

# TRENDWATCH

## Rethinking the Hospital Readmissions Reduction Program

Reducing readmissions is an important way to improve quality and lower health care spending. Hospitals are making significant progress; as reported by the Centers for Medicare & Medicaid Services (CMS), the national readmission rate (i.e., instances when patients return to the same or different hospital within 30 days of discharge) fell to 17.5 percent in 2013, after holding steady at around 19 to 19.5 percent for many years.<sup>1</sup> However, reducing readmissions is a complex undertaking because not all readmissions can or should be prevented; indeed, some are planned as part of sound clinical care. Furthermore, while hospitals are working to reduce readmissions caused by clinical care practices, there are many other factors beyond hospitals' control—including sociodemographic<sup>a</sup> factors, such as poverty and lack of access to supportive services in the community that aid post-hospitalization recovery, that

increase the risk of readmission. Public policy efforts intended to reduce hospital readmissions should target the reduction of only avoidable readmissions. In measuring hospital performance, policies must account for many factors beyond hospitals' control in order to facilitate accurate comparisons of performance.

To encourage efforts to reduce readmissions, Congress created in the Affordable Care Act (ACA) the Hospital Readmissions Reduction Program (HRRP), which instructs CMS to penalize hospitals with higher-than-expected readmissions for specific clinical conditions—such as heart attack, pneumonia and heart failure.<sup>2</sup> The HRRP payment penalties took effect in fiscal year (FY) 2013; hospitals can incur a penalty of up to 3 percent of their Medicare payments.

While hospital readmissions are declining, there are serious questions about how the HRRP assesses penalties that affect the fairness and long-term

sustainability of the program.

Specifically, hospitals and other stakeholders have raised concerns about:

1. The lack of risk-adjustment for key sociodemographic factors, usually outside of hospital control, that influence the likelihood of readmission; and
2. The inclusion of readmissions unrelated to the initial admission in the determination of the HRRP penalties.

Other critiques have highlighted the imbalance between the total penalty amounts relative to the reimbursement for readmissions. As CMS increases both the reimbursement at risk and adds conditions to the program, more hospitals will face penalties, further highlighting the urgency of addressing the program's shortcomings. The HRRP's approach to calculating hospital penalties needs refinement to achieve the goal of reducing readmissions without unfairly penalizing hospitals.

### Overview of the Hospital Readmissions Reduction Program<sup>3</sup>

Mandated by the ACA, the HRRP is a payment penalty program designed to reduce Medicare fee-for-service (FFS) hospital readmission rates for conditions that account for expensive, high-volume admissions and frequent readmissions. As of federal FY 2013,

CMS reduces a hospital's Medicare payments for all patients if it has a higher-than-expected 30-day readmission rate for patients with specific clinical conditions. By law, only those hospitals paid under the Inpatient Prospective Payment System are eligible

for HRRP penalties; therefore, CMS excludes critical access hospitals (CAHs), inpatient psychiatric facilities and post-acute care providers such as long-term acute care hospitals.<sup>b</sup>

CMS uses an ACA-mandated formula to determine each eligible

hospital’s readmissions performance. The formula calculates an “excess readmission ratio” for each hospital using readmission measures for the clinical conditions in the program, and then translates that ratio into a financial penalty. As of FY 2015, the HRRP includes readmission measures for heart attack, heart failure, pneumonia, chronic obstructive pulmonary disease (COPD) and total hip and knee replacements. The excess readmission ratio calculated by the measures determines whether a hospital has a higher number of readmissions than the national average for other hospitals treating a similar clinical mix of patients (i.e., patients with a similar mix of age and clinical risk factors for readmissions). CMS applies a “risk adjustment,” described in a later section of this *TrendWatch*, to account for the differences in clinical mix across hospitals before making comparisons. Hospitals with “excess” readmissions when compared to the expected level incur a penalty—the higher the number of excess readmissions, the higher the penalty. When calculating each hospital’s readmissions performance, CMS excludes patients

who had certain planned readmissions, transferred to other hospitals, or left against medical advice. However, CMS includes patients readmitted for reasons unrelated to the initial hospital stay in readmission rate calculations.

The HRRP’s measures assess readmissions over a three-year “performance period.” However, this performance period begins over four years prior to the payment adjustment, which means that a hospital may face a HRRP penalty despite more recent improvements in performance. In addition, the program determines penalties based on performance before the time period and conditions subject to the HRRP were known. For example, CMS did not finalize inclusion of elective total hip replacement in the HRRP until Aug. 19, 2013, well after the initial performance evaluation period (July 1, 2010 to June 30, 2013) for this condition had ended.

The number of clinical conditions included in the HRRP has expanded over time. In FY 2013, hospitals were assessed on readmission rates for patients with heart failure, pneumonia and acute myocardial infarction (AMI) using National Quality Forum

(NQF)-endorsed measures, as required by the ACA. Beginning in FY 2015, Congress authorized the Secretary of Health and Human Services (HHS) to expand the number of HRRP conditions for which hospitals may incur a penalty. As a result, CMS included penalties for excessive readmissions associated with COPD and elective total hip/total knee arthroplasty in FY 2015 and will add coronary artery bypass grafting to the program in FY 2017.

In addition to adding new conditions, the maximum penalty under the HRRP also has increased. In FY 2013, the maximum penalty was a 1 percent reduction in base operating payments for all Medicare FFS discharges. The maximum penalty increased to 2 percent in FY 2014 and 3 percent for FY 2015 and beyond. Higher penalties raise the level of reimbursement at-risk, while each additional condition increases the number of patients included in the program and, consequently, the probability that hospitals will face a readmission penalty. Under this structure, the HRRP is merely a way to cut hospital payments, rather than an incentive program to improve patient care.

**HRRP calculations utilize past performance periods that include older experience data, which do not reflect more recent hospital efforts to reduce readmissions.**

Chart 1: Performance Periods for Each HRRP Adjustment Year



HRRP = Hospital Readmissions Reduction Program; FY = Fiscal Year  
 Source: FY 2011, 2012, 2013, 2014, and 2015 Inpatient Prospective Payment System Final Rules.

## Not All Readmissions Are Avoidable

Providers may be able to prevent certain readmissions if they ensure that their patients receive the right care at the right time, both in the hospital and in subsequent care settings. However, many readmissions may be unavoidable due to the natural progression of disease, accepted treatment protocol or a patient’s preferences. Recognizing the potential for confusion when evaluating readmissions, the American Hospital Association (AHA) consulted with clinicians to create this framework for types of readmissions:

- A **planned** readmission **related** to the initial admission, such as placement of a ventricular assist device following a heart attack.
- A **planned** readmission **unrelated** to the initial admission, such as readmission for removal of a lung tumor

discovered during an admission for a heart attack.

- An **unplanned** readmission **unrelated** to the initial admission, such as readmission for a fracture sustained in a car accident following an initial stay for pneumonia.
- An **unplanned** readmission **related** to the initial admission, such as readmission for a surgical site infection or adverse reaction to a medication.

Planned readmissions are typically part of clinically appropriate care. For example, during an acute care admission, clinicians may identify the need for a hysterectomy or hernia repair and plan these procedures within 30 days of the original hospital admission. At first, CMS did not adequately exclude these and other planned readmissions from calculating penalties in the pro-

gram. However, after receiving feedback from hospitals, CMS developed an algorithm to omit planned readmissions from the HRRP penalty calculation.<sup>4</sup> Accordingly, many planned readmissions within 30 days of discharge no longer count as a readmission for the HRRP.

Similarly, CMS should not hold hospitals accountable for unplanned, unrelated admissions because they are unpredictable and not typically preventable. However, these readmissions are currently included in the HRRP penalty calculation even though they are not associated with care delivered by the hospital. Avoidable, unplanned readmissions related to the original admission—such as an infection after receiving a surgical procedure in the hospital—are included in the HRRP and should be the focus of hospital improvement efforts.

### The HRRP should only focus on unplanned readmissions related to the initial admission.

Chart 2: A Framework for Classification of Readmissions

	Related to Initial Admission	Unrelated to Initial Admission
Planned Readmission	A <b>planned</b> readmission for which the reason for readmission is <b>related</b> to the reason for the initial admission.	A <b>planned</b> readmission for which the reason for readmission is <b>not related</b> to the reason for the initial admission.
Unplanned Readmission	An <b>unplanned</b> readmission for which the reason for readmission is <b>related</b> to the reason for the initial admission.	An <b>unplanned</b> readmission for which the reason for readmission is <b>not related</b> to the reason for the initial admission.

HRRP = Hospital Readmissions Reduction Program  
Source: American Hospital Association.

“ ”  
*from the field*

“If someone fractures his leg after being hospitalized for pneumonia and is readmitted, that would count toward a readmission penalty. It is hard to understand why hospitals would be penalized for an event we cannot control and that is unrelated to the care the patient received.”

— Paul Janke, president and CEO, Bay Area Hospital, Coos Bay, Ore.<sup>5</sup>

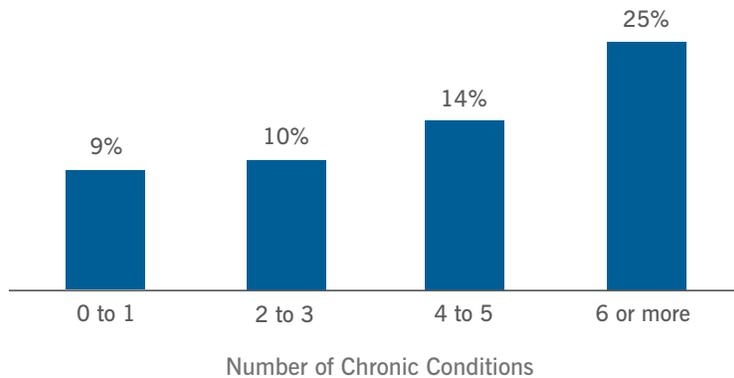
## Risk-adjustment Should Account for Factors Outside of a Hospital’s Control

Hospitals are intensely focused on reducing avoidable readmissions using a number of strategies. For example, many hospitals have used the tools from Project Re-engineered Discharge (Project RED), which focuses on enhancing the clarity and effectiveness of discharge plans and care coordination. Hospitals are arranging follow-up appointments, educating patients about what to expect when they are discharged, and conducting follow-up phone calls in the days immediately after hospital discharge to address issues such as questions about medications.<sup>6</sup>

Nevertheless, the likelihood of patients being readmitted to the hospital is affected not only by the steps hospitals take to improve care, but also by a variety of clinical and non-clinical factors beyond providers’ control. For example, Medicare beneficiaries with six or more chronic conditions have a readmission rate of 25 percent, compared to 9 percent for those with one or no chronic conditions.<sup>7</sup> Similarly, patients whose illnesses are more severe, or who have other co-morbid conditions (e.g., a heart failure patient who also is diabetic) face greater challenges in recovering from illness and are more likely to have readmissions. While not all hospitals treat the same proportions of these types of patients, the HRRP requires the comparison of the performance of all hospitals. Therefore, it is important to ensure that hospitals are not adversely impacted and receive

### Medicare beneficiaries with multiple chronic conditions have higher readmission rates.

Chart 3: 30-Day Readmission Rates for Medicare Fee-for-Service Beneficiaries, by Number of Chronic Conditions, 2011



Source: Lochner KA, et al. (2013). Multiple Chronic Conditions Among Medicare Beneficiaries: State-Level Variations in Prevalence, Utilization, and Cost, 2011. *Medicare & Medicaid Research Review*. [http://www.cms.gov/mmrr/Downloads/MMRR2013\\_003\\_03\\_b02.pdf](http://www.cms.gov/mmrr/Downloads/MMRR2013_003_03_b02.pdf)

greater penalties simply because they treat more complex patients.

Risk-adjustment is a widely accepted statistical technique that accounts for some the factors outside the control of providers when one is seeking to isolate and compare the quality of care. It is intended to create a “level playing field” that allows fairer comparisons of whether providers are doing all they can to ensure the quality of care. The readmission measures used in the HRRP risk-adjust for several clinical factors, including age, gender, comorbidities and patient frailty. CMS recognizes that comorbidities and frailty contribute to the cause and outcome of the admission

and acknowledges that hospitals have limited tools to cure or manage them during a single inpatient stay.

However, CMS does not apply a similar risk-adjustment to account for sociodemographic factors within a hospital’s service area. Research shows that economically disadvantaged patients often have limited access to services and resources that can help support their recovery post-hospitalization and, therefore, reduce their likelihood of being readmitted. Such supports include public transportation to get to follow up appointments, grocery stores to support any special dietary needs, and social supports.<sup>9</sup> A study at Henry Ford



*from the field*

“[Because penalties fall disproportionately on] teaching and safety-net hospitals that care for disadvantaged patients, the Hospital Readmissions Reduction Program diverts money away from these hospitals and has the unintended consequence of worsening disparities between rich and poor.”

— Steven Lipstein, president and CEO, BJC HealthCare, St. Louis, Mo.<sup>8</sup>

Hospital in Detroit, Mich., found that patients living in high-poverty neighborhoods were 24 percent more likely to have a readmission when compared to their peers in higher-income neighborhoods.<sup>10</sup> In addition, researchers who evaluated readmission rates reported by more than 4,000 hospitals for patients with AMI, heart failure and pneumonia found that nearly 60 percent of the variation in hospital readmission rates was due to community attributes, including high unemployment rates, never-married residents, and fewer general practitioners per capita.<sup>11</sup> High-quality inpatient care and coordination with other care providers cannot change these individual and neighborhood characteristics.

CMS has resisted risk-adjusting for additional sociodemographic factors, including sociodemographic status, suggesting that doing so would “mask disparities in quality of care provided.”<sup>12</sup> However, excluding important sociodemographic factors, such as income, education, occupation and primary language, creates an inherent disadvantage for hospitals treating patient populations at higher risk for readmission. As a result, many researchers have demonstrated that hospitals caring for the neediest patients are much more likely to incur a penalty under the HRRP.<sup>13, 14, 15, 16, 17</sup>

**Current risk-adjustment does not account for key sociodemographic factors associated with readmissions.**

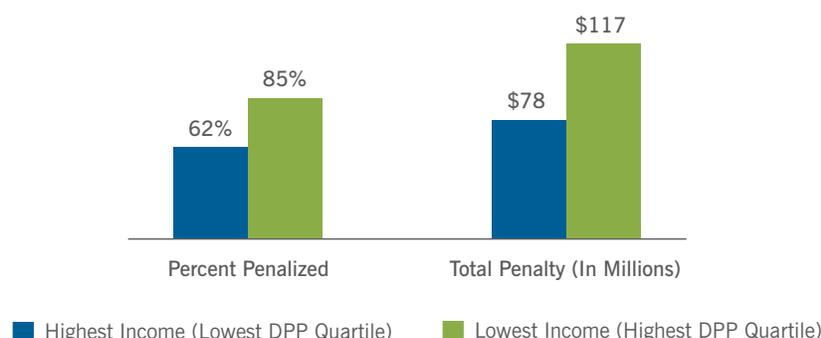
Chart 4: Sociodemographic Factors Excluded from Medicare HRRP Risk-adjustment

Sociodemographic Factors	
Dual eligibility (Medicaid) status	Income level
Education level	Medicare eligibility status (e.g., aged, disabled)
Employment status	Primary language and health literacy
Geographic region	Social support structure (e.g., single or married)
Housing situation	

HRRP = Hospital Readmissions Reduction Program  
Source: Avalere analysis of HRRP measure specifications.

**Hospitals with a larger percentage of low-income patients are more likely to incur a HRRP penalty.**

Chart 5: Hospitals Incurring an HRRP Penalty, by DPP Quartile, FY 2015<sup>(1)</sup>



HRRP = Hospital Readmissions Reduction Program; FY = Fiscal Year; DPP = Disproportionate Patient Percentage  
Source: American Hospital Association  
(1) The Centers for Medicare & Medicaid Services uses DPP to determine eligibility for disproportionate share hospital payments. DPP includes Medicaid and Medicare Supplemental Security Income days. In this analysis, each quartile includes 849 hospitals.

**Policymakers Recommend Risk-adjusting for Sociodemographic Factors**

Recognizing the disproportionate readmissions risk for hospitals serving low-income patients, in June 2013 the Medicare Payment Advisory Commission (MedPAC) recommended that CMS account for sociodemographic factors in calculating HRRP penalties.<sup>18</sup> Specifically, MedPAC recommended that hospitals continue to report unadjusted readmission rates, so that data on

potential disparities would be available. However, to calculate readmissions penalties, MedPAC recommended that CMS compare hospitals’ readmission rates to peer groups with similar proportions of low-income patients, rather than evaluating their performance based on national levels. Each hospital would have a fixed target readmission rate based on its percentage of patients receiving

Supplemental Security Income benefits.<sup>c</sup> Hospitals that exceed the target would incur a penalty, while those below the target would not. In such a way, CMS would use one method to report publicly on readmission results (i.e., unadjusted for sociodemographic factors), and a second method for assessing payment adjustments. MedPAC reiterated its recommendations in its March 2014

report,<sup>19</sup> while other stakeholders also have called on CMS to incorporate sociodemographic factors.

An expert advisory panel convened by the NQF recommended including sociodemographic factors in risk-adjustment models for outcome measures—such as readmission rates, mortality and cost—in order to fully account for all characteristics outside of provider control that could influence performance. The NQF is a non-profit, consensus-standards organization that endorses quality measures assessing the performance of hospitals, physicians, health plans and others. The NQF endorsement process is intended to assess whether measures are important, scientifically sound, usable and feasible to collect. NQF-endorsed measures are used extensively in CMS’s “accountability programs” (i.e., quality reporting and pay-for-performance programs). In the case of the HRRP, CMS is required to use NQF-endorsed measures for the first three conditions in the program (i.e., heart attack, heart failure and pneumonia) and is expected to seek NQF endorsement of any additional measures added to the program.

The NQF’s existing evaluation criteria prohibit using sociodemographic factors in risk-adjustment models. Similar to CMS, the NQF believed such adjustment could mask disparities. NQF convened a panel of experts in response to the increased use of outcome measures to determine provider payment adjustments, and concerns from many stakeholders about whether the lack of sociodemographic adjustment in measures lead to worse performance for

some providers simply because they serve a more socioeconomically disadvantaged patient population. In August 2014, the panel published its final report, which recommended that policymakers include sociodemographic factors in measures because “patient characteristics that are present before care begins can influence patient outcomes” and lead to incorrect conclusions about care quality.<sup>20</sup>

The panel recommended that measures used for accountability applications (such as the HRRP) should include risk-adjustments for both clinical and sociodemographic factors. These adjustments would help isolate the effect of hospital care on readmissions from the circumstances outside of providers’ control. The panel called on the NQF to define a timeline for transitioning to sociodemographic-adjusted measures and to work with organizations such as CMS, the Office of the National Coordinator for Health Information Technology, and the Agency for Healthcare Research and Quality to define a standard set of sociodemographic variables. Commenters broadly supported the recommendations, with 143 of 158 organizations that submitted comments offering support, including providers and some consumer advocates. Only eight organizations opposed the recommendations, including CMS and some consumer and purchaser groups.<sup>21</sup>

Legislators also have turned their attention to the issue of sociodemographic adjustment. In 2014, legislators in the 113th Congress demonstrated bipartisan support for addressing this issue by introducing two bills supported

by the AHA that would have required CMS to include sociodemographic factors in the HRRP’s risk-adjustment methodology. Representative James Renacci (R-Ohio) introduced the Establishing Beneficiary Equity in the Hospital Readmission Program Act in March 2014, which would have required CMS to risk-adjust readmission rates based on the share of Medicaid-Medicare dual eligible individuals served by the hospital.<sup>23</sup> The bill would have excluded additional readmissions for patients whose diagnoses may require frequent hospitalizations, such as transplants or end-stage renal disease. The legislation also would have encouraged CMS to consider whether it could exclude non-compliant patients from the calculation of readmission rates. The Hospital Readmission Program Accuracy and Accountability Act, introduced by Senator Joe Manchin (D-W.V.) in June 2014, would have required CMS to define a methodology to risk-adjust readmission measures using Census data for at least one of three sociodemographic factors: income, education or poverty level.<sup>24</sup> Beginning in FY 2017, CMS could use an alternative method, such as the peer groups recommended by MedPAC.

These two bills, and the MedPAC and NQF expert panel recommendations, all acknowledged the need for the HRRP’s risk-adjustment methodology to account for additional sociodemographic factors to help ensure that CMS compares hospital performance fairly, while maintaining an incentive for all hospitals to prevent avoidable readmissions.

“ ”  
*from the field*

“The growing body of evidence suggests that the primary drivers of variability in 30-day readmission rates are the composition of a hospital’s patient population and the resources of the community in which it is located—factors that are difficult for hospitals to change.”

— Karen E. Joynt, M.D., M.P.H., and Ashish K. Jha, M.D., M.P.H.<sup>22</sup>

## Other Proposed Modifications to the Penalty Formula

In addition to the issue of adjusting for sociodemographic factors, stakeholders have raised a number of other concerns about whether the statutorily mandated payment penalty formula creates an appropriate incentive to reduce readmissions. In its June 2013 *Report to Congress*, MedPAC found that the readmissions penalty formula has a “multiplier effect” that results in:

- 1) readmissions penalties that far exceed the cost of excess readmissions, and
- 2) an inverse relationship between national readmission rates and hospital penalties.<sup>25</sup> That is, as readmission rates drop across the nation, the magnitude of the penalty could stay the same or grow. Over the long run, this penalty structure actually penalizes hospitals for achieving the goal of the program—real reduction in readmissions that mean better care for patients at lower cost.

The AHA has found that the multiplier effect is, in part, due to the design of readmissions penalty formula. The intent of the formula is to recoup

the “excess costs” paid to hospitals for readmissions determined to be excess readmissions for each condition in the program. But the formula specified in the statute multiplies the per-admission payment by the number of *all admissions* for that condition, not merely the number of readmissions. This allows Medicare to recoup a payment amount that is far greater than the payments made for the excess readmissions. This issue could be somewhat mitigated if the HRRP’s legislative language were clarified so that the formula multiplies by the number of expected readmissions instead of the number of admissions.

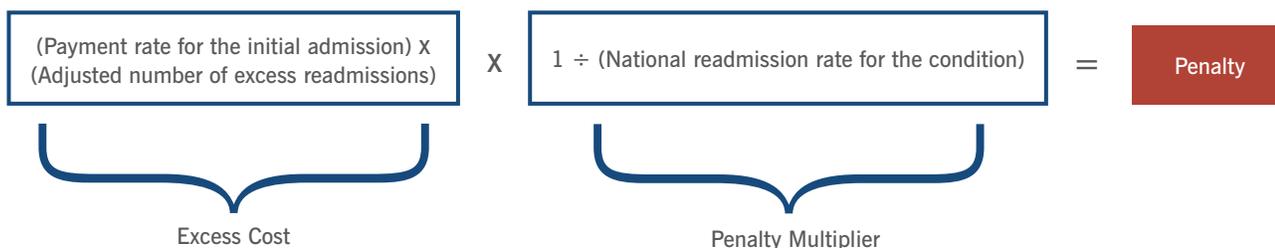
Others have highlighted limitations with the statutory requirement defining how CMS must measure “excess” readmissions. Specifically, CMS calculates an “excess readmissions ratio” that is the ratio of predicted to expected readmissions. The readmissions are calculated using a complex regression formula that blends the national average readmission rate with the hospital’s actual

readmissions. The regression formula uses what is known as a “random effects model,” which assumes that random variations in performance are more likely to be present when there is a smaller volume of cases for a given condition. To adjust for these effects, rates for hospitals with less volume are more heavily weighted toward the national average. Hospitals with a larger number of cases for a given condition will be judged mostly on their own performance, while scores for smaller hospitals are pulled toward the national average. However, the use of this blended model makes it more difficult for hospitals to assess their actual performance. In its June 2013 report, MedPAC also notes that the use of this measurement approach reduces the incentive for hospitals to collaborate on reducing readmissions; if the national average readmission rate goes down, a given hospital’s readmission penalty may increase because it has not reduced its readmissions as quickly as the national average.<sup>26</sup>

**The HRRP formula has a multiplier effect that makes the penalties greater than the hospital revenue for readmissions.**

Chart 6: Simplified HRRP Penalty Formula Showing the Multiplier Effect

Simplified Penalty Formula:

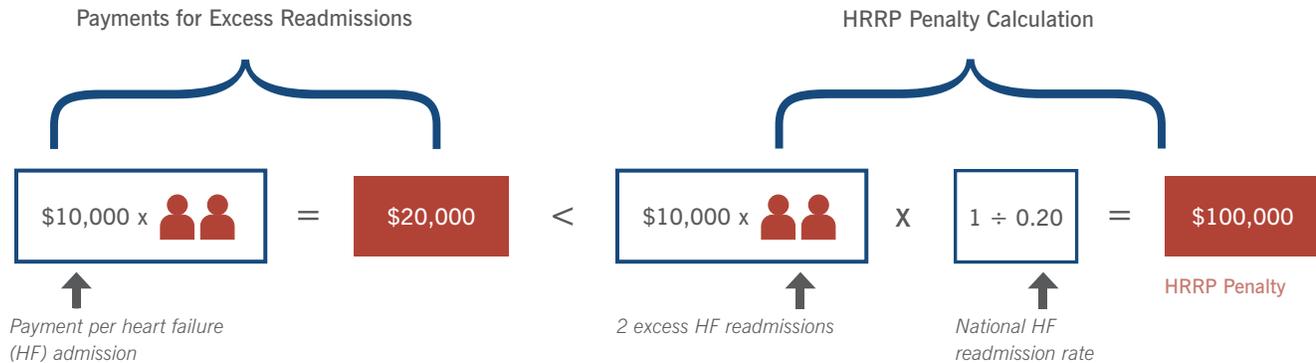


HRRP = Hospital Readmissions Reduction Program  
 Source: Medicare Payment Advisory Commission. (15 June 2013). June 2013 Report to Congress: Medicare and the Health Care Delivery System. Chapter 4 Appendix: Refining the Hospital Readmissions Reduction Program. [http://www.medpac.gov/documents/reports/jun13\\_ch04\\_appendix.pdf?sfvrsn=0](http://www.medpac.gov/documents/reports/jun13_ch04_appendix.pdf?sfvrsn=0)

**Due to the multiplier effect, the hospital in this example has a penalty five times larger than the cost of excess readmissions.**

Chart 7: Example Hospital Penalty Calculation Illustrating the Multiplier Effect<sup>(1)</sup>

Hospital A has 100 HF admissions and 22 risk-adjusted HF readmissions. The national average readmission rate is 20 percent, meaning Hospital A has two excess readmissions. Hospital A receives \$10,000 for each HF admission, so the cost of the excess readmissions is \$20,000. However, due to the multiplier effect, the penalty is \$100,000:



CMS = Centers for Medicare & Medicaid Services; HRRP = Hospital Readmissions Reduction Program; HF = Heart Failure  
 Source: Medicare Payment Advisory Commission. (15 June 2013). June 2013 Report to Congress: Medicare and the Health Care Delivery System. Chapter 4 Appendix: Refining the Hospital Readmissions Reduction Program. [http://www.medpac.gov/documents/reports/jun13\\_ch04\\_appendix.pdf?sfvrsn=0](http://www.medpac.gov/documents/reports/jun13_ch04_appendix.pdf?sfvrsn=0)

(1) In this example, the hospital has 100 HF admissions and 22 HF readmissions. Since the national HF readmission rate is 20 percent, CMS would expect the hospital to have only 20 HF readmissions. As a result, the hospital has two excess HF readmissions that would be subject to an HRRP penalty.

Comparison against national averages also may inflate the number of penalized hospitals. Although readmission rates have declined nationally, as many as three-quarters of hospitals have incurred a penalty during each year of the HRRP.<sup>27</sup> This trend will persist in subsequent years of the program, as the formula does not set an acceptable lower bound for readmissions.<sup>28</sup>

Some researchers have raised concerns that efforts to reduce unnecessary hospitalizations may inadvertently serve to increase readmissions penalties. For example, the Altarum Institute studied readmission rates in San Diego County

after area hospitals began participating in the Center for Medicare & Medicaid Innovation’s Community-Based Care Transitions Program<sup>d</sup> in 2010.<sup>29</sup> Altarum found that readmissions and hospitalizations per 1,000 Medicare FFS beneficiaries in the county fell 15 percent and 11 percent, respectively, in 2013 compared to 2010. However, the HRRP calculates readmissions on a per hospital discharge basis. As a result, because their readmissions and discharges declined at about the same rate, it appears that their readmission rates did not improve significantly. On a per discharge basis, San Diego County

hospitals ultimately only had a 4 percent decline in their readmission rate, with 10 of 14 hospitals incurring a FY 2015 HRRP penalty. In essence, decreases in discharges masked reductions in total readmissions. Worse yet, if discharges fall at a faster rate than readmissions, then hospital readmission rates would increase, despite a decline in the total number of readmissions.

MedPAC recommended to Congress an alternative method for assessing hospital performance that respects the intent of the program while recognizing improvements. The proposal would set a risk-adjusted readmission rate target

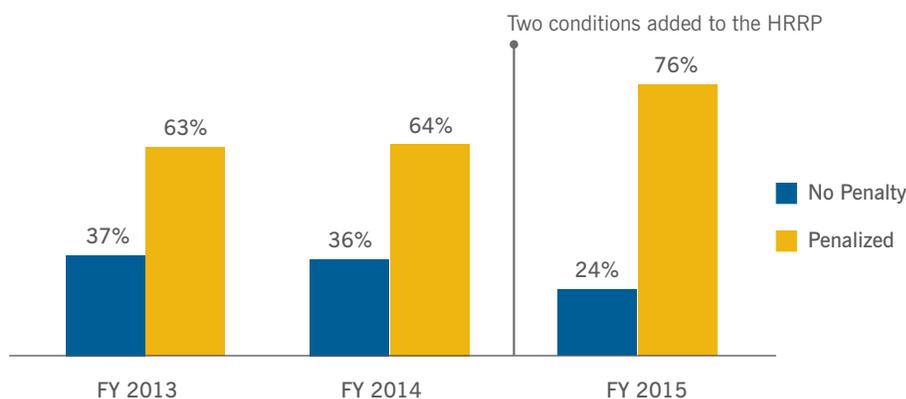
“Some hospitals and communities are creating the standard for best practices, and the rest of the country should be learning from them. Instead, the measure that Medicare uses makes them appear to [have made] little progress.”

— Dr. Joanne Lynne, director, Center for Elder Care and Advanced Illness, Altarum Institute<sup>30</sup>

based on historical national performance and a hospital's share of low-income beneficiaries.<sup>31</sup> For example, CMS could set the unadjusted target at the 40th percentile of the national hospital readmission rate during 2011, and then risk-adjust that target based on a hospital's share of low-income beneficiaries. Such a target would create a defined benchmark for hospitals to work toward during the performance year and, unlike the current system, every hospital could avoid a penalty by achieving fewer readmissions than the target. Ultimately, the Medicare program would continue to reduce expenditures related to readmissions, in addition to collecting any penalties imposed on hospitals that fail to reduce readmissions below the predetermined target.

**The percentage of penalized hospitals will increase as additional conditions are included in the program.**

Chart 8: Percent of Hospitals Incurring a HRRP Penalty, FYs 2013-2015

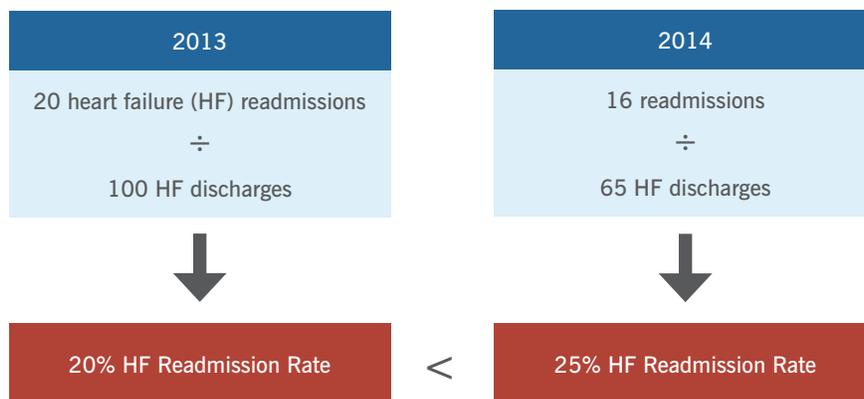


CMS: Centers for Medicare & Medicaid Services; HRRP = Hospital Readmissions Reduction Program; FY = Fiscal Year  
 Source: Avalere analysis of FY 2013, 2014, and 2015 Inpatient Prospective Payment System Final Rule Supplemental Data Files.  
 Note: FY 2013 n = 3,500, FY 2014 n = 3,483, FY 2015 n = 3,476

**Hospital efforts to reduce discharges can increase readmission rates.**

Chart 9: Example of Increased Readmission Rate despite Fewer Total Readmissions

Hospital B has 100 HF discharges and 20 readmissions in 2013, a readmission rate of 20 percent. In 2014, due to population health management efforts, Hospital B's HF discharges decline to 65 and HF readmissions to 16. Although the total number of HF readmissions fell by 20 percent, Hospital B's HF readmission rate increased to 25 percent:



HRRP = Hospital Readmissions Reduction Program; CMS = Centers for Medicare & Medicaid Services; HF = Heart Failure  
 Source: Adapted from: Lynn J and Jencks S. (26 August 2014). A Dangerous Malfunction in the Measure of Readmission Reduction. Altarum Institute. <http://medicaring.org/2014/08/26/malfunctioning-metrics/>  
 Note: CMS does not count readmissions as a new index stay for the purposes of assessing HRRP payment penalties.

## Hospitals Are Reducing Readmissions through Innovative Approaches

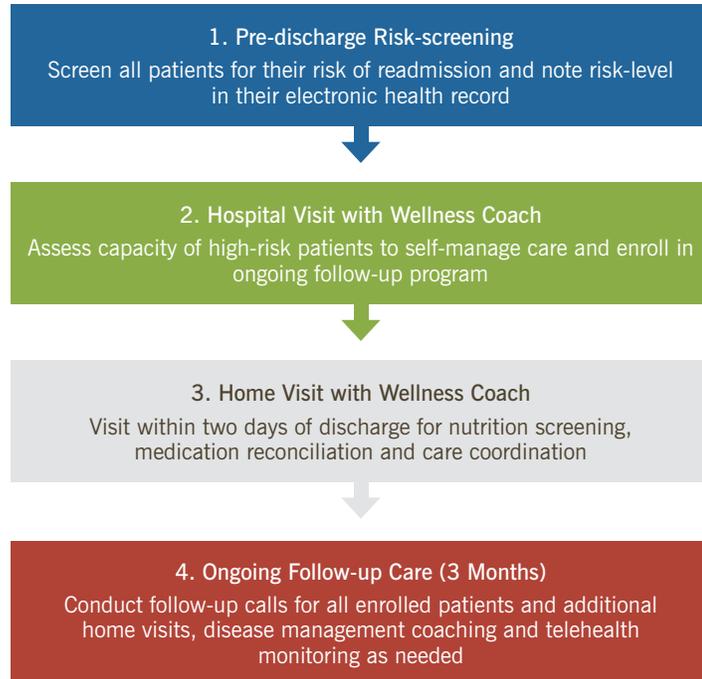
Despite issues with the HRRP, hospitals are committed to reducing avoidable readmissions. The Health Resource and Educational Trust (HRET), an educational affiliate of the AHA,<sup>32</sup> joined CMS's Partnership for Patients<sup>e</sup> as a Hospital Engagement Network (HEN) that included 1,500 hospitals and 31 state hospital associations.<sup>33</sup> The HENs have helped advance the Partnership's goal of reducing readmissions by identifying and sharing best practices.

To that end, HRET developed a number of tools and resources to prevent readmissions, including a toolkit, checklist and multilingual posters. The toolkit describes four primary drivers of lower readmission rates: (1) identification of high-risk patients, (2) self-management skills (e.g., appropriate medication use), (3) coordination of care along the care continuum, and (4) adequate follow-up and community resources.<sup>34</sup> For each driver, the toolkit includes example interventions and metrics to measure success. Early results are promising, as HRET's HEN hospitals have decreased heart failure readmission rates by an average of 13 percent.<sup>35</sup>

In 2008, the University of California San Francisco Medical Center started a team-based intervention to prevent readmissions for elderly patients with heart failure. The medical center's multi-disciplinary team includes two nurse program coordinators, geriatricians, hospitalists, cardiologists, clinical nurse specialists, case

**Ongoing follow-up care for high-risk patients is essential to reducing readmissions.**

Chart 10: Steps in Swedish Covenant Hospital's Care Transitions Program



Source: Przybyciel N. (24 April 2014). Aggressive Intervention Helps Chicago Hospital Drastically Lower Number of Patients Readmitted After Treatment. Swedish Covenant Hospital Press Release. <http://www.swedishcovenant.org/about-us/in-the-news/news-details/2014/04/24/aggressive-intervention-helps-chicago-hospital-dramatically-lower-number-of-patients-readmitted-after-treatment>

managers, social workers, pharmacists, dieticians and post-acute care providers.<sup>37</sup> When the patient is first admitted to the hospital, the team alerts external providers who are responsible for the patient, such as

the primary care physician, and engages others, such as home health care providers, during the course of treatment and discharge.<sup>38</sup> During the inpatient stay, providers educate patients about their

“ ”  
*from the field*

“Smaller hospitals are required to meet the same guidelines as larger ones but with fewer patients and fewer employees... If we can get best practices and tools that someone has already invested in, such as patient education or a checklist, that saves us a great deal of time.”

— Scotta Orr, director, Quality and Accreditation, Transylvania Regional Hospital, Brevard, N.C.<sup>36</sup>

condition using the “Teach Back” method, which ensures that patients understand and “repeat back” their care plan before returning home.<sup>39</sup> After discharge, patients at the highest risk of readmission receive home visits from geriatricians to help manage cognitive conditions and improve medication adherence.<sup>40</sup> The program has reduced 30-day heart failure readmission rates by 45 percent.<sup>41</sup>

Swedish Covenant Hospital, a safety-net provider in Chicago, Ill., implemented a care transitions program focused on reducing readmissions for

patients with chronic conditions discharged home that were uninsured or ineligible for home health services.<sup>42</sup> The program features disease management coaching by registered nurses, a home visit to reconcile medications and conduct nutrition screening, and ongoing telemonitoring, telephone calls and home visits as needed for three months.

After implementing the program, Swedish reduced its Medicare FFS readmission rate from 16 percent in 2012 to 14.3 percent in 2013. Rather than focusing on conditions included in

the HRRP, Swedish focused on all types of patients with chronic conditions. Unfortunately, the lagging HRRP performance period began to incorporate Swedish’s 2013 improvement only at the end of the FY 2015 performance period (July 2010 to June 2013). As a result, Swedish has incurred a HRRP penalty in all three-adjustment years, including FY 2015.<sup>43</sup> These penalties may further strain scarce resources deployed to reduce readmissions, as Swedish already draws on its general account and grant funding to support the care transitions program.



*from the field*

“Without these crucial services, these patients would fall through the cracks of the health care system and remain at higher risk of complications, dramatically impacting their quality of life while contributing a large portion to the soaring level of health care expenditures in the U.S.”

— Kathy Donofrio, associate vice president and nursing director, Swedish Covenant Hospital<sup>44</sup>

## Conclusion

Not all readmissions are the same; they can be planned or unplanned, and related or unrelated to the initial admission. Planned readmissions often have a medically supported reason, while unplanned, unrelated readmissions are unpredictable and beyond a hospital’s

control. Improvements to the HRRP should focus the penalty on admissions that are avoidable and related to the initial admission. An adjustment for sociodemographic factors will ensure that hospitals serving higher-risk populations do not incur disproportionate

penalties. Critical changes to the HRRP evaluation timeframe and performance rate calculation would promote continued innovation in reducing readmissions without unfairly penalizing hospitals focused on providing care for their community’s population.

## POLICY QUESTIONS

- How can regulators reform the HRRP to focus only on unplanned, related readmissions – those that hospitals are best able to prevent?
- What additional research is necessary to ensure appropriate risk-adjustment of readmission rates for the HRRP?
- What are the best methods to account for patients’ life circumstances and sociodemographic factors when calculating expected and actual readmission rates?
- How can policymakers encourage hospitals and other providers to continue to design and implement innovative approaches to reduce readmissions?
- What are the best approaches for disseminating information about programs proven to reduce readmissions?
- How can regulators anticipate and avoid unintended adverse consequences for patients and providers when imposing financial penalties for excess readmissions?

## ENDNOTES

1. U.S. Department of Health and Human Services. (7 May 2014). New HHS Data Shows Major Strides Made in Patient Safety, Leading to Improved Care and Savings. <http://innovation.cms.gov/Files/reports/patient-safety-results.pdf>
  2. Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 (2010).
  3. Centers for Medicare & Medicaid Services. (24 November 2014). Readmissions Reduction Program. <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>
  4. Centers for Medicare & Medicaid Services. (19 August 2013). 42 CFR §§ 412.50 – 412.154. <http://www.gpo.gov/fdsys/pkg/FR-2013-08-19/pdf/2013-18956.pdf>
  5. KCBY CBS 11. (18 November 2014). Bay Area Hospital Working to Lower Readmission Rate. <http://www.kcby.com/news/health/Bay-Area-Hospital-working-to-lower-readmission-rate-283104981.html>
  6. See the Project RED website at <http://www.bu.edu/fammed/projectred/index.html>
  7. Lochner KA, et al. (2013). Multiple Chronic Conditions Among Medicare Beneficiaries: State-Level Variations in Prevalence, Utilization, and Cost, 2011. *Medicare & Medicaid Research Review*. [http://www.cms.gov/mmrr/Downloads/MMRR2013\\_003\\_03\\_b02.pdf](http://www.cms.gov/mmrr/Downloads/MMRR2013_003_03_b02.pdf)
  8. Lipstein SH. (May 2014). Viewpoint: Without sociodemographic data, ACA provisions unfairly penalize teaching hospitals. Association of American Medical Colleges. <https://www.aamc.org/newsroom/reporter/may2014/380604/viewpoint.html>
  9. Hu J., et al. (May 2014). Socioeconomic Status and Readmissions: Evidence from an Urban Teaching Hospital. *Health Affairs*. [https://www.henryford.com/documents/PR/Readmission\\_Study.pdf](https://www.henryford.com/documents/PR/Readmission_Study.pdf)
  10. *Ibid.*
  11. Herrin J, et al. (9 April 2014). Community Factors and Hospital Readmissions Rates. *Health Services Research*. <http://onlinelibrary.wiley.com/doi/10.1111/1475-6773.12177/abstract>
  12. Lipstein SH and Dunagan CW. (22 July 2014). The Risks of Not Adjusting Performance Measures for Sociodemographic Factors. *Annals of Internal Medicine*. <http://annals.org/article.aspx?articleid=1890210>
  13. Gu Q., et al. (13 January 2014). The Medicare Hospital Readmissions Reduction Program: Potential Unintended Consequences for Hospitals Serving Vulnerable Populations. *Health Services Research*. <http://onlinelibrary.wiley.com/doi/10.1111/1475-6773.12150/abstract>
  14. Gilman M, et al. (August 2014). California Safety-Net Hospitals Likely To Be Penalized By ACA Value, Readmission, and Meaningful-Use Programs. *Health Affairs*. <http://content.healthaffairs.org/content/33/8/1314.abstract>
  15. Williams KA, et al. (11 September 2014). Medicare Readmission Penalties in Detroit. *New England Journal of Medicine*. <http://www.nejm.org/doi/full/10.1056/NEJMc1405047>
  16. Sjoding MW, et al. (1 November 2014). Readmission Penalties for Chronic Obstructive Pulmonary Disease Will Further Stress Hospitals Caring for Vulnerable Patient Populations. <http://www.atsjournals.org/doi/abs/10.1164/rccm.201407-1345LE#VKLCW14AAA>
  17. Amy JH, et al. (2 December 2014). Neighborhood Socioeconomic Disadvantage and 30-Day Rehospitalization: A Retrospective Cohort Study. *Ann Intern Med*. <http://annals.org/article.aspx?articleid=1983380>
  18. Medicare Payment Advisory Commission. (June 2013). Report to Congress: Medicare and the Health Care Delivery System. Chapter 4: Refining the Hospital Readmissions Reduction Program. [http://www.medpac.gov/documents/reports/jun13\\_ch04.pdf?sfvrsn=0](http://www.medpac.gov/documents/reports/jun13_ch04.pdf?sfvrsn=0)
  19. Medicare Payment Advisory Commission. (March 2014). Report to Congress: Medicare Payment Policy. Chapter 3: Hospital Inpatient and Outpatient Services. [http://www.medpac.gov/documents/reports/mar14\\_ch03.pdf?sfvrsn=0](http://www.medpac.gov/documents/reports/mar14_ch03.pdf?sfvrsn=0)
  20. Fiscella K, et al. (15 August 2014). Risk Adjustment for Socioeconomic Status or Other Sociodemographic Factors. National Quality Forum Technical Report. [http://www.qualityforum.org/Publications/2014/08/Risk\\_Adjustment\\_for\\_Socioeconomic\\_Status\\_or\\_Other\\_Sociodemographic\\_Factors.aspx](http://www.qualityforum.org/Publications/2014/08/Risk_Adjustment_for_Socioeconomic_Status_or_Other_Sociodemographic_Factors.aspx)
  21. Lipstein SH and Dunagan CW. (22 July 2014). The Risks of Not Adjusting Performance Measures for Sociodemographic Factors. *Annals of Internal Medicine*. <http://annals.org/article.aspx?articleid=1890210>
  22. Joynt KE and Jha AK. (18 April 2012). Thirty-Day Readmissions—Truth and Consequences. *New England Journal of Medicine*. <http://www.nejm.org/doi/full/10.1056/NEJMp1201598>
  23. H.R. 4188 Establishing Beneficiary Equity in the Hospital Readmission Program Act of 2014. (11 March 2014). <https://www.congress.gov/113/bills/hr4188/BILLS-113hr4188h.pdf>
  24. S. 2501 Hospital Readmissions Program Accuracy and Accountability Act of 2014. (19 June 2014). <https://www.congress.gov/113/bills/s2501/BILLS-113s2501is.pdf?asp?id=22288>
  25. Medicare Payment Advisory Commission. (June 2013). Report to Congress: Medicare and the Health Care Delivery System. Chapter 4: Refining the Hospital Readmissions Reduction Program. [http://www.medpac.gov/documents/reports/jun13\\_ch04.pdf?sfvrsn=0](http://www.medpac.gov/documents/reports/jun13_ch04.pdf?sfvrsn=0)
  26. *Ibid.*
  27. Avalere analysis of FY 2013, FY 2014, and FY 2015 Inpatient Prospective Payment System Final Rules: Hospital Readmissions Reduction Program Supplemental Data Files. Available at: <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>
  28. James J, et al. (12 November 2013). Medicare Hospital Readmissions Reduction Program. *Health Affairs Health Policy Brief*. [http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief\\_id=102](http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=102)
  29. Lynn J. (8 December 2014). The Evidence that the Readmissions Rate (Readmissions/Hospital Discharges) is Malfunctioning as a Performance Measure. <http://medicaring.org/2014/12/08/lynn-evidence/>
  30. Altarum Institute. (16 December 2014). Medicare's Measure for Readmissions Fails to Identify Excellence and Improvement. <http://altarum.org/about/news-and-events/medicare%E2%80%99s-measure-for-readmissions-fails-to-identify-excellence-and-improvement>
  31. Medicare Payment Advisory Commission. (15 June 2013). June 2013 Report to Congress: Medicare and the Health Care Delivery System. Chapter 4 Appendix: Refining the Hospital Readmissions Reduction Program. [http://www.medpac.gov/documents/reports/jun13\\_ch04\\_appendix.pdf?sfvrsn=0](http://www.medpac.gov/documents/reports/jun13_ch04_appendix.pdf?sfvrsn=0)
  32. Health Research and Educational Trust. (1 December 2014). About Us. <http://www.hret.org/about/index.shtml>
  33. Vesley R. (11 November 2014). Hospital Engagement Networks participants make big strides in reducing patient harm and readmissions. [http://www.hhnmag.com/display/HHN-news-article.dhtml?dcrPath=/templatedata/HF\\_Common/NewsArticle/data/HHN/Magazine/2014/Nov/fea-hospital-engagement-networks](http://www.hhnmag.com/display/HHN-news-article.dhtml?dcrPath=/templatedata/HF_Common/NewsArticle/data/HHN/Magazine/2014/Nov/fea-hospital-engagement-networks)
  34. Health Research and Educational Trust. (2014). Readmissions Change Package: Improving Care Transitions and Reducing Readmissions. [http://www.hret-hen.org/index.php?option=com\\_phocadownload&view=category&download=1232:preventable-readmission-change-package&id=72:preventable-readmissions](http://www.hret-hen.org/index.php?option=com_phocadownload&view=category&download=1232:preventable-readmission-change-package&id=72:preventable-readmissions)
  35. Vesley R. (11 November 2014). Hospital Engagement Networks participants make big strides in reducing patient harm and readmissions. [http://www.hhnmag.com/display/HHN-news-article.dhtml?dcrPath=/templatedata/HF\\_Common/NewsArticle/data/HHN/Magazine/2014/Nov/fea-hospital-engagement-networks](http://www.hhnmag.com/display/HHN-news-article.dhtml?dcrPath=/templatedata/HF_Common/NewsArticle/data/HHN/Magazine/2014/Nov/fea-hospital-engagement-networks)
  36. McKinney M. (19 May 2012). Laying the Groundwork for Quality. *Modern Healthcare*. <http://www.modernhealthcare.com/article/20120519/MAGAZINE/305199934>
  37. Brimmer K. (26 November 2012). UCSF Medical Center Program Slashes Heart Failure Readmission Rates. <http://www.healthcarefinancenews.com/news/ucsf-medical-center-program-slashes-heart-failure-readmissions>
  38. Rush-Monroe K. (6 July 2011). UCSF Medical Center Program Cuts Heart Failure Readmission Rate by 30 Percent. <http://www.ucsf.edu/news/2011/07/10166/ucsf-medical-center-program-cuts-heart-failure-readmission-rate-30-percent>
  39. Brimmer K. (26 November 2012). UCSF Medical Center Program Slashes Heart Failure Readmission Rates. <http://www.healthcarefinancenews.com/news/ucsf-medical-center-program-slashes-heart-failure-readmissions>
  40. Rush-Monroe K. (6 July 2011). UCSF Medical Center Program Cuts Heart Failure Readmission Rate by 30 Percent. <http://www.ucsf.edu/news/2011/07/10166/ucsf-medical-center-program-cuts-heart-failure-readmission-rate-30-percent>
  41. Brimmer K. (26 November 2012). UCSF Medical Center Program Slashes Heart Failure Readmission Rates. <http://www.healthcarefinancenews.com/news/ucsf-medical-center-program-slashes-heart-failure-readmissions>
  42. Przybyciel N. (24 April 2014). Aggressive Intervention Helps Chicago Hospital Drastically Lower Number of Patients Readmitted After Treatment. *Swedish Covenant Hospital Press Release*. <http://www.swedishcovenant.org/about-us/in-the-news/news-details/2014/04/24/aggressive-intervention-helps-chicago-hospital-dramatically-lower-number-of-patients-readmitted-after-treatment>
  43. Avalere analysis of FY 2013, FY 2014, and FY 2015 Inpatient Prospective Payment System Final Rules: Hospital Readmissions Reduction Program Supplemental Data Files. Available at: <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>
  44. Joseph N. (17 January 2014). North Side Patients to Benefit From Grant Award. *Chicago Tribune*. <http://www.chicagotribune.com/suburbs/community/chi-ugc-article-north-side-patients-to-benefit-from-grant-awa-2014-01-17-story.html>
- a. A combination of socioeconomic factors, such as income and employment status, and demographic factors, such as age and health literacy.
  - b. All hospitals in Maryland are exempt from the HRRP due to that state's unique reimbursement system, although CMS requires Maryland to operate its own readmissions reduction program.
  - c. Supplemental Security Income (SSI) is a Federal program for senior citizens—as well as individuals who have significant disabilities - who have very little or no income. Beneficiaries receive payments to help meet needs like food, clothing and shelter. Additional information on the SSI program can be found at <http://www.ssa.gov/ssi/>.
  - d. San Diego County's Aging and Independence Services convened the hospitals as the partner agency for the Community-Based Care Transitions Program.
  - e. One goal of the Partnership for Patients is to reduce readmission rates by 20 percent compared to 2010.

TrendWatch, produced by the American Hospital Association, highlights important trends in the hospital and health care field. Avalere Health supplies research and analytic support.

TrendWatch—March 2015

Copyright © 2015 by the American Hospital Association. All Rights Reserved



American Hospital Association  
800 10th Street, NW  
Two CityCenter, Suite 400  
Washington, DC 20001-4956  
202.638.1100  
[www.aha.org](http://www.aha.org)



Avalere Health LLC  
1350 Connecticut Avenue, NW  
Suite 900  
Washington, DC 20036  
202.207.1300  
[www.avalere.com](http://www.avalere.com)