

# Value-Based Purchasing 2020: A 10-Year Progress Report

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In 2020, 10 years after the [Affordable Care Act](#) (ACA) passed and became in law (March 2010), CMS and healthcare organizations are still evolving and adapting policies and strategies to optimize outcomes and performance under [value-based care](#) (VBC). The most publicized areas of the ACA involved increased coverage for the uninsured and those with pre-existing conditions. The ACA also started CMS efforts to design and implement value-based programs—devised to encourage providers to [improve quality](#) by granting incentives for meeting regulatory [measures](#) or penalties for falling short.

CMS defines VBC as paying for healthcare services in a manner that directly links performance on cost, quality, and the patient's experience of care. According to [CMS](#), as of 2020, there are 31 programs defined as value-based; CMS sponsors 11 of these, and the [Center for Medicare and Medicaid Innovation](#) (CMMI) defines 20.

## What Value-Based Care Means to Health Systems

Three programs impacting health systems under VBC include the following:

1. The [Hospital Value-Based Purchasing Program](#) (VBP).
2. The [Hospital Readmission Reduction Program](#) (HRRP).
3. The [Hospital-Acquired Conditions Reduction Program](#) (HACRP).

In general, each program covers acute-care hospitals with exclusions for specialty hospitals, such as children's, critical access, cancer, psychiatric, rehabilitation, and long-term care hospitals. Because these programs use selected measures first specified

under the Hospital [Inpatient Quality Reporting](#) (IQR) Program, implemented in 2003, organizations were already reporting these measures, making them a natural basis for penalties and bonuses under VBC programs.

CMS reports and calculates yearly measures from a prior time period (generally, one to three years early). For example, the agency based the 2020 results for mortality on data from July 2015 to June 2018. CMS then shares the measures, definitions, and time periods with health systems for review and correction and makes the measures available on the public website [Hospital Compare](#).

The agency then adjusts the hospital Medicare Severity-Diagnosis Related Group (MS-DRG) operating payment for the federal fiscal year to reflect the results of these measures. If the [readmission](#) measures show a need for improvement, the hospital may receive a penalty of 0 to 3 percent—an amount deducted from the MS-DRG payment. Medicare designed the program around readmissions because inpatient hospital spend reflects the largest share of Medicare overall spend.

Generally, CMS also scores hospitals in relation to each other, with the measures moving (recalibrated) as hospitals improve their performance. With this process, approximately the same number of hospitals will always receive an annual penalty. Under HACRP, for example, 25 percent of hospitals will receive a penalty each year. One exception is VBP, which scores on both improvement and achievement.

## A Summary of Hospital Value-Based Programs

The following chart (Figure 1) is a summary of hospital value-based programs:

Program	Starting Year	Structure
VBP	2012	Bonus or penalty based on four domain areas; a budget-neutral program with incentive or penalty potential of plus or minus 2 percent.
HRRP	2012	Currently maximum penalty of 3 percent on all MS-DRGs for excess readmission rates for 6 conditions.
HACRP	2015	All hospitals above the 75 <sup>th</sup> percentile on measures receive a 1 percent penalty on all MS-DRGs.

*Figure 1: Hospital value-based programs.*

The above structure converts to a maximum penalty in 2020, equating to a 6 percent decrease on the MS-DRG operating payment for all three programs. In 2020,

approximately 400 hospitals, or 12 percent of total eligible hospitals, received a penalty in all three programs, with penalties for those 400 hospitals totaling close to \$400 million.

A 2015 [Health Affairs](#) study showed a bias against teaching hospitals and hospitals with greater than 400 beds, with those hospitals showing a mean penalty of -0.9 and -0.8, respectively. These rates are close to double the average hospital payment adjustment of -0.5.

## The Value-Based Purchasing Program

In 2020 the VBP Program distributed a bonus payment to 56 percent of the eligible hospitals, or 1,530 acute care hospitals, with a median bonus of .4 percent of MS-DRG payments. This equates to a median payment of \$65,000. Ten hospitals received over \$1 million for their performance. On the downside, 1,200 hospitals received a penalty (median of .3 percent or \$88,000). VBP is a budget-neutral program supported through a 2 percent reduction to payment; these funds are redistributed to hospitals achieving the higher scores on the measures.

VBP scoring for 2020 comprises four domains, each weighted at 25 percent:

- Clinical outcomes: includes mortality for acute myocardial infarction (AMI), heart failure (HF), pneumonia (PN), and complications for hip and knee arthroplasty (THA/TKA).
- Efficiency and cost reduction: measured by the Medicare spend per beneficiary report.
- [Safety](#): includes perinatal care (PC-01, elective delivery prior to 39 weeks) and hospital-acquired condition (HAC) scores.
- Person and community engagement: measured by [Hospital Consumer Assessment of Healthcare Providers and Systems](#) (HCAHPS) survey.

The HACRP also measures HAC scores in the safety domain. Therefore, hospitals with low scores on these measures can receive a penalty in both programs.

The VBP score gives separate points for achievement and improvement: achievement uses a threshold and benchmark for hospital comparison, and organizations earn points awarded for improvement compared to a baseline, assuming they meet a threshold. Adding the higher score of achievement or improvement then generates a [Total Performance Score](#) (TPS).

## Impact of the Value-Based Purchasing Program

Since its launch in 2012, VBP has made the following impacts:

- A modest effect on payment: Initial results of a 2015 U.S. Government Accountability Office (GAO) [study](#) on VBP showed a modest effect on payment and no apparent change in quality of care, as well as no apparent shift in the quality metrics VBP employs. Hospitals didn't report any changes in focus with this program, but the GAO study acknowledged potential for metrics shifts as the

- program adjusted metrics and weights for scoring.
- No change in patient outcomes: A 2016 [BMJ study](#) found no evidence that the program had improved patient outcomes. The study, which focused on mortality rates, found no significant changes.
- A need for improvement: The title of a [JAMA forum](#) blog by Ashish K. Jha, MD, MPH, gives a good summary of the author’s opinion: “Value-Based Purchasing: Time for Reboot or Time to Move On?” Dr. Jha states the current structure of the program is not producing the originally envisioned results. He lists three efforts that would improve the program:
  - Larger incentives.
  - Fewer measures.
  - Simpler design.
- Recommended Redesign: The [Medicare Payment Advisory Commission](#) (MedPAC) recommended to Congress redesigning VBP programs and establishing one single incentive program. Criteria for incentive would include importance of HAC, emphasis on patient experience, and refinement of incentive pools. The MedPAC 2019 report stated the current programs have issues with regulatory burden, overlap, lack of fixed measures, and need to focus on all-condition mortality and readmission measures.

In 2020 there were [3,129 hospitals](#) in the VBP Program. Among these, 547, or 18 percent, received no penalty, and 2,583 hospitals got a penalty. Fifty-six hospitals received the maximum penalty of a 3 percent reduction of MS-DRG operating payments. The performance period was July 2015 to June 2018.

## The Hospital Readmission Reduction Program

The HRRP reduces payments to hospitals when readmissions exceed an expected level. An excess readmission rate is calculated for a 30-day risk-adjusted unplanned readmission for the following conditions:

- AMI.
- Chronic obstructive pulmonary disease (COPD).
- HF.
- PN.
- Coronary artery bypass graft (CABG) surgery.
- Elective primary THA/TKA.

The HRRP doesn’t include the [Hospital-Wide All-Cause Readmission](#) (HWR) measure, and readmission measures for a hospital with fewer than 25 cases would not be included in the calculation.

CMS assigns hospitals to five peer groups based on the proportion of dual-eligible stays within the three-year performance period. The agency added this comparison in 2019 to account for more complex patients and the impact on readmissions. The reduction ranges from a maximum of 3 percent to no reduction in payment, with reduction applied to all MS-DRGs.

With the HRRP program, CMS is encouraging providers to increase communication and care coordination and be responsible for a patient’s post-discharge care.

## Impact of the Hospital Readmission Reduction Program

In a 2018 [report](#), MedPAC stated the HRRP had been successful for beneficiaries and the Medicare program, with readmission rates declining after its implementation. Moreover, the decline did not materially increase outpatient observation or emergency department visits or adversely impact mortality. Rates declined from 2012 to 2016 by 3.6 percent for AMI, 3 percent for HF, and 2.3 percent for PN (Figure 2).

Source: MedPAC analysis of 2008 through 2016 Medicare claims files for Medicare FFS beneficiaries age 65 or older.

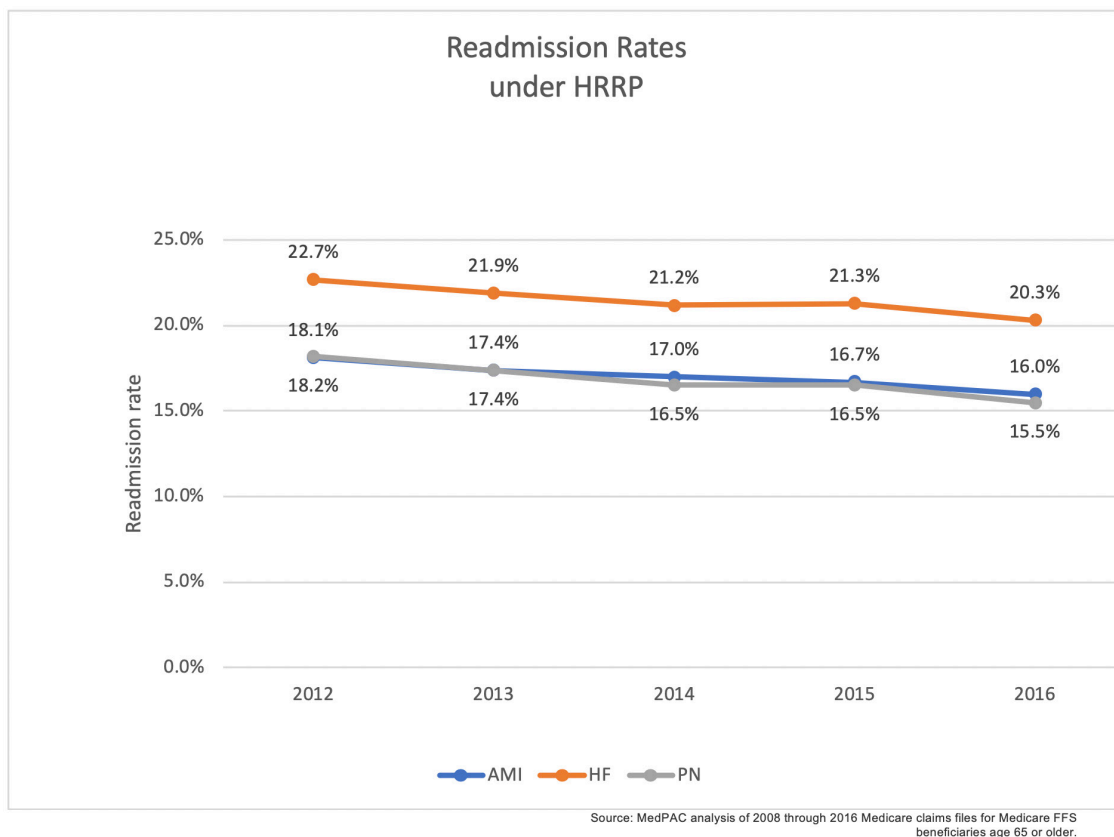


Figure 2: The readmission rate decline under the HRRP

## The Hospital-Acquired Condition Reduction Program

CMS applies a flat 1 percent payment reduction to hospitals that rank in the worst performing 25 percentiles of all hospitals under the HACRP. The agency designed the program to improve patient safety and lower the number of HACs. CMS estimates the program saves [\\$350 million](#) annually.

CMS calculates the patient-safety score using the following measures with PSI 90 in Domain 1 as one measure and each healthcare-associated infection (HAI) as a separate measure in Domain 2, for a total of six measures:

## Domain 1

The following CMS Patient Safety Indicator (PSI) 90 measures for discharges from July 2016 through June 2018 measures count as one measure in the HAC program:

- PSI 03 — pressure ulcer rate.
- PSI 06 — iatrogenic pneumothorax rate.
- PSI 08 — in-hospital fall with hip fracture rate.
- PSI 09 — perioperative hemorrhage or hematoma rate.
- PSI 10 — postoperative acute kidney injury requiring dialysis rate.
- PSI 11 — postoperative respiratory failure rate.
- PSI 12 — perioperative pulmonary embolism or deep vein thrombosis rate.
- PSI 13 — postoperative sepsis rate.
- PSI 14 — postoperative wound dehiscence rate.
- PSI 15 — unrecognized abdominopelvic accidental puncture/laceration rate.

## Domain 2

The Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN) HAI measures for discharges January 2017 to December 2018 each receives a score and counts as one measure (for a total of five):

- Central line-associated bloodstream infection (CLABSI).
- Catheter-associated urinary tract infection (CAUTI).
- Surgical site infection (SSI) (colon and hysterectomy).
- Methicillin-resistant staphylococcus aureus (MRSA) bacteremia.
- Clostridium difficile infection (CDI).

In 2020 785 hospitals received a penalty under HACRP, with an average penalty of \$350,000. The [American Hospital Association](#) (AHA) has commented on this program and the inherent bias in the formulas. An AHA study shows the penalties disproportionately impact teaching and large urban hospitals. There is not an adequate method to risk adjust the data.

## Impact of the Hospital-Acquired Condition Reduction Program

The [Agency for Healthcare Research and Quality](#) (AHRQ) shows the rate of HACs declining. From 2010 through preliminary 2017 data, the average annual reduction in the overall rate of HACs was approximately 4.5 percent. The 2014 rate started at 99 HACs per 1,000 hospital discharges and is estimated at 86 HACs per 1,000 discharges for 2017. Based on these reductions compared with 2014, the AHRQ estimates a total of 910,000 fewer HACs in 2017. These HAC reductions link to savings estimates of approximately \$7.7 billion in costs and approximately 20,500 fewer HAC-related inpatient deaths.

A 2019 [study](#) found improvements in rates of conditions pre-HACR from 133.4 per 1,000 discharges to post-program of 122.2 per 1,000 discharges. This study concluded the CMS program did not improve patient safety beyond existing trends because greater improvement was observed in non-targeted measures (which are not part of the CMS HACRP). CMS states HACRP has yielded [2.1 million](#) fewer incidents of harm and \$28 billions of savings.

## The Spread of Value-Based Programs

Both commercial payers and Medicaid lag behind Medicare in the spread of VBP. Several commercial payers have adopted programs to move to VBP, and Medicaid will vary by state, but momentum toward the value scale has accelerated:

- [UnitedHealthcare](#) published a value-based report stating their value-based programs have a reach of 110,000 physicians and 1,100 hospitals; the payer wants to continue to expand VBP and drive clear, measurable change.
- [Humana](#), which has reported on its value-based care results for the past six years, sees continued support for the value model to improve the health and experience of patients and providers.
- According to the [Institute for Medicaid Innovation's 2019 Annual Medicaid Managed Care Survey](#), approximately 95 percent of the responding health plans used an alternative payment model or VBP arrangement for large and medium-size plans (over 250,000 covered lives). The majority of health plans (82 percent) have implemented value-based arrangements with primary care providers, while less than 15 percent of payments to hospitals are under this type mechanism.

## The Industry Response to Value-Based Programs

Medicare is a large payer, representing generally over 35 percent of a health system's gross revenue, based on California's Office of Statewide Health Planning and Development [hospital data](#). To keep the payments from decreasing, organizations need to manage and improve their quality metrics. Leading organizations are preparing for an increasing percentage of value-based arrangements in the future.

The following examples show systems moving to the new model of value:

- Jefferson Health signed a three-year VBC contract with Independence Blue Cross. According to John Brand, Jefferson's chief communications officer, the [new contract](#) "aligns reimbursement with preventive care rather than sick care."
- Christiana Care Health System is actively looking to partner with government payers and commercial plans in value-based models, according to Janice Nevin, MD, president and CEO. In a [2019 publication](#), Nevin stated that commercial payers are coming to the table differently, giving her organization more opportunity to move from volume to value.
- The State of New York is pushing their Medicaid program into the new VBP paradigm. In October 2019, [Health Leaders](#) interviewed Mark Wright, CFO at Niagara Falls Memorial Medical Center. He broke the contracts with Medicaid into two levels: level 1 as a model of sharing cost savings and level 2 a form of

capitation with quality metrics the hospital will need to meet to participate in both upside and downside risk.

## Value-Based Strategies for Health Systems

Health systems can prepare for increasing value-based programs by taking the following steps:

- Develop a formal system to track the measures in the various programs: The highest priority should be placed on the scores that track with the institution's mission and priorities, using an appropriate analytics tool. The Health Catalyst® [Community Care Accelerator](#), for example, generates reports that show metrics, allowing users to drill down to the provider level and see the gaps for specific measures. Once the measures are visible in an organization, assigning management accountability for the measures will ensure success.
- Know the organization's scores for the CMS programs: CMS provides a time-period each year for organizations to review their scores. Organizations must review this data to ensure it accurately reflects the state of care at their facilities. This [data](#) is available to the public and should be correct.
- Identify both areas of excellence and areas that need improvement: Organizations can leverage [predictive](#) tools such as the following to enhance their performance monitoring:
  - A surveillance tool that combines clinical knowledge and data can help monitor, detect, predict, and prevent threats to patient safety before harm can occur. (e.g., the Health Catalyst® [Patient Safety Monitor™ Suite: Surveillance Module](#)).
  - A machine learning-enabled tool can add predictive capability to try to prevent future readmissions with appropriate interventions (such as the Health Catalyst® [Readmission Explorer](#), which shows the trends in readmissions). For instance, one hospital may have a great score for heart failure, but it needs to improve in pneumonia; focusing on the process in pneumonia would reveal opportunities for interventions to decrease the readmission rate (e.g., looking into follow-up visits and understanding patient communication with their primary care physician).
- Identify performance plans that need additional support: Organizational management needs to help navigate roadblocks to value and ensure problems are solved. Complex healthcare processes often demand multidisciplinary team. Putting the patient at the center and using all community resources will help. Hospitals will need to partner with facilities involved in post-acute care as well as other entities that can help in overall population management.

## Value-Base Care: 10 Years of Growth, Change, Challenges

Hospitals have learned from the Medicare value-based programs since 2010, with the emphasis on quality and cost proving to be a positive trend for the healthcare industry. Significant readmission improvements are benefiting health systems and patients, but organizations still need to improve and refine programs overall with an eye to simplification and consolidation. The industry also needs bring all stakeholders together to actively participate in healthcare improvement and question whether the current



measures represent value to providers, payers, and patients.

In a [March 2020](#) blog post, healthcare policy analyst Paul Keckley, PhD, summarized the current state of the U.S. system, explaining: “The transition from volume to value is inevitable but the road from here to there is bumpy.” With both inevitability and obstacles projected, healthcare organizations have the opportunity now to reevaluate and adapt larger changes to their programs and leverage predictive tools in preparation for the next decade of VBC. 📌