Financial Impact of Accounting for Social Risk in the Hospital Readmissions Reduction Program

by Karen E. Joynt Maddox MD MPH, Mat Reidhead BS MA, Andrew C. Qi BS, Kristine Huang BA, and David R. Nerenz PhD

Introduction

Medicare's Hospital Readmissions Reduction Program (HRRP), which was launched in 2012, is a mandatory pay-for-performance program that penalizes hospitals with high 30-day readmission rates.[1] This program has been controversial because while it adjusts performance for medical risk, it does not adjust for social risk factors such as poverty, which have been shown to affect readmission rates.[2-5] Consequently, the program disproportionately penalizes safety-net hospitals.[6-8] Congress passed the 21st Century Cures Act in 2016, which required Medicare to account for differences in poverty rates between hospitals when assessing hospital performance in the HRRP. Beginning in 2019, the HRRP stratifies hospitals into five "peer groups" to compare hospitals with similar proportions of patients that are poor (measured by the proportion of dually enrolled Medicare and Medicaid patients).

This research investigates the impact of stratification on hospital penalties under the HRRP.

Data and Methods

We used publicly available data on 3,049 hospitals and examined hospital characteristics, patient neighborhood characteristics and state Medicaid eligibility to estimate HRRP penalties before and after stratification. We calculated penalty amounts under both the old and new (stratified) HRRP formulae to compare the projected penalties during the first year of stratification to what they would have been under the old system. We estimated the difference in HRRP penalties in relative (percent change) and absolute (dollars) terms between 2018 and 2019.

Results

In total, hospitals in the lowest quintile of dually enrolled Medicare and Medicaid patients will see an increase of more than $12 million in penalties, while hospitals in the highest quintile – who serve the highest proportion of poor patients – will see a decrease of more than $22 million in penalties.

The average penalty per hospital will be about $176,400 under both stratification and traditional policy specifications due to the overall budget-neutrality of the program. Changes in penalites for hospitals ranged from an increase

Figure 1: HRRP Penalty Change (by Percent)

% Change
- -14.2 to -10%
- -9.9 to 0%
- 0.1 to 5%
- 5.1 to 10%
- 10.1 to 37.3%
- MD HRRP exempt
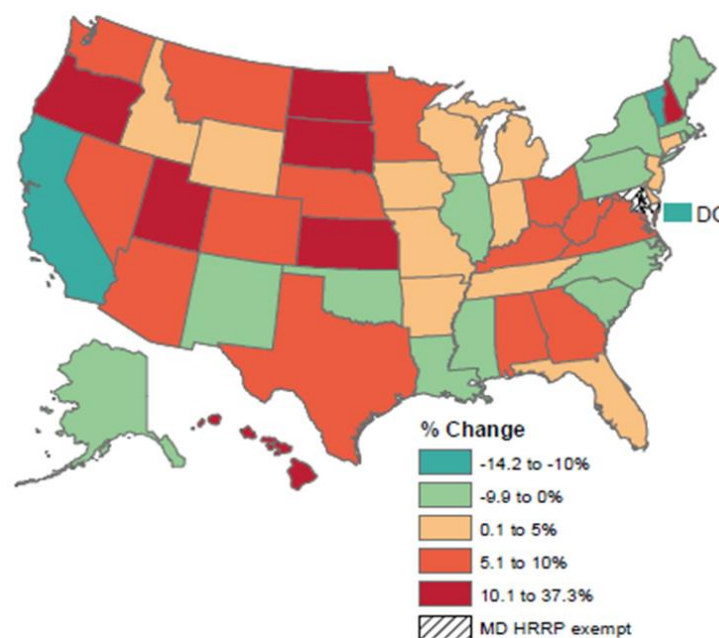
KEY FINDINGS

➢ **Stratification of the HRRP led to significant shifts in penalties.**

➢ **Hospitals in the lowest-poverty group saw a total increase of $12.3 million in penalties, while those hospitals in the highest-poverty group saw a total decrease of $22.4 million in penalties.**

➢ **States with more generous Medicaid eligibility saw a greater reduction in penalties than states with less generous Medicaid eligibility.**

➢ **The impact of this policy change on trends in readmission rates as well as hospital financial performance should be monitored.**

POLICY BRIEF

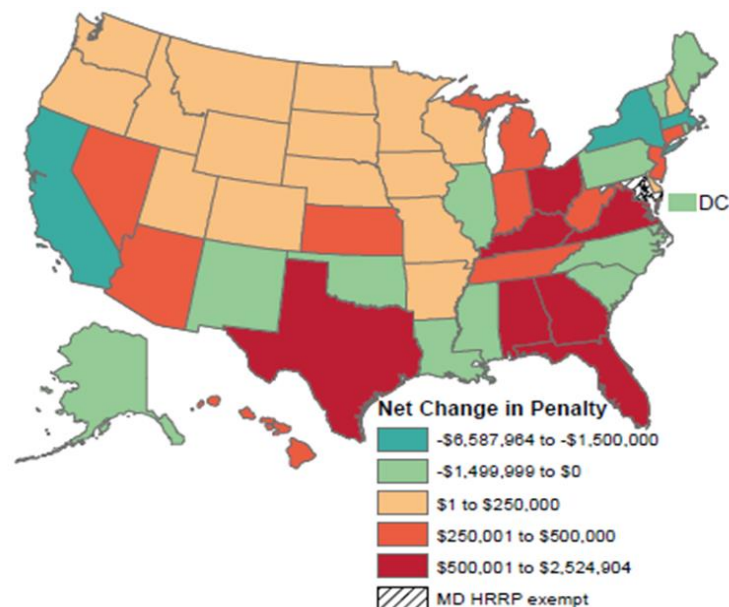of just over $225,000 to a decrease of more than $436,000 and varied signficantly by stratum.

Similarly, the average penalty at the state level will be $21,094,000 under both stratification and traditional policy specifications. The changes in penalties differed signficantly state by state.

On a relative basis, California is projected to have the greatest reduction in penalites (-14.2%), while South Dakota is projected to have the greatest increase in penalties (+37.3%). Missouri is projected to have an 0.8% increase in penalties (Figure 1).

On an absolute basis, California is also projected to have the greatest reduction in penalites ($6,587,964 lower), while Florida is projected to have the greatest increase in penalties ($2,524,904 higher). Missouri is projected to nearly break even, with a $103,036 increase in penalties (Figure 2).

The state-level shifts are correlated with state Medicaid generosity, with states with more generous eligibility criteria having a greater reduction in penalties than those in less generous states, likely because the proportion of a hospital's population that is dually eligible is a better proxy for the overall safety net population in such states.

Figure 2: HRRP Penalty Change (by Total State Dollars)

Net Change in Penalty
- -$6,587,964 to -$1,500,000
- -$1,499,999 to $0
- $1 to $250,000
- $250,001 to $500,000
- $500,001 to $2,524,904
- MD HRRP exempt

Policy Implications

Stratification of the HRRP is associated with a significant shift in penalties. Hospitals serving the poorest patient populations will see the greatest shift in penalties. Penalties are projected to drop by over $22 million for safety-net hospitals. This could mean that these hospitals have more money to provide services to vulnerable patient populations.

At the state level, the projected shift in dollars is also large, and it particularly benefited hospitals in states that have more generous Medicaid eligibility. Because hospitals are assigned to "peer groups" based on their proportion Medicaid, they get more credit for having a high proportion of poor patients if more of those patients are on Medicaid.

There is still debate about the ideal way to account for social risk in the readmissions program. Some have argued that direct adjustment (giving each hospital credit for their exact proportion of patients who are poor), rather than breaking hospitals into five groups, would have been a better approach.[9] Some have argued that adjusting for social risk may reduce hospitals' incentive to improve and lead to widening disparities in readmissions.

Overall, the new HRRP program is a fairer way of judging hospital performance on readmissions. Policymakers should monitor the impact of this change on trends in readmission rates as well as hospital financial performance as the policy is fully implemented.

1. Centers for Medicare and Medicaid Services. FY 2013 IPPS Final Rule: Hospital Readmissions Reduction Program Baltimore, MD: Centers for Medicare and Medicaid Services; 2012. ; 2. Joynt KE et al, *JAMA.* 2011;305(7):675-681.; 3. Tsai TC et al. *Ann Surg.* 2014;259(6):1086-1090.; 4. Nagasako EM et al. *Health Aff (Millwood).* 2014;33(5):786-791.; 5. Hu J et al. *American journal of medical quality* 2018:1062860617753063.; 6. Joynt KE, Jha AK. *JAMA.* 2013;309(4):342-343.; 7. Gilman M et al. *Health Aff (Millwood).* 2014;33(8):1314-1322.; 8. Gilman M, et al. *Ann Intern Med.* 2015;163(6):427-436.; 9. Joynt Maddox KE et al. *Health Serv Res.* 2019;54(2):327-336.

Center for Health Economics and Policy
INSTITUTE FOR PUBLIC HEALTH AT WASHINGTON UNIVERSITY