# 15

# Redesigning Medicare's hospital quality incentive programs

## R E C O M M E N D A T I O N

**15**     The Congress should:

- Replace Medicare's current hospital quality programs with a new hospital value incentive program (HVIP) that:
    - includes a small set of population-based outcome, patient experience, and value measures;
    - scores all hospitals based on the same absolute and prospectively set performance targets;
    - accounts for differences in patients' social risk factors by distributing payment adjustments through peer grouping, and
- For 2020, update the 2019 Medicare base payment rates for acute care hospitals by 2 percent. The difference between the update recommendation and the amount specified in current law should be used to increase payments in a new HVIP.

**COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0**

# Redesigning Medicare's hospital quality incentive programs

## Chapter summary

The quality of hospital care has improved in recent years, in part due to Medicare's four hospital quality incentive programs: the Hospital Inpatient Quality Reporting Program, Hospital Readmissions Reduction Program (HRRP), Hospital-Acquired Condition Reduction Program (HACRP), and Hospital Value-based Purchasing Program. Nevertheless, the Commission has several concerns about the design of these programs. First, there are too many overlapping hospital quality reporting and payment programs, which creates unneeded complexity. Second, all-condition measures are more appropriate to use in pay-for-performance programs than the condition-specific readmissions and mortality measures currently used. Third, the existing programs include process measures that are not tied to outcomes and measures that are not reported consistently across hospitals. Fourth, some of the programs score hospitals using "tournament models" in which providers are scored relative to one another despite the potential availability of a clear, absolute, and prospectively set system of targets.

The Commission asserts that quality measurement should be patient oriented, encourage coordination, and promote delivery system change. In our June 2018 report to the Congress, we examined the potential to create a single, outcome-focused, quality-based payment program for hospitals—that is, the hospital value incentive program (HVIP)—based on our principles for quality measurement. Initially, the HVIP can incorporate existing quality measure

## In this chapter

- Design of a hospital value incentive program

- Scoring methodology

- Converting HVIP points to payment adjustments using peer grouping

- Comparison of HVIP model to existing hospital quality programs

- Recommendation to redesign hospital quality incentive programs

domains such as readmissions, mortality, spending, patient experience, and hospital-acquired conditions (or infection rates). Assuming equal weighting of the measure domains, the HVIP increases the weight of mortality and patient experience and decreases the weight of readmissions and infection rates compared with current quality programs. In line with the Commission's principles, the HVIP uses clear, prospectively set performance standards to translate hospital performance on these quality measures to a reward or a penalty.

According to the Commission's principles, adjusting measure results for social risk factors can mask disparities in clinical performance. Therefore, the HVIP accounts for differences in providers' patient populations by incorporating a peer-grouping methodology in which quality-based payments are distributed to hospitals separated into 10 peer groups, defined by the share of beneficiaries with full dual eligibility for Medicare and Medicaid treated (as a proxy for income). The HVIP redistributes pools of dollars to hospitals in the peer groups based on their quality performance. The pools of dollars are funded by a payment withhold from all hospitals in the peer group (e.g., 5 percent) and a portion of the current-law hospital payment update. Under the Commission's HVIP model, the use of peer grouping of hospitals that serve different populations makes payment adjustments more equitable compared with the existing quality payment programs.

Consistent with the Commission's principles, the HVIP links payment to quality of care to reward hospitals for efficiently providing high-quality care to beneficiaries. Accordingly, the Commission recommends that the Congress replace Medicare's current hospital quality programs with this new HVIP that includes a small set of population-based outcome, patient experience, and value measures; scores all hospitals based on the same absolute and prospectively set performance targets; and accounts for differences in patients' social risk factors by distributing payment adjustments through peer grouping. As we discuss in Chapter 3 of this report, the Commission recommends that payments in the HVIP be increased by the difference between the Commission's update recommendation for acute care hospitals and the amount specified in current law. Adding the additional payment in the HVIP will better reward hospitals providing higher quality care. In addition, eliminating the existing penalty-only programs (i.e., HRRP and HACRP) would have the effect of removing about $1 billion in penalties that hospitals currently pay each year. ∎

## Background

The Commission contends that Medicare payments should not be made without considering the quality of care delivered to beneficiaries and has recently formalized a set of principles for quality measurement in the Medicare program (Medicare Payment Advisory Commission 2018). For several years, fee-for-service (FFS) Medicare has provided hospitals with incentive payments based on the quality of care delivered. These incentive payments are distributed through four programs: the Hospital Inpatient Quality Reporting Program (IQRP), Hospital Readmissions Reduction Program (HRRP), Hospital Value-based Purchasing (VBP) Program, and Hospital-Acquired Conditions Reduction Program (HACRP). The quality of hospital care has improved in recent years, at least in part as a result of these programs. However, the hospital industry has raised concerns that these programs' designs are complex, are overlapping, and send hospitals different performance signals. In addition, aspects of the programs do not align with the Commission's principles for measuring quality in Medicare.

As noted in our June 2018 report to the Congress, the Commission has four main concerns about the design of the current hospital quality programs. The first is that too many overlapping hospital quality payment and reporting programs create unneeded complexity for hospitals and the Medicare program itself (Medicare Payment Advisory Commission 2016a, Medicare Payment Advisory Commission 2016b). Some of the quality measures are scored in multiple programs, although for fiscal years 2020 and 2021, CMS has removed some of this duplication. For example, CMS recently removed readmissions and mortality measures from the IQRP since they are scored in the HRRP and VBP programs. However, hospital-acquired condition (HAC) measures continue to be scored in both HACRP and the VBP Program (Centers for Medicare & Medicaid Services 2018).

Second, the Commission believes that all-condition mortality and readmissions measures are more appropriate to score in pay-for-performance programs than the condition-specific (e.g., acute myocardial infarction) measures that are scored in the IQRP, VBP Program, and HRRP. Using all-condition measures would increase the number of observations and reduce the random variation that single-condition readmission rates face under current policy (Medicare Payment Advisory Commission 2013).

The all-condition measure also affords more flexibility to hospitals to tailor interventions to the particular conditions most relevant to their patient population.

Third, the current IQRP includes process measures that are not tied to outcomes and are burdensome to report (e.g., hearing screening before hospital discharge). The Commission believes that quality payment programs should include population-based measures, though providers may choose to use more granular outcomes and process measures to internally manage their own quality improvement. As part of its Meaningful Measures Initiative, this year CMS has removed many of the process measures from the IQRP, but some remain. Between fiscal years 2020 and 2022, CMS is removing two structural measures, four chart-abstracted measures, and seven clinical process of care measures based on electronic health record (EHR) data from the IQRP because the data collection and reporting costs outweigh the benefit of their continued use (Centers for Medicare & Medicaid Services 2018).

Fourth, the VBP Program, HRRP, and HACRP score hospitals using "tournament models" (i.e., providers are scored relative to one another), despite the potential availability of clear, absolute, and prospectively set performance criteria. For example, the HACRP's statutory design penalizes 25 percent of hospitals every year, even if all hospitals significantly reduce their HAC rates. The Commission's principles for quality measurement encourage Medicare quality programs to use fixed targets to make it clear to providers what level of performance is expected and to not artificially limit who can be successful in the program.

The Commission's initial work on redesigning Medicare's hospital quality payment programs presented in the June 2018 report to the Congress focused on the creation of a single hospital value incentive program (HVIP) that would be patient oriented, encourage coordination across providers and time, and promote change in the delivery system. This chapter updates our original HVIP work reported in June 2018 by incorporating three key changes. First, to address the importance of tying hospital infection rates to quality payments, our HVIP model includes, for scoring purposes, HACs as a measure domain. Second, to provide greater emphasis on patient experience, our HVIP model scores each of 10 patient experience measures instead of only the patient's overall hospital rating. Finally,

the model's payment adjustments, which are redistributed to hospitals based on their quality performance, are calculated using two different pools of dollars (funded through either a 2 percent or 5 percent withhold). The different pools of dollars were constructed in light of the Commission's discussions about (1) increasing the HVIP withhold amount over time (e.g., from 2 percent to 5 percent) versus beginning with a higher withhold amount than the current VBP Program (e.g., 5 percent) and (2) increasing HVIP payments by redirecting an estimated 0.8 percentage point from the fiscal year (FY) 2020 hospital update to the HVIP, which is about 1.0 percent of inpatient payments.[1] We expect the combination of including a portion of the payment update and replacing the current quality incentives (which reduce hospital's Medicare payments in aggregate) with the new HVIP (which would increase Medicare payments in aggregate) better rewards hospitals providing higher quality care.

Since existing hospital quality programs are defined in statute, the Congress would need legislation to eliminate them and create a new HVIP.[2] Although the HVIP would replace quality programs that affect FFS hospital payment, the HVIP measures and scoring methodology—where practical—should align across all Medicare accountable entities and providers, including Medicare Advantage plans and accountable care organizations (ACOs). All should be held accountable for a small set of population-based measures, scored against absolute thresholds, and have their payments adjusted through peer grouping. For example, ACO quality payments can be based on the ACO's performance on population-based quality measures, like all-condition readmissions, with different payment adjustments for groups of ACOs based on their patient population's social risk factors (i.e., peer groups). Medicare's use of the same set of measures and scoring framework across different populations could also promote multipayer alignment.

## Design of a hospital value incentive program

As we initially proposed in the June 2018 report to the Congress, hospitals should have their payments adjusted based on their performance on quality and cost measures under a single program instead of three separate programs. Medicare should not pay hospitals and other providers merely for reporting quality measures, but should pay based on performance on these measures. The Commission therefore recommends that the IQRP be retired and the HRRP, HACRP, and VBP Program be combined into one HVIP.

The current hospital quality payment programs apply different penalties and rewards to affect hospital payments. The HRRP penalizes hospitals with excess readmissions compared with the expected amount by removing up to 3 percent of their payments. The HACRP penalizes the 25 percent of hospitals with the highest rates of HACs by removing 1 percent of their payments. The budget-neutral VBP Program redistributes a 2 percent withhold of each hospital's payments based on their quality performance, where hospitals can be penalized or rewarded by more than their withhold. In aggregate, based on the structure of all the current hospital quality payment programs, hospitals have the potential to be rewarded up to about 3 percent of their inpatient payments and penalized up to about 6 percent. Most net payment adjustments are less than 2 percent. Implementing the HVIP would increase Medicare inpatient hospital spending by between $750 million and $2 billion in 2020 and by $5 billion to $10 billion over five years due to the elimination of the existing penalty programs.

Fundamentally, the HVIP encourages quality improvement by tying hospital performance to payment, but CMS should also continue to further quality improvement through public reporting of quality results on Hospital Compare and other websites. Public reporting allows beneficiaries to see the quality of care provided at hospitals, and it fosters competition among providers. Under an HVIP, CMS should also continue to provide hospitals with quality feedback reports to help them understand their performance (e.g., benchmarks). Even though the Commission's HVIP would score and make payment adjustments using all-condition measures, CMS should monitor condition-specific results (e.g., acute myocardial infarction mortality) calculated using claims data, as well as publicly report and provide hospitals with condition-specific results, which would be helpful for a hospital's internal quality improvement efforts.

### Measure domains

The Commission recommends that the HVIP include quality measure domains based on our quality

measurement principles and largely calculated or administered by CMS: readmissions, mortality, Medicare spending per beneficiary (MSPB), patient experience, and HAC rates.[3] These risk-adjusted measures are included in the existing hospital quality programs and thus are known to hospitals. Providers could choose to use other granular quality measures to manage their own quality improvement efforts, but those measures would not factor into Medicare payment. We envision that, as new quality measures are developed or hospital performance on current measures "top out" (i.e., everyone performs well on the measure), CMS would refine the HVIP measures and measure domains. The HVIP should continue to incorporate population-based outcome, patient experience, and value measures that are not unduly burdensome for providers. For each of these measures, to reward increasingly improved performance, policymakers could weight recent year performance higher than performance in earlier years.

## Readmissions

Hospital readmissions are disruptive to patients and caregivers and costly to the health care system; they also put patients at additional risk of hospital-acquired infections and complications. Readmissions are a major source of patient and family stress and can contribute substantially to loss of functional ability, particularly in older patients. Measuring and adjusting payments based on a hospital's readmission rates holds the hospital accountable for ensuring that beneficiaries have the discharge information they need and encourages hospitals to coordinate with other providers. Since the implementation of the HRRP, hospitals have taken action and improved readmission rates. The readmission measure is also understandable to the beneficiary and can be calculated through claims data.

In the HVIP, hospitals are scored on their risk-adjusted rates of unplanned readmissions within 30 days of discharge for all conditions using Medicare claims. Our model also uses three years of claims data (2014 through 2016) to increase the number of observations. Using three years of all-condition readmissions (rather than the six conditions used in the HRRP) reduces random variation and allows Medicare to measure the quality of care for low-volume providers. The all-condition measure also holds hospitals accountable for more of their patient population than condition-specific measures do.

## Mortality

Mortality during or soon after a hospital stay (e.g., within 30 days) is an important outcome measure, and it encourages hospitals to coordinate with post-acute care providers. Like the readmission measure, this outcome measure can be determined with a high degree of accuracy through claims. Our HVIP model used an all-condition, risk-adjusted measure of mortality during the hospital stay and 30 days after discharge. (The measure excludes patients who are in hospice care before admission.) As with the readmission measure, we used three years of data (2014 to 2016) to increase the number of observations.

## Medicare spending per beneficiary

MSPB measures efficient care, not volume of services, and reduces fragmentation of care. By pairing the spending measure with mortality and readmissions, hospitals have an incentive to maintain episode quality while reducing episode costs. The measure shows 30-day episode spending at an individual hospital compared with Medicare spending nationally for hospitals with comparable patients. Our model uses the MSPB measure CMS computes for the VBP Program: price-standardized, risk-adjusted (e.g., age, sex, severity of illness) measures that include all Medicare Part A and Part B claims paid during the period from 3 days before an inpatient hospital admission through 30 days after discharge, divided by the episode-weighted median MSPB amount across all hospitals (the median MSPB measure equals 1.0). The model uses the MSPB values calculated with three years of data (2014 to 2016).

## Patient experience

Based on the Commission's principles, a new HVIP includes population-based patient experience measures. The literature finds that high-quality hospitals and physicians appear to focus not only on technical excellence but also on how patients perceive their care (Chatterjee et al. 2015). When patients have a better experience, they are more likely to adhere to treatments, return for follow-up appointments, and engage with the health care system by seeking appropriate care.

The Hospital Consumer Assessment of Healthcare Providers and Systems® (HCAHPS®) is a national standardized survey instrument and data collection methodology for measuring patients' perspectives on their care during a recent hospital stay.[4] The survey allows

Medicare, hospitals, beneficiaries, and others to make objective and meaningful comparisons of hospitals. Since 2006, CMS and hospitals have worked with third-party survey vendors to collect survey results from a random sample of each hospital's adult inpatient discharges. The survey results are used to calculate 10 core measures of patient experience: (1) communication with nurses, (2) communication with doctors, (3) responsiveness of hospital staff, (4) communication about medicines, (5) cleanliness of hospital environment, (6) quietness of hospital environment, (7) discharge information, (8) care transition, (9) overall rating, and (10) whether the beneficiary would recommend the hospital to others. (Hospitals can add their own survey items to the core survey.) All the HCAHPS measures are scored in the VBP Program and they are publicly reported on the Hospital Compare website.

We considered three ways the HVIP could incorporate patient experience. For simplicity, the patient experience measure domain could be based on the single overall hospital rating measure (i.e., share of patients who gave their hospital a rating of 9 or 10 on a scale of 0 (lowest) to 10 (highest)). The overall hospital rating measure is strongly or moderately correlated with the other quality measures, so by scoring a hospital's overall rating, the other measures are likely captured (Centers for Medicare & Medicaid Services 2017). A second approach would be to score a subset of the HCAHPS measures—for example, using a composite of four communication measures: communication with doctors, communication with nurses, responsiveness of staff, and discharge information. All the patient experience measures are moderately positively correlated, so any small changes in the measures included in the composite would not have large effects on how groups of hospitals score in the HVIP. A third approach is to use the current VBP Program methodology, which scores a composite of all HCAHPS measures, with cleanliness and quietness combined into one measure. This approach captures a more comprehensive picture of a patient's experience with a hospital's care compared with using only the overall rating or a subset of HCAHPS measures.

The Commission's HVIP model uses the third approach from the VBP Program, which scores a composite of all HCAHPS measures. When the HVIP is implemented, CMS can determine through the federal rule-making and comment process which HCAHPS measures to score.

We spoke with several hospitals' quality leaders about their use of and experiences with the HCAHPS survey. They asserted that patient experience, and the HCAHPS, is ingrained in their quality measurement and improvement work. They also commented that the HCAHPS should be updated to include communication with care teams since patient care is handled by teams of practitioners (e.g., respiratory therapists, certified nursing assistants), not just nurses and physicians. Hospitals also commented that the HCAHPS survey administration approach should be modernized to include web-based and email surveys, as opposed to just mailed and telephone surveys. We agree that CMS should consider updating the HCAHPS to better capture patients' experiences during hospital care.

## Hospital-acquired conditions

HACs are among the leading threats to patient safety. Over a million HACs occur across the U.S. health care system every year, leading to the loss of tens of thousands of lives and adding billions of dollars to health care costs (Agency for Healthcare Research and Quality 2016). However, the monitoring and evaluation of infection rates through Medicare's programs and other national initiatives, such as the Partnership for Patients, have improved infection rates.

As part of the HACRP and the VBP Program, hospitals are scored on six self-reported HAC standardized infection ratios (observed over predicted infections), including central line–associated bloodstream infection, catheter-associated urinary tract infection, colon and hysterectomy surgical site infections, methicillin-resistant *Staphylococcus aureus bacteremia*, and *Clostridium difficile* infection. Hospitals use their own claims and medical records to report their infection rates through the Centers for Disease Control and Prevention's (CDC's) National Health Safety Network (NHSN). The NHSN provides hospitals, states, and regions with comparative data needed to identify problems and measure local and national progress on prevention efforts.

There are concerns that some hospitals are better than others at reliably and accurately reporting infections and other patient safety issues (Calderwood et al. 2017). Even so, the Commission believes it is important to drive quality improvement by tying infection rates to payment through the HVIP. However, the Commission encourages CMS

and the CDC to improve their monitoring and validation of the data.

The Commission's HVIP model averages each hospital's standardized infection ratios for all the available HAC measures. The publicly available CMS data include infection ratios based on just one year of data (October 2016 to September 2017). (About 600 hospitals did not have a sufficient sample to publicly report all 6 infection rates. Under the Commission's HVIP model, those hospitals were scored only on the other four measure domains.) As with the claims-based readmissions, mortality, and MSPB measures, the Commission recommends an HVIP that would use three years of HAC results, which would increase the number of hospitals with HAC results available to score.

## Scoring methodology

Salient features of the HVIP model include weighting of measure domains and the methodology to convert a hospital's performance to a score.

### Weighting of measure domains

Our HVIP model's simulations treat each measure as an equally weighted, separate domain (each domain is worth 20 percent of the total HVIP score), consistent with the VBP Program methodology. With the equal weighting, the HVIP increases the weight of mortality and patient experience and decreases the weight of readmissions and infection rates compared with current quality programs. Policymakers could give the measure domains different weights based on a ranking that takes into account interests shared by the Medicare program and its beneficiaries. We found that the measure domains have moderately positive correlations with each other; therefore, small weighting changes will not have large effects on hospital's rankings with the HVIP. When the HVIP is implemented, CMS can determine through the federal rule-making and comment process how to weight HVIP measure domains.

### Converting measure performance to HVIP points (score)

One of the Commission's principles is that Medicare quality programs should reward providers based on clear, absolute, and prospectively set performance targets rather than score providers relative to one another

(as in the tournament model). Under a tournament model, a provider's reward or penalty depends only on its performance relative to the performance of other providers; thus, no hospital knows how its performance will be judged until after other hospitals' performance has been assessed. The HVIP is designed to reward or penalize a hospital based on the individual performance the hospital achieves relative to a prospectively set system of targets. Hospitals will know ahead of time how different levels of performance will translate into a performance score and payment adjustments. CMS should also give hospitals the opportunity to review the computation of the HVIP. Rewards are to be distributed based on a continuous scale (thereby minimizing payment "cliffs") so that hospitals with similar levels of performance receive similar financial rewards. Some argue that tournament models may be necessary for new measures for which performance data do not yet exist for setting appropriate targets. However, CMS addresses this concern in current quality programs by collecting and publicly reporting new measure results for a year or more before using them for payment.

Medicare can define the performance targets (i.e., set the performance scale) using different methods. For example, the continuous scale of targets can be set along a broad distribution of historical data so that most entities have the opportunity to earn credit for their performance. Medicare could also start the continuous scale of targets around a desired value to drive quality improvement above that value. Medicare can assess targets annually, and if needed, revise them depending on whether expectations for quality achievement are met. For example, for measures new to pay-for-performance, there is likely to be a greater increase in performance in the early years, so the targets could change annually. For other measures where achievement requires more than a year, the targets could be the same for a three-year period. In principle, the targets should be prospectively set and should encourage both high and low performers to improve.

In our HVIP model, hospitals earn points for their performance on quality metrics based on a continuous scale, starting at 0 and gradually increasing to 10 points. The scale stretches over almost the entire distribution of performance, giving both low-performing and top-performing hospitals an incentive to continue to achieve high-quality results. Table 15-1 (p. 436) presents a subset of the scale of points associated with performance targets in our HVIP model.

| | Risk-adjusted readmission rates (lower is better) | Risk-adjusted mortality rates (lower is better) | Relative Medicare spending per beneficiary (lower than 1 is better) | Patient experience composite (higher is better) | Standardized hospital-acquired conditions composite ratio (lower than 1 is better) |
|---|---|---|---|---|---|
| 0 points | 21% or above | 14% or above | 1.16 or above | 79.26% or below | 1.85 or above |
| 2 points | 19% | 12% | 1.11 | 80.67 | 1.65 |
| 4 points | 17% | 10.5% | 1.04 | 83.44 | 1.27 |
| 6 points | 14% | 8.5% | 0.98 | 86.22 | 0.90 |
| 8 points | 12% | 7% | 0.91 | 89.00 | 0.52 |
| 10 points | 10% or below | 5% or below | 0.84 or below | 91.78 or above | 0.14 |

Note:    HVIP (hospital value incentive program). Each measure in the HVIP is continuously scored from 0 to 10 points; only a subset of points is displayed here. Lower rates are better for readmissions, mortality, Medicare spending per beneficiary (MSPB), and standardized hospital-acquired conditions (HAC) ratios; hospitals with lower rates on these measures receive more HVIP points. The MSPB value is based on the hospital's spending compared with the national mean. The patient experience composite is the average of all 10 Hospital Consumer Assessment of Healthcare Providers and Systems® measure results. The standardized HAC composite ratio is the average of a hospital's standardized infection ratios for up to six HAC measures.

Source:    MedPAC analysis of Medicare fee-for-service hospital quality data, 2014–2017.

A hospital's total HVIP score is the average of all of its points earned across the five measure domains. The 2,875 hospitals included in our sample had a nearly normal distribution of total quality performance scores under our HVIP model (Figure 15-1).[5]

Table 15-2 (p. 438) presents average total HVIP and measure domain points earned by different groups of hospitals. On average, hospitals with a high share of beneficiaries with full dual eligibility for Medicare and Medicaid tend to do worse on readmissions (4.4 points vs. 5.9 points for hospitals with a low share of fully dual-eligible beneficiaries) and patient experience (4.7 points vs. 6.1 points for hospitals with a low share of fully dual-eligible beneficiaries). These differences in average scores may be due to differences in hospitals' financial resources or the social risk factors of hospital populations, such as the availability of primary care, housing stability, medication adherence, and mental health and substance use disorders. Based on the Commission's principles to avoid masking disparities in care, the HVIP accounts for these population differences by adjusting payment through peer grouping (rather than adjusting quality measure results).

## Converting HVIP points to payment adjustments using peer grouping

In measuring providers' performance on quality measures, the Commission contends that Medicare should take into account, as necessary, differences in providers' populations, including social risk factors. However, CMS should not adjust measure results for social risk factors because doing so can mask disparities in clinical performance, which could discourage reduction in disparities in access, quality, and outcomes compared with the status quo and could result in adjusting for factors within a hospital's control. Instead, Medicare should adjust performance payments through peer grouping so that, for purposes of rewards or penalties, each provider's performance is compared with that of its "peers"—defined as providers with a similar patient mix.[6]

At the same time, CMS should target technical assistance resources at low-performing providers, which can include hospitals caring for populations with more social risk factors that affect health outcomes (known as "social determinants of health"), such as housing, language and

**FIGURE**
**15–1**

**Hospitals have a nearly normal distribution of total quality performance under the potential HVIP**



Total HVIP points (out of 10 points)
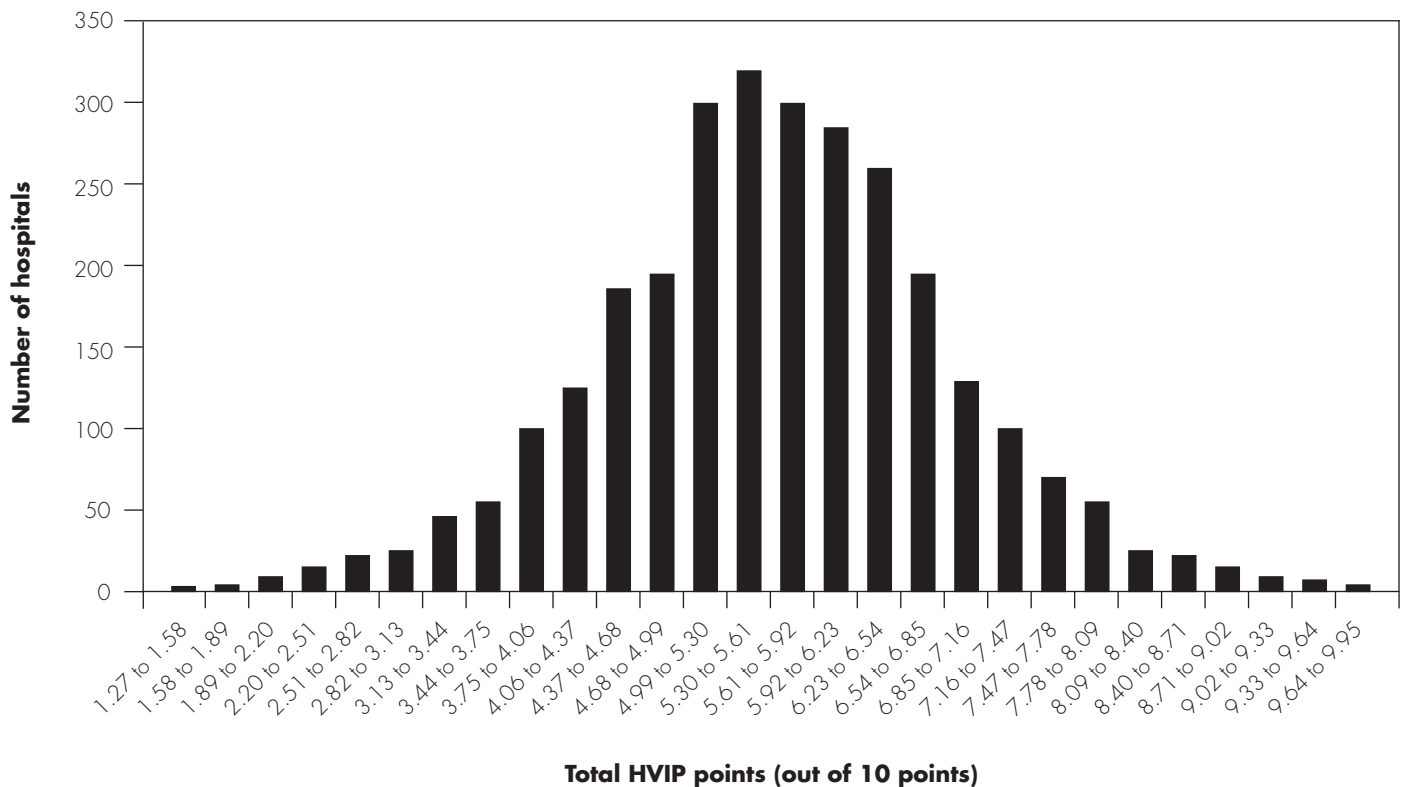
Note:     HVIP (hospital value incentive program). Hospitals receive 0 to 10 total HVIP points based on their performance on five equally weighted measure domains (readmissions, mortality, Medicare spending per beneficiary, patient experience composite, and standardized hospital-acquired conditions composite ratio). Our HVIP modeling scores hospitals using a continuous performance-to-points scale based on almost the entire distribution of current hospital performance, so each hospital has the potential to earn at least some points. There are 2,875 hospitals included in our HVIP model.

Source: MedPAC analysis of Medicare fee-for-service hospital quality data, 2014–2017.

culture proficiency, access to transportation, and food security. There are numerous examples of how hospitals have implemented successful programs to improve outcomes for these populations. Hospitals can help diabetic patients at discharge to understand their access to healthy foods and, if there is a need, connect patients to local food banks. Hospitals can assess community health needs and forge community partnerships to meet the needs of the community they serve by coordinating with, for example, transportation services and homeless shelters (American Hospital Association 2017). Although quality improvement can be more challenging in populations with greater social risk, there is evidence that some efforts to address social determinants of health succeed. For example, after the implementation of the HRRP, safety-net

hospitals improved readmission rates more rapidly than other hospitals (Salerno et al. 2017).

The HVIP implements the peer-group approach by distributing quality-based payments to hospitals classified in 10 peer groups. Each peer group has about the same number of hospitals (in our current model, about 287 hospitals), and hospitals are assigned to peer groups based on their share of Medicare patients who are fully dual-eligible beneficiaries. We used eligibility for full Medicaid benefits as a proxy for whether a hospital's patients are more difficult to treat because individuals with full Medicaid benefits have low income and are much more likely than other Medicare beneficiaries to be disabled, have multiple chronic conditions, and have functional

**Illustrative total HVIP points by hospital characteristics**

**Average points (score)**

| Hospital group | Number of hospitals | Total HVIP points (score) | Readmissions | Mortality | MSPB | Patient experience | HAC |
|---|---|---|---|---|---|---|---|
| All hospitals | 2,875 | 5.7 | 5.2 | 6.4 | 5.2 | 5.0 | 5.9 |
| **Hospital size** | | | | | | | |
| Large urban | 1,179 | 5.4 | 4.7 | 7.0 | 4.5 | 5.0 | 5.7 |
| Other urban | 1,033 | 5.8 | 5.7 | 6.4 | 5.3 | 5.7 | 6.0 |
| Rural | 663 | 5.9 | 5.5 | 5.3 | 6.2 | 6.1 | 6.4 |
| **Teaching status** | | | | | | | |
| Major teaching | 301 | 5.1 | 3.7 | 7.1 | 4.7 | 4.6 | 5.1 |
| Other teaching | 757 | 5.6 | 5.2 | 6.8 | 4.9 | 5.1 | 6.1 |
| Nonteaching | 1,817 | 5.8 | 5.5 | 6.1 | 5.4 | 5.8 | 6.0 |
| **Ownership** | | | | | | | |
| Nonprofit | 1,781 | 5.9 | 5.5 | 6.7 | 5.4 | 5.7 | 6.0 |
| For profit | 714 | 5.3 | 4.7 | 6.1 | 4.5 | 5.0 | 5.8 |
| Government | 380 | 5.5 | 5.2 | 5.6 | 5.4 | 5.5 | 5.7 |
| **Share of fully dual-eligible beneficiaries** | | | | | | | |
| Low | 958 | 5.9 | 5.9 | 6.5 | 4.9 | 6.1 | 5.9 |
| Moderate | 958 | 5.7 | 5.4 | 6.2 | 5.2 | 5.7 | 6.1 |
| High | 959 | 5.4 | 4.4 | 6.4 | 5.4 | 4.7 | 5.8 |

Note:    HVIP (hospital value incentive program), MSPB (Medicare spending per beneficiary), HAC (hospital-acquired conditions). Hospitals receive up to a total HVIP score of 10 points, which is the average of their performance on five equally weighted measures: risk-adjusted, unplanned readmissions; risk-adjusted 30-day postdischarge mortality; MSPB; patient experience composite, which is the average of all 10 Hospital Consumer Assessment of Healthcare Providers and Systems® measure results; and a standardized HAC composite ratio, which is the average of a hospital's standardized infection ratios for up to 6 HAC measures. Hospitals in the low share of fully dual-eligible beneficiaries group have an average of 11 percent of fully dual-eligible patients; hospitals in the moderate share of fully dual-eligible group have an average of 18 percent of fully dual-eligible patients; hospitals in the high share of fully dual-eligible beneficiaries group have an average of 33 percent of fully dual-eligible patients.

Source:  MedPAC analysis of hospital quality data, 2014–2017.

impairments. To assign peer groups, we excluded patients with partial Medicaid benefits because their care needs are less complex. We expect that as more data and research about the effects of patient-level social risk factors on quality performance become available, the approaches to assigning providers to peer groups will evolve.

As shown in Table 15-3, the average share of a hospital's patient population represented by fully dual-eligible beneficiaries in each peer group ranged from less than 7

percent (Peer Group 1) to about 48 percent (Peer Group 10)—in other words, a difference of about 40 percentage points (Table 15-3). When defining the HVIP peer groups, policymakers could consider whether consolidating some of the middle peer groups that do not have large differences in shares of fully dual-eligible beneficiaries could improve the equity of payment adjustments among hospitals that serve relatively similar shares of such beneficiaries.

**TABLE
15–3**

Illustration of hospital payment adjustments using
peer groups under potential HVIP model

| Peer group | Average: | | Enhanced pool of dollars based on 3 percent of hospitals' IPPS payments | | Enhanced pool of dollars based on 6 percent of hospitals' IPPS payments | |
|---|---|---|---|---|---|---|
| | Share of fully dual-eligible beneficiaries | Total HVIP points | Pool of dollars (in millions) | Payment multiplier | Pool of dollars (in millions) | Payment multiplier |
| **1** (lowest share of fully dual-eligible beneficiaries) | 6.5% | 6.3 | $308 | 0.50% | $616 | 1.00% |
| **2** | 10.7 | 5.8 | 332 | 0.52 | 664 | 1.04 |
| **3** | 12.9 | 5.7 | 405 | 0.52 | 810 | 1.04 |
| **4** | 15.0 | 5.7 | 333 | 0.52 | 665 | 1.04 |
| **5** | 17.0 | 5.7 | 313 | 0.52 | 626 | 1.04 |
| **6** | 19.0 | 5.6 | 316 | 0.54 | 633 | 1.10 |
| **7** | 21.8 | 5.6 | 259 | 0.54 | 518 | 1.10 |
| **8** | 25.0 | 5.5 | 253 | 0.56 | 505 | 1.11 |
| **9** | 30.0 | 5.3 | 286 | 0.56 | 573 | 1.12 |
| **10** (highest share of fully dual-eligible beneficiaries) | 47.6 | 4.7 | 230 | 0.66 | 459 | 1.32 |

Note:    HVIP (hospital value incentive program), IPPS (inpatient prospective payment system). There are about 287 hospitals in each of the 10 hospital peer groups. Peer groups are assigned based on the share of the hospital's Medicare patients who are fully eligible for Medicare and Medicaid benefits for a majority of the year. Fully dual-eligible beneficiaries qualify for a full range of Medicaid benefits. The 3 percent enhanced pool of dollars for each peer group includes a 2 percent withhold of each hospital's IPPS payments and 1 percent of each hospital's IPPS payments from the current-law hospital payment update. The 6 percent enhanced pool of dollars for each peer group includes a 5 percent withhold of each hospital's IPPS payments and 1 percent of each hospital's IPPS payments from the current-law hospital payment update. The payment multiplier is the percentage adjustment to payments per point.

Source:    MedPAC analysis of hospital quality data, 2014–2017.

## Distribute enhanced pool of dollars within each peer group

Our HVIP model is designed to redistribute a peer group's pool of dollars to hospitals in the peer group based on their performance on the quality measures.[7] Each peer group's pool of dollars is based on two sources. One source is a percentage payment withhold from each of the peer group's inpatient payments. The VBP Program currently uses a 2 percent total base payment withhold. Other options under consideration include a 2 percent withhold amount that scales up to 5 percent over a two- to three-year period. Alternatively, CMS could immediately begin with a higher withhold amount (e.g., 5 percent). The second source for the pool of dollars is part of the current-law hospital payment update. For the HVIP model, we assumed that 0.8 percentage point of the total hospital payment update, which applies to both inpatient

and outpatient payment, would be added to the HVIP pool. This amount roughly translates to a little more than 1 percent of inpatient spending. We therefore modeled hospital performance using a pool of dollars based on a 2 percent withhold and 1 percent of total base inpatient spending (or a 3 percent pool), as well as a 5 percent withhold and 1 percent of total base spending (or a 6 percent pool). By eliminating the current readmissions penalty program and hospital-acquired condition programs, hospitals will no longer face those penalties in their hospital payment rates. Therefore, the HVIP will result in higher spending than under current law.

In our HVIP model, we followed five steps to convert performance points to payment adjustments based on the 3 percent and 6 percent pools of dollars, using currently available hospital quality and payment data. (See text box

**TABLE
15–4**

**Illustrative HVIP payment adjustments by hospital peer groups**

| Peer group | Enhanced pool of dollars based on 3 percent of hospital's IPPS payments | | Enhanced pool of dollars based on 6 percent of hospital's IPPS payments | |
|---|---|---|---|---|
| | Net payment adjustment (after 2 percent withhold) | Bonus payment as a percentage of withhold | Net payment adjustment (after 5 percent withhold) | Bonus payment as a percentage of withhold |
| **1** (lowest share of fully dual-eligible beneficiaries) | –0.43% to 2.97% | 79% to 248% | –1.85% to 4.93% | 63% to 199% |
| **2** | –0.28 to 2.64 | 86 to 232 | –1.55 to 4.28 | 69 to 186 |
| **3** | –0.45 to 2.63 | 78 to 231 | –1.89 to 4.26 | 62 to 185 |
| **4** | –0.96 to 2.54 | 52 to 227 | –2.92 to 4.08 | 42 to 182 |
| **5** | –0.65 to 2.42 | 67 to 221 | –2.31 to 3.85 | 54 to 177 |
| **6** | –0.85 to 2.65 | 57 to 233 | –2.30 to 4.31 | 46 to 186 |
| **7** | –0.31 to 2.58 | 65 to 229 | –2.42 to 4.17 | 52 to 183 |
| **8** | –1.08 to 3.01 | 46 to 250 | –3.16 to 5.01 | 37 to 200 |
| **9** | –1.27 to 3.01 | 37 to 251 | –3.53 to 5.02 | 37 to 200 |
| **10** (highest share of fully dual-eligible beneficiaries) | –1.16 to 4.14 | 42 to 307 | –3.32 to 7.28 | 34 to 246 |

Note:    HVIP (hospital value incentive program), IPPS (inpatient prospective payment system). There are about 287 hospitals in each of the 10 hospital peer groups. Peer groups are assigned based on the share of the hospital's Medicare patients who are fully eligible for Medicare and Medicaid benefits for a majority of the year. Fully dual-eligible beneficiaries qualify for a full range of Medicaid benefits. The 3 percent enhanced pool of dollars for each peer group includes a 2 percent withhold of each hospital's IPPS payments and 1 percent of each hospital's IPPS payments from the current-law hospital payment update. The 6 percent enhanced pool of dollars for each peer group includes a 5 percent withhold of each hospital's IPPS payments and 1 percent of each hospital's IPPS payments from the current-law hospital payment update.

Source:    MedPAC analysis of hospital quality data, 2014–2017.

describing the process to convert each hospital's HVIP points to a quality-based payment adjustment, pp. 442–443.) Overall, we found that it was feasible to compute incentive payments that support the Commission's HVIP goals.

After scoring each hospital on the same continuous performance-to-points scale, we divided the 2,875 hospitals in our HVIP sample into 10 equal-sized peer groups based on the share of a hospital's patient population represented by fully dual-eligible Medicare beneficiaries (text box Steps 1 and 2). The average share of a hospital's patient population represented by fully dual-eligible Medicare beneficiaries in each peer group ranged from less than 7 percent (Peer Group 1) to about 48 percent (Peer Group 10) (Table 15-3, p. 439). The average total HVIP points that hospitals in each peer group received ranged from 6.3 (Peer Group 1) to 4.7 (Peer Group 10). Peer Group 10 had fewer total HVIP

points mainly because of higher average readmission rates and lower patient experience ratings compared with Peer Group 1 hospitals. Although Peer Group 10's point total was lower on average, some hospitals in the peer group were high performers and received more HVIP points than the average for all hospitals. Nevertheless, while hospitals with high shares of fully dual-eligible beneficiaries on average earn fewer HVIP points, for any given level of performance they receive a higher bonus payment (e.g., percent payment adjustment per HVIP point) than hospitals with few fully dual-eligible beneficiaries (Table 15-3, p. 439).

For each peer group, we calculated a pool of dollars for expected HVIP payments based on both 3 percent and 6 percent of the peer-group hospitals' combined base inpatient prospective payment system (IPPS) payments (text box Step 3). Intrinsic to the peer group's pool of

dollars is the number of discharges for that group's hospitals, so the pool of dollars is smaller for those peer groups that have hospitals with fewer discharges and thus lower aggregate IPPS base payments to be used in the withhold calculation. Under the 3 percent pool of dollars option, a total of $3.04 billion would be distributed to hospitals based on their HVIP points. The withhold pool for each peer group ranged from about $230 million (Peer Group 10) to $405 million (Peer Group 3) (Table 15-3, p. 439).

For each peer group, we also calculated the payment multiplier, or the percentage adjustment to payments per point, which converts a hospital's total HVIP points to dollars and results in spending the 3 percent or 6 percent pool of dollars for each group (text box Step 4). For the 3 percent pool of dollars (2 percent withhold), the payment multiplier ranged from 0.50 percent (Peer Group 1) to 0.66 percent (Peer Group 10) (Table 15-3, p. 439). In other words, high-performing hospitals in Peer Group 10 would have the potential to earn a slightly higher payment adjustment per performance point compared with the other groups because the payment multiplier for Peer Group 10 is higher than for the other groups. This potential is also true for the 6 percent pool of dollars.

For both the 3 percent and 6 percent enhanced pools of dollars, we calculated each hospital's payment adjustment using its total HVIP points and its peer group's payment multiplier (text box Step 5). Under a 3 percent pool of dollars, a hospital's net payment adjustment ranged from –1.27 percent to 4.14 percent. Hospitals would recover from 37 percent to 307 percent of their 2 percent withhold (Table 15-4). Hospitals in aggregate would receive about 1 percent more from the HVIP than they put into the program. This result is due to the enhanced funding of the pool with dollars from the fiscal year 2020 current-law update.

Under a 6 percent pool of dollars, a hospital's net payment adjustment ranged from –3.53 percent to 7.28 percent (Table 15-4). Hospitals would recover 34 percent to 246 percent of their 5 percent withhold. Like the 3 percent pool of dollars, hospitals in aggregate would receive about 1 percent more from the HVIP than they put into the program. For both the 3 percent and 6 percent pools of dollars, the largest rewards are within Peer Group 10 because those hospitals have the largest payment multipliers. Hospitals in this peer group have the potential to earn a greater reward for better performance than hospitals in other peer groups.

Our HVIP modeling scores hospitals using a continuous performance-to-points scale based on almost the entire distribution of current hospital performance, so each hospital has the potential to earn points and be rewarded. Using either a 3 percent or 6 percent pool of dollars in our modeling, the vast majority of hospitals would receive more than the withhold because the pool of dollars is enhanced by a portion of the hospital payment update. More than half of hospitals would receive a reward greater than a 1 percent net payment adjustment. As discussed in an earlier section, Medicare can define the HVIP performance scale using different methods, for example, around a desired value, which can change the distribution of hospitals being rewarded.

## Comparison of HVIP model to existing hospital quality programs

As we reported in June 2018, we examined differences between hospital performance in the existing programs and our HVIP model. To compare performance, we assigned hospitals to quintiles based on their total amount of rewards or penalties in the existing programs and assigned them to quintiles based on their payment adjustments under the HVIP model using both the 3 percent and 6 percent pool of dollars. We found that, with a 3 percent pool, about 30 percent of hospitals were in the same quintile under both the existing programs and the HVIP model, while about 35 percent were in the same quintile in both programs when the HVIP used a 6 percent pool. About 70 percent to 73 percent were in the same quintile or within one quintile under the existing program and the HVIP model (for both 3 percent and 6 percent pools). Four key factors drove large changes: the enhanced pool of dollars, peer grouping, the reduction in maximum penalties due to condition-specific readmissions in the HRRP, and the heavier weighting of patient experience in the HVIP compared with the VBP Program.

### Effect of peer grouping on reducing disparities among hospitals

Our HVIP model uses a small set of measures and a continuous performance-to-points scale, and it converts those points to payment adjustments relative to groups of hospitals that serve similar shares of fully dual-eligible populations (hospital peer groups). Since one goal of an HVIP is to adjust payments to account for differences in

## Using peer groups to convert hospital value incentive program points to rewards and penalties

The Commission's model of the new hospital value incentive program (HVIP) distributes quality-based payments to hospitals classified in 10 peer groups. Hospitals are assigned to peer groups based on their share of Medicare patients who are also fully eligible for Medicaid (Medicaid eligibility being used as a proxy for low income). Each peer group has about the same number of hospitals and an enhanced pool of dollars based on a payment withhold from each of the group's hospitals and a portion of the current-law hospital payment update. (We modeled 3 percent and 6 percent pools of dollars based on a 2 percent and 5 percent payment withhold, respectively, and about 1 percent of payment from the current-law update.) The pool of dollars is redistributed to the peer group's hospitals based on their quality performance.

We followed five steps to convert each hospital's quality measure performance to a payment adjustment that provides rewards or penalties.

*Step 1:* Convert each hospital's performance on quality measures to total HVIP points based on a continuous performance-to-points scale. Every hospital is scored on the same scale.

*Step 2:* For each hospital, calculate the share of Medicare patient discharges that are fully eligible for Medicaid. Divide hospitals into 10 equal-sized peer groups based on the hospital population's share of fully dual-eligible patients.

*Step 3:* For each peer group, create an enhanced pool of dollars of expected HVIP payments to hospitals, based on a specified withhold from each of the group's hospitals (e.g., 2 percent or 5 percent of each hospital's base inpatient prospective payment system (IPPS) payments), and a portion of the current-law hospital payment update (e.g., about 1 percent of each hospital's base IPPS payments).

*Step 4:* For each peer group, calculate the payment multiplier or percentage adjustment to payment per HVIP point, which converts total HVIP points to dollars and results in spending the group's enhanced pool of dollars defined in Step 3.

Point multiplier = HVIP pool for peer group / sum of (each hospital's base IPPS payments × hospital's total HVIP points)

*Step 5:* Compute each hospital's adjustment for the coming year based on past performance and its peer group's point multiplier.

Hospital's HVIP-based adjustment = payment multiplier × hospital's total HVIP points.

Table 15-5 illustrates the conversion of HVIP points to payment adjustments using peer grouping. In this example, Peer Group 1 has two hospitals, Hospital A and Hospital B. Hospital A has higher total HVIP performance compared with Hospital B. The two hospitals are assigned to the same peer group because they have a similar share of fully dual-eligible

social risk factors, we examined how hospitals serving large shares of low-income patients performed. Figure 15-2 (p. 444) compares the existing quality payment program adjustments with the HVIP model's payment adjustments by peer group. Under the existing programs, Peer Group 1 (lowest share of fully dual-eligible beneficiaries) hospitals receive a –0.54 percentage point payment adjustment, while Peer Group 10 (highest share of fully dual-eligible beneficiaries) hospitals receive a –1.34 percentage point

adjustment, on average. For the HVIP, whether using a 3 percent or 6 percent pool of dollars, aggregate payment adjustments are 1 percent within each peer group because the pools are calculated and distributed within the group and because the enhanced pool of dollars includes about 1 percent of the current-law update. Thus, compared with the existing quality payment programs, the HVIP approach makes payment adjustments more equitable among hospitals that serve different populations.

beneficiaries. We withhold 2 percent of each of the hospital's total base IPPS payments. We also add 1 percent of IPPS payments to the withhold amount to create an enhanced pool of dollars from a portion of the current-law update. Since Hospital A has fewer discharges, its contribution to the pool of dollars is less than Hospital B's contribution. The total HVIP enhanced bonus pool to be redistributed for this peer group is equivalent to 3 percent of combined payments to the two hospitals ($1.95 million). The payment multiplier is calculated, which, after conversion to dollars, results in recovering the entire $1.95 million

withhold dollars. For Peer Group 1, each HVIP point earns a 0.39 percent payment adjustment. Thus, Hospital A earns a payment adjustment of 3.90 percent, which is equal to $195,000 (or a reward of $95,000 greater than the hospital's withhold) (Step 5). Hospital B earns a payment adjustment of 2.93 percent, which is equal to $1,755,000. Both hospitals receive a reward, but relative to the 2 percent withhold, Hospital A has a greater positive payment adjustment because its performance is higher. The entire $1.95 million pool is distributed to the hospitals in the peer group. ■

| TABLE 15–5 | Example of converting HVIP points to payment adjustments for a peer group's hospitals | |
|---|---|---|
| | **Peer Group 1** | |
| | **Hospital A (500 discharges)** | **Hospital B (5,000 discharges)** |
| HVIP points (Step 1) | 10.0 | 7.5 |
| Total base IPPS payments | $5,000,000 | $60,000,000 |
| 2 percent withhold of IPPS payments | $100,000 | $1,200,000 |
| 1 percent of IPPS payments from current-law payment update | $50,000 | $600,000 |
| Total HVIP enhanced pool of dollars for peer group (3 percent of IPPS payments) (Step 3) | $1,950,000 | |
| Payment multiplier (Step 4) | 0.39% adjustment per point | |
| Hospital HVIP-based adjustment (Step 5) | 3.90% ($195,000) | 2.93% ($1,755,000) |
| Reward or penalty relative to 2 percent withhold | +1.90% (+$95,000) | +0.93% (+$555,000) |

Note:   HVIP (hospital value incentive program), IPPS (inpatient prospective payment system). This example assumes the peer group has two hospitals (Step 2).

We also compared HVIP payments for other categories of hospitals with existing quality programs. Under the HVIP, large urban hospitals and major teaching hospitals would, on average, receive rewards rather than the penalties they receive under the current programs. For example, major teaching hospitals have a –1.16 percentage point penalty under current programs; under the HVIP, with a 3 percent pool of dollars or a 6 percent pool of dollars,

teaching hospitals would receive positive adjustments of a 0.84 percentage point reward or a 0.92 percentage point reward, respectively (Table 15-6, p. 445). In addition, under the HVIP, rural and nonteaching hospitals on average would receive higher rewards than large urban and major teaching hospitals. For example, rural hospitals, which currently have a –0.52 percentage point payment adjustment on average, would have a 1.19 percentage point positive adjustment under the HVIP based on a 3

**FIGURE**
**15–2**

**Compared with existing quality payment programs, the potential HVIP makes payment adjustments more equitable for hospitals grouped by share of fully dual-eligible beneficiaries**
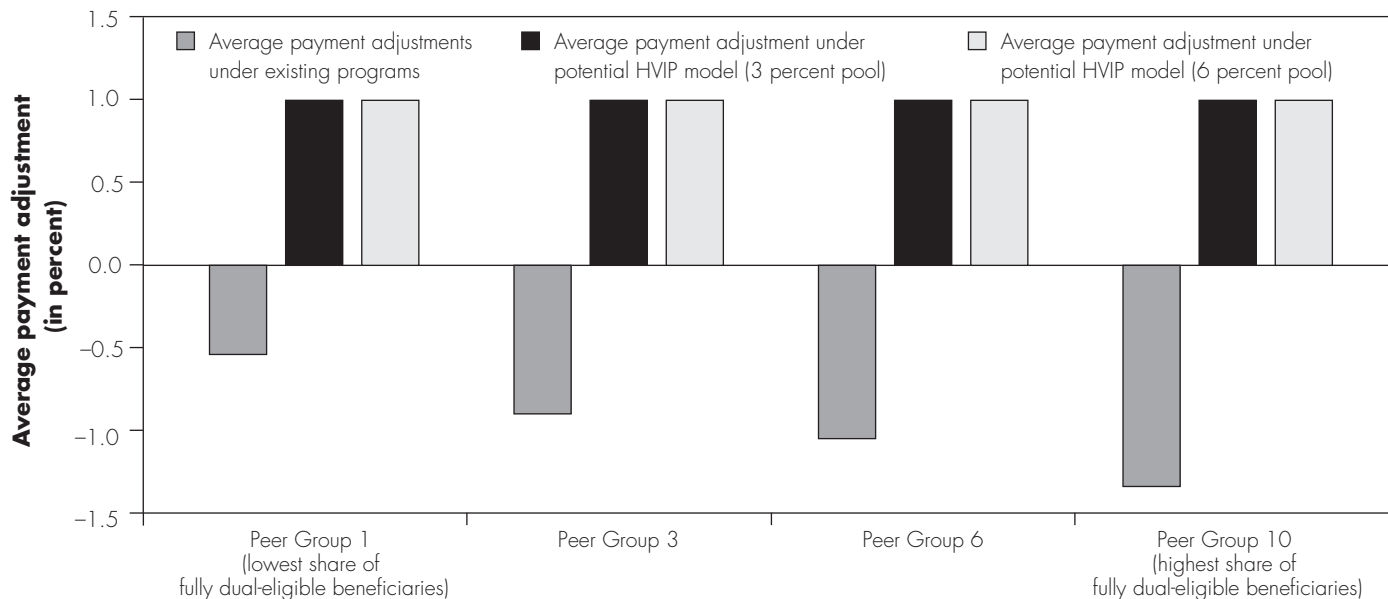


Note:    HVIP (hospital value incentive program). The existing quality programs include the Hospital Readmissions Reduction Program (HRRP), Hospital-Acquired Condition Reduction Program (HACRP), and Hospital Value-based Purchasing (VBP) Program. The HRRP and HACRP are penalties, and the VBP Program is budget neutral. The average HVIP adjustment is the sum of each hospital's HVIP adjustment after the withhold divided by the sum of each hospital's base payment. The HVIP is budget neutral. Peer groups are assigned based on the share of the hospital's Medicare patients who are fully eligible for Medicare and Medicaid benefits for a majority of the year. Fully dual-eligible beneficiaries qualify for the full range of Medicaid benefits.

Source:  MedPAC analysis of Medicare fee-for-service hospital quality data, 2014–2017.

percent pool and a 1.39 percent positive adjustment with a 6 percent HVIP pool of dollars.

Relatively efficient providers (as defined by the Commission) also receive more of a reward from the HVIP compared with other hospitals. Under the HVIP model with a 3 percent pool of dollars, efficient hospitals would receive, on average, a 1.23 percentage point reward, while less efficient hospitals would receive a 0.96 percentage point reward. There is more of a difference between the HVIP payment adjustments when using a 6 percent pool of dollars. Efficient providers would receive a 1.46 percentage point reward, while less efficient hospitals would receive, on average, a 0.92 percent payment adjustment. As seen with the peer grouping, compared with the existing quality payment programs, the HVIP approach makes payment adjustments more equitable

among hospitals that serve different populations and hospitals deemed more efficient than others.

## Recommendation to redesign hospital quality incentive programs

Consistent with the Commission's principles, the HVIP links payment to quality of care to reward providers for offering high-quality care to beneficiaries. A single quality payment program for hospitals, such as our HVIP model, would be simpler to administer and would produce more equitable results compared with the existing quality payment programs. The HVIP, as a single program, would eliminate the complexity of overlapping program requirements, would focus on outcomes, and would

TABLE
15–6

**Illustrative comparison of existing quality programs and potential HVIP payment adjustments**

| Hospital group | Number of hospitals | Current quality payment adjustments | HVIP payment adjustment after 2% withhold (3% pool) | HVIP payment adjustment after 5% withhold (6% pool) |
|---|---|---|---|---|
| All hospitals | 2,875 | –0.93% | 1.00% | 1.00% |
| **Hospital size** | | | | |
| Large urban | 1,179 | –1.01 | 0.93 | 0.85 |
| Other urban | 1,033 | –0.92 | 1.05 | 1.09 |
| Rural | 663 | –0.52 | 1.19 | 1.39 |
| **Teaching status** | | | | |
| Major teaching | 301 | –1.16 | 0.84 | 0.92 |
| Other teaching | 757 | –0.99 | 1.00 | 1.00 |
| Nonteaching | 1,817 | –0.73 | 1.05 | 1.10 |
| **Fully dual-eligible peer groups** | | | | |
| Peer Group1 (lowest share) | 286 | –0.54 | 1.0 | 1.0 |
| Peer Group 3 | 287 | –0.88 | 1.0 | 1.0 |
| Peer Group 6 | 288 | –1.02 | 1.0 | 1.0 |
| Peer Group 10 (highest share) | 287 | –1.34 | 1.0 | 1.0 |
| **Ownership** | | | | |
| Nonprofit | 1,781 | –0.88 | 1.06 | 1.13 |
| For profit | 714 | –1.10 | 0.43 | 0.71 |
| Government | 380 | –0.99 | 1.00 | 1.00 |
| **Efficient providers** | | | | |
| Relatively efficient hospitals | 328 | –0.60 | 1.23 | 1.46 |
| Less efficient hospitals | 2,547 | –1.02 | 0.96 | 0.92 |

Note: HVIP (hospital value incentive program). The current quality programs include the Hospital Readmissions Reduction Program (HRRP), Hospital-Acquired Condition Reduction Program (HACRP), and Hospital Value-based Purchasing (VBP) Program. The HRRP and HACRP impose penalties, and the VBP Program is budget neutral. The HVIP adjustment is the sum of each hospital's HVIP adjustment after the withhold divided by the sum of each hospital's base payment. Efficient hospitals, defined by the Commission, consistently do relatively well on cost and quality metrics (see criteria in Chapter 3 of this report).

Source: MedPAC analysis of hospital quality data, 2014–2017.

promote the coordination of care. It would also align with the Commission's principles for quality measurement by setting absolute value targets and using peer grouping to account for differences in provider populations. Under peer grouping in our HVIP model, differences in payment adjustments were reduced among providers serving populations of varying social risk factors. The HVIP, with an enhanced pool of dollars, also begins to reward hospitals that efficiently deliver higher quality.

The following recommendation (repeated from Chapter 3 of this report) would increase hospital payments by increasing the base payment rate and by increasing the average rewards hospitals receive under the potential Medicare hospital value incentive program.

**The Congress should:**

- **Replace Medicare's current hospital quality programs with a new hospital value incentive program (HVIP) that:**

    - **includes a small set of population-based outcome, patient experience, and value measures;**

    - **scores all hospitals based on the same absolute and prospectively set performance targets;**

    - **accounts for differences in patients' social risk factors by distributing payment adjustments through peer grouping, and**

- **For 2020, update the 2019 Medicare base payment rates for acute care hospitals by 2 percent. The difference between the update recommendation and the amount specified in current law should be used to increase payments in a new HVIP.**

Hospitals will be scored on their performance on quality and value measures, such as readmissions, mortality, patient experience, spending, and infection rates, against prospectively set performance-to-points scales (targets). In the HVIP, hospitals will have a percentage of their total base payment adjusted (penalty or reward) based on their performance.

The payment multiplier is determined within each separate peer group. Peer groups are defined by the social risk factors (for which we use full eligibility for both Medicare and Medicaid as a proxy) of the given hospital population. We expect that as more data and research about the effects of patient-level social risk factors on quality performance become available, the approaches to assigning providers to peer groups will evolve. Each peer group's percentage payment adjustments per HVIP point are prospectively set with the intent of distributing an entire pool of dollars to the peer group's hospitals based on the hospitals' past performance on the performance-to-points scale. The expected distributions could be set equal to the sum of (1) a projected percentage payment reduction in the base payment amount (e.g., 5 percent) from each hospital in the peer group and (2) the difference between the current law FY 2020 update (projected to be 2.8 percent) and the Commission's recommended update of 2 percent. Because the reduction in the update will be directed to the HVIP, the HVIP will be expected to distribute more in bonuses than the amount withheld. To implement the HVIP for FY 2020, the Congress would need to create the HVIP in legislation in the spring of 2019. CMS would then use the

FY 2020 IPPS rule-making process, which occurs in the late spring and summer of 2019, to implement the HVIP.[8] Until the HVIP is implemented, hospitals would continue to be evaluated using the four current quality reward programs.

This recommendation would replace current hospital quality programs, which overlap and are unduly complex. A single quality payment program for hospitals, such as our HVIP model, would be simpler to administer and would produce more equitable results compared with the existing quality payment programs. The HVIP, as a single program, would eliminate the complexity of overlapping program requirements, would focus on outcomes, and would promote the coordination of care. It would also align with the Commission's principles for quality measurement by setting absolute value targets and using peer grouping to account for differences in provider populations. Under peer grouping in our HVIP model, differences in payment adjustments were reduced among providers serving populations with varying social risk factors.

**Spending**

- The recommendation would increase inpatient spending relative to current law due to the elimination of the Hospital Readmissions Reduction Program, Hospital-Acquired Conditions Reduction Program, and Inpatient Quality Reporting Program. The expected increase in spending would be between $750 million and $2 billion over one year and between $5 billion and $10 billion over five years.

**Beneficiary and provider**

- The recommendation would maintain beneficiaries' access to care and providers' willingness to treat Medicare beneficiaries. Beneficiaries may benefit from hospitals' enhanced incentives to improve the quality of care they provide. The recommendation would also reduce the reporting burden on providers and, relative to current law, make payment adjustments more equitable among hospitals that serve populations with different social risk factors. ■

# Endnotes

1   The HVIP pool of dollars in future years would consist of the withhold plus about an additional 0.8 percent of base inpatient and outpatient payments, which is about 1.0 percent of inpatient payments.

2   The IQRP was mandated by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 and updated by the Patient Protection and Affordable Care Act of 2010 (PPACA). The HRRP, VBP Program, and HACRP are mandated in PPACA.

3   CMS calculates claims-based mortality, readmissions, and MSPB measures. CMS oversees the administration of the Hospital Consumer Assessment of Healthcare Providers and Systems® (HCAHPS®) patient experience survey (including certifying survey vendors and developing standardized data collection and sampling protocols). Hospitals work with a survey vendor or follow the standardized protocols themselves to collect and report the core and supplemental experience data from their patients. CMS calculates HAC rates using chart-abstracted surveillance data hospitals report to the Centers for Disease Control and Prevention's National Healthcare Safety Network database.

4   CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality, a U.S. government agency.

5   The illustrative HVIP model sample uses inpatient prospective payment system (IPPS) hospitals. It does not include the following hospitals: critical access hospitals, hospitals in Maryland and Puerto Rico, hospitals with 100 or fewer IPPS discharges in 2016, or hospitals with missing descriptive information or quality results (e.g., missing HCAHPS or MSPB data available from CMS's Hospital Compare datasets or insufficient claims to calculate mortality and readmission rates).

6   Considering suggestions from the Commission and the recent requirement legislated in the 21st Century Cures Act of 2016, CMS is implementing a peer-group scoring model, using five peer groups, in the HRRP. Others have tested and found that the peer-grouping approach adequately accounts for differences among providers serving populations with social risk factors (Office of the Assistant Secretary for Planning and Evaluation 2016, Samson et al. 2018).

7   Like the current VBP Program, HACRP, and HRRP, CMS can implement the withhold as a prospective adjustment to rates based on a hospital's past performance. An alternative would be for CMS to implement the withhold through retrospective claims adjudication.

8   Given the tight time frame for a FY 2020 implementation, CMS may need to use previous years' performance on existing measures to calculate HVIP performance targets, payment multipliers, and hospital payment adjustments. During the FY 2020 rule-making process, CMS would also, at a minimum, need to publish prospectively set HVIP targets and payment multipliers that will be used to determine FY 2021 HVIP payment adjustments.

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