

# Network of Patient Safety Databases Falls Chartbook, 2023



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# NETWORK OF PATIENT SAFETY DATABASES: FALLS CHARTBOOK, 2023

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HEALTH AND HUMAN SERVICES  
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AHRQ Publication No. 23-0090  
September 2023  
<https://www.ahrq.gov/npsd/data/chartbook/index.html>



## ACKNOWLEDGMENTS

The Network of Patient Safety Databases Falls Chartbook, 2023 and accompanying online dashboards are the product of voluntary participation in the Agency for Healthcare Research and Quality (AHRQ) Patient Safety Organization (PSO) program by providers and PSOs nationwide. Many individual providers, hospital facilities, and PSOs collaborated to collect and submit the data used in this report. Without the efforts of these dedicated individuals and organizations, the AHRQ and Network of Patient Safety Databases (NPSD) team would not have been able to produce this report.

Specifically, we thank:

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**Data Support Contractors:** Cormac Corporation and Mathematica Inc.

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## **DATA LIMITATIONS:**

- The Network of Patient Safety Databases (NPSD) does not contain a representative sample of patient safety concerns and cannot be used to calculate the actual incidence or prevalence of patient safety events. The reporting of patient safety concerns to the NPSD is voluntary as is the reporting to PSOs by providers.
- The NPSD is a summary of the elements in Hospital Common Formats Event Reports for specific types of patient safety concerns, that have been submitted voluntarily by Agency for Healthcare Research and Quality (AHRQ)-listed Patient Safety Organizations (PSOs).
- Descriptive analyses of patient safety concerns in the NPSD highlight potential issues worthy of attention and provide a snapshot of safety issues, but on their own cannot be used to establish causal relationships.
- While it is believed that the Common Formats for Event Reporting-Hospitals (CFER-H) are primarily used as intended to capture patient safety events in hospital settings, providers may also have used the CFER-H to report data from other settings. As only data submitted in the CFER-H are included in the NPSD dashboards and chartbooks, they are characterized as reflecting data from the hospital setting even though they may originate from other settings.

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## INTRODUCTION TO THE NPSD

The Network of Patient Safety Databases (NPSD) provides an interactive, evidence-based management resource for healthcare providers, Patient Safety Organizations (PSOs), and others. The U.S. Department of Health & Human Services was authorized to create the NPSD by the [Patient Safety and Quality Improvement Act of 2005 \(PSQIA\)](#), and it is implemented by the Agency for Healthcare Research and Quality (AHRQ), the lead federal agency for patient safety. The goal of the legislation is to create a national learning system that promotes using non-identifiable data about patient safety concerns to prevent patient harm and improve patient safety. Because the NPSD contains a large volume of standardized, non-identifiable patient safety data from across the country, it serves as a unique and valuable resource for research and learning.

AHRQ developed the Common Formats, a standardized reporting format using common language and definitions, to collect information about patient safety events and concerns from across the nation. PSOs collect voluntary reports from healthcare providers and submit data to the PSO Privacy Protection Center (PSOPPC). The PSOPPC ensures the Common Formats data are non-identifiable before transmittal to the NPSD for aggregation and analysis. Because the NPSD contains a large volume of standardized, non-identifiable patient safety data from multiple sources across the country, it is a unique and valuable resource for research and learning about how to improve patient safety and prevent patient harm. These data can then be used to identify trends and patterns in patient safety concerns, and to provide insight in how to mitigate patient safety risks and reduce harm across healthcare settings nationally. Each provider and PSO that participates by contributing data advances knowledge about patient safety.

## Data and Analysis Available at the NPSD

Submission of patient safety event data by providers to PSOs and PSOs to the NPSD is completely voluntary. The NPSD data are not statistically comparable to clinical quality measures. For example, the data from clinical quality measures reported by agencies such as the Centers for Medicare and Medicaid Services (CMS) and the Centers for Disease Control and Prevention (CDC), which may focus on all eligible members of a population, can establish denominators, and calculate rates of occurrence. Voluntary patient safety reporting systems are, however, marked by variability in the rate and consistency of reporting, and denominators are typically unavailable. Hence, the event report data submitted to the NPSD cannot be used to calculate the actual incidence or prevalence of patient safety events. Altogether, the NPSD Chartbooks and Dashboards comprise three sections covering different types of NPSD analyses: Data Submission Summary, Generic Patient Safety Concerns, and Event-Specific Modules. Details on the different types of analyses available in the NPSD can be found in the Generic Patient Safety Concerns Chartbook.

## Standalone Analysis of Falls

The Common Formats include event-specific modules pertaining to nine patient safety event types that represent the majority of reported preventable injuries that happen in hospitals. Event-specific modules capture information that goes beyond generic data and is related to relevant



patient outcomes or processes of care in hospitals. Event-specific modules are employed in addition to, not in place of, the Generic Patient Safety Concerns module. In that spirit, moving forward NPSD Chartbooks will separate event-specific analyses from analyses of Generic Patient Safety Concerns to allow the reader to focus on outcomes and processes of care that are relevant to specific events.

This Network of Patient Safety Databases: Falls Chartbook, 2023 (NPSD Fall Chartbook), and accompanying online Dashboards, represent a comprehensive look at all falls submitted to the PSOPPC in CFER-H V1.2 from June 26, 2014 through December 31, 2022. This first standalone Chartbook for Fall Events and its accompanying Dashboards merge the previously published Fall events module with the 2022 Supplemental Analyses to provide a closer examination of falls, enhance the ability to identify patterns in patient safety concerns, and provide insights on how to mitigate patient safety risks and reduce harm nationally. This Chartbook builds on the foundation of the detailed analyses from 2022, including both previously unpublished findings and deeper context about patient falls, utilizing the NPSD’s large volume of standardized, non-identifiable data from multiple PSOs across the country.

The *data elements* included in this Chartbook are similar to those previously published as part of the larger NPSD Patient Safety Chartbooks, however, the *analyses* differ substantially. Previous analyses provided descriptive snapshots that are useful for quick reference. While the data elements and analytic techniques, namely Frequent Pattern Mining, that were published in 2022 are still used, this Chartbook provides stratified analyses to account for the intersection of multiple, clinically relevant patient characteristics. The figures in this Chartbook present a sequential, data-driven narrative based on the logical structure of the Common Formats.

## NPSD Chartbook Text Formatting

The text of the NPSD Chartbook has been formatted to assist readers in recognizing when the discussion relates to a Common Formats Event Type, Data Element, and Answer Value. Event Types represent the distinct modules of the CFER-H (e.g., *Fall*). Data Elements (abbreviated DE) refer to the concepts reported in the CFER-H and are captured through individual questions asked of those who report each patient safety concern (e.g., “What type of injury was sustained?”). Answer Values represent the unique response options for each Data Element. For example, DE204: “What type of injury was sustained?” has four Answer Values: *Fracture; Laceration requiring sutures; Skin tear, avulsion, hematoma, or significant bruising; and Other.*

Each of these types of information contained in the CFER-H is formatted differently in the text to clarify the context of the information for readers. The following formatting is used throughout the remainder of this document:

- Event Types: All key words have first-letter capitalization, and are italicized (e.g., *Fall, Fall Incident*)
- Data Elements: All letters are capitalized, and bold-faced (e.g., **DATA ELEMENT ASSOCIATED WITH EVENT TYPE**)
- Answer Values: First letter of the first word is capitalized, and all letters are italicized (e.g., *Moderate harm*)



## FALLS

The *Fall* event type in CFER-H V1.2 is designed to collect information on *Incidents* involving a fall. The *Fall* (**DATA ELEMENT ASSOCIATED WITH EVENT TYPE**) collects data regarding the processes of care related to the fall, as well as the specific patient outcome of a fall and does not require that a process failure be identified.

Information related to processes of care include: **FALL ASSISTANCE**, whether the patient was **ON MEDICATION KNOWN TO INCREASE FALL RISK** at the time of fall, and **PATIENT ACTIVITY PRIOR TO THE FALL**. Two types of information about the patient's outcome are collected; the AHRQ Harm Scale, which captures *Residual harm* to the patient after any intervention to reduce harm, and separate **DATA ELEMENTS** unique to the *Fall* regarding the presence of and specific type of physical injury sustained as a result of the fall. While the AHRQ Harm Scale provides the following possible responses: *No harm, Mild harm, Moderate harm, Severe harm, Death, or Unknown harm*, due to small counts across the categories of *Moderate to Severe harm*, this Chartbook displays falls where the **EXTENT OF HARM** is categorized as *No harm, Harm* (i.e., *Mild harm, Moderate harm, Severe harm, or Death*), or *Unknown harm*. The extent of overlap between the degree of residual harm and the severity of injury from a fall is unknown due to variability in the way that data submitters may have interpreted the residual harm question in CFER-H V1.2.

In addition to data corresponding to patient outcomes and processes of care that are collected in CFER-H V1.2, the figures below also incorporate data on **PATIENT AGE** and **RISK FACTORS**.

The figures below present summary information from the *Fall* reports received by the PSOPPC that met inclusion and exclusion criteria for specific analyses. Therefore, percentages displayed in these figures are expected to differ from those presented in the Data Submission Summary and Generic Patient Safety Concerns dashboards and Chartbook. The definition of a fall event is “a sudden, unintended, uncontrolled, downward displacement of a patient's body to the ground or other object (e.g., onto a bed, chair, or bedside mat).” The scope of reporting for the CFER-H V1.2 *Fall* includes assisted falls and falls not know to be assisted and excludes:

- A fall resulting from a purposeful action or violent blow (e.g., a patient pushes another patient)
- Near fall – loss of balance that does not result in a fall.

The data presented below includes all falls in CFER-H V1.2, excluding the conditions above, that were submitted to the PSOPPC from June 26, 2014 through December 31, 2022. **INITIAL REPORT DATES** range from April 24, 2008 through December 24, 2022.

Finally, as noted above, the observations presented here are based on voluntary data submissions using the Common Formats for Hospitals and, therefore, are not necessarily representative of all patient settings.

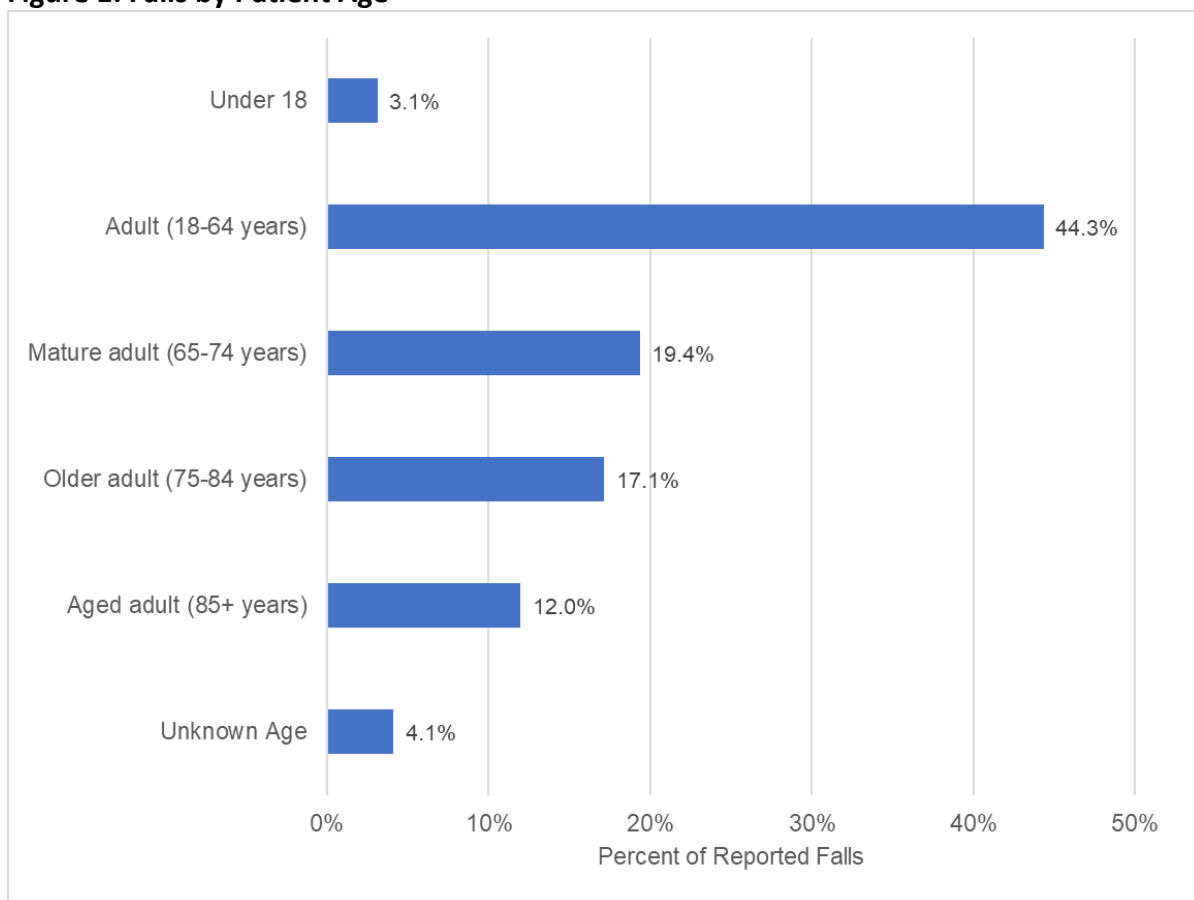
## Falls by Patient Age

This figure displays reports of *Falls* by **PATIENT AGE** across the following age groups: *Under 18 (>28 days-17 years)*, *Adult (18-64 years)*, *Mature Adult (65-74 years)*, *Older adult (75-84 years)*, and *Aged adult (85+ years)*.

Among *Fall Incidents*, the majority of falls were experienced by adults aged 18-64 years (44.3%; 47,131 / 243,449) with frequency decreasing across increasing patient age groups. Patients under 18 made up only 3.1% (7,564 / 243,449) of reported falls. **PATIENT AGE** was unknown for 4.1% of reported falls (9,971 / 243,449).

Important information is provided in the Technical Notes below.

**Figure 1: Falls by Patient Age**



Note: Counts and percentages were taken from falls through December 31, 2022. N=243,449. Percentages may not sum to 100% due to rounding.

### Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE 45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult

(65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.

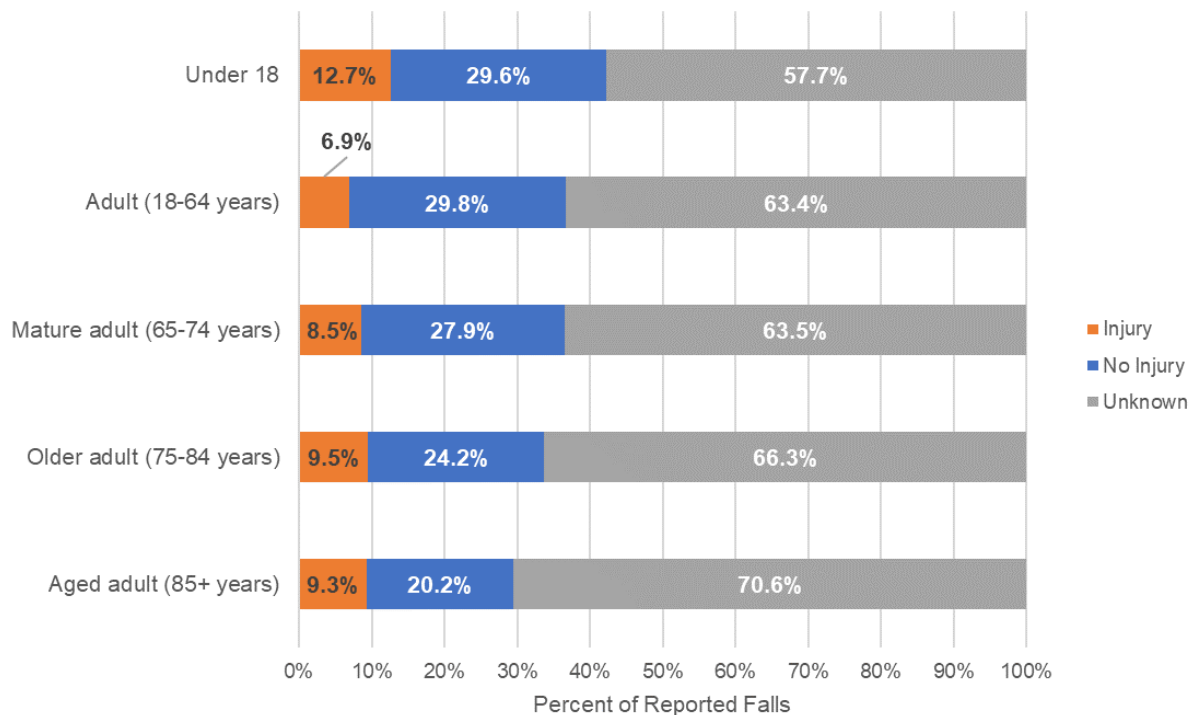
### Injury by Patient Age

This figure presents the distribution of whether or not patients experienced **INJURY AS RESULT OF FALL** by **PATIENT AGE**. Injuries were divided into three groups: *No Injury* where the incident did not result in physical injury, *Injury* where the patient fall resulted in physical injury, and *Unknown* where presence of physical injury could not be determined.

Across all age groups, the presence of injury as a result of the fall was *Unknown* or could not be determined for the majority of *Fall Incidents*. The percentage of falls where presence of physical injury could not be determined increased across age groups, ranging from 57.7% (4,367 / 7,564) among patients *Under 18* to 70.6% (20,536 / 29,120) among *Aged adults (85+ years)*. While patients *Under 18* made up only 3.1% of all reported falls (see above, Falls by Age) they had the highest rates of *Injury* reported (12.7; 957 / 7,564).

Important information is provided in the Technical Notes below.

**Figure 2: Presence of Injury as a Result of Fall by Patient Age**



Note: Counts and percentages taken from falls through December 31, 2022 where **PATIENT AGE** was reported. N=233,478. Percentages may not sum to 100% due to rounding.

## Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- **INJURY AS RESULT OF FALL** in the Fall module is captured in DE201 in response to the question: “Did the patient sustain a physical injury as a result of the fall?” For this analysis, reported falls where no data was provided in response to DE201 are presented as *Unknown*

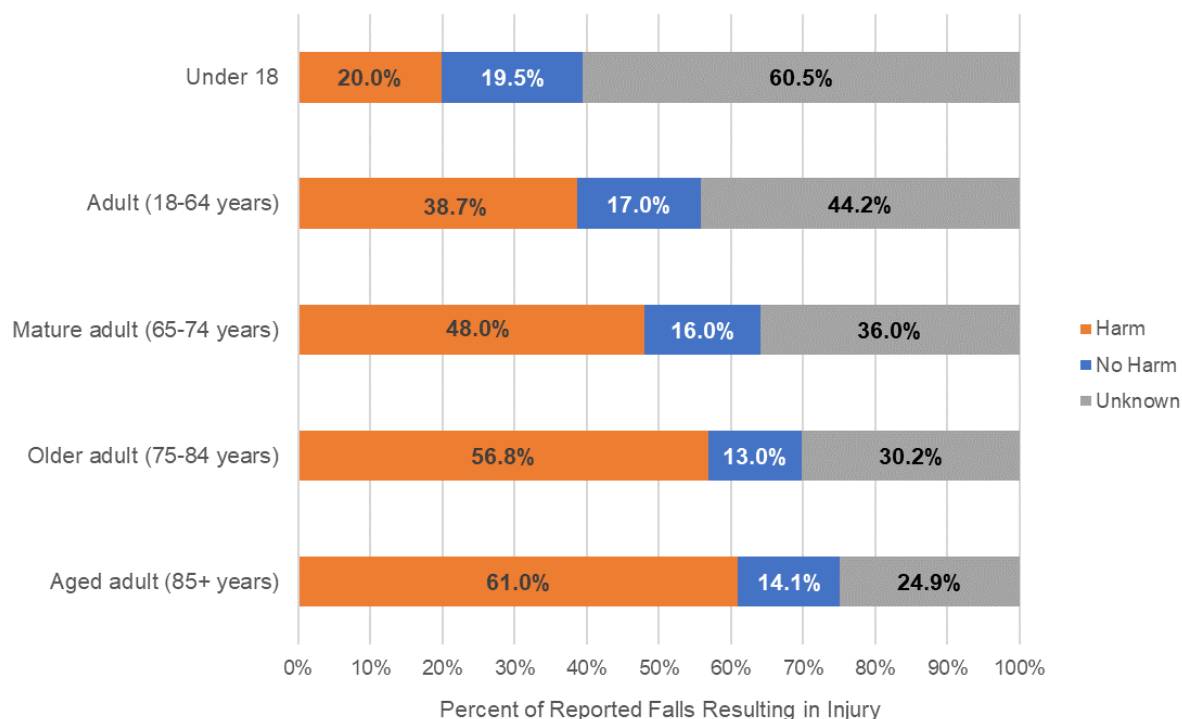
### Residual Harm from Injury by Patient Age

This figure presents the distribution of **RESIDUAL HARM** among patients who experienced **INJURY AS RESULT OF FALL** by **PATIENT AGE**. Residual harm is the extent of harm to the patient after discovery of the incident and after any attempts to minimize adverse consequences. As above, injuries were divided into three groups: *No Injury* where the incident did not result in physical injury, *Injury* where the patient fall resulted in physical injury, and *Unknown* where presence of physical injury could not be determined.

Across all age groups, the rate of injuries resulting in *No residual harm* was somewhat similar, ranging from 19.5% (187 / 957) among patients *Under 18* to 13.0% (515 / 3,959) among *Older adults (75-84 years)*. However, the rate of injuries resulting in *Residual harm* increased with age from 20.0% (191 / 957) among patients *Under 18* to 61.0% (1,650 / 2,705) among *Aged adults (85+ years)*. Conversely, the rate of injuries where harm to the patient was *Unknown* decreased substantially across age groups from 60.5% (579 / 957) among patients *Under 18* to 24.9% (673 / 2,705) among *Aged adults (85+ years)*.

Important information is provided in the Technical Notes below.

**Figure 3: Residual Harm from Injury by Patient Age**



Note: Counts and percentages taken from falls that resulted in *Injury* to patients through December 31, 2022 where **PATIENT AGE** was reported. N=19,064. Percentages may not sum to 100% due to rounding.

### Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- **INJURY AS RESULT OF FALL** in the Fall module is captured in DE201 in response to the question: “Did the patient sustain a physical injury as a result of the fall?”
- **RESIDUAL HARM** or **EXTENT OF HARM** is indicated by DE55 in response to the question “After any intervention to reduce harm, what was the degree of residual harm to the patient from the incident (and subsequent intervention)?” For this figure, all Incident reports with **EXTENT OF HARM** reported are displayed as either No harm, Harm (i.e., *Mild harm, Moderate harm, Severe harm, or Death*), or Unknown due to small counts across the categories of *Moderate* to *Severe harm*. Additionally, the extent of overlap between the degree of residual harm and the severity of injury from a fall is unknown due to variability in the way that data submitters may have interpreted the residual harm question in CFER-H V1.2.

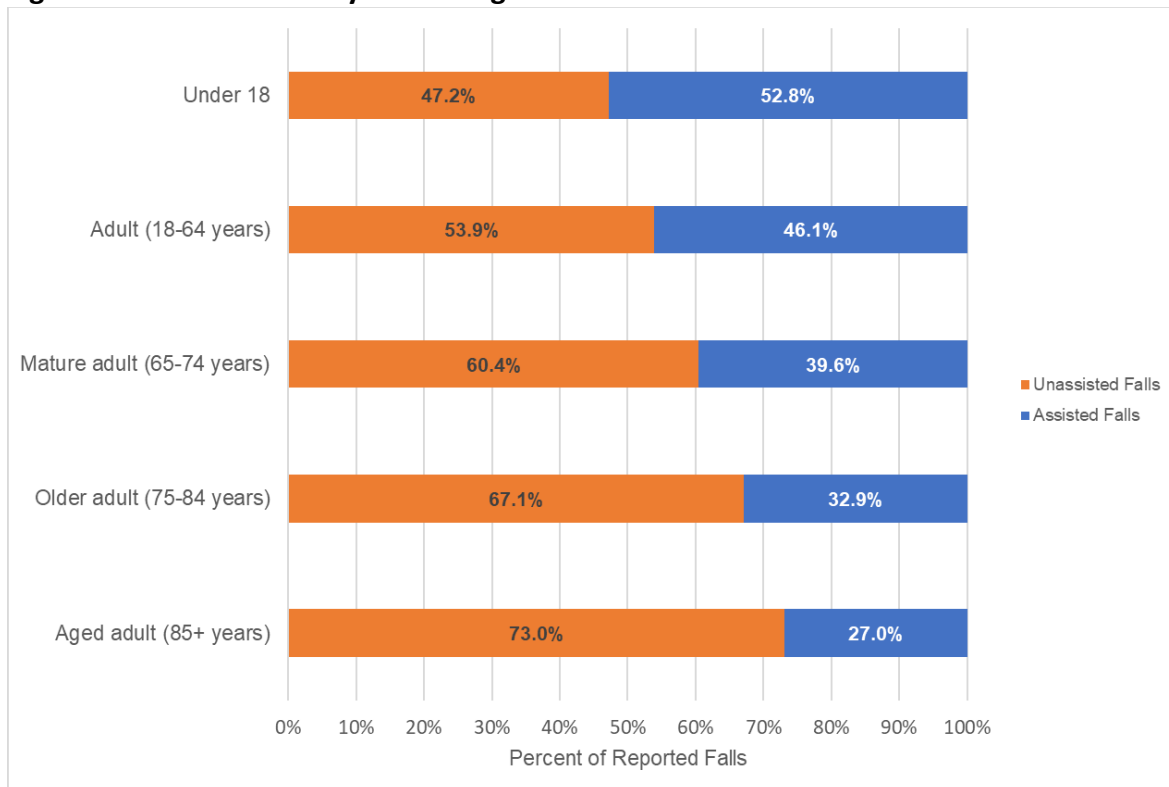
## Fall Assistance by Patient Age

This figure presents the distribution of fall assistance for patients experiencing an **UNASSISTED OR ASSISTED FALL** by **PATIENT AGE**. An assisted fall is defined as “when patient begins to fall and is assisted to the ground by another person.” Falls were divided into two groups: *Falls known to have been assisted* and *Falls considered unassisted*. Note that for this visualization, *Falls considered unassisted* includes both *Falls known to be unassisted* and falls where it was *Unknown* to the reporter whether assistance was provided or not.

Across all age groups, there was a greater proportion of *Falls considered unassisted* (61,436 / 103,983; 59.1%) than *Falls known to be assisted* (42,547 / 103,983; 40.9%). The proportion of *Falls considered unassisted* increased with age ranging from 47.2% (1,737 / 3,681) of falls among patients *Under 18* to 73.0% (9,151 / 12,531) of falls among *Aged adults (85+ years)*.

Important information is provided in the Technical Notes below.

**Figure 4: Fall Assistance by Patient Age**



Note: Counts and percentages taken from falls through December 31, 2022 where non-missing information was available for UNASSISTED OR ASSISTED FALL and PATIENT AGE was reported. N=100,537. Percentages may not sum to 100% due to rounding.

## Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- **UNASSISTED OR ASSISTED FALL** in the Fall module is captured in DE192 in response to the question: “Was the fall unassisted or assisted?” Here, an unassisted fall is defined as a fall not known to be assisted and includes both *Falls known to be unassisted* and falls where it was *Unknown* to the reporter whether assistance was provided or not.

### Presence of Injury by Fall Assistance and Patient Age

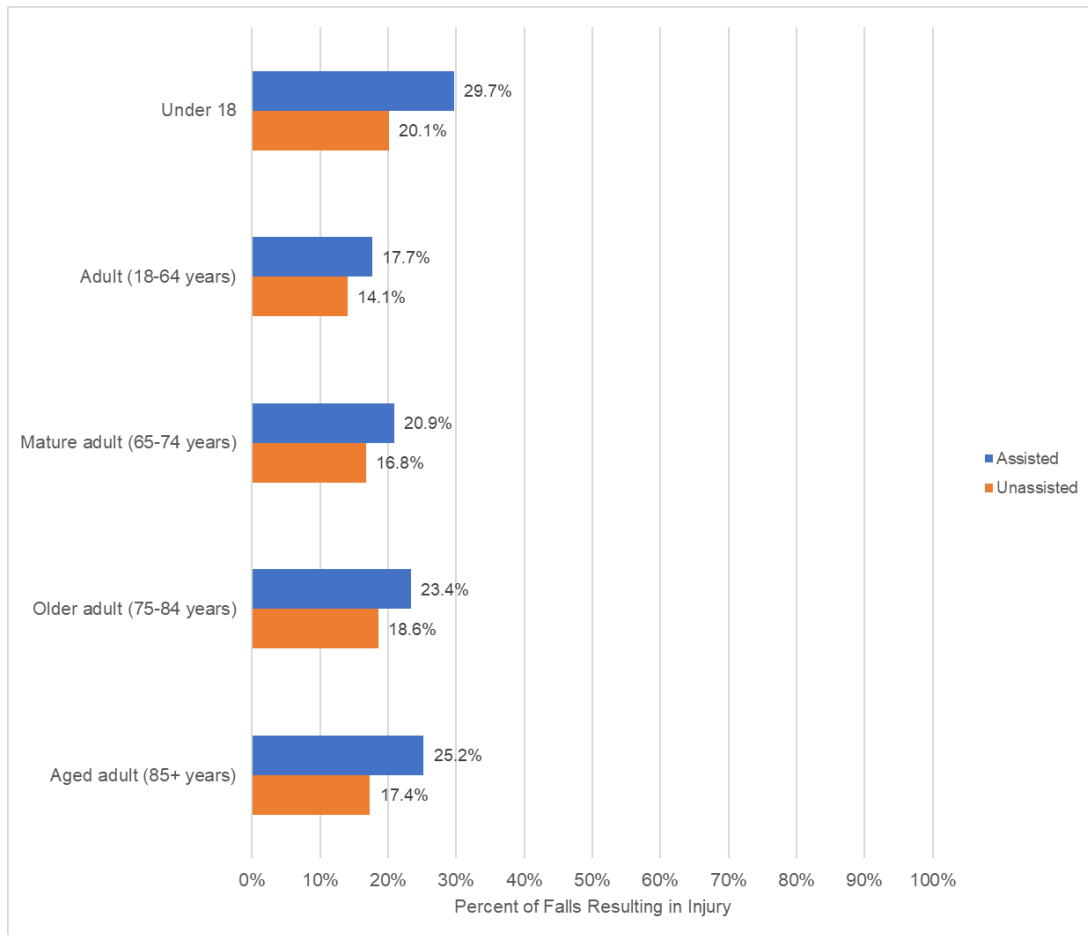
This figure presents the distribution of falls where patients experienced **INJURY AS RESULT OF FALL** for **UNASSISTED OR ASSISTED FALLS** by **PATIENT AGE**.

Across all age groups, rates of *Injury* were consistently higher among patients whose falls were *Assisted* than *Unassisted*. This difference was most striking among patients *Under 18* and *Aged adults (85+ years)* where the rates of *Injury* for *Assisted falls* were 47.6% and 45.3% higher than the rates observed for *Unassisted falls*. Among patients *Under 18*, 29.7% (578 / 1,944) of *Assisted falls* resulted in injury, compared to 20.1% (350 / 1,737) of *Unassisted falls*. Among *Aged adults (85+ years)*, 25.2% (853 / 3,380) of *Assisted falls* resulted in injury, compared to 17.4% (1,589 / 9,151) of *Unassisted falls*.

Important information is provided in the Technical Notes below.

### Figure 5: Presence of Injury by Fall Assistance and Patient Age





Note: Counts and percentages taken from falls through December 31, 2022 where non-missing information was available for UNASSISTED OR ASSISTED FALL and PATIENT AGE was reported. N=103,537.

### Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE 45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- **INJURY AS RESULT OF FALL** in the Fall module is captured in DE201 in response to the question: “Did the patient sustain a physical injury as a result of the fall?”
- **UNASSISTED OR ASSISTED FALL** in the Fall module is captured in DE192 in response to the question: “Was the fall unassisted or assisted?” Falls considered unassisted includes both *Falls known to be unassisted* and falls where the reporter responded *Unknown* to DE192. Here, an unassisted fall is defined as a fall not known to be assisted and includes both *Falls known to be unassisted* and falls where it was

Unknown to the reporter whether assistance was provided or not.

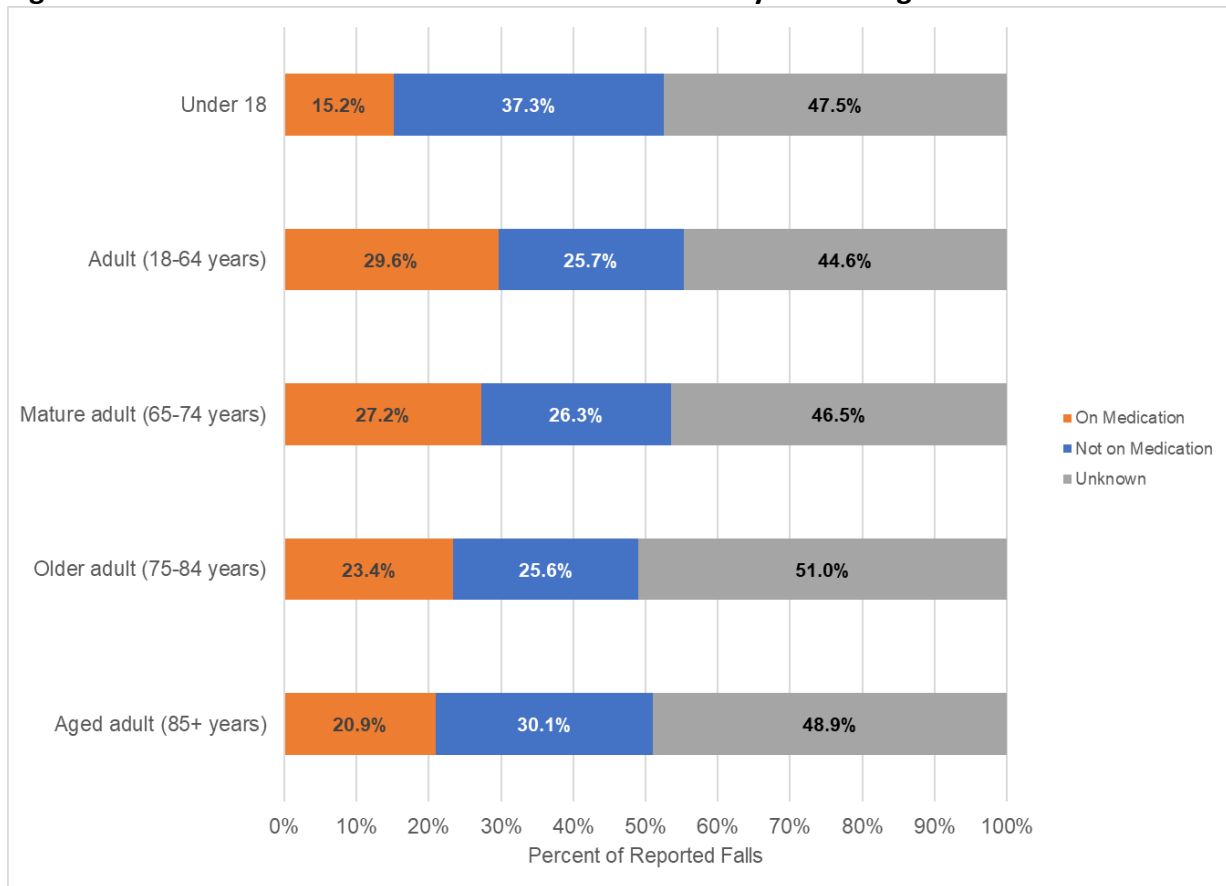
### Use of Medication that Increases Risk of Falls by Patient Age

This figure presents the distribution of falls where the patient was **ON MEDICATION KNOWN TO INCREASE FALL RISK** at the time of the fall by **PATIENT AGE**.

Across all age groups, it was *Unknown* whether the patient was on medication known to increase fall risk for nearly half of all reported falls. Reported use of medication known to increase risk of falls was lowest among patients *Under 18* (15.2%; 562 / 3,700) --- almost half the rate reported among *Adult (18-64 years)* patients (29.6%; 13,512 / 45,614).

Important information is provided in the Technical Notes below.

**Figure 6: Use of Medication that Increases Risk of Falls by Patient Age**



Note: Counts and percentages taken from falls through December 31, 2022 where non-missing information was available for whether the patient was **ON MEDICATION KNOWN TO INCREASE RISK OF FALLS** and **PATIENT AGE** was reported. N=101,515. Percentages may not sum to 100% due to rounding.

### Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE 45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- Whether the patient was **ON MEDICATION KNOWN TO INCREASE RISK OF FALLS** in the *Fall* module is DE219 in response to the question: “At time of the fall, was the patient on medication known to increase the risk of fall?”

### Presence of Injury by Use of Medication Known to Increase Risk of Falls and Patient Age

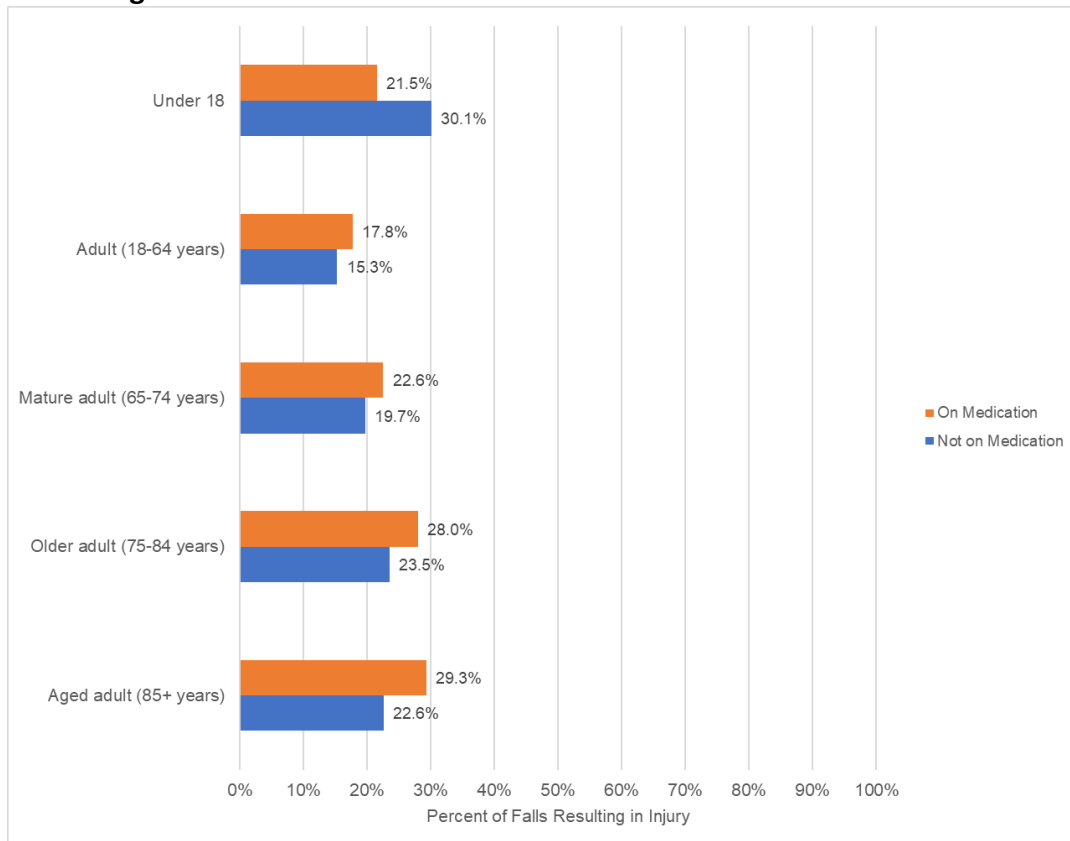
This figure compares the distribution of falls where patients experienced **INJURY AS RESULT OF FALL** for patients that were **ON MEDICATION KNOWN TO INCREASE FALL RISK** at the time of the fall compared to those not on such medications at the time of the fall. This figure further examines the distribution by **PATIENT AGE**.

For all adult patients where use of medication was known (i.e., not *Unknown* or missing), rates of *Injury* were consistently higher among patients who were *on medication* at the time of the fall. This difference was greatest among patients *Aged adults (85+ years)* where the rate of *Injury* for patients who were *On medication* at the time of the fall was 29.5% higher than the rate observed for patients who were *Not on medication* at the time of the fall (29.3%; 788 / 2,687 and 22.6%; 876 / 3,869, respectively).

Among patients *Under 18*, the rate of *Injury* among patients *on medication* was 28.6% lower than the rate of *Injury* among patients *Not on medication* (21.5%; 121 / 562 and 30.1%; 416 / 1,380, respectively)

Important information is provided in the Technical Notes below.

**Figure 7: Presence of Injury by Use of Medication Known to Increase Risk of Falls and Patient Age**



Note: Counts and percentages taken from falls through December 31, 2022 where non-missing information was available for whether the patient was ON MEDICATION KNOWN TO INCREASE FALL RISK at the time of the fall and PATIENT AGE was reported. N=53,976.

### Technical Notes

- In CFER-H V1.2, PATIENT AGE is indicated by DE 45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- **INJURY AS RESULT OF FALL** in the Fall module is captured in DE201 in response to the question: “Did the patient sustain a physical injury as a result of the fall?”
- Whether the patient was **ON MEDICATION KNOWN TO INCREASE RISK OF FALLS** in the *Fall* module is DE219 in response to the question: “At time of the fall, was the patient on medication known to increase the risk of fall?”

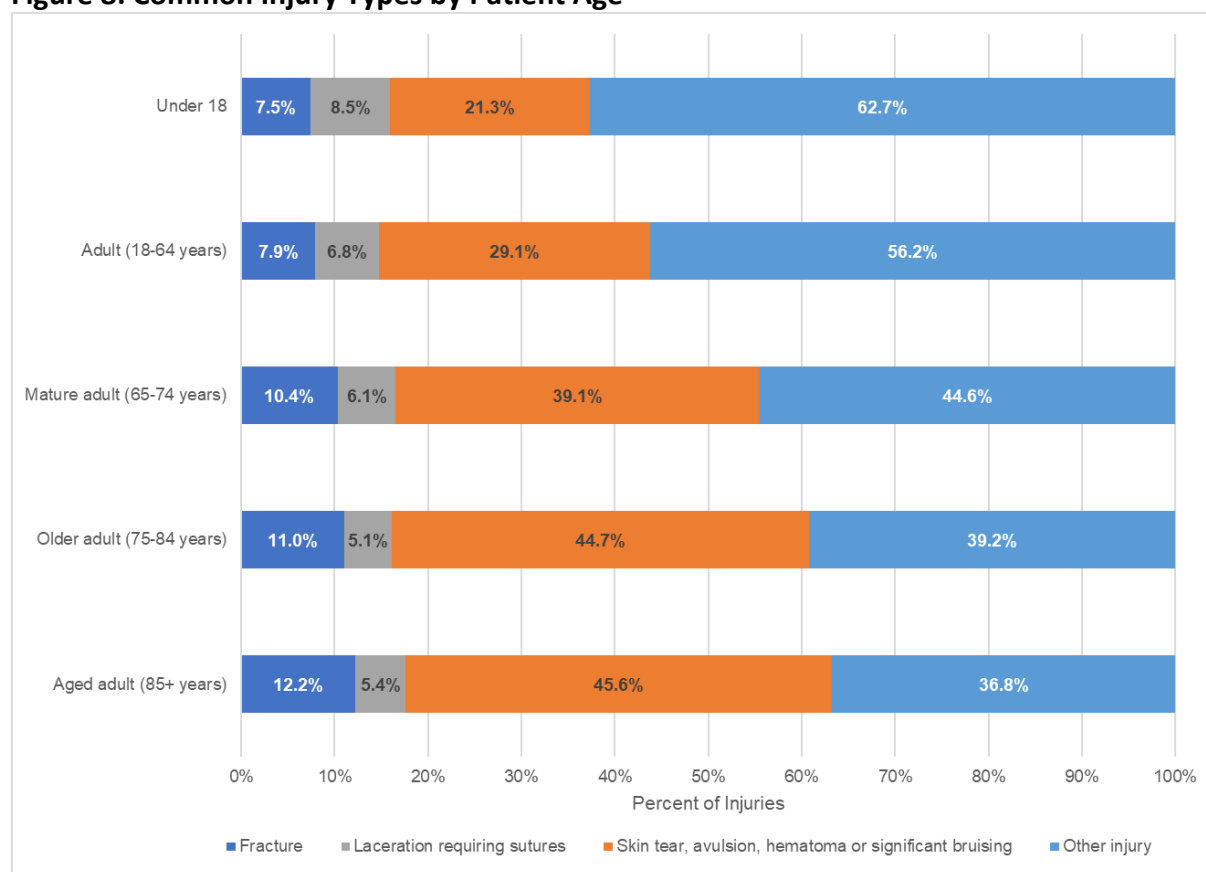
## Common Types of Injury by Patient Age

This figure presents the distribution of the most commonly reported **TYPE OF INJURY AS RESULT OF FALL** for *Fall Incidents that resulted in injury* by **PATIENT AGE**.

Across *Under 18* patients, *Adult (18-64 years)* patients, and *Mature adult (65-74 years)* patients, *Other injury* was the most frequently reported type of injury (62.7%, 244 / 389; 56.2%, 2,720 / 4,841; and 44.6%, 1,318 / 2,957, respectively).<sup>1</sup> *Skin tear, avulsion, hematoma, or significant bruising* was the most common injury among *Older adults* (44.7%; 1,421 / 3,180) and *Aged adults* (45.6%; 1,022 / 2,241).

Important information is provided in the Technical Notes below.

**Figure 8: Common Injury Types by Patient Age**



Note: Injury counts and percentages taken from injuries from falls through December 31, 2022. N=13,714. Counts were taken where valid, non-missing information was available for TYPE OF INJURY and PATIENT AGE were reported for INJURY AS A RESULT OF A FALL. Additionally, *Dislocation* and *Intracranial* injury are excluded from this figure due to small

<sup>1</sup> Minor injuries from the pre-existing injury types in CFER-H v1.2 made up over 20% of Other injuries. Source: [NPSD Data Spotlight, Falls: Associated Factors and Clinical Outcomes, 2023. Rockville, MD: Agency for Healthcare Research and Quality; March 2023. AHRQ Pub. No. 23-0030](#)

counts. Percentages may not sum to 100% due to rounding.

## Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- **INJURY AS RESULT OF FALL** in the Fall module is captured in DE201 in response to the question: “Did the patient sustain a physical injury as a result of the fall?”
- **TYPE OF INJURY** resulting from a fall is indicated by DE204 in the Fall module in response to the question “What type of injury was sustained?” Valid values are those that are populated (non-missing). Note: 445 falls were not indicated as injuries by DE201 (“Did the patient sustain a physical injury as a result of the fall?”), despite having a known injury type as a result of a fall indicated by DE204. Note that *Dislocation* and *Intracranial injury* are excluded from this figure due to small counts.

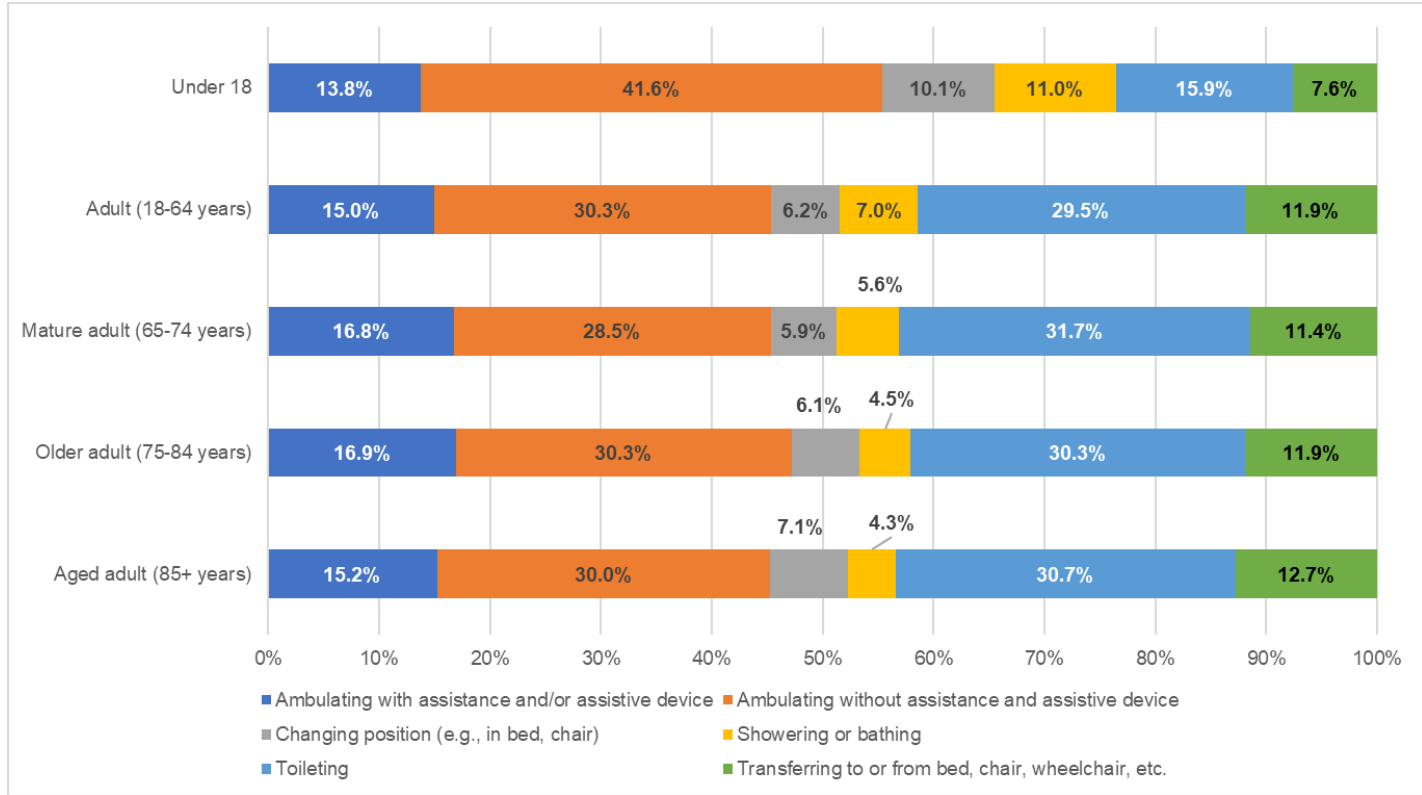
## Patient Activity Preceding the Fall by Age

This figure displays the distribution of the most commonly reported **PATIENT ACTIVITY PRIOR TO FALL** by **PATIENT AGE**. Out of an initial 98,884 reports, patient activity was most commonly reported as *Unknown* for 26.8% (26,530) of reports and *Other* for 14.3% (14,089). *Reaching for an item* (2.6%; 2,597 / 98,884), *Undergoing a procedure* (0.5%; 444 / 98,884), *Dressing or undressing* (1.2%; 1,197 / 98,884), and *Navigating bedrails* (0.5%; 445 / 98,884), were excluded from this figure to avoid risk of disclosure due to very small counts by age groups.

Excluding these reports, the most common patient activities were: *Ambulating with assistance and/or assistive device or medical equipment*; *Ambulating without assistance and assistive device or medical equipment*; *Changing position*; *Showering or bathing*; *Toileting*; and *Transferring to or from bed, chair, wheelchair, etc.* Across all age groups, *Ambulating without assistance and without an assistive device* and *Toileting* accounted for the majority of all reported patient activities. The proportion of patients who were either *Ambulating without assistance and without an assistive device* and *Toileting* were similar across all adult patients. However, among patients *Under 18*, patients who were *Ambulating without assistance and without an assistive device* (41.6%; 644 / 1,548) outnumbered patients who were *Toileting* (15.9%; 246 / 1,548) by 162%.

Important information is provided in the Technical Notes below.

**Figure 9: Patient Activity Preceding the Fall by Patient Age**





Note: Counts and percentages taken from falls through December 31, 2022. N=53,582. Counts were taken where valid, non-missing information was available for PATIENT ACTIVITY BEFORE THE FALL and PATIENT AGE. Percentages may not sum to 100% due to rounding.

### Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE 45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- **PATIENT ACTIVITY BEFORE THE FALL** is indicated by DE207 in response to the question “Prior to the fall, what was the patient doing or trying to do?” Valid values for DE207 are those that are populated (non-missing).

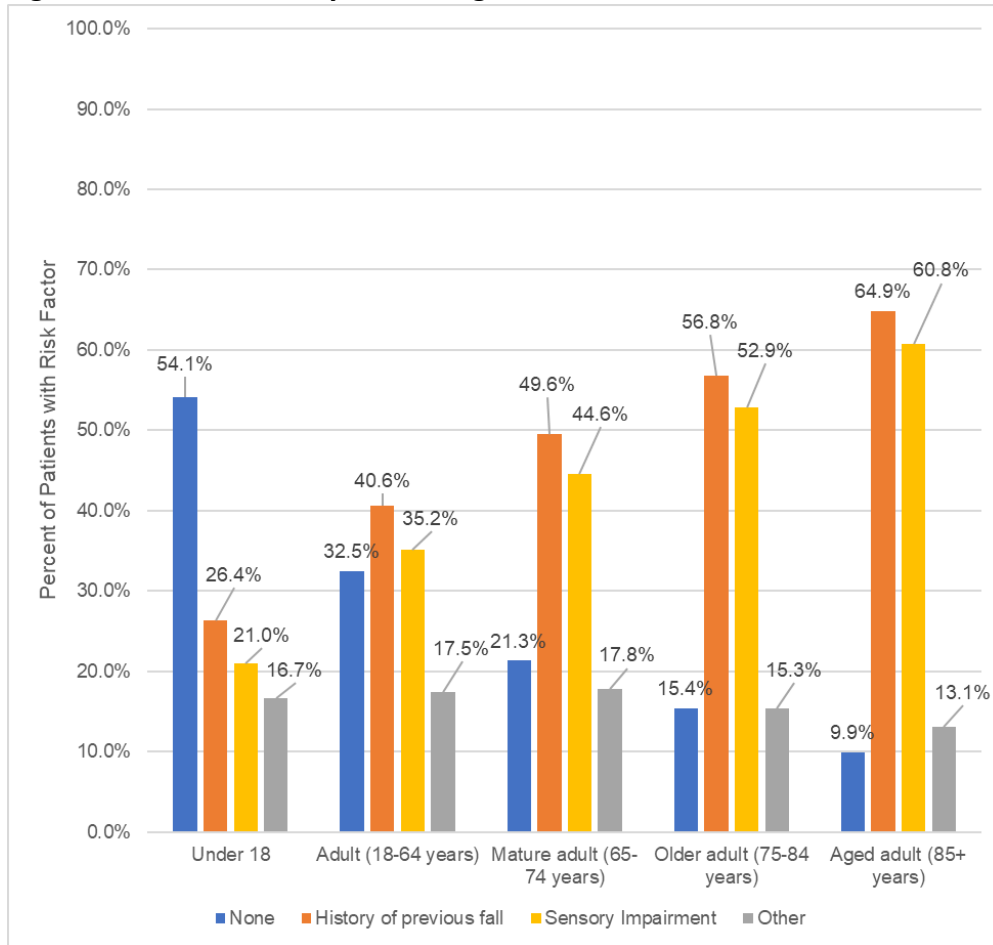
### Risk Factors by Patient Age

The figures below display **RISK FACTORS** by **PATIENT AGE**. While the Common Formats includes *Prosthesis or specialty/prescription shoe* as a risk factor, it is not displayed as these responses make up less than 1% of risk factors indicated.

Among all adult patients *History of previous fall* was the most commonly reported risk factor followed by *Sensory impairment (vision, hearing, balance, etc.)*. Among patients *Under 18*, no risk factor was the most commonly reported (54.1%; 211 / 390).

Important information is provided in the Technical Notes below.

**Figure 10: Risk Factors by Patient Age**



Note: Counts and percentages taken from falls through December 31, 2022. N=21,027. Counts were taken where valid, non-missing information was available for RISK FACTORS and PATIENT AGE was reported. Percentages and counts shown may not total 100% due to rounding and the fact that more than one risk factor may be indicated.

### Technical Notes

- In CFER-H V1.2, **PATIENT AGE** is indicated by DE 45. While the AHRQ Age Scale provides the following possible responses: Neonate (0-28 days), Infant (>28 days >1 year), Child (1-12 years), Adolescent (13-17 years), Adult (18-64 years), Mature Adult (65-74 years), Older adult (75-84 years), and Aged adult (85+ years), due to very small counts the Neonate through Adolescent categories were condensed into a single Under 18 age group.
- **RISK FACTORS** are indicated by data elements with the prefix DE212, specifically: “History of previous fall?” (DE212\_A2427), “Prosthesis or specialty/prescription shoe?” (DE212\_A2430), “Sensory impairment (vision, hearing, balance, etc.)?” (DE212\_A2433), “None?” (DE212\_A1005), and “Unknown” (DE212\_A66). Missing responses (those that are not populated) and “N/A” records for risk factor data elements were excluded altogether. Due to small cell counts and to reduce risk of disclosure, Falls

where Sensory impairment (vision, hearing, balance, etc.) were reported were excluded from this analysis.

## FOCUS: PATIENT ACTIVITY

Among all Falls, *Ambulating without assistance and without an assistive device*, *Toileting*, and *Ambulating with assistance and/or with an assistive device* were the most common patient activities before the falls. A global view of commonly used interventions applied to patients enable understanding of interventions in place for these *Fall* events.

The analyses below examine existing differences among commonly used interventions across patients with different outcomes as a result of a *Fall* --- patients who experienced *Injury* and *Residual harm* and patients who experienced *No injury* and *No residual harm*, to shed light on potentially effective interventions and provide learning opportunities for patient safety improvements.

Due to the small counts and potential data quality issues arising from variability in the way that data submitters may interpret the residual harm question in CFER-H V1.2, this analysis excludes *Falls* where patients experienced *Injury and no harm* and where patients experienced *No injury and harm*. Additionally, missing responses (those that are not populated) and “N/A” records for **PATIENT ACTIVITY PRIOR TO THE FALL** and records with missing responses or reported no **INTERVENTIONS IN PLACE** were excluded.

Each of the patterns listed below represents a combination of intervention(s) in place that have been reported in a single event. A single patient event can have multiple interventions indicated and be represented in more than one pattern. Therefore, the counts of all frequent patterns do not add up to the number of all records in the analysis. For brevity, only the 10 most frequent combinations of intervention(s) in place are displayed.

Important information for the analyses below is provided in the Technical Notes in Appendix A.

## Common Intervention(s) in Place Among Patients Ambulating with Assistance

*Ambulating with assistance* involves ambulating activity *with assistance and/or with an assistive device or medical equipment* prior to the fall. Below, commonly reported interventions in place are examined for these subgroups across outcomes: injury with harm, and no injury with no harm.

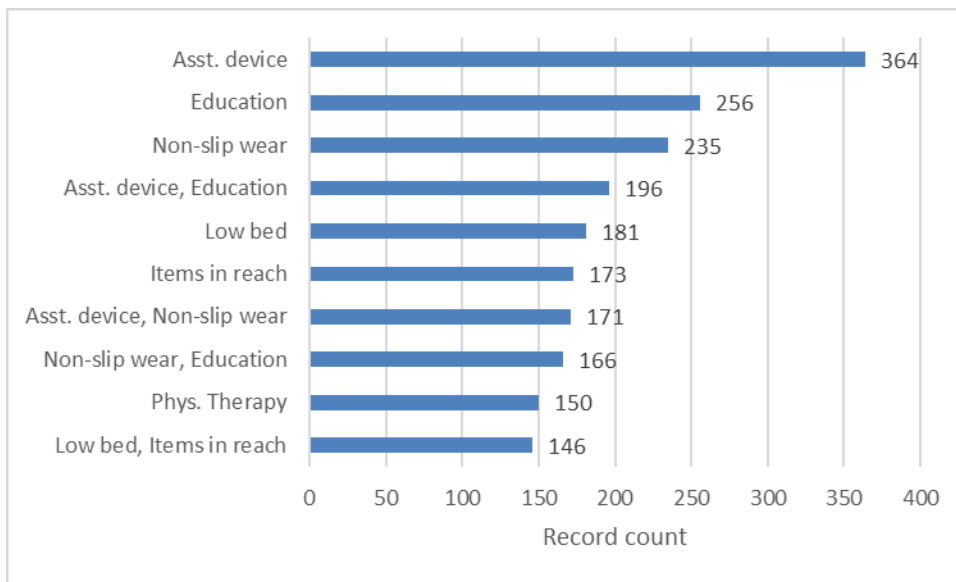
For all 243,449 reported *Fall Incidents*: 7,523 (3.1%) indicated *injury* and *residual harm* to the patient, and 30,741 (12.6%) indicated *no injury* and *no residual harm* to the patient. Among these 7,523 records, 484 (6.4%) indicated that activity prior to the *fall* was *ambulating with assistance*; from the 30,741 records, 2,166 records (7.0%) indicated that activity prior to the *fall* was *ambulating with assistance*. The figures below are based on these 484 and 2,166 events respectively.

Overall, both groups share similar commonly used interventions: either individual preventive measures or combinations that co-occur in reported Fall incidents. In particular --- *Assistive*

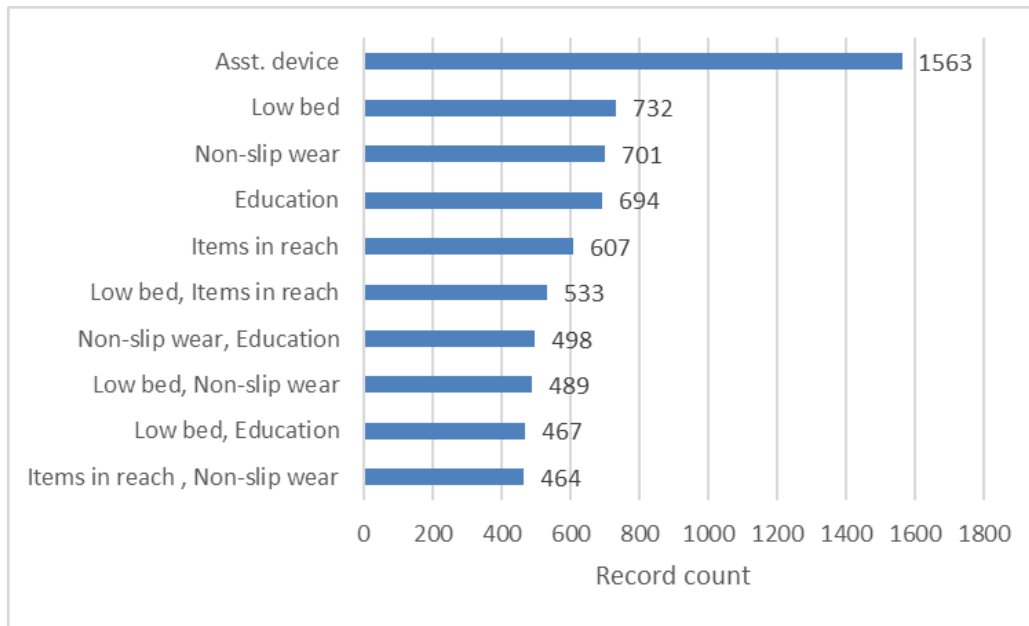
*device, Patient and family education, Nonslip footwear, Bed in low position, Call light/personal items within reach, Visible identification of patient as being at risk for fall (e.g., Falling Star), and their combinations are commonly used interventions in both groups.*

The most common intervention in both the *injury with residual harm*, and *no injury with no residual harm* groups was *Assistive device*. *Alarm* is among the top 10 commonly used interventions for the *no injury and no residual harm* group. However, it does not appear in the intervention patterns for the group where falls resulted in both *injury and residual harm*.

**Figure 11: Top 10 Intervention(s) in Place – Patients Ambulating with Assistance Before Falls Resulting in INJURY and RESIDUAL HARM**



**Figure 12: Top 10 Intervention(s) in Place – Patients Ambulating with Assistance Before Falls Resulting in NO INJURY and NO RESIDUAL HARM**



### Common Intervention(s) in Place Among Patients Ambulating Without Assistance

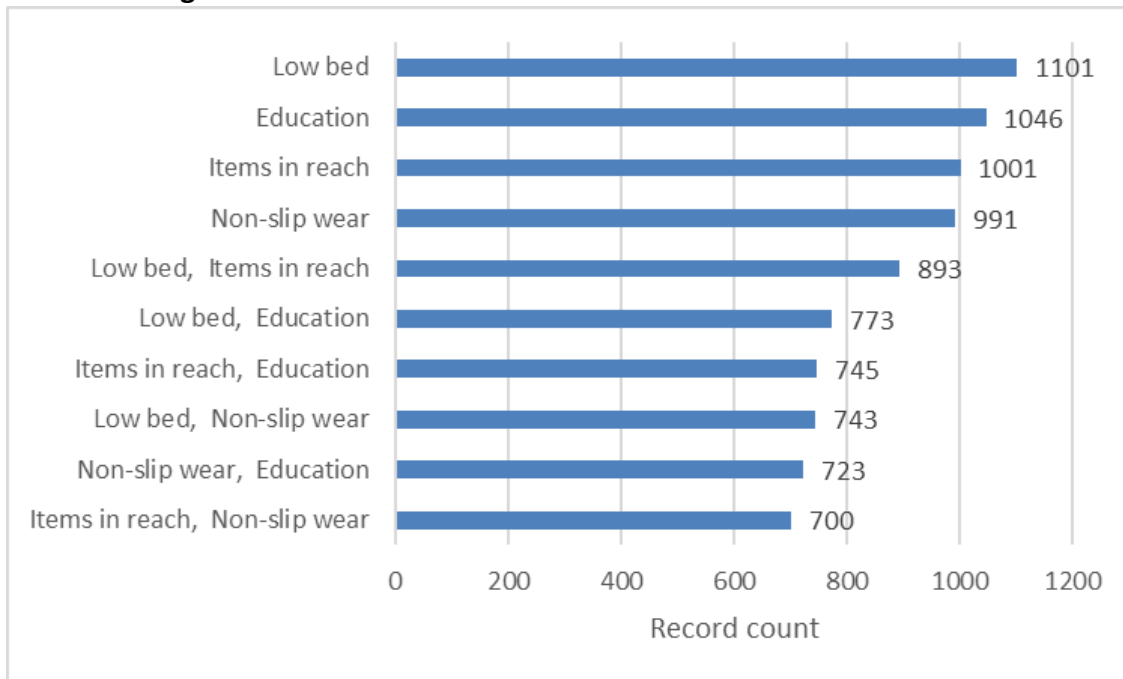
*Ambulating without assistance* involves ambulating activity *without assistance and without an assistive device or medical equipment* prior to the fall. Below, commonly reported interventions in place are examined for these subgroups across outcomes: injury with harm, and no injury with no harm.

For all 243,449 reported *Fall Incidents*: 7,523 (3.1%) indicated *injury and harm* to the patient and 30,741 (12.6%) indicated *no injury and no harm* to the patient. Among these 7,523 records, 1,723 (22.9%) indicated that activity prior to the *fall* was *ambulating without assistance*; of the 30,741 records, 4,960 (16.1%) indicated that activity prior to the *fall* was *ambulating without assistance*. The figures below are based on these 1,723 and 4,960 events respectively.

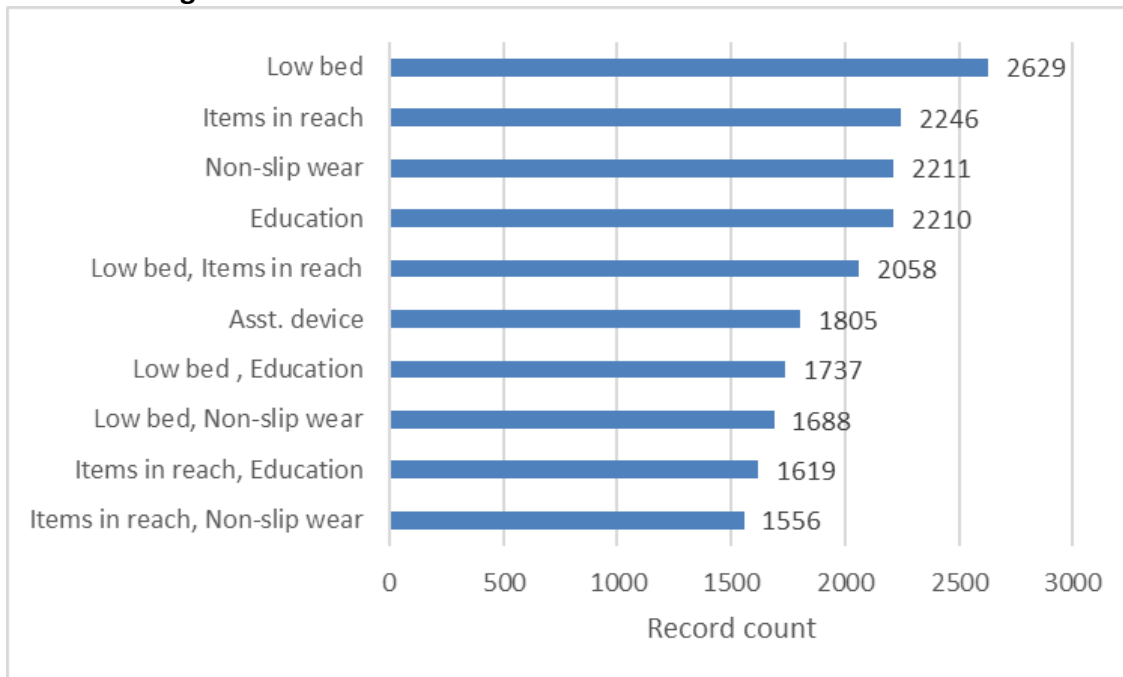
Overall, the two groups share similar commonly used interventions: either individual preventive measures or combinations that co-occur in reported *Fall incidents*. In particular --- *Bed in low position, Patient and family education, Call light/personal items within reach, Nonslip footwear, Visible identification of patient as being at risk for fall (e.g., Falling Star)*, and their combinations are commonly used interventions in both groups. The most common intervention in both groups was *Bed in low position*.

*Assistive device* is among the top 10 commonly reported interventions in place and being used prior to fall for the *no injury and no residual harm* group. This may reflect scenarios where an assistive device had previously been ordered, but was not in use at the time of the fall. It does not appear in the list of common intervention patterns where falls resulted in both *injury and residual harm* to the patient.

**Figure 13: Top 10 Intervention(s) in Place – Patients Ambulating without Assistance Before Falls Resulting in INJURY and RESIDUAL HARM**



**Figure 14: Top 10 Intervention(s) in Place – Patients Ambulating without Assistance Before Falls Resulting in NO INJURY and NO RESIDUAL HARM**



## Common Intervention(s) in Place Among Patients Toileting

*Toileting* is the second most common activity prior to a *Fall Incident*. Below, commonly reported interventions in place are examined across the same outcome groups as above.

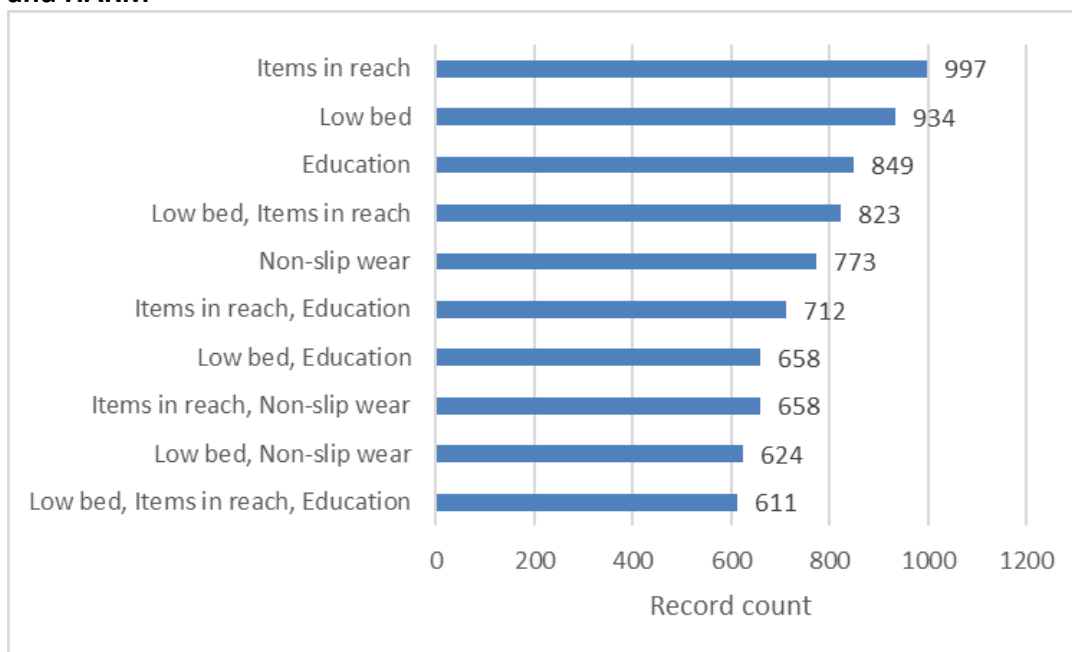
For all 243,449 reported falls: 7,523(3.1%) indicated *injury* and *harm* to the patient and had valid intervention information, and 30,741 (12.6%) indicated no injury and no harm to the patient and had valid intervention information. Among the 7,523 records, 1,408 (18.7%) indicated that activity prior to the fall was toileting; of the 30,741 records, 4,887 (15.9%) indicated that activity prior to the fall was toileting. The figures below are based on these 1,408 and 4,887 events, respectively.

Overall, the two groups share similar commonly used interventions: either individual preventive measures or combinations that co-occur in reported *Fall incidents*. In particular --- *Call light/personal items within reach, Bed in low position, Patient and family education, Nonslip footwear, Visible identification of patient as being at risk for fall (e.g., Falling Star), Assistive device*, and their combinations are commonly used interventions in both groups.

*Assistive Device* was used more often (2,110 out of 4,887 cases, 43.2%) in the *no injury and no harm* group compared with that in the *injury and harm* group (472 out of 1,408 cases, 33.5%). *Alarm* was among the common interventions for the *no injury and no harm* group. However, it does not appear in the intervention patterns for the group where falls resulted in both *injury* and *residual harm*.

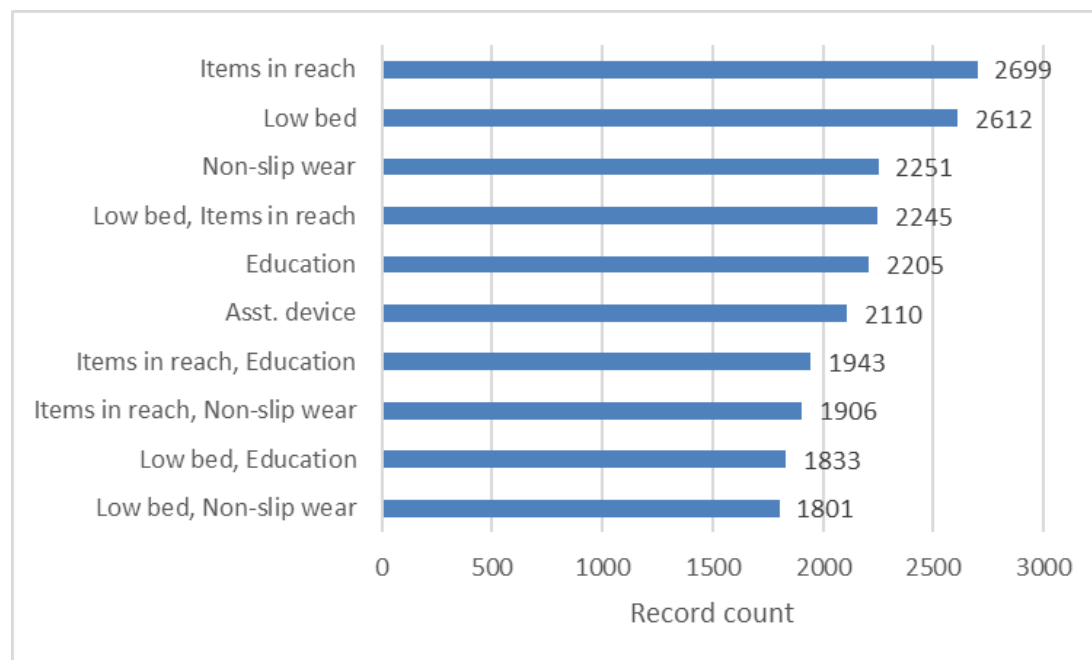
Curiously, *Toileting regimen*, which is closely related with *Toileting* as an activity, was not among the interventions for either the *injury and harm* or the *no injury and no harm* group.

**Figure 15: Top 10 Intervention(s) in Place – Patients Toileting Before Falls Resulting in INJURY and HARM**





**Figure 16: Top 10 Intervention(s) in Place – Patients Toileting Before Falls Resulting in NO INJURY and NO HARM**



### FOCUS: PATIENT RISK FACTORS

Risk factors can impact the occurrence and outcome of *Fall Incidents*. In the following analyses, frequent combinations (patterns) of interventions for *Fall Incidents* with the most common risk factors, i.e., *History of previous fall*, or *Sensory impairment* are examined. These analyses show a broad overview of interventions used among different **RISK FACTOR** groups across different outcomes: *Injury and residual harm* vs. *No injury and no residual harm*.

Due to the small counts and potential data quality issues arising from variability in the way that data submitters may interpret the residual harm question in CFER-H V1.2, this analysis excludes *Falls* where patients experienced *Injury and no harm* and where patients experienced *No injury and harm*. Additionally, missing responses (those that are not populated) and “N/A” records for **RISK FACTOR** and records with missing responses or reported no **INTERVENTIONS IN PLACE** were excluded.

As in the previous section, each of the patterns listed below represents a combination of intervention(s) in place that have been reported in a single event. A single patient event can have multiple interventions indicated and be represented in more than one pattern. Therefore, the counts of patterns do not add up to the number of all records in the analysis. For brevity, only the 10 most frequent combinations of intervention(s) in place are displayed.

Important information for the analyses below is provided in the Technical Notes in Appendix B.

### Common Intervention(s) in Place Across Patients with a History of Falls

In this section, frequent combinations (patterns) of interventions for the *Fall Incidents* where *History of Falls* was indicated as a patient risk factor are studied. Frequent patterns of interventions occur in groups with different outcomes: injury and harm vs. no injury and no harm are compared.

Among all *Falls* through December 31, 2022: 3,461 (1.4%) indicated *Injury and residual harm* to the patient and 9,045 (3.7%) indicated *No injury and no residual harm* to the patient and included valid, non-missing **INTERVENTIONS IN PLACE** and valid **RISK FACTOR** data. Among the 3,461 falls, 2,443 (70.6%) indicated a *History of falls* as a risk factor; and among the 9,045 records with *No injury and no harm*, 6,229 (68.9%) indicated a *History of falls* as a risk factor. The figures below are based on these 2,443 and 6,229 events respectively.

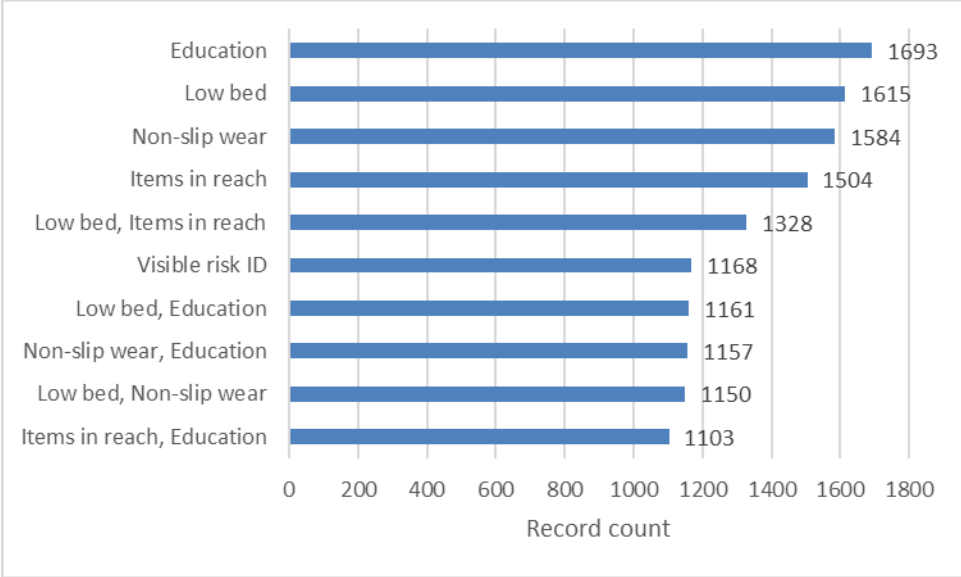
Each pattern listed represents a combination of intervention(s) in place that have been reported in a single event where *History of falls* was indicated as a risk factor.

The frequent combinations (i.e., frequent patterns) of interventions are similar between the *injury and harm vs. no injury and no harm* groups. Overall, the two groups share similar commonly used interventions, in particular: *Bed in low position*, *Call light/personal items in reach*, *Patient/family education*, *Non-slip footwear*, *Visible identification of patient as being at risk for fall* (e.g., *Falling Star*), and their combinations.

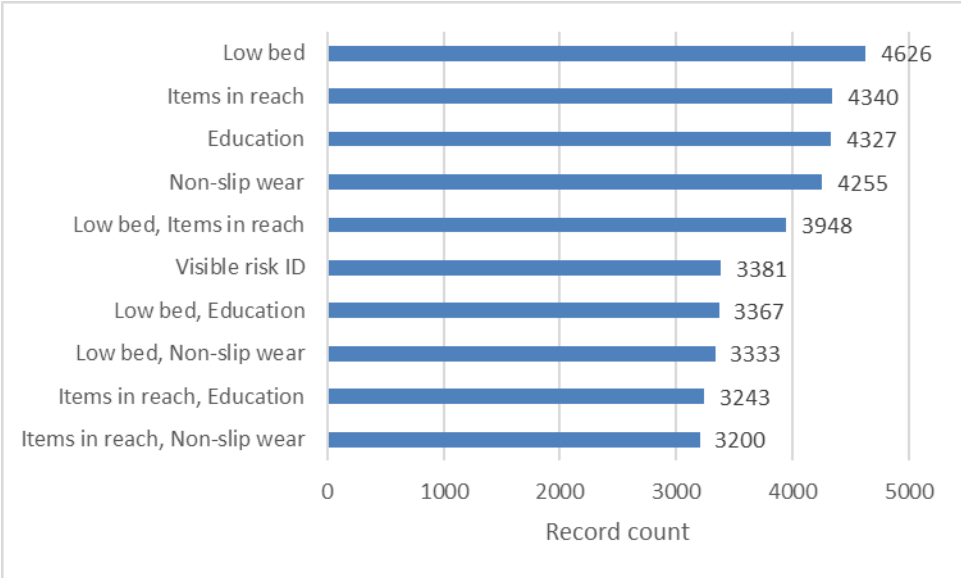
The percentages of several intervention patterns in the *no injury and no residual harm* group are slightly higher than those in the *injury and residual harm* group. For instance: *Bed in low position* was used in 4,626 out of 6,229 records (74.3%) in the *no injury and no harm* group, and 1,615 out of 2,443 records (66.1%) in the *injury and harm* group; *Call light/personal items in reach* was used in 4,340 out of 6,229 records (69.7%) in the *no injury and no harm* group, and 1,504 out of 2,443 records (61.6%) in the *injury and harm* group; *Non-slip footwear* was used in 4,255 out of 6,229 records (68.3%) in the *no injury and no harm* group, and 1,584 out of 2,443 records (64.8%) in the *injury and harm* group;

While not reflected in the figures below, further analysis showed *Assistive device* was among the top 20 commonly reported interventions for the *injury and harm* group. However, it does not appear in the intervention patterns for the group where falls resulted in *no injury and no harm*.

### Figure 17: Top 10 Intervention(s) in Place for Patients with History of Falls - Falls Resulting in INJURY and HARM



**Figure 18: Top 10 Intervention(s) in Place for Patients with History of Falls - Falls Resulting in NO INJURY and NO HARM**



**Common Intervention(s) in Place Across Patients with Sensory Impairment**

In this section, frequent combinations (patterns) of interventions for the *Fall Incidents* among patients with *Sensory impairment* are studied. Frequent patterns of interventions occurring in groups with different outcomes: injury and harm vs. no injury and no harm are compared.

Of the 243,449 reported falls with INITIAL REPORT DATES from April 24, 2008 to December 31, 2022: 3,461 (1.4%) indicated injury and harm, 9,045 (3.7%) indicated no injury and no harm to the patient, and had both valid Interventions and valid risk factors. Among the 3,461 records,

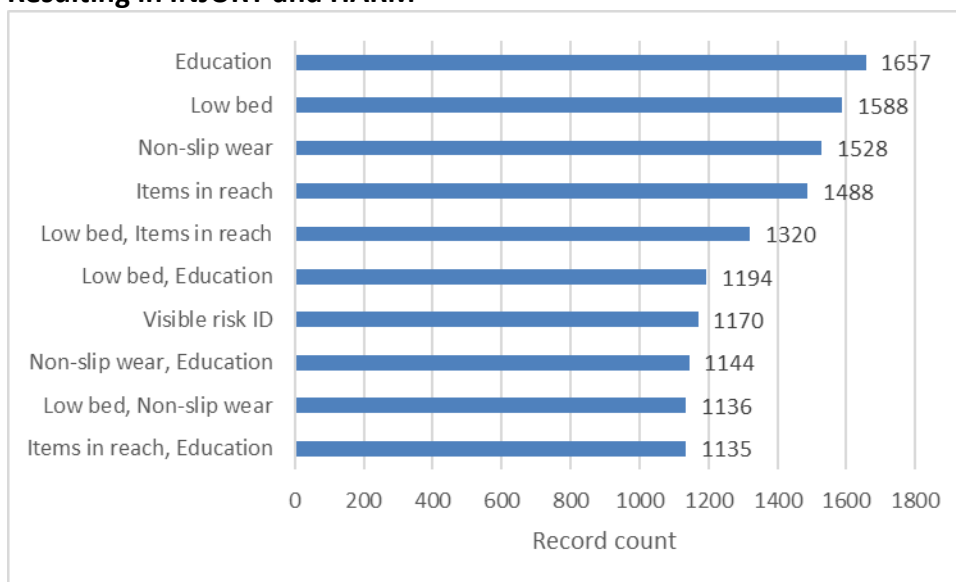
2,299 (66.4%) indicated sensory impairment as a risk factor; and among the 9,045 records, 5,622 (62.2%) indicated sensory impairment as a risk factor. The figures below are based on these 2,299 and 5,622 events respectively.

The frequent combinations (i.e., frequent patterns) of interventions are similar between the *injury and harm vs. no injury and no harm* groups: Overall, the two groups share similar commonly used interventions: either individual actions or a combination of actions that co-occur in reported *Fall incidents*. In particular, *Bed in low position, Call light/personal items in reach, Patient/family education, Non-slip footwear, Visible identification of patient as being at risk for fall (e.g., Falling Star)*, and their combinations are commonly used interventions in both groups.

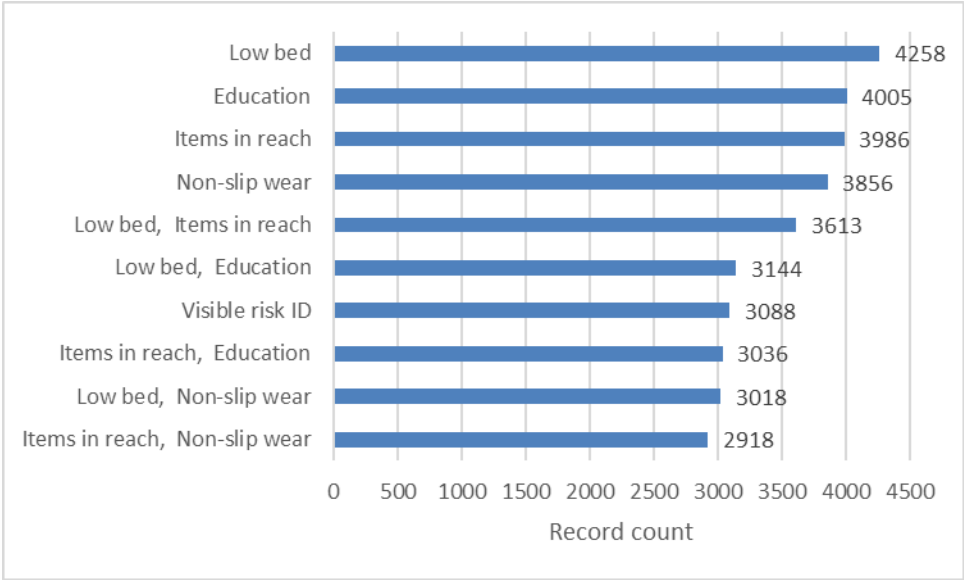
The percentages of several intervention patterns in the *no injury and no harm* group are slightly higher than those in the *injury and harm* group. For instance: *Bed in low position* was used in 4,258 out of 5,622 records (75.7%) in the *no injury and no residual harm* group, and 1,588 out of 2,299 records (69.1%) in the *injury and harm* group; *Call light/personal items in reach* was used in 3,986 out of 5,622 records (70.9%) in the *no injury and no residual harm* group, and 1,488 out of 2,299 records (64.7%) in the *injury and residual harm* group; *Visible identification of patient as being at risk for fall (e.g., Falling Star)* was used in 3,088 out of 5,622 records (54.9%) in the *no injury and no residual harm* group, and 1,170 out of 2,299 records (50.9%) in the *injury and residual harm* group;

While not reflected in the figures below, further analysis showed *Assistive device* was among the common interventions for the *injury and harm* group. However, it does not appear in the intervention patterns for the group where falls resulted in *no injury and no harm*.

**Figure 19: Top 10 Intervention(s) in Place for Patients with Sensory Impairment - Falls Resulting in INJURY and HARM**



**Figure 20: Top 10 Intervention(s) in Place for Patients with Sensory Impairment - Falls Resulting in NO INJURY and NO HARM**



## APPENDIX A - TECHNICAL NOTES FOR ANALYSES PRESENTED IN FOCUS: PATIENT ACTIVITY

### Common Intervention(s) in Place Among Patients Ambulating with Assistance

- In the CFER-H V1.2, **INJURY AS A RESULT OF FALL** is indicated by DE201 in the Fall module in response to the question “Did the patient sustain a physical injury as a result of the fall?” Valid values for DE201 are those that are populated (non-missing).
- In the CFER-H V1.2, **EXTENT OF HARM** is indicated by DE 55 in response to the question “After any intervention to reduce harm, what was the degree of residual harm to the patient from the incident (and subsequent intervention)?” For this figure, all Incident reports with **EXTENT OF HARM** reported are displayed as either No harm, Harm (i.e., *Mild harm*, *Moderate harm*, *Severe harm*, or *Death*), or Unknown due to small counts across the categories of *Moderate* to *Severe harm*.
- *Ambulating without assistance* is indicated in the field **PATIENT ACTIVITY BEFORE THE FALL** (DE207) in response to the question “Prior to the fall, what was the patient doing or trying to do?”
- **INTERVENTION(S) USED TO PREVENT FALL** are captured in the *Fall* module, DE216 in response to the question: “Which of the following were in place and being used to prevent falls for this patient?” Multiple response categories may be submitted with each report, causing the total number of interventions in place to exceed the total number of fall incidents represented by the data. Appendix C lists the abbreviations shown.
- For this analysis, records with missing responses to the preceding patient activity prior to the fall data element (indicated by DE207 in response to the question “Prior to the fall, what was the patient doing or trying to do?”), as well as records with missing responses or answered no interventions to the fall data element (indicated by DE216 in response to the question “Which of the following were in place and being used to prevent falls for this patient?”) were excluded.

### Common Intervention(s) in Place Among Patients Ambulating Without Assistance

- In the CFER-H V1.2, **INJURY AS A RESULT OF FALL** is indicated by DE201 in the Fall module in response to the question “Did the patient sustain a physical injury as a result of the fall?” Valid values for DE201 are those that are populated (non-missing).
- In the CFER-H V1.2 *Fall*, **EXTENT OF HARM** is indicated by DE 55 in response to the question “After any intervention to reduce harm, what was the degree of residual harm to the patient from the incident (and subsequent intervention)?”
- *Ambulating with assistance* is indicated in the field **PATIENT ACTIVITY BEFORE THE FALL** (DE207) in response to the question “Prior to the fall, what was the patient

doing or trying to do?”

- **INTERVENTION(S) USED TO PREVENT FALL** are captured in the *Fall* module, DE216 in response to the question: “Which of the following were in place and being used to prevent falls for this patient?” Multiple response categories may be submitted with each report, causing the total number of interventions in place to exceed the total number of fall incidents represented by the data. Appendix C lists the abbreviations shown.
- For this analysis, records with missing responses to the preceding patient activity prior to the fall data element (indicated by DE207 in response to the question “Prior to the fall, what was the patient doing or trying to do?”), as well as records with missing responses or answered no interventions to the fall data element (indicated by DE216 in response to the question “Which of the following were in place and being used to prevent falls for this patient?”) were excluded.

### Common Intervention(s) in Place Among Patients Toileting

- In the CFER-H V1.2, **INJURY AS A RESULT OF FALL** is indicated by DE201 in the Fall module in response to the question “Did the patient sustain a physical injury as a result of the fall?” Valid values for DE201 are those that are populated (non-missing).
- In the CFER-H V1.2, **EXTENT OF HARM** is indicated by DE 55 in response to the question “After any intervention to reduce harm, what was the degree of residual harm to the patient from the incident (and subsequent intervention)?” For this figure, all Incident reports with **EXTENT OF HARM** reported are displayed as either No harm, Harm (i.e., *Mild harm, Moderate harm, Severe harm, or Death*), or Unknown due to small counts across the categories of *Moderate to Severe harm*.
- Toileting is indicated in the field **PATIENT ACTIVITY BEFORE THE FALL (DE207)** in response to the question “Prior to the fall, what was the patient doing or trying to do?” Valid values for DE207 are those that are populated (non-missing).
- **INTERVENTION(S) USED TO PREVENT FALL** are captured in the *Fall* module, DE216 in response to the question: “Which of the following were in place and being used to prevent falls for this patient?” Multiple response categories may be submitted with each report, causing the total number of interventions in place to exceed the total number of fall incidents represented by the data. Appendix C lists the abbreviations shown.
- For this analysis, records with missing responses to the preceding patient activity prior to the fall data element (indicated by DE207 in response to the question “Prior to the fall, what was the patient doing or trying to do?”), as well as records with missing responses or answered no interventions to the fall data element (indicated by DE216 in response to the question “Which of the following were in place and being used to prevent falls for this patient?”) were excluded.



## APPENDIX B - TECHNICAL NOTES FOR ANALYSES PRESENTED IN FOCUS: RISK FACTORS

### Common Intervention(s) in Place Across Patients with a History of Falls

- In the CFER-H V1.2, **INJURY AS A RESULT OF FALL** is indicated by DE201 in the Fall module in response to the question “Did the patient sustain a physical injury as a result of the fall?” Valid values for DE201 are those that are populated (non-missing).
- In the CFER-H V1.2, **EXTENT OF HARM** is indicated by DE55 in response to the question “After any intervention to reduce harm, what was the degree of residual harm to the patient from the incident (and subsequent intervention)?”
- **RISK FACTORS** are indicated by data elements with the prefix DE212, specifically DE212\_A2427 for **HISTORY OF PREVIOUS FALL**.
- **INTERVENTION(S) USED TO PREVENT FALL** are captured in the *Fall* module, DE216 in response to the question: “Which of the following were in place and being used to prevent falls for this patient?” Multiple response categories may be submitted with each report, causing the total number of interventions in place to exceed the total number of fall incidents represented by the data. Appendix C lists the abbreviations shown.
- For this analysis, records with missing responses to the **HISTORY OF PREVIOUS FALL** risk factor data element (indicated by DE212\_A2427), as well as records with missing responses or answered no interventions to the fall data element (indicated by DE216 in response to the question “Which of the following were in place and being used to prevent falls for this patient?”) were excluded.

### Common Intervention(s) in Place Across Patients with Sensory Impairment

- In the CFER-H V1.2, **INJURY AS A RESULT OF FALL** is indicated by DE201 in the Fall module in response to the question “Did the patient sustain a physical injury as a result of the fall?” Valid values for DE201 are those that are populated (non-missing).
- In the CFER-H V1.2, **EXTENT OF HARM** is indicated by DE55 in response to the question “After any intervention to reduce harm, what was the degree of residual harm to the patient from the incident (and subsequent intervention)?”
- **RISK FACTORS** are indicated by data elements with the prefix DE212, specifically DE212\_A2433 for **SENSORY IMPAIRMENT (VISION, HEARING, BALANCE, ETC.)**.
- **INTERVENTION(S) USED TO PREVENT FALL** are captured in the *Fall* module, DE216 in response to the question: “Which of the following were in place and being used

to prevent falls for this patient?” Multiple response categories may be submitted with each report, causing the total number of interventions in place to exceed the total number of fall incidents represented by the data.

- For this analysis, records with missing responses to the **SENSORY IMPAIRMENT (VISION, HEARING, BALANCE, ETC.)** risk factor data element (indicated by DE212\_A2433), as well as records with missing responses or answered no interventions to the fall data element (indicated by DE216 in response to the question “Which of the following were in place and being used to prevent falls for this patient?”) were excluded.

**APPENDIX C - ABBREVIATED RESPONSE CATEGORIES FOR DE216 (WHICH OF THE FOLLOWING WERE IN PLACE AND BEING USED TO PREVENT FALLS FOR THIS PATIENT?)**

<b>Original answer values from CFER H - V1.2</b>	<b>How these answers are labeled in figures and text of this report</b>
Assistive device (e.g., wheelchair, commode, cane, crutches, scooter, walker)	Asst. device
Bed or chair alarm	Alarm
Bed in low position	Low bed
Call light/personal items within reach	Items in reach
Change in medication (e.g., timing or dosing of current medication)	Change in meds
Non-slip floor mats	Non-slip mats
Hip and/or joint protectors	Joint protectors
Non-slip footwear	Non-slip wear
Patient and family education	Education
Patient sitting close to the nurses' station	Near staff
Physical/occupational therapy, includes exercise or mobility program	Phys. Therapy
Sitter	Sitter
Supplemental environmental or area lighting (when usual facility lighting is considered insufficient)	Lighting
Toileting regimen	Toilet regimen
Visible identification of patient as being at risk for fall (e.g., Falling Star)	Visible risk ID



Publication No. 23-0090  
September 2023  
[www.ahrq.gov](http://www.ahrq.gov)