.

Discharge:

- Patient discharge placement challenges and extended hospitalizations.



The majority of the Serious Reportable Events reported in 2023 (Figure 2) were classified in the care management event category (82%).



The care management event category includes:

A. Patient death or serious injury[4] associated with a medication error.

B. Patient death or serious injury associated with unsafe administration of blood products

C. Maternal death or serious injury associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting

D. Death or serious injury of a neonate associated with labor or delivery in a low-risk pregnancy

E. Patient death or serious injury associated with a fall while being cared for in a health care setting

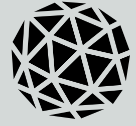
F. Any Stage 3, Stage 4, and unstageable pressure ulcers acquired after admission/presentation to a health care setting

G. Artificial insemination with the wrong donor sperm or wrong egg

H. Patient death or serious injury resulting from the irretrievable loss of an irreplaceable biological specimen

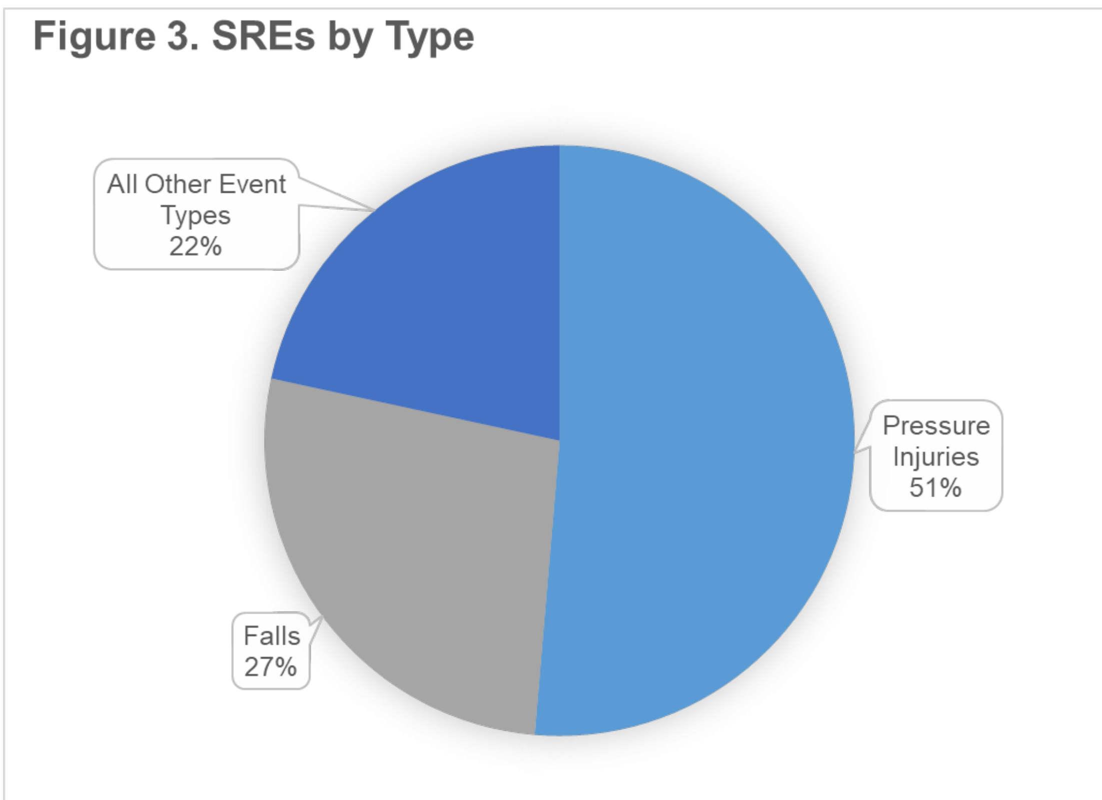
I. Patient death or serious injury resulting from failure to follow-up or communicate laboratory, pathology, or radiology test results

[4] National Quality Forum (NQF) defines serious injury as "a loss of a body part, disability, loss of bodily function, or require major intervention for correction (e.g., higher level of care, surgery)."



SRE data in the Vermont Hospital Report Card[5] indicate that in 2018-2019, care management events accounted for 72% of events and surgical events accounted for 13%. Since then, the difference has become more pronounced. In 2023, as shown in Figure 2, care management events comprise a greater percentage (82%), and surgical events represent a smaller percentage (6%) of the events. In 2023, patient protection events were 5% of all SREs reported.

Figure 3 shows that falls and pressure injuries comprised 78% of all SREs reported in 2023. This is consistent with 2019 and 2020 Vermont Hospital Report Card data, which showed that falls and pressure injuries were the leading event types reported. In 2020, pressure injuries overtook falls as the leading type of SRE reported and remains the highest category of events reported in 2023.



[5] Hospital Report Cards, Vermont Department of Health, https://www.healthvermont.gov/stats/systems/hospital-report-cards, accessed February 29, 2024.

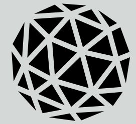
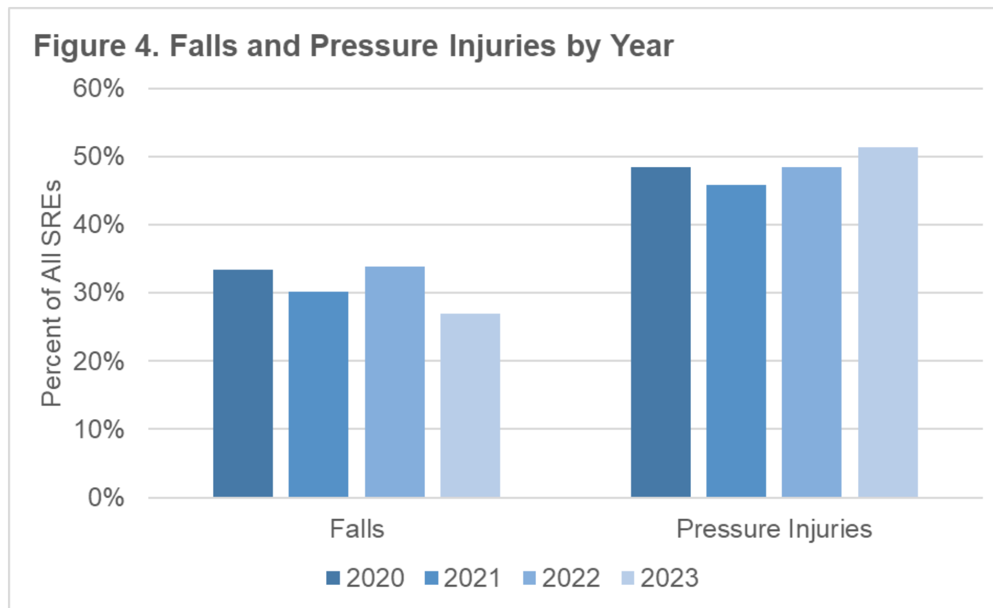
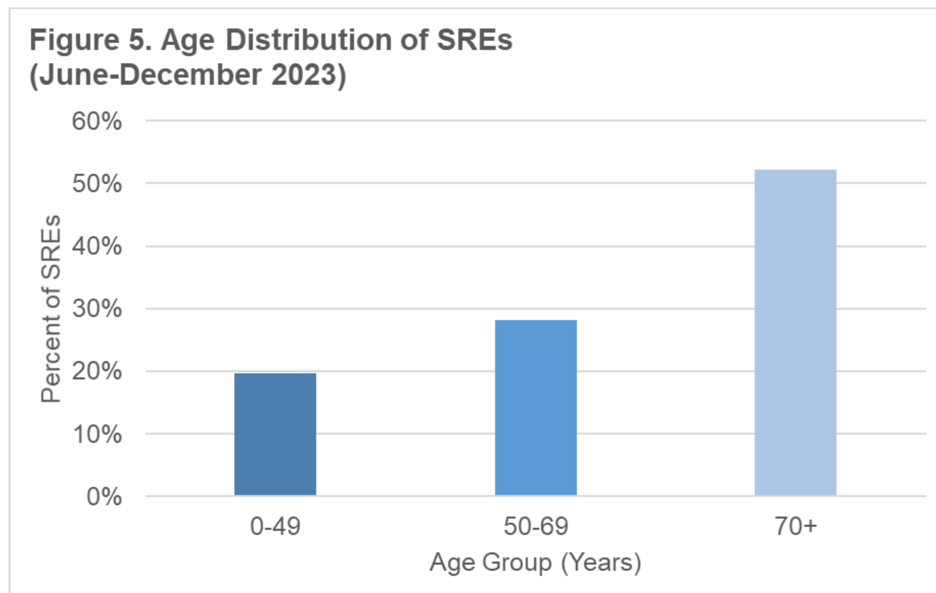


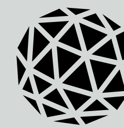
Figure 4 shows a decrease in falls and an increase in pressure injury events from 2022 to 2023, relative to the total number of SREs reported for each year.



The 70+ age group represents 52% of all SREs reported from June- December 2023 (Figure 5). Census data for Vermont in July 2023 show persons 65 years and over represent 21.6% of the population.[6] The US Department of Health and Human Services and the Agency for Healthcare Research and Quality (AHRQ) "acknowledge that adults aged 65 years and older are at serious risk for adverse events throughout their continuum of care."[7]



[6] U.S. Census Bureau QuickFacts: Vermont, accessed 3/12/2024.
[7] AHRQ. https://psnet.ahrq.gov/primer/adverse-events-near-misses-and-errors, accessed March 12, 2024.



IV. Process Improvement

VPQHC supported several best practices for preventing falls and pressure injuries, which hospitals implemented to address these commonly reported SREs.

Pressure Injury Prevention Strategies

- Established interdisciplinary pressure injury prevention champions and teams.
  Identified high-risk, vulnerable patients through skin assessment by two nurses upon admission and transfer
  Created pressure injury prevention care “bundles” to provide standardized interventions for patients at risk for pressure injury through an individualized care plan
  Assured sustainment of skin risk assessments and implementation of pressure injury prevention care “bundles” through wound care huddles and assessment by of Wound, Ostomy and Continence certified Nurses
  Provided specialty pressure relieving mattresses and beds
- Implemented hourly rounding and focused on effective patient turning with protection of bony prominence
- Standardized communication and handoffs among providers and staff
- Established unit-based peer-peer mentoring
- Delivered continuous pressure injury prevention education/support for new and existing clinical staff
- Dissemination of resources through the Eastern US Quality Improvement Collaborative related to injuries from falls and immobility

Fall Prevention Strategies Implemented

- Established interdisciplinary fall prevention champions and teams
- Identified high-risk, vulnerable patients
- Created fall prevention care “bundles” to provide standardized interventions for patients at risk for fall through an individualized care plan
- Assured the physical environment was free from slip, trip, and fall hazards
- Established interventions that focused on the need to reduce injury to those that do fall
- Learned from falls through post fall huddles, including patient feedback
- Increased patients’ physical activity to prevent deconditioning
- Standardized communication and handoffs among providers and staff
- Developed standardized education for patients and families regarding fall risk: “Call Don’t Fall!”
- Delivered fall prevention awareness education for all employees
- Dissemination of resources through the Eastern US Quality Improvement Collaborative related to pressure injuries

Conclusion

Hospitals, ASCs, VPQHC, and VDH are partnering to improve patient safety during hospitalizations and episodes of outpatient surgical care to decrease serious adverse events and facilitate quality improvement efforts.

As VPQHC reflects on the improvements implemented to prevent falls and pressure injuries through hospital systems analysis, intervention sustainability and consistency of purpose are of utmost importance and profoundly challenging. VPQHC and VDH will continue to support hospitals and ASCs in best practices for patient safety and creating a culture of safety. At the same time, it is crucial to reiterate how staffing shortages and delayed access to post-acute care can affect patient safety within the healthcare system.