

The Relationship Between Transparency and Quality Performance in Urban Safety Net Hospitals

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Research Objectives

The call for accountability in health care quality has led some hospitals to voluntarily share quality performance data with consumers on the Internet (i.e., become more “transparent”). This study examined the relationship between transparency & quality performance on urban, safety net hospitals that comprise the National Association of Public Hospitals & Health Systems (NAPH) membership by:

- Analyzing whether safety net hospitals that share quality data on their websites are more likely to be top performers on quality (CMS core measures) & patient satisfaction (HCAHPS) measures; and
- Identifying key characteristics that predict transparency among safety-net hospitals.

Study Design/Population Studied

Logistic regression models were conducted in PASW/SPSS v. 18.0 (n=99 safety-net hospitals) to determine if hospital transparency predicted high performance on CMS core or patient satisfaction measures, controlling for various hospital characteristics. A second set of logistic regression models were run to determine which hospital characteristics predicted hospital transparency.

Variables used in the study included:

- Status as a “top performer” (i.e., top 25%) relative to other NAPH hospitals on composite scores of CMS core measures & of HCAHPS data;
- Transparency (whether hospital posted core measure or HCAHPS data on its website);
- Bed size;
- Electronic medical record (EMR) capability;
- Net revenue;
- Payer mix;
- Region; and
- System status (i.e., whether the hospital is a stand-alone unit or is part of a multi-hospital system).

Hospital-specific data were collected from: the 2008 AHA Annual Survey, the 2007 NAPH Annual Hospital Characteristics Survey, CMS’s “Hospital Compare” website, & an October 2009 analysis of 99 hospital websites.

Figure 1. Predictors of Transparency

Predictors of Transparency	Model 1: Posts Core Measures Online	Model 2: Posts HCAHPS Online
Independent Variables Used in Models:	Odds Ratio	Odds Ratio
Core Measures Top Performer	12.03**	
HCAHPS Top Performer		5.082**
Northeast Region		.166
South Region	.109*	
Midwest Region	.073*	.389
West Region	.079*	.090*
High Net Revenue	2.068	8.796
High Low Income Case Mix	.356	1.917
Bed Size	.968	.139
Part of a Multi-Hospital System		.673
Has a fully implemented EMR	1.056	

*p<.05, **p<.01

Figure 2. Predictors of Quality

	Model 3: Core Measures Top Performer	Model 4: HCAHPS Top Performer
Independent Variables Used in Models:	Odds Ratio	Odds Ratio
Posts Core Measures Online	12.977*	
Posts HCAHPS Online		5.338*
Northeast Region	.812	.000
South Region	3.42	1.7
Midwest Region	2.168	
West Region		.697
High Net Revenue	.083*	.437
High Low-Income Case Mix	3.763	.789
Bed Size	3.810	.658
Part of a Multi-Hospital System	6.857*	.679
Has a fully implemented EMR	13.574*	

*p<.05, **p<.01

Principal Findings

Predictors of Transparency:

The first model found that hospitals that were *high (top 25%) performers on core measures or located in the Northeast* (compared to those in the South, Midwest, and West) were more likely to post core measures online after controlling for the other characteristics (p<.05). The second model showed that hospitals that were *high (top 25%) performers on HCAHPS measures or located in the South* (compared to those in the West) were more likely to post HCAHPS data online (p<.05).

Predictors of Core Measure & HCAHPS Top Performers:

The third model found that hospitals that *posted core measure data online, had a fully-implemented EMR, or were part of a multi-hospital system* were more likely to be top performers (i.e., in the top 25% relative to other NAPH hospitals) on core measures (p<.05). Region, bed size, payer mix, & net revenue were not statistically significant. In the fourth model, hospitals that *posted HCAHPS data online* were more likely to be a top performer on HCAHPS data (p<.05). No other variables were statistically significant.

Conclusions

- Urban safety-net hospitals that are either: voluntarily transparent about quality performance, have a fully-implemented EMR, or are part of a system are more likely to be top performers on core measures, controlling for other hospital characteristics.
- Urban safety-net hospitals that are top performers on core measures and HCAHPS indicators are more likely to be transparent about their quality performance (the only predictor of transparency besides region).

Implications for Policy/Delivery/Practice

Regardless of whether transparency drives higher quality or higher quality drives transparency, the relationship suggests that hospitals interested in quality improvement should consider embracing greater transparency efforts.

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Research Objective

The call for accountability in health care quality has led some hospitals to voluntarily share quality performance data with consumers on the Internet (i.e., become more “transparent”). This study examines the relationship between transparency and quality performance by:

1. Examining whether safety-net hospitals publish scores on the Internet are more likely to be top performers in the Centers for Medicare and Medicaid Services (CMS) core quality and patient satisfaction (HCAHPS) measures; and
2. Identifying characteristics that predict transparency among safety-net hospitals.

Study Design

Logistic regression models were conducted in PASW/SPSS v. 18.0 (n=99 safety-net hospitals) to determine if hospital transparency predicted high performance on CMS core or patient satisfaction measures, controlling for various hospital characteristics. A second set of logistic regression models were run to determine which hospital characteristics predicted hospital transparency.

Variables used in the study included: composite scores of core process measure and HCAHPS data; transparency (hospital posted core measure or HCAHPS data on its website); bed size; electronic medical record (EMR) capability; net revenue; payer mix; region; and system status (hospital is part of a multi-hospital system). Hospital-specific data was collected from the 2008 AHA Annual Survey, the 2007 NAPH Annual Hospital Characteristics Survey, CMS’s HospitalCompare website, and an analysis of 99 hospital websites.

Population Studied

The 99 acute-care safety-net hospitals comprising the National Association of Public Hospitals and Health Systems membership. Patients at these mostly urban facilities are disproportionately uninsured.

Principal Findings

The first model found that hospitals that either posted core measure data online, had a fully-implemented EMR, or were part of a system were more likely to be top performers (i.e., in the top 25th percentile) on core measures ($p < .05$). Region, bed size, payer mix, and net revenue were not statistically significant. In the second model, hospitals that posted HCAHPS data online were more likely to be a top performer on HCAHPS data ($p < .05$). No other variables were statistically significant.

The third model found that hospitals that were high performers on core measures or located in the Northeast (compared to those in the South, Midwest, and West) were more likely to post core measures online after controlling for the other characteristics ($p < .05$). The fourth model showed that hospitals that were high performers on HCAHPS measures or located in the South (compared to those in the West) were more likely to post HCAHPS data online ($p < .05$).

Conclusions

Urban safety-net hospitals that are voluntarily transparent about quality performance, have a fully-implemented EMR, or are part of a system are more likely to be top performers on core measures, controlling for other hospital characteristics. Urban safety-net hospitals that are top performers on core measures and HCAHPS indicators are more likely to be transparent about their quality performance (the only predictor of transparency besides region).

Implications for Policy, Delivery or Practice

Regardless of whether transparency drives higher quality or higher quality drives transparency, the relationship suggests that hospitals interested in quality improvement should consider embracing greater transparency efforts.