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Under Pressure: Financial Impact of the Hospital-Acquired Conditions Initiative. A Statewide Analysis of Pressure Ulcer Development and Payment

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Abstract

OBJECTIVE—To assess the financial impact of the 2008 Hospital-Acquired Conditions Initiative's pressure ulcer payment changes on Medicare and other payors.

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Disclaimer:
The findings and conclusions in this report are those of the authors and do not necessarily represent those of the sponsor, the Agency for Healthcare Research and Quality.

Conflict of Interest
All authors have completed and submitted the ICJME Form for Disclosure of Potential Conflicts of Interest. The remaining authors report no conflicts of interest.

Author Contributions
Dr. Meddings and Ms. Reichert had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.
Study concept and design: Meddings, Reichert, McMahon, Grazier
Acquisition of data: Meddings, Reichert
Analysis and/or interpretation of data: Meddings, Reichert, Grazier, Rogers
Drafting of the manuscript: Meddings, Reichert
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Statistical analysis: Reichert, Meddings
Obtaining funding: McMahon, Meddings
Study supervision: Meddings

SUPPORTING INFORMATION
Additional Supporting Information may be found in the online version of this article:
Table S1. Pressure Ulcer Diagnosis ICD-9-CM Codes
Figure S1. Study Flow Diagram
Appendix S1. Changes in Pressure Ulcer Diagnosis ICD-9-CM codes related to the 2008 Hospital-Acquired Conditions Initiative
Appendix S2. Identification of hospital discharges with reduced hospital payment due to the pressure ulcer payment changes in the 2008 Hospital-Acquired Conditions Initiative
Appendix S3. Calculation of Outlier Payments
Appendix S4. Trends in pressure ulcer diagnosis code use, 2009–2011
Table S3. Percentage of Adult Discharges in California Hospitals with Stage III and IV Pressure Ulcers, from 2009–2011

DESIGN, SETTING AND PARTICIPANTS—Retrospective before-and-after study of all-payor statewide administrative data for >2.4 million annual adult discharges from 311 nonfederal acute-care California hospitals in 2007 and 2009, using the Healthcare Cost and Utilization Project State Inpatient Datasets. We assessed how often and by how much the 2008 payment changes for pressure ulcers affected hospital payment.

MEASUREMENTS—Pressure ulcer rates and hospital payment changes

RESULTS—Hospital-acquired pressure ulcer rates were very low (0.28%) in 2007 and 2009; present-on-admission pressure ulcer rates increased from 2.35% in 2007 to 3.00% in 2009. By clinical stage of pressure ulcer (available in 2009), hospital-acquired stage III–IV ulcers occurred in 603 discharges (0.02%); 60,244 discharges (2.42%) contained other pressure ulcer diagnoses. Payment removal for stage III–IV hospital-acquired ulcers reduced payment in 75 (0.003%) discharges for a statewide payment decrease of $310,444 (0.001%) for all payors and $199,238 (0.001%) for Medicare. For all other pressure ulcers, the Hospital-Acquired Conditions Initiative reduced hospital payment in 20,246 (0.81%) cases (including 18,953 cases with present-on-admission ulcers) reducing statewide payment by $62,538,586 (0.21%) for all payors and $47,237,984 (0.32%) for Medicare.

CONCLUSION—The total financial impact of the 2008 payment changes for pressure ulcers was negligible. Most payment decreases occurred by removal of comorbidity payments for present-on-admission pressure ulcers other than stages III–IV. The removal of payment for hospital-acquired stage III–IV ulcers was more than 200 times less than the removal of payment for other types of pressure ulcers that occurred in implementation of the Hospital-Acquired Conditions Initiative.

Keywords

hospital-acquired conditions; pressure ulcer; payment; Medicare

Pressure ulcers (i.e., “bed sores”) are skin or tissue injuries over bony prominences, due to pressure and/or shear, ranging in severity from stage I (non-blanchable erythematous intact skin) to stage IV (with full-thickness tissue loss exposing bone, tendon or muscle).[1] Hospital-acquired pressure ulcers are common (1–2.5 million annually in the US[2,3]), painful,[4] expensive,[2,3,5,6] often preventable[7] and potentially life-threatening.[3] Cost estimates to heal a single pressure ulcer vary by severity and population studied from hundreds of dollars[2] for earlier ulcer stages I–II, to $5000–$151,700[3,5,6] for more advanced ulcers.

“Value-based purchasing” programs[7–12] are used to motivate hospitals to prevent complications like pressure ulcers by payment changes. For example, the October 2008 Hospital-Acquired Conditions Initiative (HACI)[11,13] eliminated extra Medicare payments for treating certain complications, including pressure ulcers. As detailed in official Centers for Medicare and Medicaid Services (CMS) information[9,10,14] by press releases and on-line material prepared for Medicare providers about the Hospital-Acquired Conditions Initiative, advanced stage pressure ulcers (stage III or IV) no longer can generate extra payment as a comorbidity *when hospital-acquired*. Somewhat inexplicably (described only in implementation details of the Hospital-Acquired Conditions Initiative in the *Federal Register*[13]*)*, earlier stage (stage I–II) pressure ulcers as well as “unstageable” and “stage-not-specified” ulcers also no longer generate extra payment as comorbidities *whether hospital-*

acquired or present-on-admission. Payment removal for these present-on-admission pressure ulcers appears to be a pure cost cutting decision because hospitals cannot influence their development. In this study, we performed two analyses assessing the impact of the 2008 Hospital-Acquired Conditions Initiative using the administrative data upon which this policy is implemented. First, we assessed the overall changes in pressure ulcer rates_categorized as present-on-admission versus hospital-acquired using 2007 (pre-policy) data and 2009 (post-policy) data, without respect to pressure ulcer 'stage' because pressure ulcer stage codes were not available in 2007. Next, we calculated the reductions in hospital payment that occurred in 2009 resulting from changes in pressure ulcer payment due to the 2008 Hospital-Acquired Conditions Initiative whose implementation requires identification of pressure ulcers by both status upon admission and stage.

METHODS

Study Design and Data Sources

Using administrative discharge data from the Healthcare Cost and Utilization Project State Inpatient Datasets[15] for California 2007 and 2009, MS-DRG software and hospital payment files from the CMS, we conducted a retrospective before-and-after study to assess how often and by how much hospital payment decreased as a result of the 2008 pressure ulcer payment changes. The 2009 American Hospital Association Annual Survey Database provided hospital characteristics.[16] The University of Michigan Institutional Review Board for Human Subjects approved this study.

Study Population

The Figure S1 in the Appendix diagrams the application of adult patient and hospital exclusion criteria for constructing the analytic data set. We conducted analyses specific to patients with Medicare listed as the primary payer (including fee-for-service, managed care and HMO) and an all-payor population because the HACI policy rapidly expanded to other payors.[12,17] We excluded hospitals not affected by the HACI, such as long-term care, rehabilitation, and psychiatric facilities and critical access, Veterans Affairs, and children's hospitals. We also excluded hospitals available 2007 and 2009 data.

Pressure Ulcer Case Identification

As detailed in the Appendix (Table S1, Appendix S1), pressure ulcers were identified in administrative data by ICD-9-CM diagnoses,[11,14,18] specific to ulcer location (in 2007 and 2009) and severity by stage (in 2009).

Assessing Statewide Rates of Present-on-admission and Hospital-acquired Pressure Ulcers in 2007 (pre-policy) and 2009 (post-policy)

Statewide rates of pressure ulcers in 2007 and 2009 were computed as the percentage of all adult discharges having at least one pressure ulcer diagnosis, categorized as present-on-admission versus hospital-acquired.

Assessing Hospital Payment Reductions in 2009 Due to the Hospital-Acquired Conditions Initiative's Payment Changes for Pressure Ulcers

We determined how often and by how much the HACI payment changes for pressure ulcers reduced hospital payment (in dollars) using post-policy 2009 administrative data, MS-DRG software and CMS hospital base payment files, while accounting for the 2008 pressure ulcer diagnosis code changes including pressure ulcer stage and status upon admission (Appendix S2) and associated changes in qualification for outlier payment (as detailed in Appendix S3). In brief, by the HACI, advanced stage pressure ulcers (stage III or IV) no longer can generate extra payment *when hospital-acquired* and earlier stage (stage I–II) pressure ulcers as well as "unstageable" and "stage-not-specified" ulcers also no longer generate extra payment as comorbidities *whether hospital-acquired or present-on-admission*.

RESULTS

Statewide Rates of Present-on-Admission and Hospital-Acquired Pressure Ulcers in 2007 (pre-policy) and 2009 (post-policy)

There were 2,401,269 adult discharges at 311 California hospitals in 2007 and 2,490,488 discharges in the same hospitals in 2009 (Figure S1). Considering all stages and locations (Table S1), pressure ulcers were listed as present-on-admission for 56,531 (2.35%) discharges in 2007 and 74,684 (3.00%) discharges in 2009. Hospital-acquired pressure ulcers were listed for 6,705 (0.28%) discharges in 2007 and 6,654 (0.27%) discharges in 2009.

Effect of Payment Changes for Pressure Ulcers on Hospital Payment

Figure 1 outlines the number of discharges and payment changes that occurred as a direct consequence of the 2008 HACI changes in payment for pressure ulcers. By stage (available in 2009, Table 1), diagnoses of stage III–IV hospital-acquired pressure ulcers occurred in 603 discharges (0.02%); stages I, II, unstageable and stage-not-specified ulcers (including hospital-acquired and present-on-admission) occurred in 60,244 discharges (2.42%). Beginning with 78,114 hospitalizations in 2009 with at least one pressure ulcer diagnosis, 23,250 hospitalizations would have no payment change due to having either a principal diagnosis of pressure ulcer and/or having a present-on-admission stage III or IV pressure ulcer. Non-payment for hospital-acquired stage III and IV lowered hospital payment for 75 (0.003%) hospitalizations. Non-payment for pressure ulcers of stages I, II, unstageable, and stage-not-specified lowered hospital payment for 20,246 (0.81%) hospitalizations. The remaining hospitalizations did not experience a reduction in payment due to the existence of other comorbidities that justified greater reimbursement (see Appendix S2). Pressure ulcer payment changes moved 212 discharges to qualify for new outlier status and payment; 559 additional discharges maintained outlier status but received increased outlier payment because of the DRG change (see Appendix S2).

We next estimated the net dollar impact considering pressure ulcer payment decreases and outlier payment increases using the hospital-specific base payment rates (Figure 1, bottom box). California hospitals experienced a total payment reduction of $62,849,030 (0.21%) from all payors including $47,437,222 (0.32%) from Medicare. Non-payment for hospital-

acquired stage III–IV pressure ulcers led to a net all-payor payment reduction of $310,444 (0.5% of total reduction in all-payor payments, Figure 2). California hospitals lost $5,687,255 (9.0% of total payment reductions for pressure ulcers, Figure 2) related to all other stages of hospital-acquired pressure ulcers and $56,851,331 (90.5% of reduced payments for pressure ulcers, Figure 2) for pressure ulcers described as present-on-admission stages 1, 2, unstageable and stage-notspecified. As Figure 2 emphasizes, the largest proportion of statewide payment reduction resulted from the non-payment ($62,538,586) for stage I–II, unstageable, and stage-not-specified ulcers which no longer count as payable comorbidities; this payment reduction was more than 200 times greater than for hospital-acquired stages III–IV ulcers ($310,444).

For an average hospital, the payment reduction for hospital-acquired stage III–IV pressure ulcers (including outlier payment changes) was $998 from all payors (0.001% of the hospital's total payments) including $641 from Medicare (0.001% of the hospital's Medicare payments). For an average hospital, the payment reduction for all other stages of pressure ulcers (including outlier payment changes) was $201,089 from all payors (0.2% of the hospital's total payments) including $151,891 from Medicare (0.3% of the hospital's Medicare payments).

DISCUSSION

The total financial impact of the 2008 Hospital-Acquired Conditions Initiative's payment changes for pressure ulcers was negligible. Within the very small (<0.4%) payment decrease that occurred, the largest proportion resulted from non-payment for stage 1,2, unstageable and stage-not-specified ulcers, the overwhelming majority (90.5%) of which was due to non-payment for present-on-admission ulcers – effectively a price cut unrelated to the care delivered. This payment change was more than 200 times greater than the reduction for hospital-acquired stage III–IV ulcers – the pressure ulcers described in CMS information material[9,10,14] summarizing the HACI for Medicare providers, and publicly reported from 2011–2013 on Medicare's 'Hospital Compare'.[19] By including price cuts unrelated to quality of care, hospitals are unable to preserve their payments by delivering higher quality care. Removing many present-on-admission pressure ulcers as payable comorbidities also provided an unintentional disincentive for hospitals to avoid admitting patients with pre-existing early ulcers; however, we anticipate many hospitals are unaware of the removal of early pressure ulcers as payable comorbidities, as detailed only in the *Federal Register*.[13]

Hospital-acquired pressure ulcer rates (including all stages) remained low and relatively unchanged in administrative data in 2007 and 2009; pressure ulcers recorded as present-on-admission increased (2.35% in 2007, and 3.00% in 2009). The total financial impact of the 2008 payment changes was very small for all-payor (0.21%) and Medicare (0.32%) statewide hospital payments.

Regarding limitations, this study involves one state's data for 2 years. However, California has applied the present-on-admission variable since 1997 to identify hospital-acquired conditions, which became mandatory nationwide in October 2007; 2009–2011 trends in pressure ulcer diagnoses using the new stage-specific codes in administrative data

demonstrated no significant changes (Appendix S4, Table S3). This study assesses the payment changes occurring as direct consequences of the HACI regarding pressure ulcers, not other conditions. Changes assessed using administrative data chosen for HACI implementation may not reflect actual changes in pressure ulcer rates experienced by patients, as supported by an analysis[20] demonstrating much lower pressure ulcer rates in administrative data compared to surveillance pressure ulcer data.

Intended outcomes of the HACI included fewer hospital-acquired complications for patients, and decreased hospital payment for pressure ulcers. The intended decrease in hospital-acquired pressure ulcers was not seen in the administrative data selected for the HACI's implementation in California from 2007 to 2009. Not surprisingly, hospital payments attributed to pressure ulcer diagnoses were decreased by the HACI which removed all pressure ulcers except present-on-admission stage III–IV from qualifying as payment generating comorbidities; however, payments decreased only by a tiny amount. It is unclear if the increase in present-on-admission pressure ulcer rates (all stages) from 2.35% in 2007 to 3.00% in 2009 was related to the 2008 changes in pressure ulcer diagnosis codes, or an unintended consequence because hospitals have an overall incentive to document all present-on-admission conditions to avoid potential nonpayment or reporting as hospital-acquired conditions.

CONCLUSION

The total financial impact of the 2008 Hospital-Acquired Conditions Initiative's payment changes for pressure ulcers was inconsequential, resulting in no significant financial penalty for hospitals and no significant savings for Medicare. Most payment decreases occurred by removal of comorbidity payments for present-on-admission pressure ulcers other than stages III–IV. The removal of payment for hospital-acquired stage III–IV ulcers was more than 200 times *less* than the removal of payment for other types of pressure ulcers that occurred in implementation of the Hospital-Acquired Conditions Initiative. We anticipate that the much larger removal of payment for pressure ulcers other than hospital-acquired ulcers stages III–IV will come as a surprise to most hospitals because the policy's description[9,10,14] in press releases and on-line material prepared for Medicare providers describes payment removal only for hospital-acquired stage III–IV. Although removal of payment for hospital-acquired stage III–IV is consistent with trying to motivate hospitals to deliver higher value in quality of care purchased with healthcare dollars, the removal of comorbidity payment for present-on-admission pressure ulcers is a simple price cut without respect to value.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Role of the Sponsors

This study's funder AHRQ was not involved in the study design or conduct, data collection, management, analysis, and interpretation; in the preparation, review, or approval of the manuscript; or in the decision to submit the manuscript for publication.

Additional Contributions:

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REFERENCES

1. National Pressure Ulcer Advisory Panel. NPUAP Pressure Ulcer Stages/Categories. [Accessed October 21, 2014] http://www.npuap.org/resources/educational-and-clinical-resources/npuap-pressure-ulcer-stagescategories/.
2. Beckrich K, Aronovitch SA. Hospital-acquired pressure ulcers: a comparison of costs in medical vs. surgical patients. Nurs Econ. 1999; 17(5):263–271. [PubMed: 10711175]
3. Rockville, MD: Agency for Healthcare Research and Quality; Preventing Pressure Ulcers in Hospitals: A Toolkit for Improving Quality of Care. April 2011. AHRQ Publication No. 11-0053-EF http://www.ahrq.gov/research/ltc/pressureulcertoolkit/putoolkit.pdf [Accessed March 5, 2014]
4. Pieper B, Langemo D, Cuddigan J. Pressure ulcer pain: a systematic literature review and National Pressure Ulcer Advisory Panel white paper. Ostomy Wound Manage. 2009; 55(2):16–31.
5. Lyder CH, Preson J, Grady JN, et al. Quality of care for hospitalized Medicare patients at risk for pressure ulcers. Arch Intern Med. 2001; 161:1549–1554. [PubMed: 11427104]
6. Brem H, Maggi J, Nierman D, et al. High cost of stage IV pressure ulcers. Am J Surg. 2010; 200(4): 473–477. [PubMed: 20887840]
7. Black J, Edsberg LE, Baharestani MM, et al. Pressure ulcers: avoidable or unavoidable? Results of the National Pressure Ulcer Advisory Panel Consensus Conference. Ostomy Wound Manage. 2011; 57(2):24–37.
8. [Accessed October 21, 2014] The Patient Protection and Affordable Care Act, Section 3008: Payment adjustment for conditions acquired in hospitals. Pub L No. 111-148, 124 Stat 122. http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/html/PLAW-111publ148.htm
9. U.S. Department of Health & Human Services (HHS) and the Centers for Medicare & Medicaid Services (CMS). [Accessed October 22, 2014] Hospital-Acquired Conditions (HAC) in Acute Inpatient Prospective Payment System (IPPS) Hospitals. Prepared by the Medicare Learning Network, Official CMS Information for Medicare Fee-For-Service Providers. http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/wPOAFactSheet.pdf
10. Centers for Medicare & Medicaid Services (CMS). [Accessed October 21, 2014] Hospital-Acquired Conditions. http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Hospital-Acquired_Conditions.html
11. Centers for Medicare and Medicaid Services (CMS), HHS. Medicare program; changes to the hospital inpatient prospective payment systems and fiscal year 2009 rates. Fed Regist. 2008; 73(161):48434–49083.
12. Medicaid Program. Payment Adjustment for Provider-Preventable Conditions including Health Care-Acquired Conditions. Fed Regist. 2011; 76(108):32816–32838. [PubMed: 21644388]

13. Centers for Medicare and Medicaid Services (CMS), HHS. Medicare program; proposed changes to the hospital inpatient prospective payment systems and fiscal year 2009 rates. Fed Regist. 2008; 73(84):23547–23552.

14. Centers for Medicare and Medicaid Services (CMS). [Accessed October 21, 2014] Fact Sheet: incorporating selected National Quality Forum and Never Events into Medicare's list of Hospital-Acquired Conditions. Press release: April 14, 2008. http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2008-Fact-sheets-items/2008-04-142.html

15. Agency for Healthcare Research and Quality. [Accessed March 3, 2014] Healthcare Cost and Utilization Project (HCUP) Overview and Description of State Inpatient Databases (SID). http://www.hcup-us.ahrq.gov/sidoverview.jsp

16. American Hospital Association (AHA). Data Collection Methods. Health Forum, LLC;2012. [Accessed October 21, 2014] http://www.ahadataviewer.com/about/data.

17. Washington, DC: Blue Cross Blue Shield Association; Blue Cross and Blue Shield announces system-wide payment policy for "never events". Press release: February 26,2010

18. ICD-9-CM Official Guidelines for Coding and Reporting. Centers for Medicare and Medicaid Services (CMS) and the National Center for Health Statistics (NCHS). [Accessed March 5, 2014] Effective October 1,2008. http://www.ama-assn.org/resources/doc/cpt/icd9cm_coding_guidelines_08_09_full.pdf.

19. Centers for Medicare & Medicaid Services (CMS), and the U.S. Department of Health & Human Services (HHS). [Accessed October 21, 2014] Medicare's *Hospital Compare* website measures for readmissions, complications and deaths, including hospital-acquired complications. http://www.medicare.gov/HospitalCompare/About/HOSInfo/RCD.aspx

20. Meddings J, Reichert H, Hofer T, et al. Hospital report cards for hospital-acquired pressure ulcers: how good are the grades? Ann Intern Med. 2013; 159(8):505–513. [PubMed: 24126644]

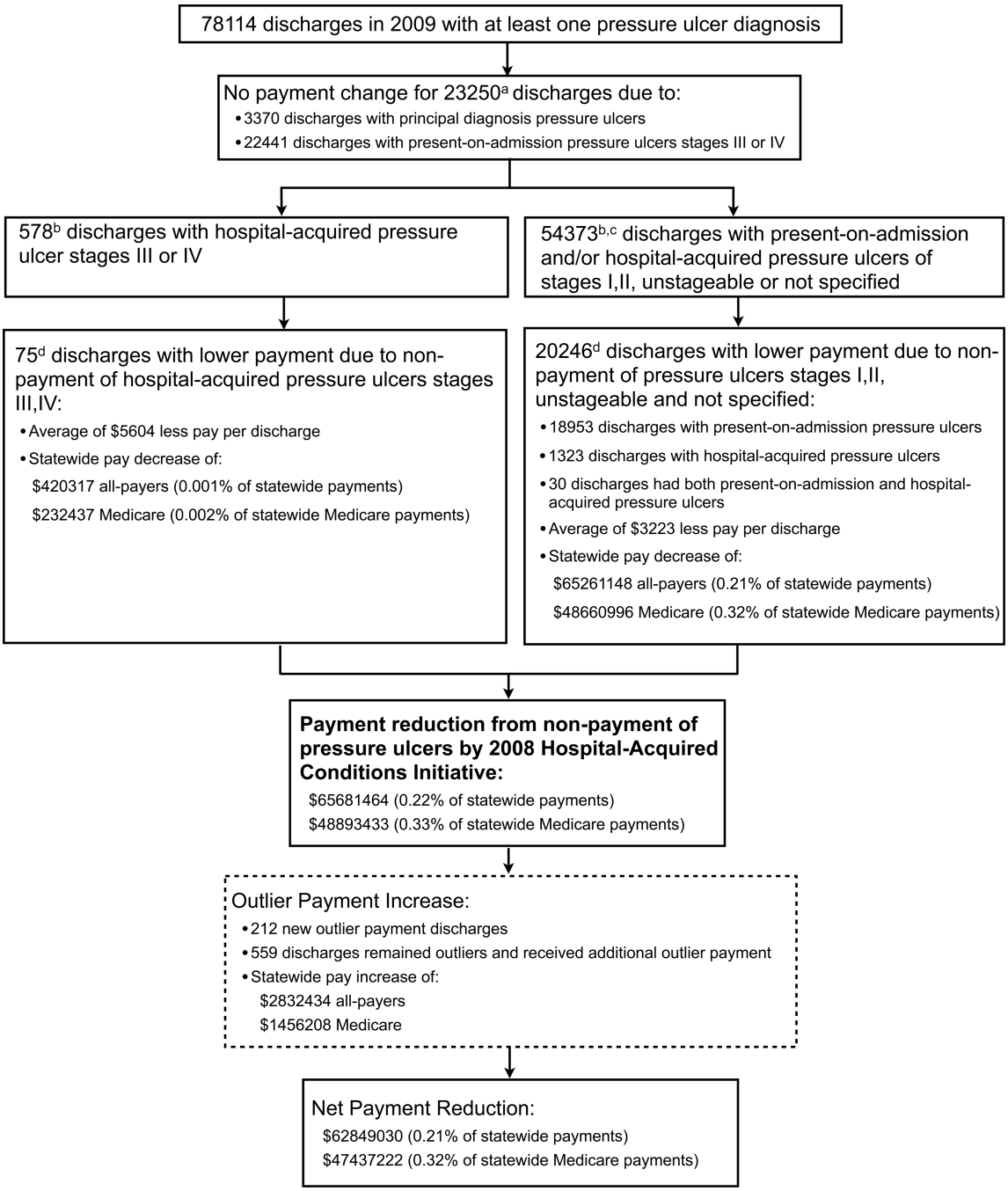

Figure 1.

Flow diagram of payment changes for pressure ulcer diagnoses for California hospitals in 2009, due to 2008 changes in pressure ulcer payment in the Hospital-Acquired Conditions Initiative

[a] N=2,561 discharges had pressure ulcer listed as principal diagnosis and a present-on-admission state III or IV pressure ulcer

[b] N=87 discharges were eligible for both scenarios of payment reduction (i.e., had hospital-acquired stage III or IV and another type of pressure ulcer)

[c] Stage I, II, unstageable and stage-not-specified ulcers are no longer eligible for payment whether present-on-admission or hospital-acquired

[d] N=18 discharges experienced a payment reduction under both scenarios

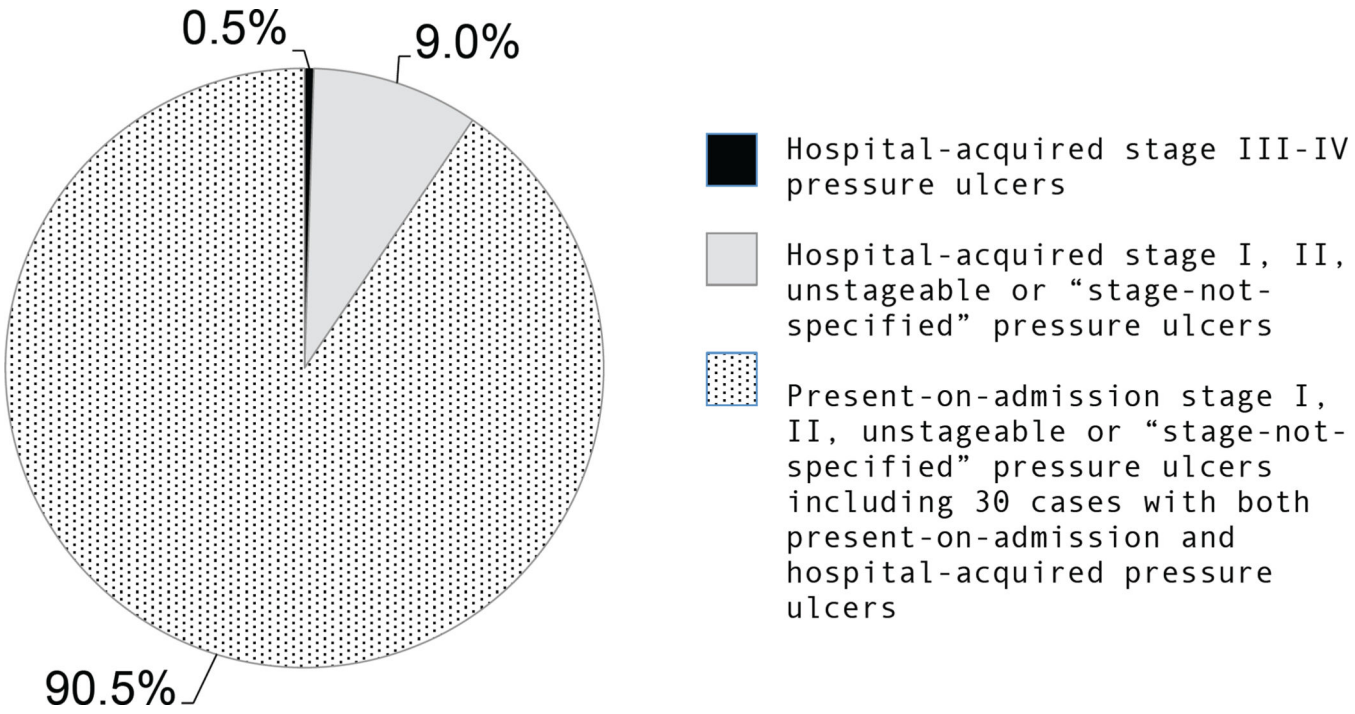

Figure 2.

Percentage of total hospital payment reductions (by pressure ulcer type) due to pressure ulcer payment changes by the 2008 Hospital-Acquired Conditions Initiative, California 2009

Table 1

Pressure Ulcers by Stage for California Hospitals in 2009

	Present-on-admission pressure ulcers[a]	Hospital-acquired pressure ulcers[a]	Total discharge records with a pressure ulcer of this stage
Stage I	13080 (0.53%)	1374 (0.06%)	14454 (0.58%)
Stage II	31962 (1.28%)	3271 (0.13%)	35233 (1.41%)
Stage III	12738 (0.51%)	450 (0.02%)	13188 (0.53%)
Stage IV	11184 (0.45%)	163 (<0.01%)	11347 (0.46%)
Stage not specified	9381 (0.38%)	711 (0.03%)	10092 (0.41%)
Unstageable	4745 (0.19%)	235 (<0.01%)	4980 (0.20%)

*Rows are not mutually exclusive due to multiple pressure ulcers per discharge.

% = Percentage of total analytic sample in 2009 with 2490488 discharges.

[a]N=259 hospitalizations had both a present-on-admission and a hospital-acquired stage-specific pressure ulcer (different stages).