

HealthAffairs



# Health Policy Brief

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## **Medicare's Hospital-Acquired Condition Reduction Program. The Centers for Medicare and Medicaid Services aims to decrease preventable conditions by reducing payments to the lowest-performing hospitals.**

### WHAT'S THE ISSUE?

As part of its efforts to become a more prudent purchaser of health care services, Medicare has worked to create incentives for hospitals to avoid making patients sicker, instead of healthier, during their inpatient stay. These so-called hospital-acquired conditions (HACs) can lead to poor patient outcomes and higher spending on health care.

The latest effort is the implementation of a new program, the Hospital-Acquired Condition Reduction Program, for fiscal year 2015 that reduces Medicare payments by 1 percent for the poorest-performing hospitals on quality measures that track the occurrence of specific preventable HACs. This brief provides an overview of this program and efforts by Congress and the Centers for Medicare and Medicaid Services (CMS) to reduce these preventable conditions.

### WHAT'S THE BACKGROUND?

When a patient goes to the hospital to receive care for one condition and develops another condition during that hospital stay, the second condition is referred to as "hospital-acquired." Examples of HACs include pressure ulcers, adverse drug events, infections at the site of surgery or associated with use of a catheter, and falls during the hospital stay. The Part-

nership for Patients, a public-private partnership working to improve the quality, safety, and affordability of health care in the United States, [estimates](#) that in 2010 adult patients experienced roughly 4.8 million HACs out of 32.8 million hospital discharges, based on a review of medical records from the Medicare Patient Safety Monitoring System and data from the Agency for Healthcare Research and Quality and the National Healthcare Safety Network (NHSN).

HACs can result in longer hospital stays, permanent harm to patients, and even death. Treating HACs requires additional interventions that are not part of the planned care, resulting in increased health care spending. The [Agency for Healthcare Research and Quality estimates](#) that the additional cost of HACs ranges from \$1,000 for treating a catheter-associated urinary tract infection to \$17,000 for treating pressure ulcers and central line-associated bloodstream infections to \$21,000 to treat surgical-site infections and ventilator-associated pneumonia.

Since the early 2000s Congress and CMS have instituted several programs intended to improve the quality of health care for Medicare beneficiaries, including creating incentives for hospitals to reduce the incidence of HACs. Historically, Medicare payment has been based on the volume of services provid-

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ed; sicker patients are likely to use more services, and therefore Medicare pays hospitals and other providers more for treating those patients, even if the need for the additional services is caused by a condition resulting from the care provided by the hospital.

For example, under the Medicare payment system for inpatient hospital services (called the inpatient prospective payment system), each patient is assigned to a payment group called a diagnosis-related group based on the patient's primary diagnosis and the presence of other conditions called comorbidities and complications that can make the primary diagnosis more difficult to treat. Cases with certain comorbidities and complications are assigned to higher-paying DRGs to recognize the additional cost of caring for those patients.

Since fiscal year 2009 CMS no longer assigns a patient to a higher-paying diagnosis-related group for certain conditions if those conditions were not present on the patient's admission to the hospital. CMS has identified a list of eleven categories of conditions, including foreign objects retained after surgery, stage III and IV pressure ulcers, falls and trauma, manifestations of poor glycemic control, and specific surgical-site infections, which—if not present on admission—are presumed to be a HAC. Those HACs will not result in the patient's being assigned to a higher-paying diagnosis-related group, although the patient may also have other conditions that will trigger a higher payment.

In addition to the HAC present-on-admission payment provision, CMS has also included specific measures related to HACs in its other hospital quality programs. Under the Inpatient Quality Reporting (IQR) program, hospitals that do not submit data on specific quality measures receive a payment update that is 2 percentage points lower than that paid to hospitals that submit data. In the past, the list of required quality measures has included individual measures that align with many of the categories of conditions that are subject to the HAC payment provision described above.

For the 2015 payment determination, CMS includes in the IQR a composite patient safety measure called PSI-90 that includes eight patient safety indicators on conditions such as pressure ulcers, postoperative hip fractures or sepsis, and certain bloodstream infections. The IQR also includes measures of health care-associated infections developed

by the Centers for Disease Control and Prevention (CDC) and collected through the NHSN. The NHSN measures capture data on the rate of certain infections, including central line-associated bloodstream infections and catheter-associated urinary tract infections.

Under the IQR, the hospital's performance on the collected measures does not affect its Medicare payments; payments are only affected by whether or not the hospital reports the data. However, CMS releases information on the hospital's performance on Medicare's Hospital Compare website.

Under Medicare's hospital value-based purchasing (VBP) program, a hospital's actual performance on certain measures affects whether the hospital's base payments under the inpatient prospective payment system are adjusted up or down. In making the adjustment, CMS takes into consideration both the level of performance on the measure and whether or not the hospital has improved its performance on the measure over time. The measures included in the VBP program are a subset of the IQR measures. For the 2015 payment determination, CMS added two HAC measures to the VBP program: the PSI-90 composite safety measure and the NHSN measure on central line-associated bloodstream infections.

## WHAT'S THE LAW?

The Affordable Care Act established a new program to encourage hospitals to reduce the occurrence of HACs. Effective October 1, 2014, the [HAC Reduction Program](#) reduces Medicare payments to the poorest-performing hospitals by 1 percent. The poorest performing are those hospitals that have HAC scores in the top 25 percent nationally. The penalty applies to the total Medicare payment under the inpatient prospective payment system, including payments for other policy purposes such as to recognize higher costs associated with being a teaching hospital or treating a low-income population (called disproportionate-share hospital payments). The HAC penalty is applied after these and other adjustments, such as the hospital VBP program adjustment.

To identify the hospitals subject to the penalty, CMS calculates a total HAC score using three measures assigned to two domains. For fiscal year 2015, domain 1 includes a single measure: the PSI-90 composite measure; domain 2 includes two NHSN measures related to specific infections: central line-associated

# 4.8 million

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bloodstream infection and catheter-associated urinary tract infection. CMS divided the measures into separate domains because of significant differences in the measures: PSI-90 is calculated from the claims hospitals submit to Medicare, while the NHSN measures are taken from patients' charts and include other patients as well as Medicare beneficiaries.

CMS assigns points for each measure depending on where the hospital's score on the measure falls within the range of all hospital scores. The best-performing hospitals—that is, those with scores in the lowest 10 percent—receive one point, hospitals in the second-lowest 10 percent receive two points, and so forth. The total HAC score is calculated by weighting the scores in each domain—domain 1 is weighted 35 percent, and domain 2 is weighted 65 percent. The higher the HAC score, the more likely the hospital is to be subject to the 1 percent penalty.

For subsequent years, CMS has added additional NHSN measures to domain 2. For fiscal year 2016 the penalty determination includes the NHSN measure on surgical-site infection. For fiscal year 2017 the calculation includes measures on infections caused by *C. difficile* and methicillin-resistant *Staphylococcus aureus*. As the number of measures in domain 2 increases, CMS also increases the weight of the domain, from 65 percent in 2015 to 75 percent in 2016 and 85 percent for fiscal year 2017.

Hospitals have an opportunity to request exemptions from measures that do not apply to their facilities and to review and submit suggested corrections to the measures data and the total HAC score. CMS publicly releases each hospital's scores on the measures, each domain, and the total HAC score.

The HAC Reduction Program uses measures that are incorporated in other quality programs, such as the IQR and the VBP program, but an individual hospital's experience under the HAC program may differ from those programs for several reasons. First, the HAC Reduction Program has a singular focus on HACs, while other programs may include a wider array of quality measures. For example, the VBP program also includes measures related to patient and caregiver experience, clinical care outcomes, and efficiency. In addition, for the HAC Reduction Program, CMS calculates the HAC measures over different time periods and for different lengths of time than the same measures included in the VBP program. CMS uses two years of data in the

HAC Reduction Program calculation but only one year in the VBP calculation.

For fiscal year 2015 a total of 724 hospitals are subject to the 1 percent penalty. Evaluation of CMS's data on the impact of the HAC Reduction Program from the inpatient prospective payment system final rule shows that hospitals with certain characteristics are more likely to be affected by the penalty. Urban teaching hospitals make up 45 percent of the hospitals subject to the HAC Reduction Program penalty but only 29 percent of hospitals overall. More refined [analysis](#) of data from the proposed rule found that a large, urban, public, major teaching hospital with a high percentage of poor patients had a 62 percent chance of receiving a HAC penalty, while a small, rural, for-profit, nonteaching hospital in the South with few poor patients had a 9 percent chance of getting the penalty.

## WHAT'S THE DEBATE?

Hospital associations have significant concerns with how Congress designed the program and how CMS is implementing it. We discuss these concerns below.

### Program Design

The statute requires the lowest-performing hospitals to be subject to the penalty regardless of whether the hospital's performance is improving or whether the performance of poorest-performing hospitals is substantially different from that of hospitals in the other quartiles.

In addition, the statutory language in [section 1886\(p\)\(1\) of the Social Security Act](#) applies the penalty to “the amount of payment that would otherwise apply” and does not exclude payment adjustments such as disproportionate-share hospital or teaching hospital status from application of the penalty. As a result, the impact of the HAC penalty is significantly greater than other quality adjustments such as those in the VBP program and the Readmission Hospital Reduction Program, for which the adjustment applies only to the base operating payment before those adjustments are made.

### Measure Overlap

The measures used in the HAC Reduction Program overlap with each other and with other quality programs. The central line-associated infections captured with the NHSN

# 25%

Under the law, up to 25 percent of hospitals will be subject to the HAC penalty, but which hospitals are affected may change over time for multiple reasons.

measure are also a component of the PSI-90 composite measure, and both measures are included in the HAC Reduction Program and the VBP program.

Hospitals argue that such overlap means that a hospital can face multiple penalties for the same incidence of below-par performance. The American Hospital Association, the Association of American Medical Colleges, and the Federation of American Hospitals recommend that measures included in the HAC Reduction Program be excluded from the VBP program. CMS counters that including measures under multiple programs is an appropriate signal of the importance of reducing HACs.

### *Inclusion of PSI-90*

Both hospitals and the Medicare Payment Advisory Commission (MedPAC) expressed substantial concern with the inclusion of the composite, claims-based PSI-90 measure in the HAC Reduction Program. MedPAC stated that the HAC Reduction Program measures should have certain features—that the condition being measured must be preventable if a hospital uses evidence-based care processes, that the measurement method must be statistically reliable, and that the measure should be based on a data source that can be found consistently across hospitals—and determined that the PSI measure did not reflect those characteristics.

Stakeholders identify numerous problems with the composition of PSI-90, including that the weights assigned to the component indicators do not appropriately reflect the relative importance of the component or the hospital's ability to prevent its occurrence. They also argue that claims-based measures do not fully reflect the patient's clinical history and care and present an inexact picture of the quality of care provided.

Performance on the measure is affected by whether or not the hospital has identified and reported complicating conditions on its claims. This creates a "surveillance bias," whereby hospitals that are more vigilant about

identifying complications are more likely to perform poorly on the measure. In addition, because the component measures focus on surgical issues, hospitals with a large volume of surgeries such as academic medical centers and large urban hospitals are more likely than other types of hospitals to be subject to penalties.

CMS acknowledged these concerns and issues with claims-based measures in general but retained the measure in part because claims data represent a widely available data source that produces minimal administrative and financial burden on hospitals. However, as described above, CMS has reduced the weight assigned to domain 1 that contains PSI-90 from its original proposal of 50 percent and has increased both the number and weight of the NHSN measures.

### WHAT'S NEXT?

CMS expects to provide hospitals with information about the calculation of their HAC score for the fiscal year 2016 adjustment in late summer 2015. Under the law, up to 25 percent of hospitals will be subject to the HAC penalty, but which hospitals are affected may change over time for multiple reasons. In future years, CMS is increasing the number of NHSN measures and using measures that a wider array of hospitals may report. For example, CMS will begin using refined versions of the current NHSN measures that expand the scope to include additional locations within the hospital. (The current measures are specific to intensive care units [ICUs], and a hospital without an ICU can request an exemption from the measures.)

In addition, the CDC is updating the assumptions used in calculating the NHSN measures, and the National Quality Forum is continuing to review the components and weight of the PSI-90 measure. CMS has also finalized a modest change to the methodology for calculating the HAC total for fiscal year 2017 that will assign a maximum value of 10 for hospitals for each NHSN measure that a hospital fails to report. ■

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