**NCPS** — Nebraska Coalition for Patient Safety

## Failed/Delayed Response to Change in Patient's Condition

Situation

Failure/delayed response remains one of the top 4 categories of events reported to NCPS. Since these types of events often result in significant patient consequences, this patient safety alert was developed to review causes/contributing factors related to failure/delayed response to change in patient's condition and to provide resources to mitigate their possible occurrence.

Top Four Event Types
2008 - 2021
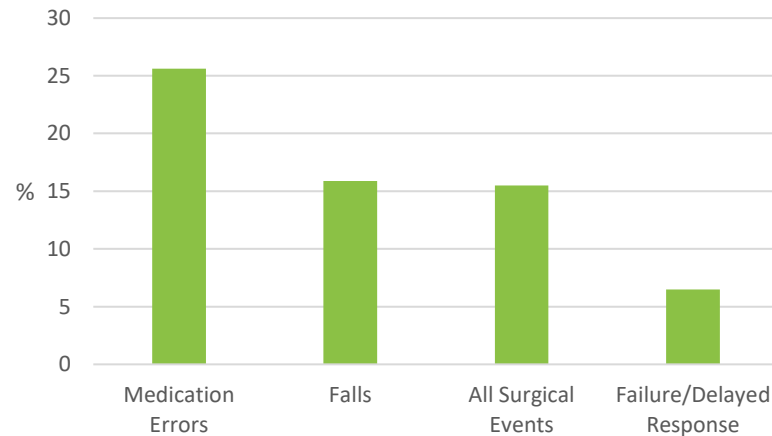
Severity Categories of Top Four Event Types
2008 - 2021

Harm Events   Death Events
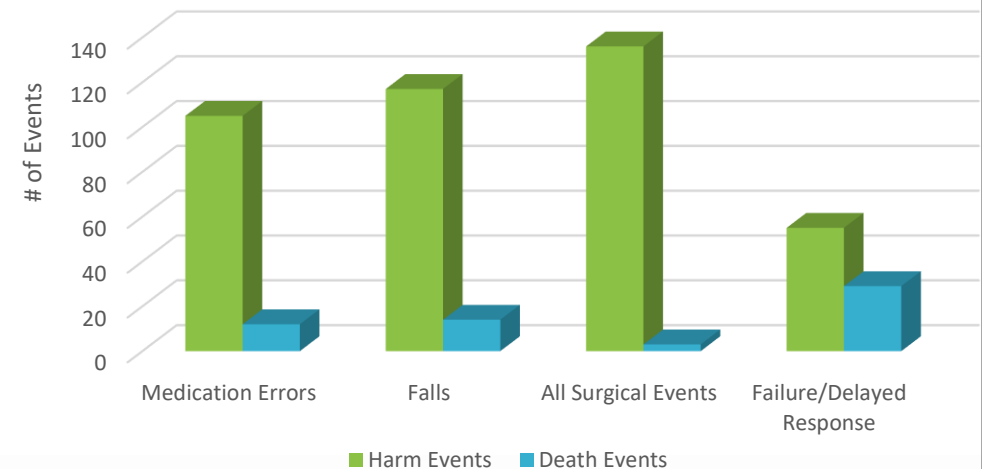
This Safety Alert is made possible through the committed efforts of NCPS organization members in reporting patient safety events.
We encourage NCPS organization members to report patient safety events to NCPS. *We improve safety when we learn together!*

Failed/Delayed Response to Change in Patient's Condition

Background	In the events reported to NCPS the most common causes or contributing factors for a failed/delayed response include: ➢ Staff knowledge deficit/insufficient training ➢ Poor handoff communication ➢ Policies/Procedures not followed ➢ Policies/Procedures not clear ➢ Lack of Critical Thinking Less often cited causes or contributing factors include: ➢ Equipment design confusing/inadequate ➢ Staff distraction ➢ Lack of equipment availability at bedside ➢ Workload/shift change ➢ Fear of speaking up about a safety concern

Failed/Delayed Response to Change in Patient's Condition

| Background	Authors of a 2018 study noted the lack of best-practice guidelines for surgical rescue measures was unlike any other reportable quality measure which all had best-practice guidelines. They attributed this in part to the inability to identify hospital, provider, and patient characteristics that influence rescue.[1]
	Study authors also noted that previous attempts to alter macrosystems such as nurse-to-patient ratios in the ICU, technology within the hospital, and teaching hospital status did little to improve mortality rates. However, a study supported by an AHRQ grant and published in the New England Journal of Medicine showed the importance of nurse-to-patient ratios for decreasing inpatient mortality rates.[2]
	Noted in the 2018 study, "The microsystem of care – where the interpersonal and interprofessional communications and collaborations occurs within dynamic, ambiguous, and complex scenarios – is critical".[1]
	In looking specifically at the impact of interpersonal and organizational factors, they found two targets for improvement: • delayed recognition of developing complications • poor interprofessional communication and inability to express clinical concerns

Failed/Delayed Response to Change in Patient's Condition

Assessment	Review of NCPS data showed that the highest number of failed/delayed response events was experienced by persons in the age range of 65 – 89 years of age. Persons 50 – 64 were the second highest age group for this event.

Failure/Delayed Response Events
2008 - 2021
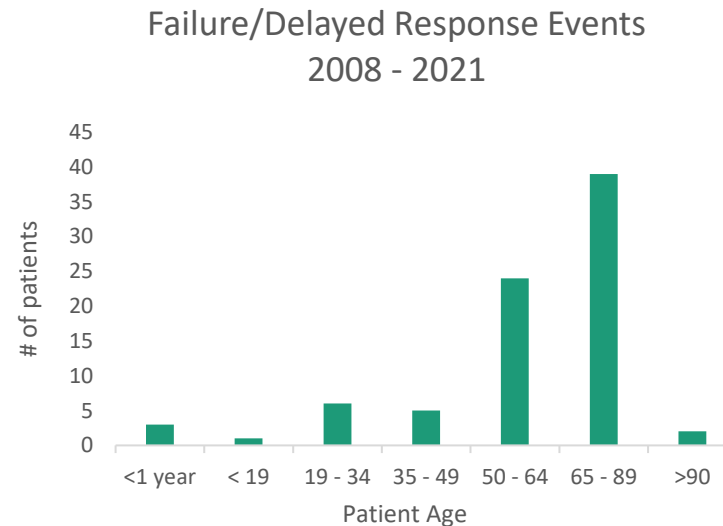
Our data corresponds with a study of the outcomes of older hospitalized patients which showed that rapid response team activation for older patients was more likely to be delayed. Reasons cited for the delay included staff's doubt if older patients would benefit from critical care procedures and confusion about the goals of care for these patients.[3]

Failed/Delayed Response to Change in Patient's Condition

Assessment	NCPS data revealed that the most common patient location for a failed/delayed response to change in a patient's condition was Med/Surg.

Failure/Delayed Response Events
2008 - 2021
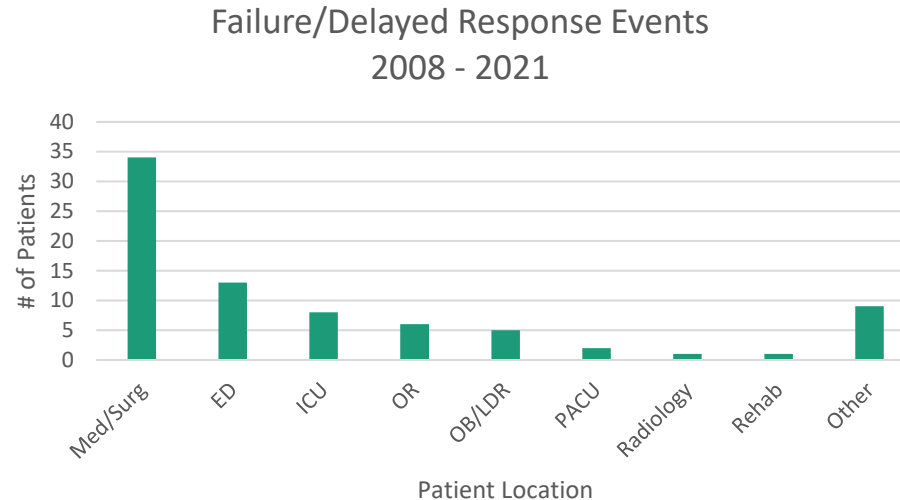
Numerous studies have looked how to improve a nurses' recognition of deterioration of a patient's status.[4,5,6,7] An important conclusion one study reached is the need for nurses to be knowledgeable and confident leaders in directing and initiating early interventions.[8]

Nursing knowledge and failure to use critical thinking skills is also often found to be a contributor to these events. The use of simulation to improve nurses' knowledge and critical thinking skills is a promising intervention.[9]

Failed/Delayed Response to Change in Patient's Condition	
Assessment	Subject matter experts have differing points of view regarding the best ways to mitigate the risk of failed/delayed response to a change in a patient's condition.[10] Questions debated include:
	• How can technology be best used to warn of a patient's early signs of a deteriorating condition?
	• Is there value in having a Rapid Response Team?
	• If a RRT team is used, what is the member structure and how is it best activated when needed?
	A study of providers from hospitals with high and low rescue rates identified five key factors which influence the successful rescue of surgical patients[1]:
	1. Teamwork
	2. Action Taking
	3. Psychological Safety
	4. Recognition of Complications
	5. Communication

Failed/Delayed Response to Change in Patient's Condition

Assessment	The Anesthesia Patient Safety Foundation has identified four themes as they pursue their primary goal of decreasing in-hospital mortality in the perioperative period due to failure to rescue.[11] These themes apply across the spectrum of care, not only for care of post-surgical patients. ❖ Theme #1: Build an environment that supports and encourages early escalation of care. ❖ Theme #2: Make technology a meaningful contributor to human workflow. ❖ Theme #3: Make anticipating and planning for deterioration a standard workflow. ❖ Theme #4: Create a culture that values all voices equally.

Failed/Delayed Response to Change in Patient's Condition	
Recommendation	❑ **Verify Staff's Knowledge is Appropriate for Their Job Duties, That They Are Competent in Their Performance of Those Duties, and Their Critical Thinking Skills are Adequate** 1. Ensure staff's knowledge is assessed and competency validated at time of hire, when new equipment or processes are implemented, and periodically thereafter as required by regulatory agencies. 2. Provide your staff with instruction to support and improve their critical thinking skills; use opportunities where it could have been better as a "teaching moment". 3. Consider using simulation to improve staff's critical thinking skills.[9] See _Caring Reliably: Having a Questioning Attitude[12]_, _Staff Safety Behaviors[13]_, _Caring Reliably: Validate and Verify[14]_ ❑ **Conduct Mock Code Blue Drills, Including Post Drill Evaluation, In All Patient Care Areas at a Variety of Times of Day** 1. Gaps in resource availability/useability can be identified and pro-actively corrected (e.g. Is resuscitation equipment available in a procedural area? Are blood pressure monitors workable/easy to read? Does variation in equipment/supplies/processes across departments makes it difficult for float staff when responding to a code?) 2. Staff performance can be observed in real time allowing for follow-up education/training as needed and reinforcement of correct behaviors (e.g. Are patient vitals consistently and correctly documented in the EMR? Is team communication adequate? Are roles and responsibilities with the code team understood?) See example of _Mock Code Blue Checklist[15]_

Failed/Delayed Response to Change in Patient's Condition

Recommendation	❑ **Effectively Utilize Rapid Response Team (RRT)**
	1. Develop a RRT policy/procedure with input from all appropriate stakeholders which provides guidance to your staff for the appropriate patient parameters to be observed to initiate a RRT.[9]
	2. Train staff in all direct patient care disciplines about the RRT policy/protocol.
	3. Review RRTs at an interprofessional committee to discover improvement opportunities and to demonstrate the value of RRT. Revise the policy and/or provide additional training to staff when gaps are identified.
	4. Develop patient family information to provide to them regarding their ability to call an RRT for a related to their family member's clinical condition.
	See IHI's Rapid Response Teams[16] and Why do healthcare professionals fail to escalate as per the early warning system[17]and Deploy Rapid Response Teams: Patient and Family Fact Sheet[18]
	❑ **Work to Embed a Culture Safety in Your Organization**
	1. Consider establishing defined staffing levels based on patient acuity for nurses/nurse aids/telemetry techs/respiratory therapists/lab staff/radiology techs.[2]
	2. Take the steps necessary so that any member of the patient care team can express a patient safety concern.
	3. Utilize patient safety communication tools such as those taught in TeamSTEPPS[R] (SBAR, Call-out, Check Back, Handoff)
	4. Utilize a standardized patient handoff tool at change of shift or when a patient's primary nurse changes.
	5. Utilize patient safety support tools such as those taught in TeamSTEPPS[R] (Task Assistance, Feedback, Advocacy and Assertion, Two-Challenge Rule, CUS, DESC Script)
	See Agency for Healthcare Research and Quality. TeamSTEPPS 2.0: Pocket Guide (2014)[19]

Self-Assessment	**Failed/Delayed Response to Change in Patient's Condition**	**Yes**	**No**	**What action is needed?**
	Does your organization have a process to assess staff's knowledge of their core duties? Do you validate their competency in performing those duties? Is the process the same for "traveling" staff?			
	Are staff's critical thinking skills cultivated by encouraging a questioning attitude and teaching the concepts/tools of "Validate and Verify" and "Know Why and Comply"? Have you considered using simulation to improve staff's critical thinking skills?[11] See *Caring Reliably: Having a Questioning Attitude[12]*, *Staff Safety Behaviors[13]*, and *Caring Reliably: Validate and Verify[14]*			
	Does you organization have a written Code Blue policy? Does it address how to handle patients with a DNR status? Does it require a post code evaluation or debrief? Are identified gaps corrected in a timely manner? Is the information shared with the appropriate hospital departments and/or committees?			
	Does your organization routinely perform Mock Code Blue Drills? (*For Joint Commission Accredited organizations this is a requirement. For others, it is a good practice. See Standard PC.02.01.11.*) Are identified gaps in staff performance, equipment, and/or processes corrected in a timely manner? See *Mock Code Blue Check List[15]*			
	Does your organization have a written RRT policy? Are all stakeholders made aware of their role in RRT? Is information about RRTs shared with the appropriate hospital departments and/or committees?			

Self Assessment	Failed/Delayed Response to Change in Patient's Condition	Yes	No	What action is needed?
	Are patient family members made aware that they can call a RRT when they see a change in their loved one's clinical condition? See *Deploy Rapid Response Teams Patient and Family Fact Sheet*[18]			
	Have you evaluated defined staffing levels based on patient acuity for nurses/nurse aides/telemetry techs/respiratory therapists/lab staff/radiology techs?			
	Does your organization's culture allow/support any member of the care team (including family members) to express a patient safety concern? See *TeamSTEPPS 2.0 Pocket Guide*[19]			
	Does your organization utilize a standardized patient safety handoff tool at change of shift or when a patient's primary nurse changes?			
	Does your organization utilize the patient safety communication tools such as those taught in TeamSTEPPS (SBAR, Call-Out, Check-Back, Handoff)? See *TeamSTEPPS 2.0 Pocket Guide*[19]			
	Does your organization utilize the patient safety support tools such as those taught in TeamSTEPPS (Task Assistance, Feedback, Advocacy and Assertion, Two-Challenge Rule, CUS, DESC Script) See *TeamSTEPPS 2.0 Pocket Guide*[19]			

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