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Quality Innovation Network - Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
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Taking Control of Adverse Events

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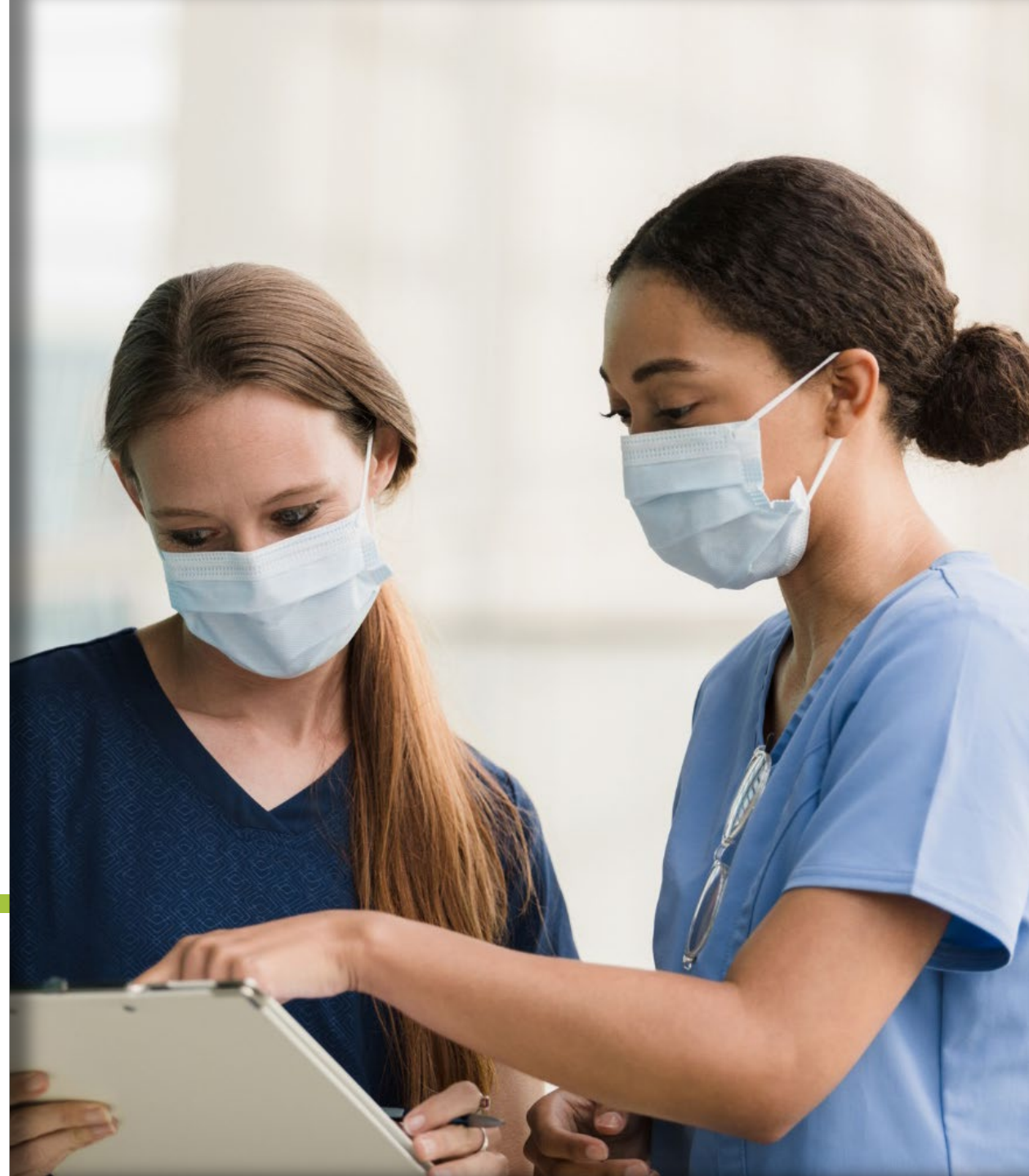

Agenda

- Highlight the correlation between Adverse Events and Hospital Events
- Explore the term Adverse Event
- Discuss using the QAPI Process to reduce hospital events
- Demonstrate the use of the Adverse Event tool using a resident fall as an example

Adverse Event = Patient Safety Event

- **Adverse Event:** An event in which care resulted in an undesirable clinical outcome – an outcome not caused by underlying disease – that prolonged the patient stay, caused permanent patient harm, required life-saving intervention, or contributed to death.
- **Patient Harm:** Harm to a patient as a result of medical care or in a health care setting, including the failure to provide needed care. Patient harm refers collectively to adverse events and temporary harm events.
- **All-Cause Harm:** Patient harm, regardless of preventability or cause. Office of Inspector General (OIG) captures all-cause harm in its adverse event reports.

2014 Wake Up Call

- **Adverse Events in SNFs: National Incidence among Medicare Beneficiaries, Department of Health and Human Services, Office of Inspector General report OEI-06-11-00370**
- In February 2014, the Office of Inspector General (OIG) released its report *Adverse Events in SNFs: National Incidence among Medicare Beneficiaries*. It reported that one in three skilled nursing facility (SNF) beneficiaries were harmed by an adverse event or temporary harm event within the **first 35** days of their skilled stay. The OIG determined that nearly 60 percent of those events were preventable.

http://oig.hhs.gov/oei/reports/oei-06-11-00370.pdf

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Initiative to Reduce Avoidable Hospitalizations in Nursing Home Residents

- CMS initiative to introduce clinical interventions and measure their impact
- Residents treated on-site were compared to residents treated in the hospital for one of six conditions.
- Residents treated initially in the hospital were about twice as likely to be subsequently treated in-hospital and more than twice as likely to die (17.0% vs 7.8%) compared to those initially treated in place.
- The results indicated a possible benefit to treating residents on-site.

OIG Top Diagnoses for Hospitalizations from Nursing Homes

- Sepsis
- Chronic obstructive pulmonary disease (COPD)/asthma
- Pneumonia
- Congestive heart failure (CHF)
- Urinary tract infection (UTI)
- Dehydration

What the Data Showed

Potentially Preventable Events Related to Resident Care

1. Falls, abrasions/skin tears, or other trauma related to care
2. Electrolyte imbalance (including dehydration and acute kidney injury/insufficiency) associated with inadequate fluid maintenance
3. Thromboembolic events related to inadequate resident monitoring and provision of care
4. Respiratory distress related to inadequate monitoring and provision of tracheostomy/ventilator care
5. Exacerbations of pre-existing conditions related to inadequate or omitted care
6. Feeding tube complications (aspiration, leakage, displacement) related to inadequate monitoring and provision of care
7. In-house acquired/worsened stage pressure ulcers, and unstageable/ suspected deep tissue injuries
8. Elopement

https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/potentially-preventable-adverse-events.pdf

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What the Data Showed

Potentially Preventable Events Related to Medication

1. Change in mental status/delirium related to use of opiates and psychotropic medication
2. Hypoglycemia related to use of antidiabetic medication
3. Ketoacidosis related to use of antidiabetic medication
4. Bleeding related to use of antithrombotic medication
5. Thromboembolism related to use of antithrombotic medication
6. Prolonged constipation/ileus/impaction related to use of opiates
7. Electrolyte imbalance (including dehydration and acute kidney injury) related to use of diuretic medication
8. Drug toxicities including: acetaminophen, digoxin; levothyroxine; ACE inhibitors; phenytoin; lithium; valproic acid; antibiotics
9. Altered cardiac output related to use of cardiac/blood pressure medication

https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/potentially-preventable-adverse-events.pdf

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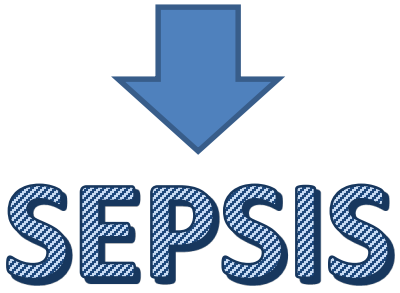
What the Data Showed

Potentially Preventable Events Related to Infections

1. Respiratory infections a. Pneumonia b. Influenza
2. Skin and wound infections a. Surgical Site Infections (SSIs) b. Soft tissue and non-surgical wound infections
3. Urinary tract infections (UTIs) a. Catheter associated UTIs b. UTIs
4. Infectious diarrhea a. Clostridium difficile b. Norovirus



https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/potentially-preventable-adverse-events.pdf

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A Culture of Patient Safety

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We Have the Tools

- Patient Safety Campaign
  - Promote your efforts
- Ongoing Performance Improvement Project
  - Consider non employee members
- Quality Assurance and Performance Improvement (QAPI) Process
  - The rule not the exception
- Celebrate the Near Miss
  - An every day occurrence

Adverse Event QAPI Review: Hospital Event

QUALITY ASSURANCE & PERFORMANCE IMPROVEMENT

Date: _____ **Event Type:** ☐ Rehospitalization ☐ Emergency Room Without Admission **Most Recent Facility Admission Date:** _____

Category: ☐ Fall; ☐ Infection; ☐ Chronic Heart Failure (CHF); ☐ Chronic Obstructive Pulmonary Disease (COPD); ☐ Other _____

Event Determination: ☐ Potentially Avoidable ☐ Unavoidable

Event Description	
Interventions in Place at Time of Event	
Root Cause Analysis (RCA)	
New Interventions: Plan, Do, Study, Act (PDSA)	

Monitoring

Date	Date	Date	Date	Date	Date	Date	Date	Date

Revision Required	Description	Date

Date Resolved	Summary

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https://www.qualityinsights.org/qin/resources#adverse-event-review-hospitalizations-fillable

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Adverse Event QAPI Review: Hospital Event

QUALITY ASSURANCE & PERFORMANCE IMPROVEMENT

Date: 2-1-2024_____ **Event Type:** ☒ Rehospitalization; ☐ Emergency Room Without Admission **Most Recent Facility Admission Date:1-14-2024** _____

Category: ☒ Fall; ☐ Infection; ☐ Chronic Heart Failure (CHF); ☐ Chronic Obstructive Pulmonary Disease (COPD); ☐ Other _____

Event Determination: ☒ Potentially Avoidable ☐ Unavoidable

- Within 30 Days of Admission
- Rehospitalization
- Fall
- Potentially Avoidable

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Event Description	**S**- Resident fell while walking to the bathroom approximately 2 hours after returning from scheduled therapy. **B**- She has been on skilled PT/OT for 14 days post right hip replacement and is transitioning from the use of a wheeled walker to a quad cane. Anticipated discharge plan is to return home prior to grand daughters wedding on Feb 26th. **A**- Found lying on right side mid way between wheelchair and bathroom. Resident is continent of bowel an bladder and states she was walking to the bathroom at time of event. Vitals are at base line, but complaining of pain in right hip and leg. Walker noted to be closed near chair and quad cane lying on floor next to resident. White tennis shoes in use and glasses on. Denies hitting head. Neuro check within normal limits Quad cane not ordered for independent use at time of fall. Nursing staff in room to deliver lunch 45 minutes prior to fall **R**- Send to emergency room per md orders for evaluation of R hip.
Interventions in Place at Time of Event	1. Wheeled walker for ambulation, may ambulate with walker independently in room. 2. White tennis shoes for ambulation
Root Cause Analysis (RCA)	**Therapy**-1. Education not given to resident to continue to use wheeled walker until quad care transition complete. 2. Walker not appropriated placed upon return to room from therapy 3. Quad cane left at chair side and not returned to therapy department **Resident**- 1. Felt confident using quad cane and did not wish to wait for nursing staff to provide wheeled walker to use the bathroom
New Interventions: Plan, Do, Study, Act (PDSA)	**System** 1. Equipment log in/out initiated in therapy department 2. Therapy to nursing hand off initiated upon return to the nursing unit to ensure ordered equipment is avalible and nursing aware of any changes to functional status

- Event Description: Use SBAR
- Interventions at time of event: what is care planned vs what is happening
- Root Cause Analysis: This is your summary, 5 Whys or Fishbone will determine this
- New Interventions: May be system changes, person specific or both

Monitoring

Date	Date	Date	Date	Date	Date	Date	Date	Date
2-07-2024	2-14-2024	2-21-2024	2-28-2024	3-28-2024	4-30-2024	5-30-2024	6-30-2024	7-30-2024

Revision Required	Description	Date
2-21-2024	Decision to conduct therapy to nursing hand off in resident room made. This will allow the resident to be reminded of current orders while ensuring equipment is present and ready for use. Need for revision discovered after "near miss" event when separate resident found ambulating without ordered walker. No adverse event occurred, however resident stated she felt she was able to do this because she had been doing well in therapy.	2-24-2024

Date Resolved 7-30-2024	**Summary**- Staff in both therapy and nursing have adopted the new interventions and no further events have been linked to this system after revision education completed on 2-24-2024. Source resident returned to facility, completed therapy and had a successful discharge to home on 3-9-2024.

- **Monitoring**- dates are weekly times 4 and monthly times 5 for a total of 6 months
  - These time frames may be shorter when assessing person centered new intervention vs system change intervention
- **Revision**- Remember the values of capturing near miss events and making adjustments. This is part of the PDSA process.
  - Remember to look for un intended change related to new interventions
- **Date Resolved-** This example is capturing a system change, but remember to tie the source resident back to the conclusion.
  - This form should be attached to the incident report and root cause analysis as part of the event review.

Questions?

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