CENTER FOR EVALUATING HEALTH REFORM

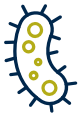
Evaluating and Improving CMS' Hospital Safety Program

The Hospital-Acquired Condition Reduction Program (HACRP) was introduced by the Centers for Medicare and Medicaid Services (CMS) in 2013 to improve patient safety. The program penalizes the 25% of hospitals with the highest rates of hospital-acquired conditions by reducing Medicare payment rates for inpatient care by 1%. Under the program, hospitals receive penalties of approximately $350 million annually.

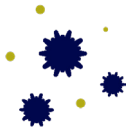
Measures of Patient Safety Used in the HACRP

CMS Recalibrated Patient Safety Indicator (PSI) 90

Catheter-Associated Urinary Tract Infection



Clostridium Difficile Infection



Methicillin-resistant Staphylococcus aureus bacteremia

Surgical Site Infection - Colon and Hysterectomy

Central Line-Associated Bloodstream Infection

Takeaways from our Research

Penalization has not improved safety.

Risk adjustment is inadequate, leading to disproportionate penalties for teaching hospitals and hospitals caring for more underserved patients.

The performance measures used to penalize hospitals are not sufficiently reliable or valid.

Concrete Steps to Improve the HACRP

Problems with Implementation	Potential Solutions
The current risk adjustment approach is insufficient to account for the large heterogeneity across patients and hospitals, disadvantaging hospitals treating more complex patients.	Include additional risk factors to risk adjustment methodologies (e.g., preoperative diagnosis, whether the case is elective or emergent, patient immonosuppression). Modify penalty thresholds based on hospital peer groups.
Some hospitals lack adequate sample size on measures for which they receive scores, diminishing the reliability of their scores as well as hospital comparisons.	Use more data years to increase sample size and employ Bayesian shrinkage to enhance assessment of hospital safety.
There is wide variability across hospitals in surveillance, testing, and reporting practices for hospital acquired conditions. CMS definitions of hospital acquired conditions are overly technical and challenging to implement.	Establish clear and simple guidelines about proper surveillance, testing, and reporting practices related to hospital acquired conditions. Provide technical assistance.
Measures do not always incentivize or reward proven preventive actions to decrease the risk of the given hospital aquired condition.	Add measures rewarding a reduction in exposures to infection.
Auditing and validation strategies have been insufficient to ensure high quality data.	Enhance auditing of performance by implementing more stringent and comprehensive validation or audit approaches, along with more severe consequences for failing validation.

Our published research

Changes in hospital safety following penalties in the US Hospital Acquired Condition Reduction Program: retrospective cohort study. Sankaran M, Sukul D, Nuliyalu U, Gulseren B, Engler TA, Arnston, E, Zlotnick H, Dimick JB, Zuidema GD, Ryan AM. *BMJ*. July 2019. doi.org/10.1136/bmj.l4109

Changes in Hospital-Acquired Conditions and Mortality Associated With the Hospital-Acquired Condition Program. Arnston EM, Dimick JB, Nuliyalu U, Errickson J, Engler TA, Ryan AM. *Annals of Surgery*. October 2019. doi.org/10.1097/SLA.0000000000003641

Hospital-Acquired Condition Reduction Program Is Not Associated With Additional Patient Safety Improvement. Sheetz KH, Dimick JB, Englesbe MJ, Ryan AM. *Health Affairs*. November 2019. doi.org/10.1377/hlthaff.2018.05504

Accuracy of quality measurement for the Hospital Acquired Conditions Reduction Program. Sheetz KH, Ryan AM. *BMJ Qual Saf*. December 2019. doi.org/10.1136/bmjqs-2019-009747

Improving the Hospital-Acquired Condition Reduction Program through Rulemaking. Lawton EJ, Sheetz KH, Ryan AM. *JAMA Health Forum*. May 2020. doi: 10.1001/jamahealthforum.2020.0416

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