Falls, a Hospital-Acquired Condition: The Pennsylvania Patient Safety Authority's Enhanced Reporting Program

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The Centers for Medicare and Medicaid Services (CMS) is addressing hospital-acquired conditions (HACs) through the Partnership for Patients and the Affordable Care Act.[1,2] There are 10 different categories of HACs that were chosen because of their high occurrence and/or the high cost associated with treating them.[3] Of the 10, the most frequently occurring class of HACs is falls and trauma, with a national rate of 0.564 per 1,000 patient discharges.[4,*] The Pennsylvania rate for falls and trauma, using CMS administrative data, is 0.581 per 1,000 patient discharges (95% CI: 0.531 to 0.632). Falls and trauma rates consist of falls that result in fractures, dislocations, and intracranial injuries and also traumas from other hospital causes, specifically harm from crushing injuries, burns, and electric shocks.[5]

Pennsylvania Patient Safety Authority analysts compared the CMS Pennsylvania falls and trauma rate with the Authority's falls rate (other trauma events were excluded due to their low number of events).[6] The Authority's falls rate was calculated using falls events that resulted in fractures, dislocations, surgical interventions, intracranial injuries, and deaths that were reported through the Pennsylvania Patient Safety Reporting System (PA-PSRS) along with discharge data reported through CMS for the same time period. The Pennsylvania rate based on PA-PSRS event reports for falls with harm was 0.332 per 1,000 patient discharges (95% CI: 0.294 to 0.370).

The average additional cost of a fall with serious injury (e.g., fracture, subdural hematoma, any injury resulting in surgical intervention, death) was $13,316.[7] The average additional length of stay was 6.3 days longer than for patients who did not fall.[7] Combining these averages with the number of falls with serious injury reported to the Authority in 2010 (215 falls with serious injury), Pennsylvania hospitals experienced an estimated additional average cost of $2.9 million and 1,355 additional days from fall injuries.[†] The Authority has developed a new falls-with-harm savings calculator for hospitals to calculate the average additional cost of falls with serious injury, additional days, and cost savings associated with 10%, 25%, 50%, 75%, and 90% reductions in falls with serious injury. This savings calculator is available on the Authority's website (see http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2012/Jun;9(2)/Pages/home.aspx).

ENHANCED FALLS REPORTING PROGRAM

In March 2012, the Authority launched a statewide initiative for reporting patient falls to provide real-time falls rate reports with benchmarking data for Pennsylvania hospitals. This new initiative is an expansion of a two-year Pennsylvania southeast region patient falls initiative that ended in 2010.[8] The new statewide falls reporting initiative has two ways to participate. In one, hospitals can participate in the CMS Hospital Engagement Network (HEN) collaboration project among the Hospital and Healthsystem Association of Pennsylvania, the Authority, and hospitals statewide in Pennsylvania. The second is through the non-HEN statewide falls reporting program. Both programs require hospitals to use standardized definitions of falls and falls with harm to provide similar comparisons of falls rates and receive meaningful falls reports with comparative data. To accomplish this task, PA-PSRS has been enhanced to

* For the purposes of this article, falls rates were calculated using discharge data for comparison with CMS, whereas other articles in this issue included falls rates calculated using patient days, which aligns with the new PA-PSRS enhancements.

† The average additional cost of a fall with serious injury and additional days were based on the study by Wong et al.

provide unit-level and facility-level reports on falls rates, detailed falls reports, and prevention strategies for participating hospitals.

Before March 2012, PA-PSRS did not have the capacity to provide users with falls rates and comparative data. Achieving this new level of functionality (i.e., providing falls rate reports with comparative data at the facility and unit levels) required enhancements in the form of utilization data entry (i.e., entering data for patient-days and patient encounters). To calculate unit-level falls rates—since falls rates will be based on the location of the falls—the Authority standardized the locations or units within a hospital. These units are referred to as care areas and are identified and grouped by type of services provided. For example, general medical/surgical units are composed of medical units, surgical units, and medical/surgical units in a hospital. Intermediary units include "intensive care unit step-down units" and telemetry-type units. Specialty units are identified by medical conditions (e.g., orthopedic unit, cardiac unit, gynecology unit). PA-PSRS has 20 care areas that are used to identify the location of a fall, including a category titled "Other," which includes chemical dependency units, ancillary departments, diagnostic labs, administration, and unspecified care areas. When the unit location of a fall is unknown or unspecified, the choice "Other" can be selected. However, falls reported in the "Other" category do not appear in a unit-level falls rate report, which reduces the validity of these reports.

Not all care areas will be measured in the statewide falls reporting program. Care areas for the falls reporting program were chosen based on where the largest number of falls and falls with harm occurred in Pennsylvania hospitals. To determine this information, the Authority conducted a search, by care areas, of falls event reports submitted to PA-PSRS from January 1, 2008, through December 31, 2010. The Table shows the location of patient falls by care areas within Pennsylvania hospitals.

DISCUSSION

Nearly half (46.5%, n= 62,992 of 135,221) of all falls reported by Pennsylvania hospitals from 2008 through 2010 occurred in medical/surgical units or intermediate units (e.g., telemetry unit,

Table. Patient Falls by Care Area (Based on Reports Submitted to the Pennsylvania Patient Safety Reporting System by Hospitals Only, 2008 to 2010)

CARE AREA	INCIDENTS	PERCENTAGE AS INCIDENTS	SERIOUS EVENTS	PERCENTAGE AS SERIOUS EVENTS (SHADED CELLS ARE ABOVE CATEGORY MEAN)	TOTAL	PERCENTAGE OF TOTAL FALLS
General medical/ surgical units	42,928	96.7%	1,472	3.3%	44,400	32.8%
Intermediate unit*	17,941	96.5	651	3.5	18,592	13.7
Inpatient psychiatric	14,360	95.8	622	4.2	14,982	11.1
Inpatient rehabilitation	13,901	97.3	392	2.7	14,293	10.6
Specialty units†	11,874	96.5	427	3.5	12,301	9.1
Critical care	6,037	96.6	211	3.4	6,248	4.6
Emergency department	5,408	95.3	265	4.7	5,673	4.2
Rehabilitation services	3,037	97.7	71	2.3	3,108	2.3
Pediatric care	2,682	96.6	94	3.4	2,776	2.1
Radiology services	2,023	94.8	111	5.2	2,134	1.6
Outpatient clinics	1,775	97.3	49	2.7	1,824	1.3
Extended care	1,207	97.7	28	2.3	1,235	0.9
Obstetrical care	1,038	98.2	19	1.8	1,057	0.8
Surgical services	769	96.2	30	3.8	799	0.6
Other‡	5,559	95.9	240	4.1	5,799	4.3
Total	130,539	96.5§	4,682	3.5§	135,221	100.0

* Includes telemetry and step-down units

† Includes units designated as single specialty units, such as oncology units and orthopedic units

‡ Includes chemical dependency, ancillary departments, diagnostic labs, administration, and unspecified care areas. Each care area in this category, except for unspecified care areas, accounted for less than 1% of the total percent of falls. Unspecified care areas accounted for 2% of total falls.

§ Average percentage

step-down unit). The majority (85.7%, n = 115,884 of 135,221) of all falls occurred in inpatient care areas (e.g., medical/surgical units, critical care units, inpatient psychiatric units), 10.0% (n = 13,538 of 135,221) occurred in care areas that provide services to outpatients and inpatients (e.g., emergency department, radiology), and 4.3% (n = 5,799 of 135,221) were assigned to the care area titled "Other." Half of the falls identified in the "Other" care area category (2%, n = 2,900 of 5,799) were falls where the location of the fall was unknown or unspecified. A detailed review of the reports submitted indicates that many of the falls in this category occurred on a hospital unit or in a diagnostic setting; however, the exact location was not identified. For hospitals participating in the falls reporting program at the unit level, providing the exact location of a fall is necessary to provide accurate unit-level falls rate reports.

CONCLUSIONS

Standardized reporting of falls requires more than a standardized definition and measure specifications. Accuracy of data and fall characteristics (e.g., location of a fall) is equally important to understanding trends and reducing incidents of falls. The care areas defined by the Authority provide insight about the location and type of fall that will allow for meaningful comparisons of falls rates and identification of trends across units.

NOTES

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