

Associations Between Patient Education Materials, Consumer Satisfaction Rates, CMS 30-day Readmission Penalties and the Size of Hospitals

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Objectives

- Identify healthcare system attributes that may lead to poor patient and family discharge understanding
- Identify health professions most likely to need improvement for communication practices within hospital systems
- Identify communication gaps within a hospital using the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) data
- Examine relationships between the size of a hospital, HCAHPS outcomes data, and CMS penalties for <30 hospital readmission rates.

The Partnership

- Alabama Hospital Association (AlaHA) & UAB School of Nursing
- Multiple Quality Improvement Projects (previously) focused on health literacy beginning with analysis of patient education materials

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Methods

- Cross-sectional pilot study -collaboration with rural and non-rural hospitals (N = 9) located in the southern region of the U.S.
- Pearson correlation coefficients (r) –determines the relationship between variables; is a measure of the linear correlation between two variables X and Y.
- Wilcoxon test was used for the group comparisons
- Public data –used to compare two related samples, matched samples, or repeated measurements on a single sample to assess whether their population mean ranks differ.

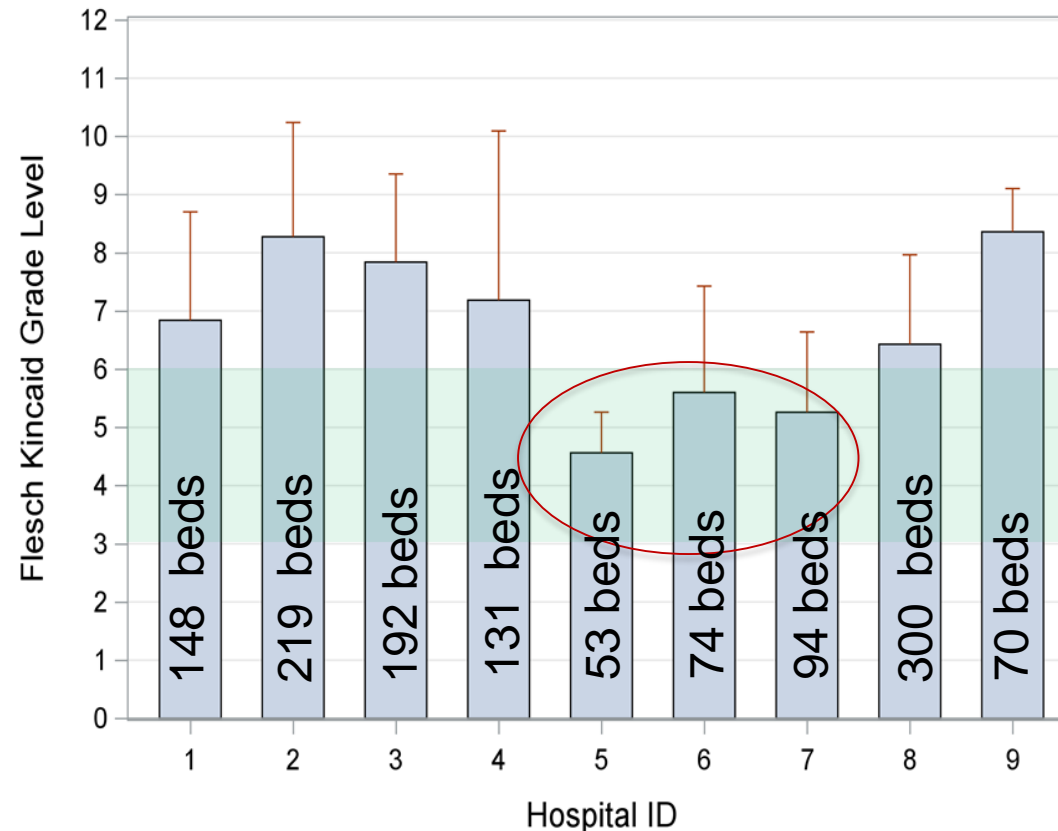
Sample

- Hospital size- Self-reported, based on # of inpatient beds, stratified into three groups:
 - 4 small (< 100)
 - 3 medium (100-199)
 - 2 large (> 200)
- Patient education materials (PEMs) used to discharge (N = 84) chosen by CNOs
- HCAHPS questions (n=5) patient satisfaction scores for communication (physicians, nurses, staff)
- 2016 CMS penalties for less than 30 day hospital readmission

Outcomes-Patient Education Materials

PEMS- should be written $\leq 6^{\text{th}}$ grade reading level (NIH & AMA)

(3) hospitals (all small) meet a sixth-grade or below reading level and have an ease of reading that is acceptable according to the Flesch-Kincaid metric



Outcomes-Readmission Penalties

Readmission penalties (CMS) are based on a percentage of Medicare payments

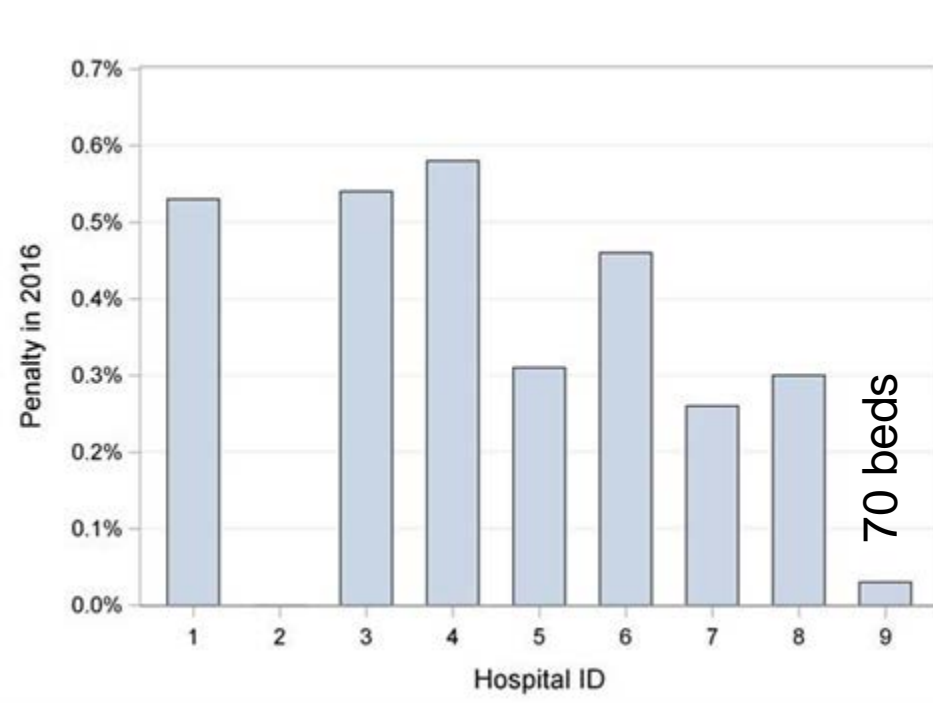
Penalties are negatively correlated with HCAHPS

nurses ($r=-0.62$, $p=0.0750$)

staff ($r=-0.63$, $p=0.0669$)

physicians ($r=-0.08$, $p=0.8444$)

As patient satisfaction scores increase for staff and nurses; penalties decrease

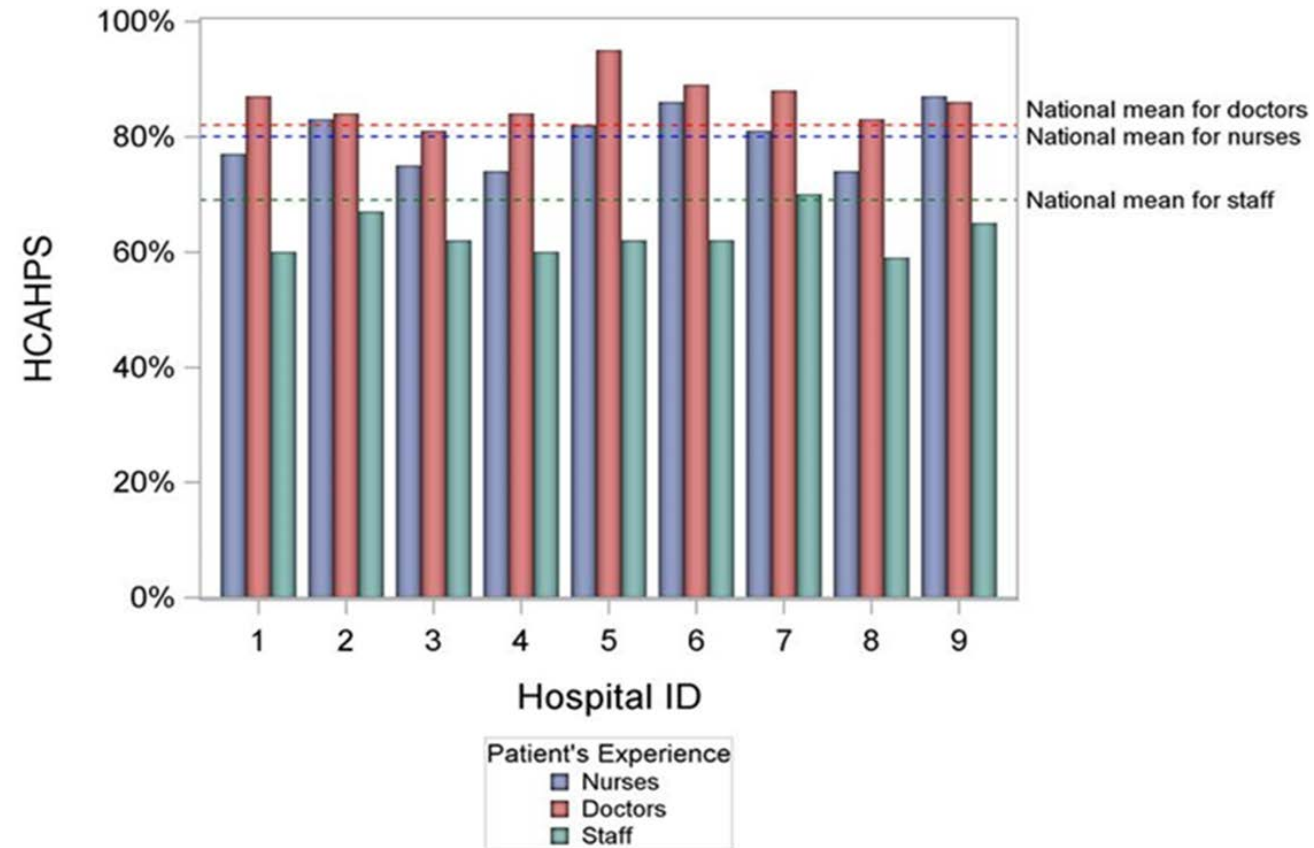


Outcomes-Satisfaction Rates

Patient satisfaction rates (HCAHPS) for communication are ~equal to/or better than the national average for physicians but fall short for nurses and staff

HCHAPS questions:

1. Did your nurse communicate well?
2. Did your doctor communicate well?
3. Staff explained about medicines before giving it to me.



Comparisons-Size / Satisfaction / Profession

Hospital size was *negatively* correlated with patient satisfaction rates for communication;

physicians ($r = -0.77, p < 0.0001$)

nurses ($r = -0.68, p < 0.0001$)

staff ($r = -0.35, p = 0.0010$)

Take Home: The smaller the hospital, the higher the satisfaction for provider-patient communication

Results of patient satisfaction rates for communication **with physicians** were best

$90.0 \pm 4.6\%$ (small hospitals)

$85.0 \pm 3.2\%$ (medium hospitals)

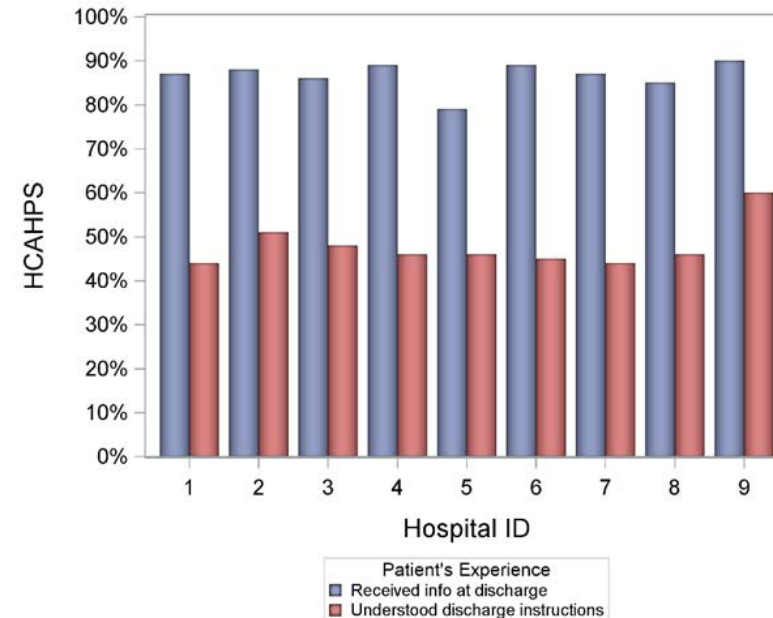
$83.5 \pm 0.7\%$ (large hospitals)

Outcome-Understanding Instructions

- Approximately 10-15% of patients report they did not receive information at discharge.
- For those who report receiving it, on average less than 50% report they understood the discharge information.

Final HCHAPS questions:

4. I received information about what to do during my recovery at home.
5. I understood how to care for myself when I left the hospital.



Next Steps

- Limitations on this study: 1 state with few hospitals and a small sample of PEMs to analyze hand picked by the nursing administration at each hospital.
- Recommendations
 - Collaborate with the Joint Commission to collect PEMs during routine visit and randomly pull all PEMs for units that have a high rate of < 30 day readmissions. Compare other publically available data to conduct multistate study using a more comprehensive approach including a cost analysis to demonstrate the value of compliance with the Ten Attributes of a Health Literate Organization.

References

American Hospital Directory, Inc. (2018). *Alabama* Retrieved November, 28, 2017 from https://www.ahd.com/states/hospital_AL.html

Centers for Medicare & Medicaid Services, Baltimore, MD. *The Hospital Consumer Assessment of Healthcare Providers and Systems*. Retrieved August 28, 2017 from <https://www.hcahpsonline.org/en/summary-analyses/>