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September 2025 | OEI-05-24-00180

Nursing Homes Failed To Report 43 Percent of Falls With Major Injury and Hospitalization Among Their Medicare-Enrolled Residents

HHS Office of Inspector General

REPORT HIGHLIGHTS

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Why OIG Did This Review

- CMS's Care Compare website is intended to provide consumers with reliable information about quality of care to inform their choices. For nursing homes, the quality measures displayed on Care Compare include rates of resident falls with major injury.
- To calculate the quality measures for falls with major injury, CMS uses data that nursing homes report from Minimum Data Set (MDS) resident assessments.
- Providers may have a disincentive to report events, such as falls, that could result in lower scores on quality measures. Previous analyses by OIG and others have identified under-reporting by providers.

What OIG Found

Nursing homes failed to report 43 percent of falls with major injury and hospitalization among Medicare-enrolled residents, as required, in resident assessments.

- For-profit and chain nursing homes as well as larger nursing homes failed to report falls most often.
- Fall reporting varied widely by State and was worse among nonrural nursing homes.
- Nursing homes failed to report falls more often for younger residents, male residents, short-stay residents, and residents with only Medicare coverage.

Nursing homes' failure to report falls on MDS assessments leads to inaccurate fall rates on Care Compare.

- Nursing homes with the lowest fall rates on Care Compare were the least likely to report the falls we examined. This suggests that low fall rates for nursing homes on Care Compare are likely driven by nursing homes' failure to report falls, rather than an actual low incidence of falls.
- As a result, Care Compare does not provide the public with accurate information about how often nursing home residents fell.

OIG released a companion data snapshot describing the falls we reviewed, the characteristics of the residents who fell, and the characteristics of the nursing homes where the falls occurred.

What OIG Recommends

1. CMS should take steps to ensure the completeness and accuracy of the nursing home-reported MDS data used to calculate the quality measures for falls with major injury.
2. CMS should explore whether approaches to improve the quality measures related to falls could similarly be used to improve the accuracy of other nursing home quality measures.

CMS concurred with both recommendations.

TABLE OF CONTENTS

BACKGROUND

OBJECTIVES

1. To determine the extent to which falls with major injury that resulted in hospitalization among Medicare-enrolled nursing home residents were accurately reported by nursing homes in Minimum Data Set (MDS) assessments.
2. To describe the characteristics of residents and nursing homes associated with failure to report falls that occurred.

Falls among older adults, including nursing home residents, are common, costly, and often preventable. According to the Agency for Healthcare Research and Quality (AHRQ), approximately half of nursing home residents experience a fall in any given year, resulting in serious injuries and decreased quality of life for residents.[1] A Centers for Disease Control and Prevention study estimated that in 2015 Medicare and Medicaid programs spent $28.9 billion and $8.7 billion, respectively, on health care related to older adults' falls.[2] While not all falls can be prevented, research has shown that nursing homes' fall rates can be reduced with the implementation of comprehensive fall prevention programs.[3]

Minimum Data Set Resident Assessments

MDS resident assessments are one tool for monitoring nursing home quality of care. The Centers for Medicare & Medicaid Services (CMS) requires Medicare- and/or Medicaid-certified nursing homes[4] to conduct standardized resident assessments using the MDS instrument. These assessments collect information about each resident's health, physical functioning, mental status, and general well-being, including whether the resident experienced falls. The nursing home staff conducting the assessment, not the resident, complete the assessment. MDS assessments must be completed upon nursing home entry, every 90 days thereafter (quarterly), upon significant change in resident status, and at the end of the nursing home stay (discharge or death). When a resident is admitted to the hospital, the nursing home must complete a discharge assessment within 14 calendar days after the nursing home discharge date and transmit it to CMS within 14 calendar days after completion.[5]

Reviews of MDS assessments for accuracy are currently limited, although CMS has announced new audit plans. CMS works with State agencies to conduct onsite visits to nursing homes approximately once per year in a process designed to ensure that

nursing homes comply with Federal quality and safety standards. As part of this survey process, State agencies must review the accuracy of MDS assessments for a sample of residents. However, this does not cover all residents of the nursing home and is just one of many criteria that inspectors must evaluate in each annual assessment.[6] CMS recently established a new MDS validation program that will consist of audits of selected nursing homes' medical records for a subset of MDS items.[7]

CMS's Nursing Home Quality Monitoring and Public Transparency

CMS calculates numerous measures derived from MDS resident assessments and Medicare fee-for-service claims to assess nursing home quality. These quality measures quantify health care processes, outcomes, and organization systems that are associated with effective, safe, and efficient health care.[8] CMS uses the nursing home quality measures in multiple programs, including the Skilled Nursing Facility Quality Reporting Program (SNF QRP), the SNF Value-Based Purchasing (SNF VBP) Program, the Nursing Home Quality Initiative, and the Five-Star Quality Rating System. CMS publishes a subset of quality measures on the Care Compare website to provide information for consumers to use when selecting a nursing home. CMS assigns each nursing home a 5-star rating on Care Compare, based on 15 quality measures, staffing, and health inspection results, as a summary score to convey overall quality of care.

The Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 required different types of post-acute care (PAC) providers to report standardized patient assessment data and quality measure data to CMS. Therefore, some of the quality measures for SNFs (most nursing homes) are also used to assess quality in other PAC settings, including home health agencies, inpatient rehabilitation facilities, and long-term care hospitals.

Quality Measures for Falls With Major Injury

CMS calculates two nursing home quality measures from the MDS that reflect the percentage of residents who experienced a fall with major injury for each nursing home:

- Long-stay measure: rate of falls with major injury among long-stay residents
- Medicare Part A SNF-stay measure: rate of falls with major injury among residents during Medicare Part A SNF stays (which are generally shorter)[9]

These measures are calculated from MDS items that record whether the resident experienced a fall during the episode of care and, if so, the severity of any injuries resulting from that fall.[10] These items are part of the discharge assessment that is

required upon a nursing home resident's hospital admission. According to CMS, when a nursing home does not know about a fall or a fall's severity at the time of the nursing home discharge, the nursing home should update the discharge assessment when it becomes aware of the fall or aware that the severity originally reported was not accurate.

Both measures are displayed for nursing homes on the Care Compare website. In addition, the long-stay measure is included as one of several measures that are used to generate the nursing homes' overall 5-star quality ratings. In future years, nursing home payments under Medicare's SNF VBP will reflect their performance on this measure.[11]

Problems With Provider-Reported Assessment Data

Providers may have a disincentive to report events, such as falls, that could result in lower scores on quality measures, and numerous studies by OIG and others have indeed found reporting to be inaccurate. In a 2023 report, OIG found that more than half of serious falls identified in Medicare hospital claims among home health patients were not reported in patient assessments as required, leading to inaccurate information on Care Compare.[12] Additionally, a 2021 report raised concerns about nursing homes' reporting of antipsychotic drug use and diagnoses that excluded residents from CMS's quality measures in resident assessments.[13] Academic researchers have repeatedly documented inaccuracies in patient assessment data, finding that falls, pressure ulcers, and infections went unreported in nursing home resident assessments.[14, 15, 16]

In response to a recommendation from OIG's 2023 report on home health agencies' fall reporting, CMS has begun to explore changes to the quality measure for falls with major injury that would be supplemented by claims and encounter data rather than relying solely on provider-reported assessment data.[17, 18] Because this quality measure is standardized across PAC settings, any changes adopted will result in changes to the nursing home long-stay measure as well.

Related OIG Work

This evaluation is part of OIG's larger body of work examining nursing home safety and oversight. OIG previously issued a series of evaluations estimating the incidence of adverse events.[19] OIG has also examined the accuracy and usefulness of the nurse staffing hours on Care Compare to increase transparency about nurse staffing levels.[20] Other recent OIG nursing home work has focused on patient safety, infection control, and facility-initiated discharges.[21]

OIG is releasing a companion data snapshot—*Serious Falls Resulting in Hospitalization Among Medicare-Enrolled Nursing Home Residents, July 2022–June 2023* (OEI-05-24-00181)—alongside this report. The data snapshot describes in more

detail the circumstances surrounding these falls, the characteristics of the residents who fell, and the characteristics of the nursing homes where the falls occurred.

Scope of Inspection

We reviewed nursing homes' reporting of falls with major injury that resulted in Medicare-paid hospitalization among residents in MDS assessments completed in the 1-year period between July 1, 2022, and June 30, 2023. This study focused on the subset of nursing home resident falls resulting in a hospital admission because (1) nursing homes must submit a discharge assessment and report any falls when a resident is admitted to the hospital and (2) we can independently verify hospitalizations in the Medicare claims. While nursing homes are required to report falls that do not result in an inpatient hospital admission, we did not assess reporting of such falls in this study. Finally, we did not determine why nursing homes did not report falls.

Methodology in Brief

We linked MDS assessments to information from a second data source, Medicare claims, to assess whether falls resulting in major injury were reported in MDS assessments as required over the 1-year period July 1, 2022, through June 30, 2023. More specifically:

- We identified falls with major injury that resulted in a hospitalization using Medicare inpatient hospital claims.
- For each hospitalization, we determined whether the person was a nursing home resident at the time of the fall using MDS assessments. When a nursing home resident is hospitalized for any reason, the nursing home must submit an MDS discharge assessment. Therefore, we compared the hospital claim dates to the discharge assessment dates. We considered a person to be a nursing home resident at the time of the fall if their discharge assessment had a discharge date within 1 day of the start of the hospitalization.
- For those nursing home residents who experienced a fall with hospitalization, we determined whether the fall was reported on the assessment as required.
- We calculated rates of unreported falls with major injury and hospitalization overall and by person-level and nursing home-level characteristics, including the fall rates on Care Compare.

Refer to the Detailed Methodology section for additional details.

Limitations

This analysis may not have identified all falls with major injury that resulted in a Medicare-paid hospitalization among nursing home residents. For example, this

analysis was based on diagnosis codes for falls and injuries in Medicare hospital claims; therefore, we may not have identified falls with major injury among nursing home residents if the inpatient hospital claims did not fully capture the cause and extent of patients' injuries. Additionally, OIG and others have found that Medicare Advantage encounter records are often less complete than traditional Medicare claims.[22, 23] As a result, we may not have identified all falls leading to hospitalization among people enrolled in Medicare Advantage.

Finally, we cannot determine what the rates for falls with major injury on Care Compare would have been if all falls we identified in the Medicare claims were reported as required. This is because the CMS quality measures include falls that are outside of the scope of this evaluation—those that did not result in a Medicare-paid hospitalization.

Standards

We conducted this study in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

FINDINGS

Nursing homes failed to report 43 percent of falls with major injury and hospitalization among Medicare-enrolled residents, as required, in Minimum Data Set assessments

During our 1-year review period, nursing homes failed to report 18,369 (43 percent) of the 42,236 falls resulting in a major injury and hospitalization that we identified among Medicare-enrolled nursing home residents, as required in MDS assessments. This high rate of nonreporting indicates nursing homes' poor overall compliance with CMS's fall reporting requirements.

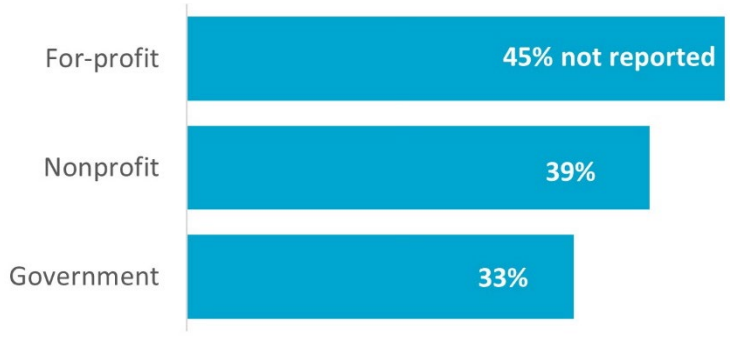
43%

of falls with major injury and hospitalization were **not reported** by nursing homes.

Nursing homes with for-profit ownership, chain membership, and more beds failed to report falls most often

Nursing homes with for-profit and chain ownership had higher rates of unreported falls than nursing homes with other ownership structures. Specifically, for-profit nursing homes did not report 45 percent of falls, whereas nonprofit and Government-owned nursing homes did not report 39 percent and 33 percent of falls, respectively. Nursing homes that belonged to a chain did not report 45 percent of falls, whereas independent nursing homes did not report 41 percent of falls.

Exhibit 1: For-profit nursing homes reported falls less often than nonprofit and Government-owned homes



Source: OIG analysis of Medicare claims, MDS assessments from July 2022 through June 2023, and Care Compare data from November 2023.

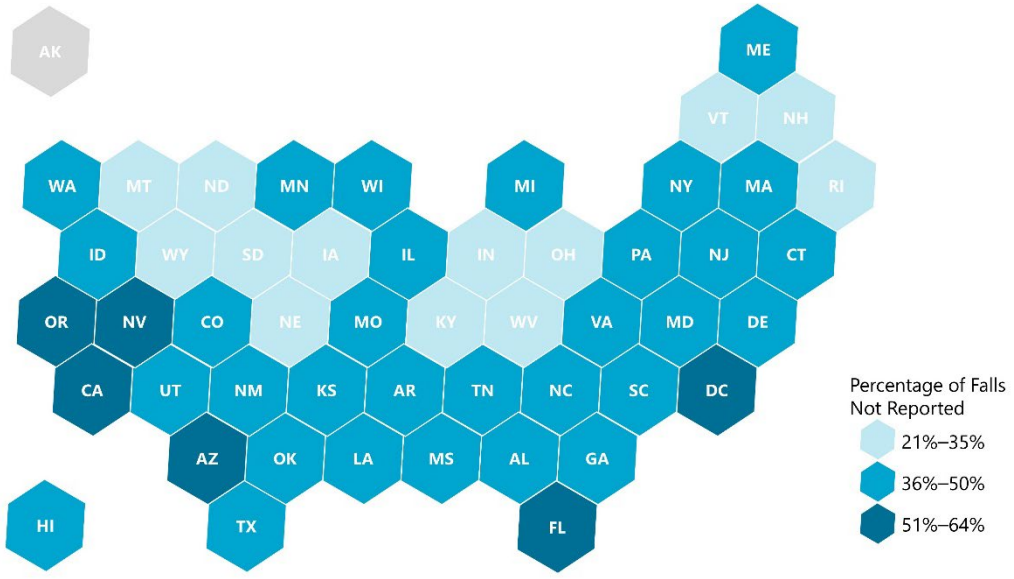
Note: Nursing homes without ownership information were excluded from this calculation.

Larger nursing homes had higher rates of unreported falls than smaller nursing homes. Specifically, nursing homes with more than 160 beds did not report 45 percent of falls, whereas nursing homes with 90 or fewer beds did not report 42 percent of falls.

Fall reporting varied widely by State and was worse among nonrural nursing homes

While 43 percent of falls nationally were not reported, there was notable variation in nonreporting rates across the States. For example, three States had nonreporting rates of 60 percent or more (Washington, DC, 64 percent; California, 61 percent; Nevada, 60 percent), whereas three other States had nonreporting rates of 25 percent or less (South Dakota, 21 percent; Vermont, 24 percent; North Dakota, 25 percent).

Exhibit 2: Nursing homes' nonreporting rates ranged from a low of 21 percent in South Dakota to a high of 64 percent in Washington, DC



Source: OIG analysis of Medicare claims, MDS assessments from July 2022 through June 2023, and Care Compare data from November 2023.

Note: Alaska's rate of unreported falls is not displayed because there were fewer than 11 falls in Alaska nursing homes.

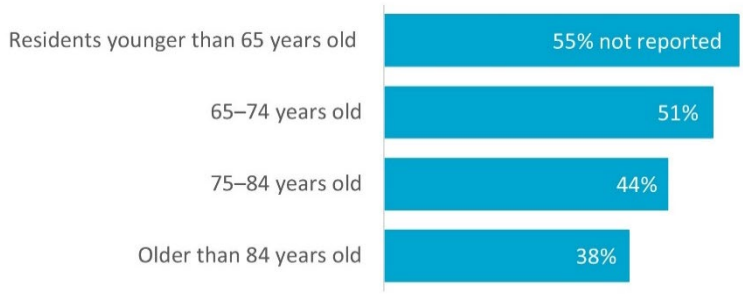
While no State's nursing homes reported all falls as required, these results suggest that some State practices (e.g., provider training or survey/certification processes) may do a better job at supporting accurate data submission by nursing homes.

Additionally, nursing homes located in nonrural areas had higher rates of unreported falls than nursing homes in rural areas. Specifically, nonrural nursing homes did not report 48 percent of falls, whereas rural nursing homes did not report 31 percent of falls.

Nursing homes failed to report falls more often for younger residents, male residents, short-stay residents, and residents with only Medicare coverage

Rates of unreported falls were higher for younger residents and male residents. While most falls occurred among the oldest nursing home residents, the percentage of falls not reported by nursing homes was lowest among those 85 years and older (38 percent). In comparison, the percentage of falls not reported was highest among residents younger than 65 years (55 percent). These youngest residents qualified for Medicare due to disability or end-stage renal disease rather than age. The percentage of unreported falls was higher for male residents (48 percent) than for female residents (41 percent).

Exhibit 3: Nursing homes failed to report falls more often for younger residents than for older residents



Source: OIG analysis of Medicare claims and enrollment data and MDS assessments from July 2022 through June 2023.

Rates of unreported falls were higher for short-stay nursing home residents and residents with only Medicare coverage (as opposed to those enrolled in both Medicare and Medicaid, known as dual-eligible enrollees). Nursing homes did not report 54 percent of falls among short-stay residents (those with stays of 100 or fewer days), compared with 27 percent of falls among long-stay residents (those with stays of 101 or more days). Nursing homes did not report 53 percent of falls among residents with only Medicare coverage, compared with 37 percent of falls among dual-eligible residents. These differences in rates of unreported falls are likely related, as short-stay residents are more likely to have only Medicare coverage, while long-stay residents are more likely to be dual-eligible.

Nursing homes' failure to report falls on Minimum Data Set assessments leads to inaccurate fall rates on Care Compare

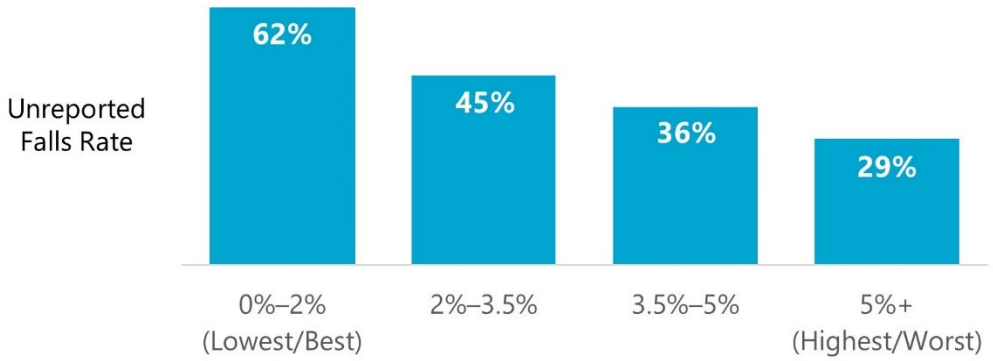
The nursing home quality measures for falls with major injury published on Care Compare provides the public with inaccurate information about how often people living in nursing homes fell. CMS calculates these measures using information about falls among nursing home residents collected as part of the MDS assessment process. According to Care Compare, from July 1, 2022, through June 30, 2023, an average of 3.4 percent of long-stay nursing home residents experienced a fall with major injury nationally.[24] However, our first finding—that nursing homes failed to report in MDS assessments nearly half of falls with major injury among Medicare-enrolled residents that resulted in a hospitalization during that same time period—suggests that the falls quality measure may substantially underestimate how often nursing home residents actually fell.

We cannot determine what the rates for falls with major injury on Care Compare would have been if all falls we identified in the Medicare claims were reported as required. The rates for falls with major injury among long-stay residents on Care Compare include enrollees with hospitalizations paid for by payers other than Medicare and falls with major injury that did not result in hospitalization—both of which are outside the scope of this evaluation.

Nursing homes with the lowest fall rates on Care Compare were the least likely to report falls that occurred

Nursing homes with low rates for falls with major injury among long-stay residents on Care Compare were the most likely to not report falls with major injury and hospitalization among their residents enrolled in Medicare. This suggests that those nursing homes' low fall rates on Care Compare are driven by a failure to report falls rather than an actual low incidence of falls. Specifically, we found that nursing homes with the lowest fall rates on Care Compare (0–2 percent) failed to report almost two-thirds of falls we identified in the Medicare claims. In contrast, nursing homes in our study with the highest fall rates on Care Compare (5 percent or more) failed to report about one-third of the falls we identified in the Medicare claims.

Exhibit 4: Nursing homes with the lowest Care Compare fall rates had the highest rates of unreported falls



Source: OIG analysis of Medicare claims, MDS assessments from July 2022 through June 2023, and Care Compare data from November 2023.

Note: Falls among residents of nursing homes without long-stay fall rates on Care Compare are excluded from this calculation of rates of unreported falls.

Nursing homes with the highest star ratings were slightly less likely to report falls that occurred

Nursing homes with higher star ratings were slightly less likely to report that their residents had falls with major injury that resulted in a hospitalization. Nursing homes with 5-star ratings—the highest rating on Care Compare—were the least likely to report falls with major injury. Specifically, these nursing homes did not report 45 percent of falls. In contrast, nursing homes with 1-star ratings—the lowest rating on Care Compare—did not report 43 percent of falls.

Example: Nursing Home That Did a Poor Job Reporting Serious Falls

We identified one nursing home that had **13 falls with major injury and hospitalization** but **only reported 3 of these falls.**

The percentage of this nursing home's long-stay residents experiencing a fall with major injury published on the CMS Care Compare website was 1.3 percent. This is much lower than the national average (3.4 percent).

This is a large (more than 200 beds), nonprofit nursing home located in New York with a 5-star overall rating.

CONCLUSION AND RECOMMENDATIONS

Because falls are significantly under-reported in MDS assessments, the quality measure for falls with major injury on Care Compare does not provide reliable information for nursing home residents and their families in selecting a nursing home or for CMS and nursing homes in their efforts to improve the safety and care of residents. The actual incidence of falls with major injury among nursing home residents is almost certainly higher than the rate CMS shares with nursing homes and reports on Care Compare. Moreover, our findings suggest that low fall rates for nursing homes on Care Compare are likely driven by nursing homes' failure to report falls rather than an actual low incidence of falls.

This report and previous work by OIG and others demonstrate that using MDS assessment data alone is insufficient for quality measurement purposes given the current levels of provider under-reporting. It is imperative that CMS take action to address this problem and ensure that the quality measures it uses—and makes available to the public—are accurate and meaningful.

OIG previously recommended that CMS use other data sources, in addition to provider-reported assessments, to improve the accuracy of the quality measure for falls with major injury in the home health setting. In response, CMS is beginning to explore using claims to ensure that all available information about falls is captured in the quality measures for falls with major injury. Because these are cross-setting measures (to fulfil the requirements of the IMPACT Act of 2014), any changes that CMS makes to the home health falls measure will apply to the nursing home measures as well.

OIG supports these positive steps from CMS to improve the accuracy of the quality measures; however, the process of changing the falls measure may take years to complete.

Therefore, in the interim, we recommend that CMS:

Take steps to ensure the completeness and accuracy of the nursing home-reported Minimum Data Set data used to calculate the quality measures for falls with major injury

CMS should take steps to improve nursing homes' reporting of falls with major injury among their residents on MDS assessments. CMS could consider multiple approaches to meet this objective. For example, CMS could work with State agencies to provide nursing homes with additional training and education about fall reporting requirements. Given our finding of significant variation in nonreporting rates across

States, CMS could target its efforts toward States with the highest nonreporting rates and seek to identify best practices among States with the lowest nonreporting rates.

CMS recently established a new MDS data validation program, which represents a positive step toward ensuring the accuracy of MDS assessment data, including nursing homes' compliance with fall reporting requirements. The program will consist of audits of selected nursing homes' medical records and will begin by validating the subset of measures included in the SNF VBP Program starting in the fiscal year 2027 program year (i.e., data submitted beginning October 1, 2024).

CMS could use data analysis to identify and then address continued problems with nursing homes' reporting of falls. For example, to identify continued gaps in nursing home reporting of falls, CMS could compare nursing homes' MDS assessment responses with inpatient hospital claims data—as we did in this study—to identify patterns of under-reporting. CMS could encourage State agencies to focus on the accuracy of fall reporting, and other questions used to generate quality measures, when reviewing MDS assessments as part of the survey process.

In response to past OIG work, CMS has reported taking steps to improve fall reporting on patient assessments in the home health setting. If CMS identifies promising approaches to improving reporting compliance in that setting, it should consider whether they may be effective in the nursing home setting as well.

As CMS continues to explore ways to improve the accuracy of quality measures, we recommend that CMS:

Explore whether approaches to improve the quality measures related to falls could similarly be used to improve the accuracy of other nursing home quality measures

Our work has demonstrated that relying on provider-reported assessments may not be the best way to obtain accurate data for quality measurement purposes. As noted above, CMS is beginning to explore using claims in addition to assessments to calculate the quality measure for falls with major injury in the home health setting. Because this measure must be measured the same way across settings, any changes that CMS makes to the home health falls quality measure will apply to the nursing home measures as well.

In addition to its exploration related to the falls quality measures, CMS should consider opportunities to improve the reliability of other nursing home quality measures that are based solely on MDS assessments. For example, if CMS determines that incorporating claims data allows it to measure falls with major injury rates more accurately, CMS should consider similarly incorporating claims data as it develops and revises other quality measures for nursing homes. Likewise, if CMS finds that additional training for nursing homes or having State agencies conduct

targeted followup through the survey process improves the accuracy of MDS fall reporting, it could apply the same approaches to improve other types of MDS reporting from which nursing home quality measures are derived.

AGENCY COMMENTS AND OIG RESPONSE

CMS concurred with both of our recommendations.

In response to our first recommendation—that CMS take steps to ensure the completeness and accuracy of MDS data used to calculate quality measures for falls with major injury—CMS described procedures it is employing in its MDS validation program, as noted in our recommendation. CMS also reported that surveyors determine whether MDS assessments accurately reflect residents' status for the sample of residents reviewed during onsite surveys, and should make referrals to OIG for investigation if they identify a pattern of willfully and knowingly submitting inaccurate or false information. Finally, as discussed in more detail below, CMS noted that the new version of the falls with major injury quality measure under development will not rely solely on MDS data, but will be supplemented with claims and encounters, which may lessen the impact of any continued MDS under-reporting of falls with major injury.

In response to our second recommendation—that CMS explore whether approaches to improve quality measures related to falls could similarly be used to improve the accuracy of other nursing home quality measures—CMS stated that it is working to ensure that all quality measures are as complete and accurate as possible by continuing to incorporate other data sources as appropriate.

In July 2025, CMS published its report summarizing progress made by the Technical Expert Panel (TEP) convened to explore changes to the falls with major injury cross-setting quality measure.[25] The TEP was evenly split between two proposed approaches for adding falls captured by the measure: (1) adding falls reported in the MDS with no or minor injury, but with a diagnosis of major injury in claims or encounters; and (2) adding falls identified in the first approach, as well as falls with major injury identified solely in claims or encounters where both (a) an external cause of injury code indicates a fall and (b) a diagnosis code indicates a major injury (similar to the methods used in this report). CMS intends to move forward with updates to the measure based on this input, and will publish additional guidance at a future date that includes technical specifications for the new measure.

OIG supports these steps by CMS, and will review additional details in the Final Management Decision.

For the full text of CMS's comments, see Appendix B.

DETAILED METHODOLOGY

Data Sources

Medicare Hospital Claims and Encounters

We used both traditional Medicare claims and Medicare Advantage encounters (hereafter referred to as "claims") to identify falls that resulted in hospitalization. We used inpatient claims to identify hospital admissions for falls with major injury with admission dates between July 1, 2022, and June 30, 2023.

Minimum Data Set Assessments

We analyzed MDS assessments with discharge dates between July 1, 2022, and June 30, 2023, to determine whether the falls identified in the claims were reported. We used MDS assessments to identify characteristics of the nursing home residents who fell.

Medicare Enrollment Database

We used the Medicare Enrollment Database (EDB) to establish the link between MDS assessments and Medicare claims at the enrollee level and to identify additional resident-level characteristics.

Care Compare Provider Data Catalog

We used data for Nursing Homes Including Rehab Services from CMS's Provider Data Catalog from November 2023 to identify nursing home characteristics, including Care Compare star ratings and fall rates.

Data Analysis

Identifying Falls With Major Injury Among Nursing Home Residents

We used diagnosis codes and external cause of injury codes from the inpatient claims to identify inpatient hospital admissions due to falls. We then used diagnosis codes to identify which of those hospitalizations met CMS's criteria for major injuries: bone fractures, joint dislocations, closed head injuries with altered consciousness, and subdural hematomas. For each admission, we noted the Medicare identification numbers of the person who was hospitalized and the date of the hospital admission.

Next, we determined which hospitalizations due to falls with major injury were among people who were nursing home residents at the time of the fall. To do this, we used Medicare identification numbers[26] to link to the MDS assessments. Specifically, we considered a person to have been a nursing home resident at the time of the fall if they had a discharge assessment

with a discharge date that was 1 day before, on, or 1 day after the start of the hospitalization.[27] We identified 628 inpatient claims that had matching MDS assessments that were not discharge assessments (i.e., they were other types of MDS assessments), but we excluded these falls from this analysis.

Fall Reporting

For the hospitalizations with matched MDS discharge assessments, we then determined whether the fall was reported in the MDS assessment as required. We reviewed the MDS item that asks how many falls with major injury the resident experienced since the last assessment. If the MDS assessment did not record that the resident had experienced at least one fall with major injury, the fall was considered to be unreported by the nursing home. We then determined the total number of these falls that were not reported on MDS assessments as required.

To evaluate the extent to which nursing homes reported these falls among their residents, we calculated the percentage of unreported falls with major injury. First, we divided the total number of unreported falls in the MDS assessments by the total number of falls identified in the hospital claims and matched to MDS assessments. We calculated the percentage of unreported falls for each nursing home by dividing the number of unreported falls by the nursing home in its MDS assessments by the number of falls identified in the review of hospitalizations and matched to the nursing homes' MDS assessments. We analyzed the number and percentage of unreported falls across nursing homes to identify any nursing homes with concerning patterns of nonreporting.

Resident-Level Characteristics

We calculated the percentage of unreported falls for different groups of residents to identify potential disparities in fall reporting. Using information from the MDS and Medicare enrollment database, we determined the percentage of unreported falls by age and sex. We also compared the percentages of unreported falls for nursing home residents covered by Medicare only versus Medicare and Medicaid (i.e., dual-eligibles) and by length of stay.

Nursing Home Characteristics

We calculated the percentage of unreported falls for different groups of nursing homes to determine whether there were differences in fall reporting by nursing home characteristics. Using CMS's Care Compare data on nursing homes, we determined the percentage of unreported falls by ownership type (for-profit, nonprofit, or Government-owned and chain membership), nursing home size (number of certified beds), Care Compare overall star rating, and Care Compare long-stay fall rate. Finally, we used nursing home ZIP codes from the Care Compare provider file to designate each nursing home as rural or not rural per the Health Resources and Services Administration's categorization. Some nursing homes had incomplete data for each of these characteristics; nursing homes without information for the characteristic examined were excluded. For example, nursing homes without an ownership type in the Care

Compare file were excluded from the calculation of percentage of unreported falls by ownership type.

APPENDICES

Appendix A: Nonreporting Rates by Nursing Home and Resident Characteristics

Exhibit 5: Rates of unreported falls by nursing home characteristics for the 12,549 nursing homes with falls

Nursing Home Characteristic		Number of Falls	Percentage of Unreported Falls (%)
Size (number of beds)	Small (90 or fewer)	11,197	42
	Medium (91–130)	15,725	44
	Large (131–160)	5,919	44
	Largest (161 or more)	9,174	45
Ownership type	For-profit	31,123	45
	Nonprofit	8,726	39
	Government	2,033	33
Chain membership	Part of a chain	27,988	45
	Independent	14,248	41
Rurality	Rural	10,483	31
	Not rural	31,532	48
Overall star rating	1 star (lowest)	10,255	43
	2 stars	8,728	43
	3 stars	8,798	43
	4 stars	7,233	44
	5 stars (highest)	6,696	45

Source: OIG analysis of Medicare claims, MDS assessments from July 2022 through June 2023, and Care Compare data from November 2023.

Exhibit 6: Unreported falls by resident characteristics

Resident Characteristic		Percentage of Residents (%)	Percentage of Falls Not Reported (%)
Age group (years)	<65	5	55
	65–74	19	51
	75–84	35	44
	85+	40	38
Sex	Female	67	41
	Male	33	48
Nursing home length of stay	Short stay (0–100 days)	61	54
	Long stay (101+ days)	39	27
Insurance coverage	Medicare and Medicaid	60	37
	Medicare only	40	53
Number of unique people			40,937
Number of falls			42,236

Source: OIG analysis of Medicare claims and MDS assessments from July 2022 through June 2023.

Appendix B: Agency Comments

Following this page are the official comments from CMS.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

DATE: August 25, 2025

TO: Ann Maxwell
Deputy Inspector General for Evaluations and Inspections

FROM: Dr. Mehmet Oz DR
Administrator

SUBJECT: Office of Inspector General Draft Report: Nursing Homes Failed to Report 43 Percent of Falls With Major Injury and Hospitalization Among Their Medicare-Enrolled Residents (OEI-05-24-00180)

The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the Office of Inspector General's (OIG) draft report.

CMS is charged with developing and enforcing quality and safety standards across the nation's health care system, a responsibility we take seriously. This duty is especially important when it comes to the care provided for people covered by Medicare and Medicaid who live in nursing homes. CMS's approach to the oversight of nursing homes, including determining the quality of care provided, is constantly evolving and CMS is continuously looking for ways to improve its oversight approach to nursing home safety and quality. For instance, the nursing homes that CMS certifies regularly report clinical information about each of their residents, and CMS uses this information to measure parts of nursing home performance.[1]

Upon a resident's entry into a Medicare or Medicaid-certified nursing home, each facility must make a comprehensive assessment of the resident's needs, strengths, goals, life history and preferences.[2] Each resident is expected to receive an accurate assessment, reflective of the resident's status at the time of the assessment, by staff qualified to assess relevant care areas and are knowledgeable about the resident's status, needs, strengths, and areas of decline.[3] Health professionals should document each resident's medical, functional, and psychosocial problems and identify resident strengths to maintain or improve medical status, function abilities, and psychosocial status using the Resident Assessment Instrument (RAI).[4] Through the RAI a nursing home should determine each resident's fall risk. The assessments must be based on the physical, mental, and psychosocial condition of each resident. These assessments include an appropriate level of involvement of physicians, nurses, rehabilitation therapists, activities professionals, medical social workers, dieticians, and other professionals, such as developmental

[1] Data.CMS.Gov, Nursing Homes Including Rehab Services, Quality Measures
[2] 42 C.F.R. §483.20 Resident Assessment
[3] State Operations Manual, Appendix PP
[4] Id.

disabilities specialists, in assessing the resident, and in correcting resident assessments, dependent upon resident need and status.[5]

Nursing homes submit standardized resident assessment data documented in the Minimum Data Set (MDS), which records the resident's status, and entry or discharge status to CMS at specified intervals. MDS information serves as the clinical basis for care planning and care delivery and provides information for Medicare and Medicaid payment systems, quality monitoring and public reporting. MDS information impacts a nursing home's payment rate and standing in terms of the quality monitoring process. For example, a set of Quality Measures (QMs) has been developed from the MDS and Medicare claims data to describe the quality of care provided in nursing homes. These measures address a broad range of function and health status indicators, such as the percent of residents who have experienced one or more falls with major injury reported in the target period or look-back period. The falls with a major injury QM was finalized in the FY 2016 SNF Prospective Payment Systems (PPS) Final Rule. Specifically, within the SNF PPS, there is the SNF Value-Based Purchasing (VBP) program, in which nursing homes report the percentage of residents residing 101 days or more where one or more fall(s) with a major injury occur. Additionally, in the SNF Quality Reporting Program (QRP), nursing homes report the percentage of residents residing any length of time where one or more fall(s) with a major injury occur. The falls with major injury QM is represented in both programs, as well as the Nursing Home Quality Initiative and the Five-Star Quality Rating System. CMS notes that most nursing homes participate in all the programs and would face consequences for not reporting, such as receiving a financial penalty.

As OIG raises in the report, CMS is aware nursing homes may have a pattern of clinical documentation or of MDS assessment or reporting practices that result in unflagging QMs, where the information does not accurately reflect the resident's status, as an attempt to avoid reporting QMs. To account for this behavior, CMS actively monitors nursing homes for inconsistent reporting both through data and survey monitoring. For example, CMS is now utilizing Medicare and Medicaid claims and encounter data, in addition to MDS assessment data to attempt to capture all major injuries resulting from falls. For example, the new version of the measure looks for claims and encounters data with a major injury when there is a fall noted on the assessment, even if there is not a major injury captured on the assessment.

Additionally, during an onsite survey, a surveyor would select a sample of residents to interview, including topics such as if they have fallen, and if so, when, and what happened. The surveyor would further investigate how many times the resident(s) fell, if there were injuries, and what the nursing home did to prevent the fall. The surveyor would also observe for any concerns of residents falling or almost falling. The surveyor would observe if the resident had any fall prevention devices in use and if they were functioning correctly. For instance, the surveyor(s) would observe if the resident had appropriate foot coverings with non-skid soles. The surveyor would further review the residents' records to determine if they had a fall with major injury in the last 120 days. The surveyor would determine if the resident assessment accurately reflected the resident's status and if anyone willfully or knowingly submitted inaccurate or false information.[6] If the surveyor identifies a pattern (i.e., three or more residents) of inaccurate MDS

[5] Id.
[6] CMS Survey Resources, LTC Survey Pathways, available for download on the CMS.gov Nursing Homes website.

coding by staff who completed, signed, and certified to the accuracy of the portion of the assessment they completed, and there are indications or concerns that the individual who completed the section(s) in question knew the coding was inaccurate, the surveyor should make a referral to the Office of Inspector General for investigation of falsification of a resident assessment.

CMS thanks OIG for their efforts on this issue and looks forward to working with OIG on this and other issues in the future.

OIG's recommendations and CMS's responses are below.

OIG Recommendation

CMS should take steps to ensure the completeness and accuracy of the nursing home reported MDS data used to calculate the quality measures for falls with major injury.

CMS Response

CMS concurs with OIG's recommendation. CMS is taking steps to verify the accuracy and completeness of MDS data through the MDS validation program under the SNF VBP program. As stated above, CMS is now utilizing Medicare and Medicaid claims and encounter data, in addition to MDS assessment data to attempt to capture all major injuries resulting from falls. For example, the new version of the measure looks for claims and encounters data with a major injury when there is a fall noted on the assessment, even if there is not a major injury captured on the assessment.

OIG Recommendation

CMS should explore whether approaches to improve the quality measures related to falls could similarly be used to improve the accuracy of other nursing home quality measures.

CMS Response

CMS concurs with OIG's recommendation. CMS is working to ensure all of our quality measures are as complete and accurate as possible by continuing to incorporate other data sources as appropriate.

ENDNOTES

[1] Jo A. Taylor, Patricia Parmelee, Holly Brown, and Joseph Ouslander, *The Falls Management Program: A Quality Improvement Initiative for Nursing Facilities*. Accessed on Apr. 30, 2025.

[2] Curtis S. Florence, Gwen Bergen, Adam Atherly, Elizabeth Burns, Judy Stevens, and Cynthia Drake, "Medical Costs of Fatal and Nonfatal Falls in Older Adults," *Journal of the American Geriatrics Society*, vol. 66, no. 4, Apr. 2018, pp. 693–698. Accessed on May 1, 2025.

[3] Jo A. Taylor, Patricia Parmelee, Holly Brown, and Joseph Ouslander, *The Falls Management Program: A Quality Improvement Initiative for Nursing Facilities*. Accessed on Apr. 30, 2025.

[4] For the purposes of this study, "nursing homes" refers to Medicare-certified skilled nursing facilities (SNFs) and Medicaid-certified nursing facilities. MDS reporting requirements and quality measures on Care Compare are the same for both types of nursing homes.

[5] This includes non-Critical Access Hospital (CAH) swing-bed facilities. CMS defines swing-bed facilities as rural hospitals that provide inpatient and SNF services. Importantly for the scoping of this study, swing-bed providers that are non-CAHs must complete MDS assessments for all residents. Specifically, these facilities must complete a swing-bed discharge assessment when Part A SNF care ends and complete the MDS items about falls in that assessment. (CMS, *Long-Term Care Facility Resident Assessment Instrument 3.0 User's Manual*, Version 1.17.1, Chapter 2, pp. 3 and 31; Appendix F item matrix, p. 11. Accessed on Oct. 30, 2024.)

[6] CMS, *State Operations Manual: Appendix PP – Guidance to Surveyors for Long Term Care Facilities*, section 483.20(g). Accessed on Mar. 6, 2025.

[7] 88 Fed. Reg. 53200 and 53346 (Aug. 7, 2023).

[8] CMS, *Quality Measures*. Accessed on Oct. 15, 2024.

[9] According to CMS, it developed these two fall measures for different programs and, therefore, they have different denominators and different reporting periods. The long-stay measure was finalized in the 2016 SNF Prospective Payment System (PPS) Final Rule and is limited to long-stay residents (101 days or more), regardless of payer. In contrast, the Medicare Part A SNF-stay measure is part of the SNF QRP, and the denominator is limited to SNF Part A PPS nursing home episodes of any length (excludes Medicare Advantage or Medicaid paid stays). This measure's reporting period lags 6 months behind the reporting period for the long-stay measure for the data displayed on Care Compare at any given time. Furthermore, the Medicare Part A SNF-stay measure is not included in the overall 5-star rating(s) and will not be included in the VBP Program in the future.

[10] The specific items from the MDS are:

- J1800 – Has the resident had any falls since admission/entry or reentry or the prior assessment (OBRA or Scheduled PPS), whichever is more recent? If yes, then the nursing home reports the number of falls (None, One, or Two or more) in each of the following three categories:

- J1900A – No injury: No evidence of any injury is noted on physical assessment by the nurse or primary care clinician; no complaints of pain or injury by the resident; no change in the resident's behavior is noted after the fall
- J1900B – Injury (except major): Skin tears, abrasions, lacerations, superficial bruises, hematomas, and sprains; or any fall-related injury that causes the resident to complain of pain
- J1900C – Major injury: Bone fractures, joint dislocations, closed head injuries with altered consciousness, subdural hematoma

[11] The Fiscal Year 2024 SNF Payment Final Rule added the long-stay measure to Medicare's SNF VBP Program beginning in performance period 2025 to determine payments to nursing homes beginning in 2027. See 88 Fed. Reg. 53200 and 53290 (Aug. 7, 2023).

[12] OIG, *Home Health Agencies Failed To Report Over Half of Falls With Major Injury and Hospitalization Among Their Medicare Patients* (OEI-05-22-00290), Sept. 5, 2023.

[13] OIG, *CMS Could Improve the Data It Uses To Monitor Antipsychotic Drugs in Nursing Homes* (OEI-07-19-00490), May 3, 2021.

[14] Prachi Sanghavi and Zihan Chen, "Underreporting of Quality Measures and Associated Facility Characteristics and Racial Disparities in US Nursing Home Ratings," *JAMA Network Open*, vol. 6, no. 5, May 23, 2023. Accessed on Apr. 7, 2025.

[15] Zihan Chen, Lauren J. Gleason, and Prachi Sanghavi, "Accuracy of Pressure Ulcer Events in US Nursing Home Ratings," *Med Care*, vol. 60, no. 10, Oct. 1, 2022, pp. 775–783. Accessed on Apr. 7, 2025.

[16] Zihan Chen, Lauren J. Gleason, R. Tamara Konetzka, and Prachi Sanghavi, "Accuracy of infection reporting in US nursing home ratings," *Health Services Research*, vol. 58, no. 5, Oct. 2023, pp. 1109–1118. Accessed on Apr. 7, 2025.

[17] Abt Associates, *2023 Technical Expert Panel Meetings: Expanded Home Health Value-Based Purchasing Model Summary Report*. Accessed on Apr. 7, 2025. 89 Fed. Reg. 88444–45 (Nov. 7, 2024).

[18] RTI International. *Standing Technical Expert Panel for the Falls with Major Injury Quality Measure Summary Report*, July 2025. Accessed on Aug. 8, 2025.

[19] In one report, OIG estimated that 22 percent of Medicare enrollees experienced adverse events or temporary harm events during their SNF stays in 2011; 10 percent of these events were falls or other trauma related to effects of medication or other aspects of resident care. See OIG, *Adverse Events in Skilled Nursing Facilities: National Incidence Among Medicare Beneficiaries* (OEI-06-11-00370), Feb. 27, 2014.

[20] OIG, *Some Nursing Homes' Reported Staffing Levels in 2018 Raise Concerns: Consumer Transparency Could Be Increased* (OEI-04-18-00450), Aug. 3, 2020. OIG, *CMS Use of Data on Nursing Home Staffing: Progress and Opportunities To Do More* (OEI-04-18-00451), Mar. 9, 2021. OIG, *CMS Use of Staffing Data To Inform State Oversight of Nursing Homes* (OEI-04-22-00550), June 9, 2025. See also ongoing OIG work: *Audit of Nursing Homes' Nurse Staffing Hours Reported in CMS's Payroll-Based Journal*.

[21] OIG, *Nonprofit and Government-Owned Nursing Homes Generally Complied With Federal Requirements Regarding the Infection Preventionist Position* (A-01-24-00002), Dec. 3, 2024. OIG, *Certain Nursing Homes May*

Not Have Complied With Federal Requirements for Infection Prevention and Control and Emergency Preparedness (A-01-20-00005), July 26, 2022. OIG, *Lessons Learned During the Pandemic Can Help Improve Care in Nursing Homes* (OEI-02-20-00492), Feb. 26, 2024. OIG, *Concerns Remain About Safeguards To Protect Residents During Facility-Initiated Discharges From Nursing Homes* (OEI-01-18-00251), Mar. 29, 2024. OIG, *Nursing Home Residents With Endangering Behaviors and Mental Health Disorders May Be Vulnerable to Facility-Initiated Discharges* (OEI-01-18-000252), Mar. 29, 2024.

[22] OIG, *CMS's Encounter Data Lack Essential Information That Medicare Advantage Organizations Have the Ability To Collect* (OEI-03-19-00430), Aug. 24, 2020.

[23] Sean Creighton, Robin Duddy-Tenbrunsel, and James Michel, "The Promise And Pitfalls Of Medicare Advantage Encounter Data," *Health Affairs Forefront*, Feb. 25, 2019. Accessed on May 10, 2023.

[24] CMS, Care Compare NH_StateUSAverages_Nov2023.csv, November 2023. Downloaded from https://data.cms.gov/provider-data/archived-data/nursing-homes on Jan. 8, 2024.

[25] RTI International. *Standing Technical Expert Panel for the Falls with Major Injury Quality Measure Summary Report*, July 2025. Accessed on Aug. 8, 2025.

[26] We used several Medicare identifiers to match the Medicare data to the MDS records. Specifically, we looked for matches between the following fields in the two data sources:

- Medicare beneficiary identification number (MBI in EDB and item A0600B in MDS)
- Social Security number (SSN in EDB and item A0600A in MDS)

For each record that matched using at least one of the above Medicare identifiers, we further required that at least two of the following fields match between the Medicare EDB and MDS: first name, last name, date of birth, and sex.

[27] Specifically, we used both the hospital claim start date and admission date fields. We considered a person to be a nursing home resident at the time of the fall if the MDS assessment discharge date was within 1 day of the hospital claim admission date or if it was the day before or the same day as the hospital claim start date.

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