

Falls and Fall Prevention Webinar Series

ILLINOIS HEALTH AND HOSPITAL ASSOCIATION
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MARCH 17, 2020



GREAT LAKES
PARTNERS FOR PATIENTS

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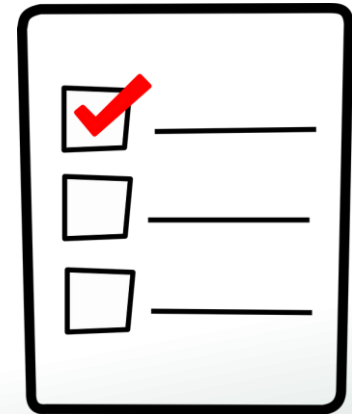
Accelerating Improvement at the Point of Care

Housekeeping Items

- The webinar is being recorded and will be made available along with the PowerPoint following the presentation.
- Feel free to use the chat feature during the presentation.
- Lines will be muted until the Question/Answers portion of presentation.

Webinar Series Information

- Tuesdays from 10:00-11:00 CT/ 11:00-12:00 ET
 - March 17th: Innovations in Fall and Fall-Injury Prevention and Reduction Strategies within Hospitals





Lecture 3: Innovations in Fall and Fall-Injury Prevention and Reduction Strategies within Hospitals

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APRN, CRRN, FAAN, FAANP, FARN
Nurse Consultant
March 17, 2020



Objectives

- Distinguish fall prevention from injury reduction.
- Examine evidence to support integration of technology to protect patients from injury and fast-track fall prevention.
- Apply technology integration to vulnerable patients aligned with population-based healthcare delivery.



Making Health Care Safer II 2013

- A PSP is defined as a type of **process or structure** whose application reduces the **probability** of adverse events resulting from exposure to the health care system across a range of diseases and procedures. **A PSP is an intervention!**

**2001 "Making Health Care Safer" Report*

- Chapter 19: Preventing In-Facility Falls
Included HIP Protectors



Evidence-based Falls Prevention in Critical Access Hospitals

- Focus: Intrinsic and Extrinsic Fall Risk Factors
- EBPs: Physiologic Changes (Toileting Regimens; Medication Review)
- Environmental: **Injury Prevention- Floor Mat**

Pearson, K., & Coburn, A. (2011) A policy brief: Maine Rural Health Research Center, Univ of So Maine:

https://www.researchgate.net/publication/261097465_Evidence-based_falls_prevention_in_Critical_Access_Hospitals



Aging Hospital Population: 2010

- 45% of the inpatient hospital population in the US was 65 years of age and older,
- among whom 19% were ages 75-84, and
- 9% were 85 years and older.

Levant, S., Chari, K., & DeFrances, C.J. (2015). Hospitalizations for patients age 85 and over in the United States, 2000-2010. NCHS Data Brief. No. 182. Available at: <http://www.cdc.gov/nchs/data/databriefs/db182.htm>.

The background of the slide features a blue gradient. On the left side, there are black silhouettes of a healthcare professional, likely a nurse, standing and assisting a patient who is seated in a wheelchair. The professional's hand is on the patient's shoulder, suggesting care and support. The overall tone is professional and focused on patient care.

Protect from Injury

Protecting Patients
from Harm:
Our Moral Imperative

5 Essentials to Protect from FRI



**Programmatic
Shift**

**Change in
assessment
structures: add
risk for FRI and
Hx of FRI**

**Change in
interventions:
Environmental
Redesign**

**Assess to
protective
interventions**

**Organizational
Support**

**You can protect patients from injurious
falls**



Protect from Injury

- Remember:
- Protection from Injury is
 - **separate and distinct**
 - from fall prevention



Injury Protection

- Floor Mats
- Hip Protectors
- Helmets
- Eliminate Sharp Edges, esp. bathrooms
- Safe Exit Sides



Creating Safe Environment

Reduce Blunt Force Trauma

Try to eliminate sharp edges

Decrease impact from falls:

Floor Mats and Hip Protectors

Ensure Safe Bathrooms! Why?

Bedside Mats – Fall Cushions



bedside fall cushion



Floor Mat



Floor Cushion



Tri-fold bedside mat



Roll-on bedside mat



Soft Fall bedside mat



Summary of Results

Feet First Fall from Bed

No Floor Mat fall over top of bedrails: ~40%
chance of severe head injury

No Floor Mat, low bed (No Bedrails): ~25%
chance of severe head injury

Low bed with a Floor Mat: ~ 1% chance of severe
head injury

Technology Resource Guide: Bedside Floor Mats



- Bedside floor mats protect patients from injuries associated with bed-related falls.
- Algorithm for Patient Selection: [VA National Falls Toolkit](#)

Floor Mat
Guide
Floor Mat
Examples

[Word](#)
[Excel](#)

[PDF](#)
[PDF](#)

Bedside Mats – Fall Cushions



bedside fall
cushion



Floor Mat



Floor Cushion



Tri-fold bedside mat



Roll-on bedside mat



Soft Fall bedside mat



Hip Protectors



Hip Protectors – Examples



New Technology: Tango Belt





Amazing!

- Protects hip during a fall
- Alerts Caregivers in the event of a fall
- Looks for changes in mobility
- <https://www.tangobelt.com/>

Quigley, P., Singhatat, W., & Tarbert, R. (2019)
Technology innovation to protect hips from fall-related fracture. *Physical Medicine and Rehabilitation*, 4(3): 1-4.



Patient Engaged Video Surveillance – Just Published!

- Greeley, A. M., Tanner, E.P., Mak, S., Begashaw, M.M., Miake-Lye, I.M., & Shekelle, P. (2020). Sitters as a patient safety strategy to reduce hospital falls. A systematic review. *Annals of Internal Medicine*. Feb. 3.
- Jan 1, 1970-Dec 4 2018
- Patient Engaged Video Surveillance



AvaSure

**Outcomes of Patient
Engaged Video
Surveillance on Falls, Other
Adverse Events, and
Workforce Safety**

TECHNOLOGY

MOBILE UNIT



PORTABLE WALL UNIT



PERMANENT CEILING UNIT



(DRY WALL)



(CEILING TILE)



TECHNOLOGY



MONITOR UP TO

16
PATIENTS



SERVER AND MONITORING STATION

EXPANDING THE SAFETY NET:

Integration of innovative technology



**MONITOR
OBSERVER**



**AVASYS
TECHNOLO
GY**



**RESPONDE
R UNIT
STAFF**



ENGAGING AND PROTECTING PATIENTS

- + Monitor Technicians
- + RN Enrollment
- + Individualized Care Management
- + Knowing Patients
- + Knowing Families
- + Monitor Technician and Unit Staff Interaction



NEW RESEARCH



Quigley, P., Votruba, L.,
Kaminski, J. (2019, May).
Outcomes of patient engaged
video surveillance on falls and
other adverse events.

Clinics in Geriatric Medicine.



NEW RESEARCH: Who was protected and how?

Age	18-64	65-84	85+	Total
Number of patients	5,173	6,393	3,455	15,021
Hours	359,584	395,392	187,506	942,482
Number of patient days	14,983	16,475	7,813	39,270
Length of surveillance hours/days	69.5/2.9	61.8/2.5	54.3/2.3	62.7/2.6

June 1, 2017 - May 31, 2018

n = 71 hospitals

PEVS: Patient Engaged Video Surveillance

Quigley, P.A., Votruba, L.J., & Kaminski (2019) Outcomes of patient engaged video surveillance on falls and other adverse events. *Clinics in Geriatric Medicine*.

Adverse events by age group

Table 3: Monitoring Staff Reported Adverse Events

Age	18-64	65-84	85+	Total
Total Falls	34	22	3	59
Unassisted Falls	26	16	2	44
Assisted Falls	8	6	1	15
Eloperments (from patient room)	14	7	6	27
Line, Tube or Drains Dislodged	40	48	18	106

June 1, 2017 - May 31, 2018
n = 71 hospitals

Numbers: Falls and other adverse events

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Eloperments (from patient room)	14	7	6	27
Line, Tube or Drains Dislodged	40	48	18	106
Total Adverse Events	122	99	30	251

June 1, 2017 - May 31, 2018
n = 71 hospitals

Adverse Event Rates

Table 4: Adverse Event Rates per 1,000 Days of Surveillance

Age	18-64	65-84	85+	Total
Total Falls per 1,000 Days of Surveillance	2.27	1.34	0.38	1.50
Assisted Falls per 1,000 Days of Surveillance	0.53	0.36	0.13	0.38
Unassisted Falls per 1,000 Days of Surveillance	1.74	0.97	0.26	1.12
Eloperments (from patient room) per 1,000 Days of Surveillance	0.93	0.42	0.77	0.69
Line, Tube or Drains Dislodged per 1,000 Days of Surveillance	2.67	2.91	2.30	2.70

June 1, 2017 - May 31, 2018

n = 71 hospitals

NEW RESEARCH: Discussion

points

The oldest and most vulnerable experienced the lowest rate of falls **0.38/1000 patient days**

Nurses responded to the oldest patients **3 seconds faster** than they responded to the younger patients

Patients who fell had **5** more verbal interventions per day and **0.83** more alarms per day than the non-falling group ($p=.0005$ and $p=.01$ respectively)

Staff response time for those who experienced an unassisted fall was **3.4 seconds slower** than the overall average stat alarm response time ($p=.07$)

CALL TO ACTION...

AONE GUIDING PRINCIPLES

MITIGATING VIOLENCE



Introduction

Workplace violence is an increasingly recognized workplace violence is generally defined as intimidation and other coercive behavior. It includes incidents such as verbal abuse, threats, and reported health care and social assistance assaults by persons. While workplace violence happens everywhere, the hospital emergency department is a high-risk area. According to a 2011 study by the Emergency Department Nurses Association, 70% of emergency nurses experienced physical violence during the past week. The actual rate of incident unreported, due in part to the perception that as

The American Organization of Nurse Executives discusses how incidents of violence are currently an environment where health care professional meetings was the development of guiding principles systematically addressing measures to decrease these resources is the hospital setting; address across the care continuum.

The guiding principles and priorities listed below patient and family violence in the work place.

Guiding Principles

1. Recognition that violence can and does happen
2. Healthy work environments promote positive outcomes
3. All aspects of violence (patient, family and staff) are preventable
4. A multidisciplinary team, including patients and families, is essential to address violence.
5. Everyone in the organization is accountable regardless of position or discipline.
6. When members of the health care team identify workplace violence, they have an obligation to address it.
7. Attention, commitment and collaboration of all levels are needed to create a culture shift.
8. Addressing workplace violence may increase patient safety.

AMERICAN NURSES ASSOCIATION POSITION STATEMENT ON INCIVILITY, BULLYING AND WORKPLACE VIOLENCE

Effective Date: July 22, 2015
Status: New Position Statement
Written By: Professional Issues Panel on Incivility, Bullying and Workplace Violence
Adopted By: ANA Board of Directors

I. PURPOSE

This statement articulates the American Nurses Association (ANA) position with regard to individual and shared roles and responsibilities of registered nurses (RNs) and employers to create and sustain a culture of respect, which is free of incivility, bullying, and workplace violence. RNs and employers across the health care continuum, including academia, have an ethical, moral, and legal responsibility to create a healthy and safe work environment for RNs and all members of the health care team, health care consumers, families, and communities.

II. STATEMENT OF ANA POSITION

ANA's Code of Ethics for Nurses with Interpretive Statements states that nurses are required to "create an ethical environment and culture of civility and kindness, treating colleagues, coworkers, employees, students, and others with dignity and respect" (ANA, 2015a, p. 4). Similarly, nurses must be afforded the same level of respect and dignity as others. Thus, the nursing profession will no longer tolerate violence of any kind from any source.

All RNs and employers in all settings, including practice, academia, and research, must collaborate to create a culture of respect that is free of incivility, bullying, and workplace violence. Evidence-based best practices must be implemented to prevent and mitigate incivility, bullying, and workplace violence; to promote the health, safety, and wellness of RNs; and to ensure optimal outcomes across the health care continuum.

This position statement, although written specifically for RNs and employers, is also relevant to other health care professionals and stakeholders who collaborate to create and sustain a safe and healthy interprofessional work environment. Stakeholders who have a relationship with the workforce also have a responsibility to address incivility, bullying, and workplace violence.

Guidelines for Preventing
workplace violence
for Healthcare
and Social Service
Workers



OSHA 3146-0001 2016

Sentinel Event Alert

A complimentary publication of The Joint Commission

Issue 59, April 17, 2018

Physical and verbal violence against health care workers

"I've been bitten, kicked, punched, pushed, pinched, shoved, scratched, and spat upon," says Lisa Terney, RN, of the Maryland Emergency Nurses Association. "I have been bullied and called very ugly names. I've had my life, the life of my unborn child, and of my other family members threatened, requiring security escort to my car."¹

Situations such as these describe some of the types of violence directed toward health care workers. Workplace violence is not merely the heinous, violent events that make the news; it is also the everyday occurrences, such as verbal abuse, that are often overlooked. While this Sentinel Event Alert focuses on physical and verbal violence, there is a whole spectrum of overlapping behaviors that undermine a culture of safety, addressed in Sentinel Event Alert issues 40 and 57.^{2,3} Those types of behaviors will not be addressed in this alert. The focus of this alert is to help your organization recognize and acknowledge workplace violence directed against health care workers from patients and visitors, better prepare staff to handle violence, and more effectively address the aftermath.

What is workplace violence?

The CDC National Institute for Occupational Safety and Health (NIOSH) defines workplace violence as "violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty."⁴ The U.S. Department of Labor defines workplace violence as an action (verbal, written, or physical aggression) which is intended to control or cause, or is capable of causing, death or serious bodily injury to oneself or others, or damage to property. Workplace violence includes abusive behavior toward authority, intimidating or harassing behavior, and threats.⁵

Each episode of violence or credible threat to health care workers warrants notification to leadership, to internal security and, as needed, to law enforcement, as well as the creation of an incident report, which can be used to analyze what happened and to inform actions that need to be taken to minimize risk in the future. Under The Joint Commission's Sentinel Event policy, rape, assault (leading to death, permanent harm, or severe temporary harm), or homicide of a patient, staff member, licensed independent practitioner, visitor, or vendor while on site at an organization is a sentinel event that warrants a comprehensive systematic analysis. While the policy does not include other forms of violence, it is up to every organization to specifically define acceptable and unacceptable behavior and the severity of harm that will trigger an investigation. The Centers for Disease Control and Prevention (CDC) National Institute for Occupational Safety and Health (NIOSH) defines workplace violence as "violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty."⁴ The U.S. Department of Labor defines workplace violence as an action (verbal, written, or physical aggression) which is intended to control or cause, or is capable of causing, death or serious bodily injury to oneself or others, or damage to property. Workplace violence includes abusive behavior toward authority, intimidating or harassing behavior, and threats.⁵

Published for Joint Commission accredited organizations and interested health care professionals, **Sentinel Event Alert** identifies specific types of sentinel and adverse events and high risk conditions, describes their common underlying causes, and recommends steps to reduce risk and prevent future occurrences.

Accredited organizations should consider information in a **Sentinel Event Alert** when designing or redesigning processes and consider implementing relevant suggestions contained in the alert or reasonable alternatives.

Please note this issue is appropriate staff within your organization. **Sentinel Event Alert** may be reprinted if credited to The Joint Commission. To receive by email, or to view past issues, visit www.jointcommission.org.





TJC SENTINEL EVENT ALERT, ISSUE 59

2. Recognizing that data come from several sources, capture, track and trend all reports of workplace violence – including verbal abuse and attempted assaults when no harm occurred.

- Gather this information from all hospital databases, including those used for OSHA, insurance, security, human resources, complaints, employee surveys, legal or risk management purposes, and from change of shift reports or huddles.
- Regularly distribute these workplace violence reports throughout the

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organization, including to the quality committee and up to the executive and governance levels.

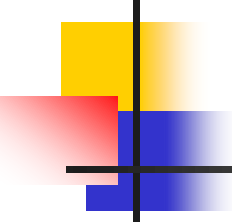
- Aggregate and report incidents to external organizations that maintain a centralized database. This can lead to identification of new hazards, trends, and potential strategies for solutions; these solutions can then be shared broadly.²⁷



NEW RESEARCH

Quigley, P., Votruba, L., Kaminski, J. (2019). Video surveillance and nursing workforce safety. *American Nurse Today*. December 8: 39-41.

Quigley, P., Votruba, L., Kaminski, J. (2019). The impact of patient engaged video surveillance on nursing workforce safety: Patient aggression / violence. *Journal of Nursing Care Quality*. Nov. 18. doi: 10.1097/NCQ.0000000000000450



ADVERSE ABUSE EVENTS FROM 2018

SAMPLE SIZE:

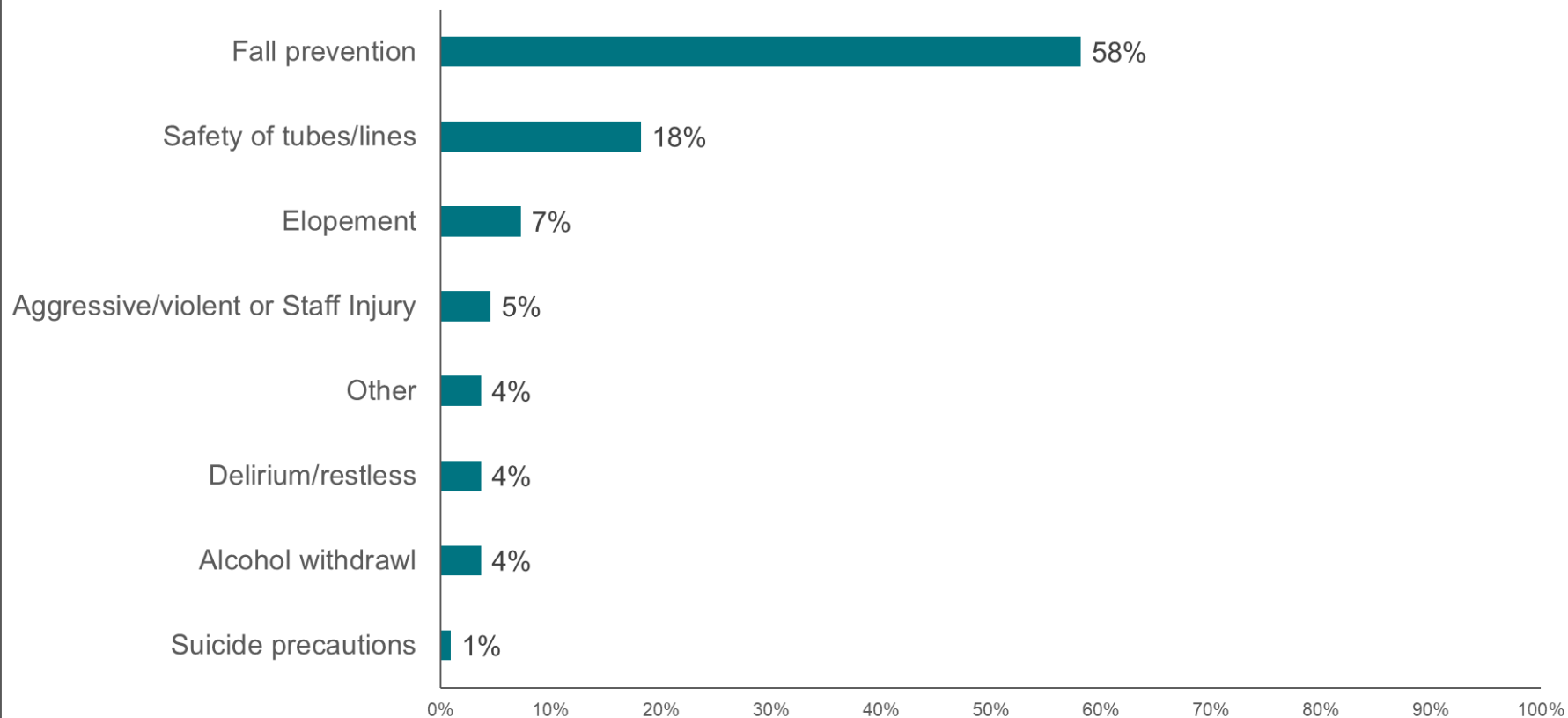
- + 176 hospitals
- + 78,748 patients
- + 204,588 monitored patient days

ABUSE EVENTS REPORTED:

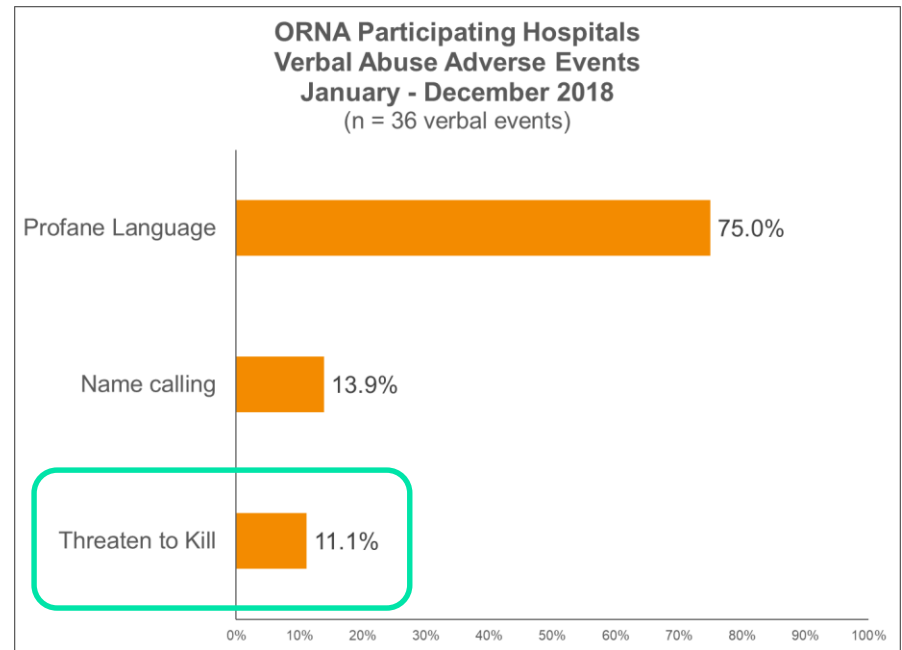
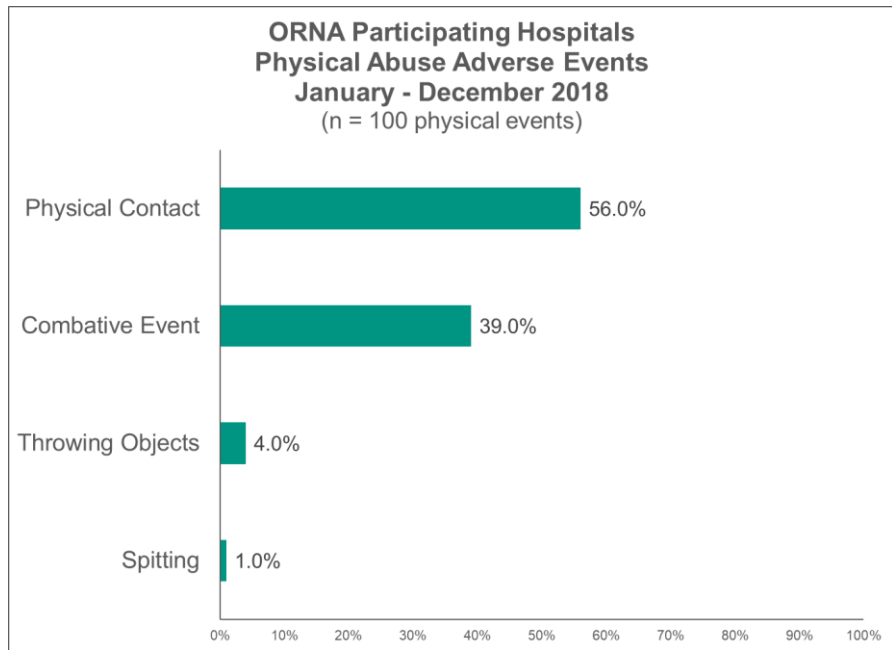
- + 136 abuse events
 - 100 physical
 - 36 verbal
- + 0.66/1000 monitored patient days

ORNA Participating Hospitals - Reason for Admission to AvaSys January - December 2018

(n = 110 patients with an Abusive Adverse Event)

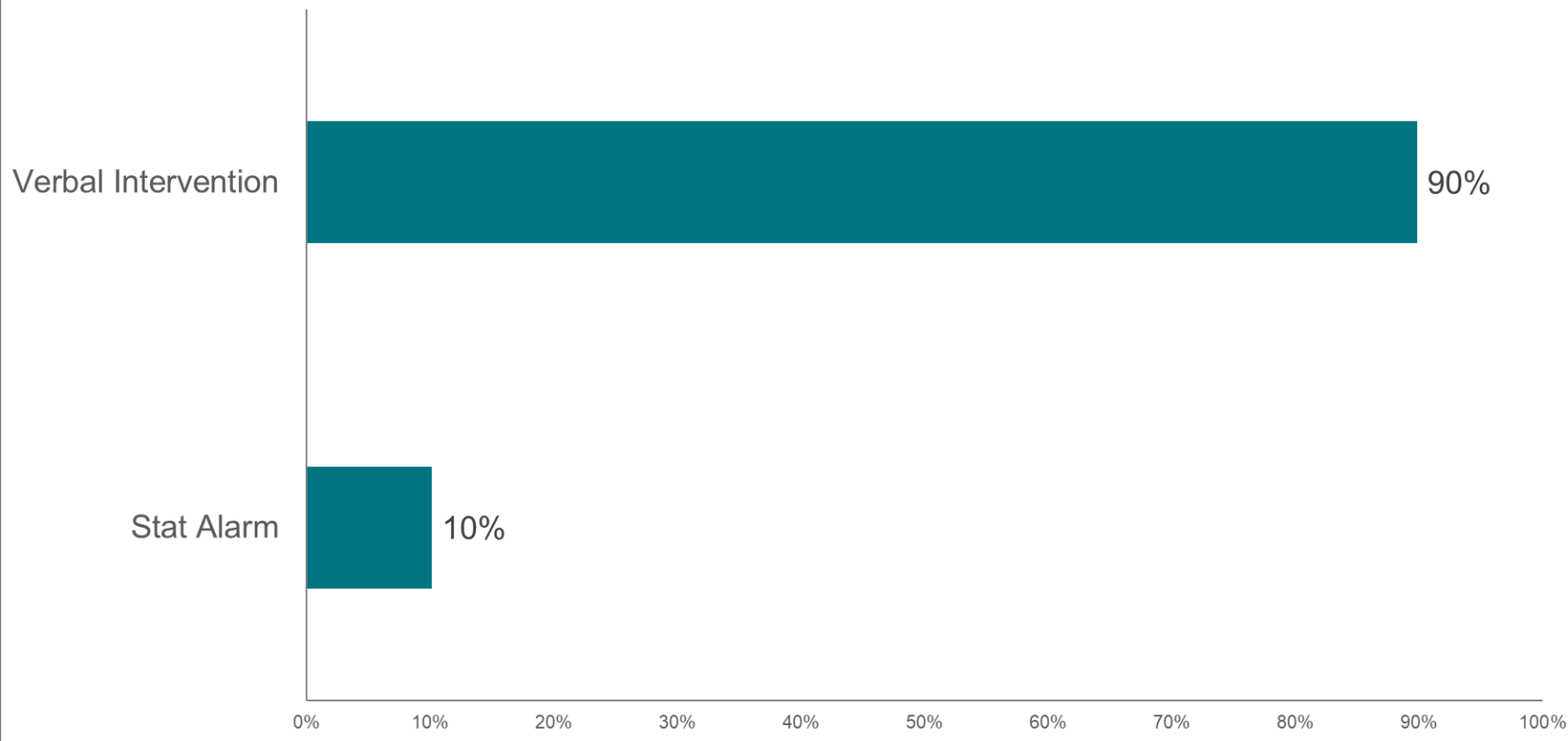


PHYSICAL VERSUS VERBAL ABUSE



ORNA Participating Hospitals - Adverse Events Prevented Interventions January - December 2018

(n = 5458 Abusive Events Prevented)





SUSTAINED OUTCOMES

- + Shift in Nursing Beliefs: Nursing culture can shift and trust and use new technology to improve patient safety and outcomes
- + Real-time Surveillance decreases noise, stimulation and alarms, and increases rest and sleep (no bed alarms)
- + Real-time Surveillance provides better focus for nursing practices as the observers are more fully present
- + More Falls are prevented within and beyond the bedroom, such as to the day room, the hallway
- + PEVS increases safety for patients and caregivers – the true safety net exists (no false alarms)

Reengineer Your Falls Program



- The best way to implement evidence-based practices is within the context of a well-designed program
- A well-designed program promotes **safe and reliable care**, promotes **vitality and teamwork**, is **patient-centered**, and all **processes are value-added**



The Context for Program Design

- “**Reliability** is the capability of a process, procedure, or health service to perform its intended function in the required time under existing conditions”
- **Vitality** is a supportive environment with effective care teams continually striving for excellence
- **Patient-centered care** honors the whole person and respects individual values and choices
- **Value-added care** is free of waste and promotes continuous flow



Tips to Integrate Protective Injury Reduction Interventions at the Point of Care.

Patient Care

- Injury Risk and History Assessment on Admission
- Injury Reduction Strategies
- Assess Your Patient
- Patient Education
- A, B, C, S Bundle

Environment of Care

- Assess environmental injury risk factors
- Assess interaction of patient and environment
- Guidelines for Footwear
- Mobility Aids in Room
- Integrate Technology



Thank you! We are
"Partners in Excellence"
Together We Achieve More!



Thank you!

Thank you to our Falls expert Patricia Quigley, PhD,
MPH, APRN, CRRN, FAAN, FAANP.

FAQ document will be sent to all registered
participants along with the session materials from
today.

If you have any questions please reach out to
your [IHA HIIN Team!](#)