



Reducing Hospital Readmissions in Medicare and Medicaid Patients Through Increased Quality of Care



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Introduction

As the cost of health care has increased over the past decade, quality-based payment systems have become favored over the more traditional fee-for-service model. An important indicator of quality is 30-day readmission rate.

As part of the quality-based medicine initiative, CMS began imposing penalties on health care organizations who fail to meet their quality standards. For example, under the Hospital Readmissions Reductions Program, those organizations with excess readmissions will face a financial penalty per each claim.

According to a 2016 study, 20% of Medicare patients are readmitted to the hospital within 30 days of being discharged, with nearly 75% of those readmissions considered avoidable. The same study also reported that an estimated 3.3 million adult all-cause 30-day readmissions accounted for \$41.3 billion in hospital costs. Annually, avoidable readmissions account for around \$17 billion. (Sushmita et al, 2016)

Factors Influencing Hospital Readmissions

The Joint Commission identified readmission risk factors at the patient level as: financial stress, mental health and substance abuse disorders, noncompliance with medications, and unstable housing status. At the provider level: a lack of awareness of patients' risks, an appropriate business case, and ineffective or nonexistent strategies for reducing readmissions. At the system level: primary and mental health care shortages, lack of care coordination, lack of partnerships between health plans and providers, and technological capacity for monitoring readmissions in real-time. (Jiang et al, 2016)

Chronic conditions are also associated with higher rates of hospital readmission. West Virginia is ranked in the top 10 in prevalence of the following chronic conditions: heart attack, coronary heart disease, stroke, cardiovascular disease, diabetes, cancer, chronic obstructive pulmonary disease, kidney disease, and obesity. (WV DHHR HSC, 2018)

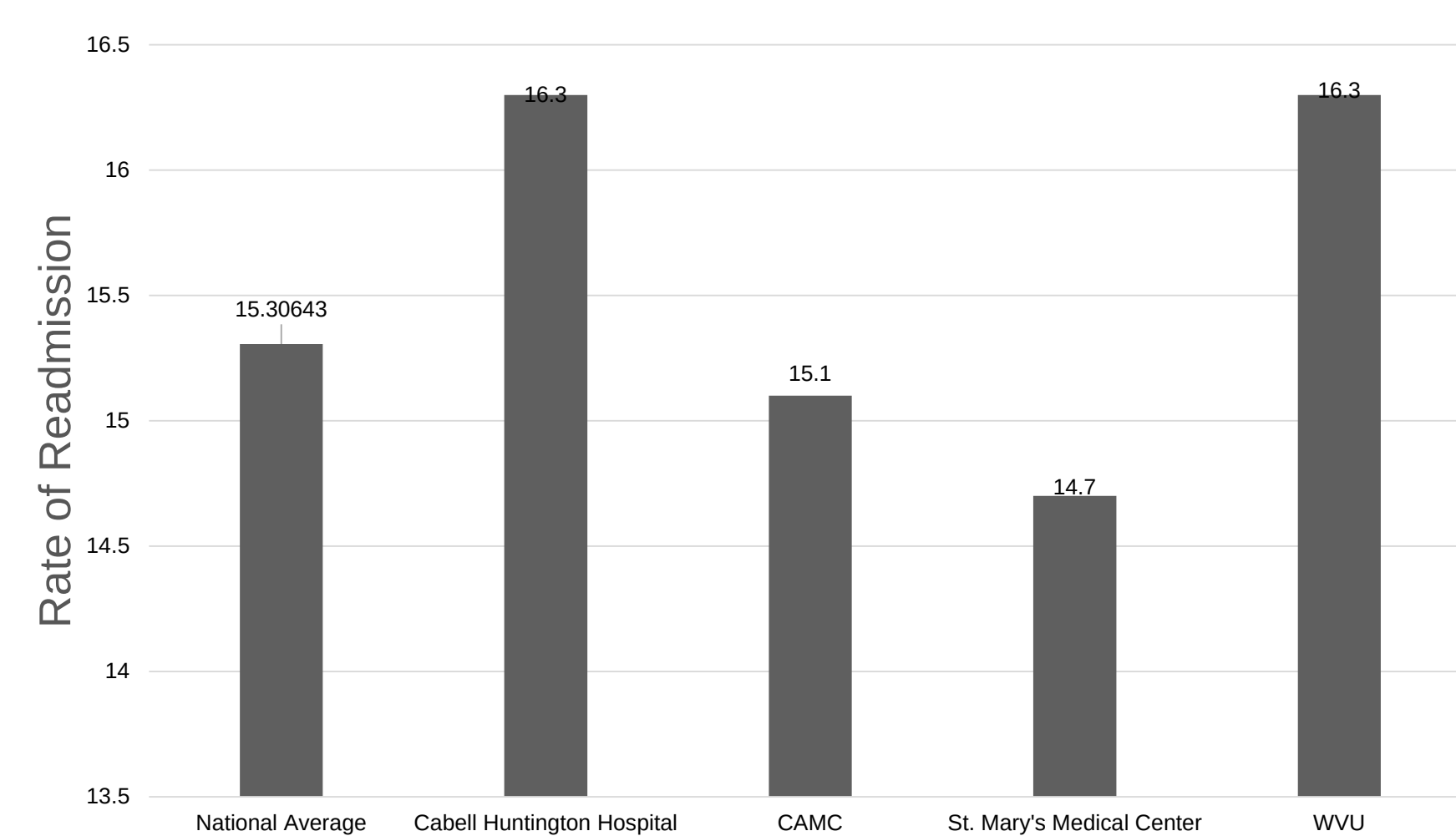


Figure 1: Comparing hospital-wide readmission rates of major WV hospitals to the national rate. (CMS, 2016c)

Data

Table 1 Average Medicare Inpatient Spending per Claim per Episode by Time Period (CMS,2016d)			
	1 to 3 Days Prior to Index Hospital Admission	During Index Hospital Admission	1 Through 30 Days After Discharge from Index Hospital Admission
National Spending	\$4	\$8,971	\$2,473
Cabell Huntington Hospital	\$8 (+100%)	\$10,172 (+13.39%)	\$2,623 (+6.07%)
Charleston Area Medical Center	\$4 (+0%)	\$10,324 (+15.08%)	\$2,894 (+17.02%)
St. Mary's Medical Center	\$9 (+125%)	\$10,046 (+11.98%)	\$2,720 (+9.99%)
West Virginia University Hospitals	\$35 (+775%)	\$10,749 (+19.82%)	\$3,803 (+53.78%)

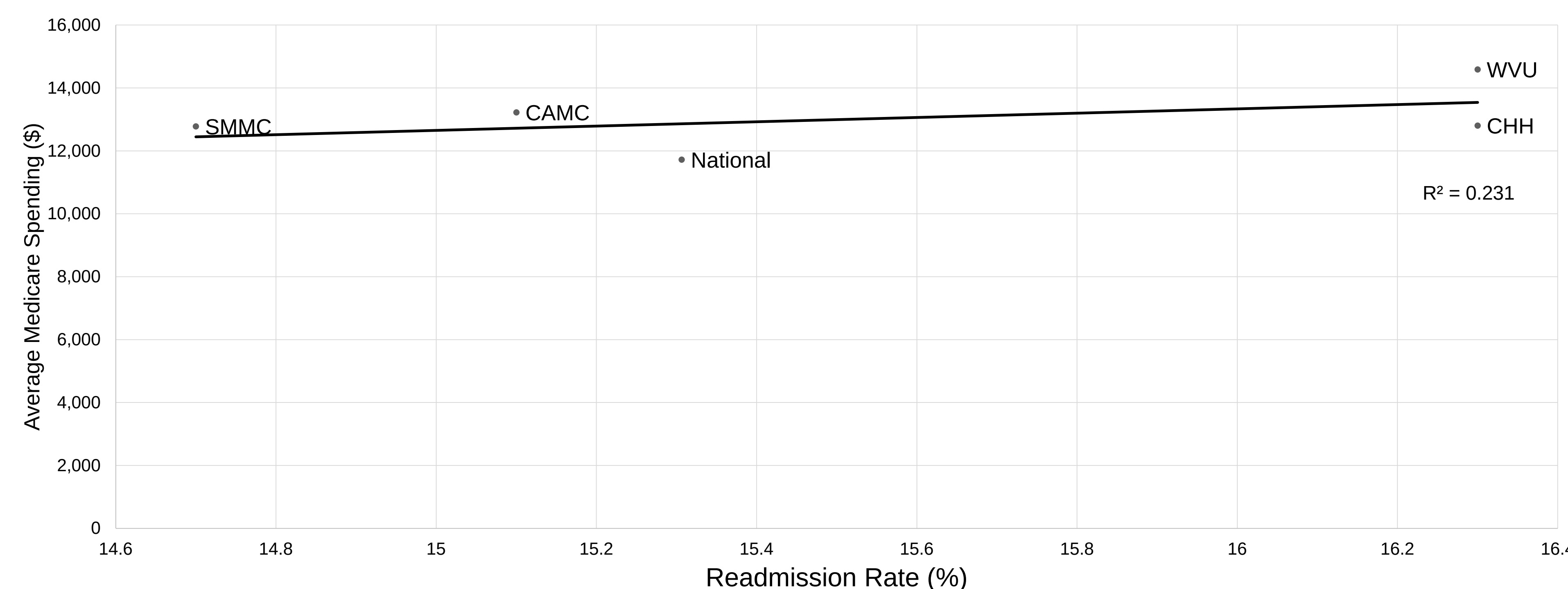


Figure 2: Relationship between Readmission Rates and Average Medicare Spending (CMS, 2016c; CMS, 2016d)

Table 2 HCAHPS Data (CMS, 2016b)			
	HCAHPS Question	Answer	Survey Response Rate
Cabell Huntington Hospital	Patients who disagree or strongly disagree that they understood their care when they left the hospital	5%	21%
	Patients who reported that they were not given information about what to do during their recovery at home	12%	21%
	Discharge information – star rating	4 stars	21%
Charleston Area Medical Center	Patients who disagree or strongly disagree that they understood their care when they left the hospital	6%	29%
	Patients who reported that they were not given information about what to do during their recovery at home	15%	29%
	Discharge information – star rating	3 stars	29%
St. Mary's Medical Center	Patients who disagree or strongly disagree that they understood their care when they left the hospital	5%	30%
	Patients who reported that they were not given information about what to do during their recovery at home	13%	30%
	Discharge information – star rating	3 stars	30%
West Virginia University Hospitals	Patients who disagree or strongly disagree that they understood their care when they left the hospital	3%	15%
	Patients who reported that they were not given information about what to do during their recovery at home	19%	15%
	Discharge information – star rating	2 stars	15%

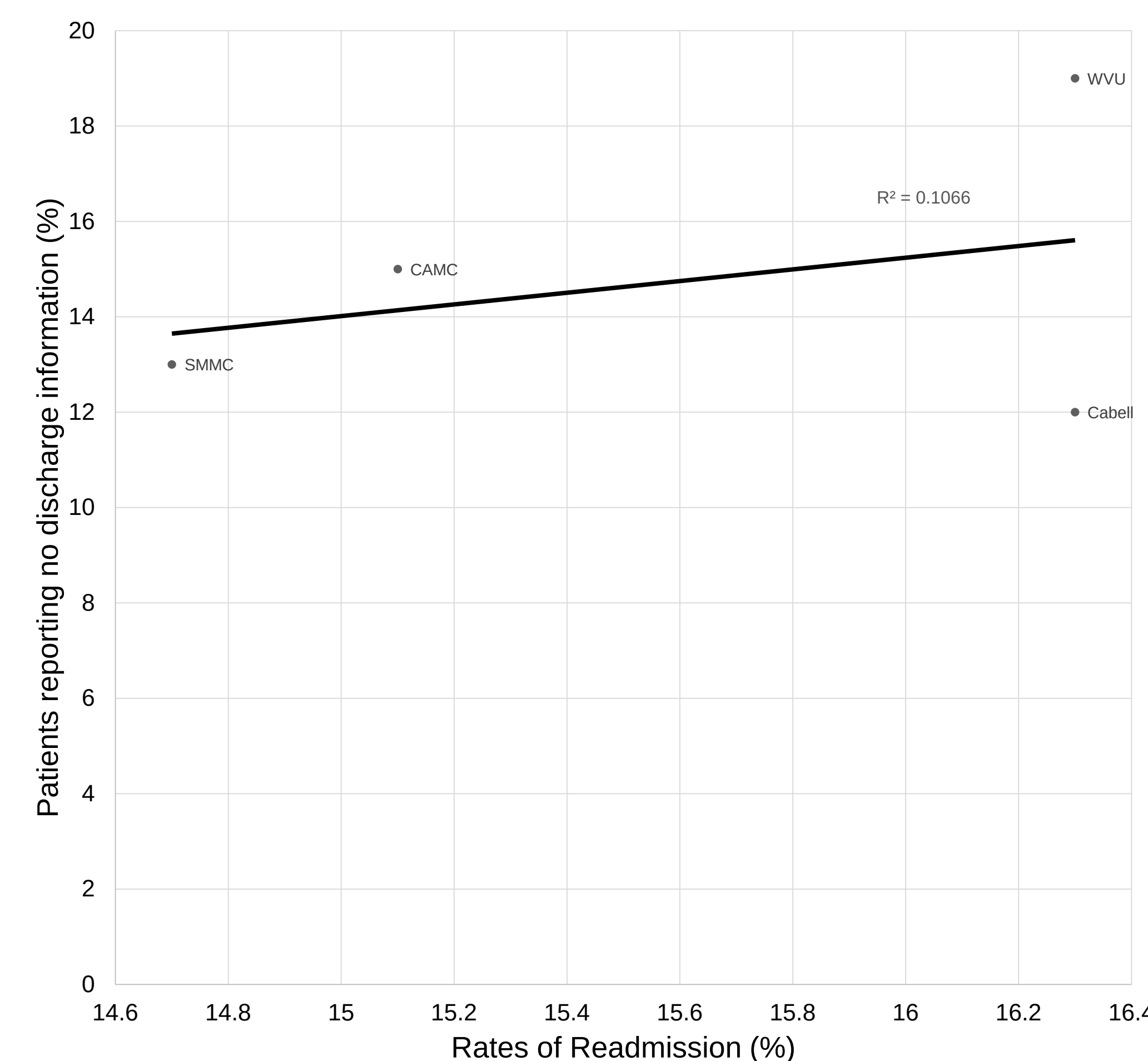


Figure 3: Relating HCAHPS data on discharge information to readmission rates (CMS, 2016b, CMS 2016c)

Study Findings

The study found that there is a positive proportionality between readmission rates and average Medicare spending, as well as between readmission rates and patients who reported they were not given discharge information.

This seems to suggest that reducing the readmission rates will reduce the cost, and improving the quality of the discharge process will decrease readmission rates.

Alternatives/Solutions

- Improve the hospital discharge process
 - Include pharmacy consult
 - Require communication between inpatient physician and primary care physician within 48 hours of discharge
- Implement pre-operative checklists and utilize time-outs
- Improve electronic medical record systems
 - Use as a tracking mechanism for care delivered during hospitalization to increase continuity
 - Integrate to communicate with physician instantaneously
- Adequate staffing
 - Include pharmacy services on every unit
 - Special response teams
 - Nurse rounding every hour
- Performance Improvement Teams
 - Lean
 - Six Sigma

Conclusions

This study was intended to find a relationship between cost of care and readmission rates in Medicare and Medicaid patients in West Virginia hospitals. These alternatives are limited to the provider as much of the patient's risk of readmission is determined by their compliance with discharge instructions. The above alternatives are general advisements for any health care organization to increase patient safety and improve quality. It is the hope that in doing so, patient outcomes are improved and readmission rates decline, thus decreasing the absorbed cost for a health care organization.

Selected References

1. Sushmita, S., Khutbe, G., Hasan, A., Newman, S., Ravindra, P., Roy, S., ... Teredesai, A. (2016). *Predicting 30-Day Risk and Cost of "All-Cause" Hospital Readmissions* (pp. 453-461). Tech. No. WS-16-08). AAAI Workshops
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