

The Relationship Between Hospital Readmissions and HCAHPS Scores

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Track: The Evolution of CAHPS Surveys
Session: Relating H-CAHPS Scores to Other Measures of Quality
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Hospital Readmissions

- Hospital 30-day readmissions cost CMS \$17.4 billion in 2004 alone¹
 - 20% of Medicare beneficiaries are readmitted within 30 days; 34% within 90 days²
- About half of all readmissions could be prevented³
 - Engage patients and families in their care
 - Coordinate post-hospital care
 - Provide better discharge and follow-up instructions

1. Medicare Payment Advisory Commission. Report to the Congress: Reforming the Delivery System (Chapt. 4). Washington, DC: MedPAC; 2008.
2. Jencks SF, Williams MV, Coleman EA. Rehospitalizations among Patients in the Medicare Fee-for-Service Program. *N Engl J Med.* 2009 April 2, 2009;360(14):1418-28.
3. Kanaan SB. Homeward Bound: Nine Patient Centered Programs Cut Readmissions. California Healthcare Foundation. 2009

Hospital Readmissions

Reducing unnecessary readmissions is a policy goal³

- To improve efficiency in care delivery for Medicare patients
- To provide more effective hospital care
- To better coordinate the care patients receive throughout the continuum of care for each illness episode

3. Kanaan SB. Homeward Bound: Nine Patient Centered Programs Cut Readmissions. California Healthcare Foundation. 2009

Patient Satisfaction

- Patient satisfaction is another way to gauge quality of care beyond process and outcomes measures
- Patients are astute observers of poor care
 - Overall health measure on SF-36
- Hospitals care about their reputation, image, and quality and are in a competitive market

Data Source: Hospital Compare

- A Web site that displays process, outcomes, patient satisfaction scores for all acute care hospitals
- A joint public/private partnership HQA: CMS, TJC, AHA, NQF, AMA, etc.
- Used 4th quarter 2005 to 3rd quarter 2008
- Disease conditions reported on are Acute Myocardial Infarction, Congestive Heart Failure, Pneumonia, and Surgical Infection (newest)
- ≥ 40 (AMI) and 70 (CHF, Pneumonia) total patients
- $N = 1,818$

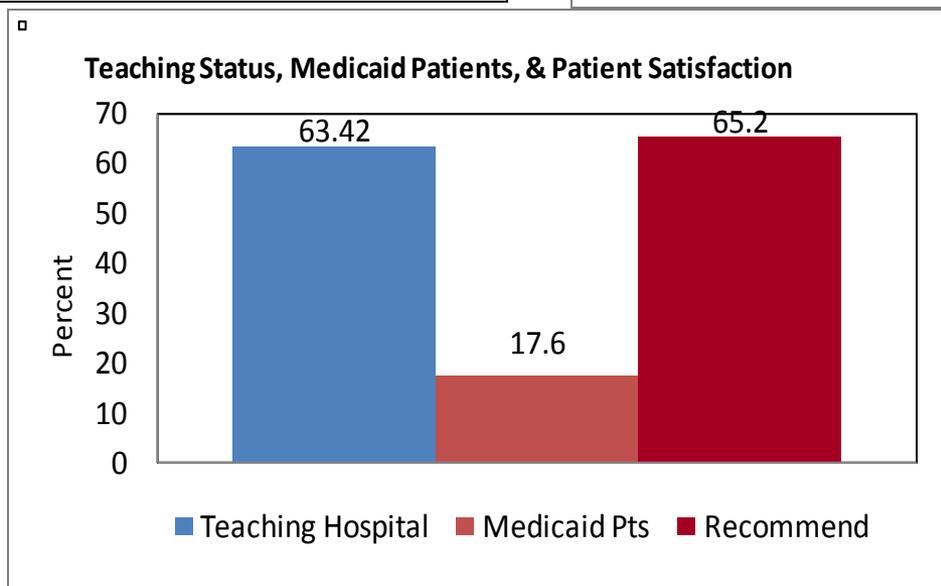
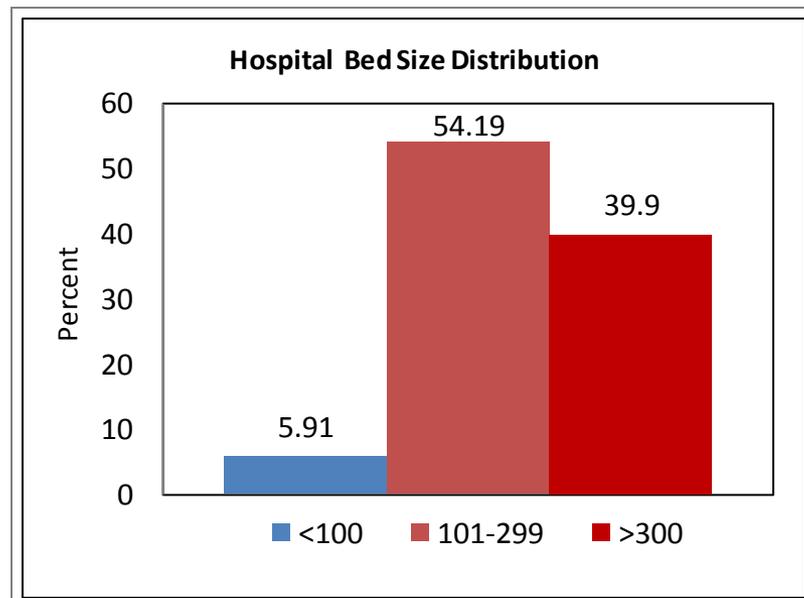
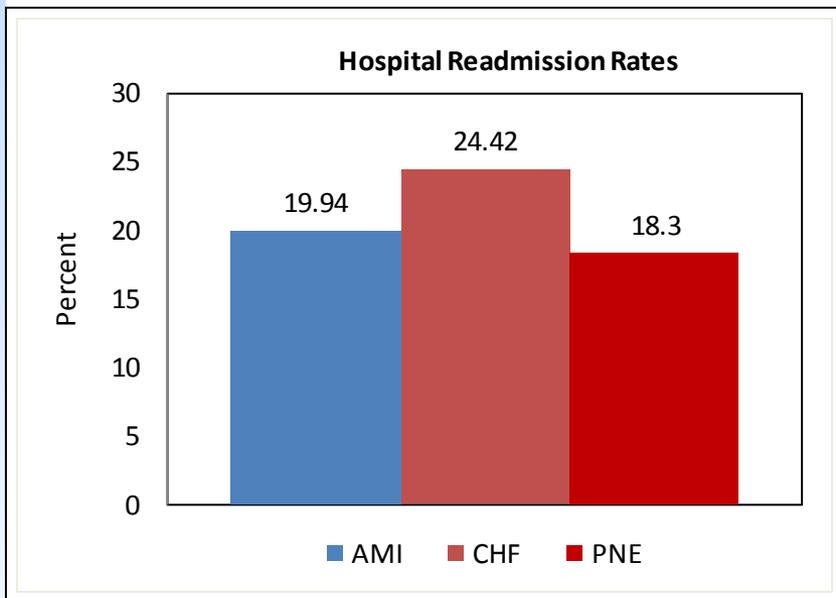
Patient Satisfaction: HCAHPS

- Hospital Consumer Assessment of Healthcare Providers and Systems is a national, standardized survey of hospital patients
- Instrument has 27 questions covering 8 dimensions
 - Communication with doctors
 - Communication with nurses
 - Pain management
 - Responsiveness of hospital staff
 - Discharge information
 - Communication about medicines
 - Cleanliness of the hospital environment
 - Quietness of the hospital environment
- Patient satisfaction and process measures are reported quarterly
- Readmission rates and mortality are reported annually.

Methods

- Relationships between specific measures of patient satisfaction?
 - Correlations for all item responses using response categories Always, Usually, Sometimes/Never
- Relationships between readmission rates for AMI, CHF, and pneumonia and patient satisfaction?
 - Correlation for readmission rates for each disease condition and HCAHPS items scores

Hospital Demographics



Results

Correlation coefficients for response levels for each domain

	Doctors always communicated well	Nurses always communicated well
Patients always received help as soon as they wanted	.70	.79
Pain was always well controlled	.76	.88
Patients would definitely recommend the hospital	.57	.72

$\rho < .0001$

Results

Correlation coefficients for HCAHPS items and readmission rates

	Doctors sometimes/ never communicated well	Nurses sometimes/ never communicated well	Patients sometimes/ never helped when called	Pain sometimes/ never well controlled	Patients would definitely not recommend hospital
Acute Myocardial Infarction	.15	.22	.23	.25	.20
Congestive Heart Failure	.23	.30	.30	.31	.27
Pneumonia	.15	.21	.23	.23	.18

$p < .0001$

Results

The impact of process measures & patient satisfaction on readmission rates

	AMI		CHF		Pneumonia	
	Estimate	ρ -value	Estimate	ρ -value	Estimate	ρ -value
Process Measures	-1.08	.32	1.94	.21	0.12	.88
Discharge Planning	-.32	.61	-0.24	.75	-.63	.26
Overall Recommend Hospital	-0.02	.01	-0.02	.04	-.00	.59
Overall Not Recommend Hospital	0.00	.88	0.05	.03	-.01	.80

Results

- The items are highly correlated with each other
 - The determinants of a positive outcome for patients on one measure likely explains variation on the other measures
 - Difficult to add them all to a regression model
- Patient satisfaction is related to readmission rates for AMI, CHF, and Pneumonia
 - Strong correlation coefficients
 - Adjusting for process measures, and discharge planning, patient satisfaction as measured by whether they would recommend that hospital is associated with readmission rates

Conclusions

- Patient perceptions and satisfaction as measured by HCAHPS are strong indicators for early and expensive readmissions
- When more patients are satisfied enough to recommend the hospital, this is associated with lower rates for AMI and CHF
 - The converse is true for CHF only

Conclusions

Hospitals should monitor the specifics of their patient HCAHPS scores as well as the overall performance and how this relates to key outcomes

- Physician's success with communication may vary significantly with nurses communication
- Patients perceptions of how their pain was controlled may be informative in ways that overall or composite measures may not reveal