



Patient Satisfaction as a Reflection of Quality Health Care and Outcomes



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Introduction

Measurement of patient satisfaction is an important consideration in any medical setting as it allows providers to tailor their practice to patient needs.

An extensively utilized, nationally administered, standardized patient satisfaction survey is the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS). The HCAHPS was developed by the Centers for Medicaid and Medicare Services and the Agency for Healthcare Research and Quality. It consists of 27 questions that evaluate patient satisfaction with diverse aspects of care such as communication with nurses, communication with doctors, responsiveness of hospital staff, pain management, communication about medicines, and discharge information.

The primary goal of analyzing patient satisfaction via surveys such as the HCAHPS is to assess the provision of efficient and effective care. However, the relationship between patient satisfaction and the quality of care provided is poorly understood and ill defined.

Clinical Question

Does improvement in patient satisfaction with their health care and its providers, as measured by the HCAHPS survey, improve health care quality and outcomes?

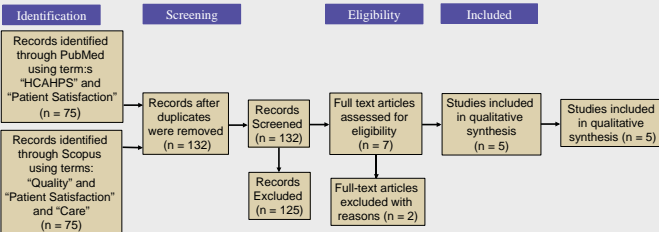
Methods

Inclusion Criteria

- Utilized the HCAHPS survey
- Highly tested quality assessment tool (s)
- USA based study involving nationwide survey of hospitals
- Studies performed during or after 2008
- Reputable journal

Exclusion Criteria

- Ill defined or non-tested quality assessment tool
- Utilized another patient satisfaction survey
- Study not involving nationwide hospitals
- Studies performed before 2008
- Non-reputable journal



Five articles were evaluated in this review. The PRISMA flow chart outlines the process by which the studies were found.

Results

Study 1: Patients' Perception of Hospital Care in the United States (Jha et al., 2008)

Objective: To determine if hospital HCAHPS survey performance relates to performance indicators of clinical care quality.

Results: After adjusting for other hospital characteristics, there was a significant relationship found between the highest quartile HCAHPS scores and mean HCA scores across all four conditions

Critique: Hospitals that did not submit HCAHPS scores could have a significant impact regarding the relationship between patient satisfaction and health care quality.

Study 2: Patient Satisfaction and Quality of Surgical Care in US Hospitals (Tsai et al., 2015)

Objective: To determine the relationship between surgical quality and efficiency with patient satisfaction.

Results: Higher patient satisfaction was associated with shorter length of stay, higher SCIP process scores, lower mortality and lower readmission rates.

Critique: The use of administrative data may not adequately account for data that does not fall under specific billing codes.

Study 3: The Cost of Satisfaction: A National Study of Patient Satisfaction, Health Care Utilization, Expenditures, and Mortality. (Fenton et al., 2012)

Objective: To define the relationship between patient satisfaction and health care utilization, expenditures, and outcomes.

Results: Respondents in the highest patient satisfaction quartile had significantly higher odds of any inpatient admission, greater total expenditures, greater prescription drug expenditures, and 26% higher mortality.

Critique: The study is limited in that patient satisfaction with the physician is the only domain of health care satisfaction addressed.

Study 4: Is There a Relationship Between Patient Satisfaction and Favorable Outcomes? (Kennedy et al., 2014)

Objective: To evaluate whether high patient satisfaction measured by HCAHPS surveys correlates with favorable outcomes.

Results: SCIP process measures and patient safety indicators, as well as length of stay, did not correlate with overall satisfaction indicating that patient satisfaction is not a gauge of patient safety and care effectiveness.

Critique: Application of this study is restricted due to the fact that all hospitals included were academic medical centers

Study 5: Patient Satisfaction as a Possible Indicator of Quality Surgical Care (Lyu et al., 2013)

Objective: To determine whether patient satisfaction is independent from surgical process measures and hospital safety.

Results: Patient satisfaction was independent of surgical process scores and hospital safety.

Critique: The small hospital sample size and that survey data was only collected from urban hospitals may limit the applicability to a larger population.

Overview of Results

Study	Jha et al., 2008	Tsai et al., 2015	Fenton et al., 2012	Kennedy et al., 2014	Lyu et al., 2013
Design	Cross-sectional	Cross-sectional	Prospective cohort	Cross-sectional	Cohort
Sample Size and Setting	2,429 nationwide hospitals: • 75% had >300 Surveys • <3% had <100 surveys	2,953 nationwide hospitals	Respondents to the MEPS: N = 51,946 Patients	Respondents to the UHC database, HCAHPS, and SCIP N = 117 Hospitals	31 hospitals in 10 states
Definition of Patient Satisfaction	9 or a 10 hospital rating on the HCAHPS Survey	"Definitely yes" response to recommending the hospital question on HCAHPS	Highest quartile of satisfaction with physician communication	Above the median for positive response to HCAHPS global ratings	Global rating of 9-10 on the HCAHPS survey
Measure of Health Care Quality	HOA 24 measures for 3 conditions: 1. Acute MI 2. CHF 3. Pneumonia Prevention of surgical complications	Efficiency: length of stay Quality: 1. SCIP scores 2. 30 day readmission rates 3. Perioperative mortality	1. Utilizations 2. Expenditures 3. Mortality	Length of stay, complications, mortality, and compliance with SCIP measures	Process of care measures, Centers for Medicare and Medicaid Services compliance rates, job
Result Data	Highest Quartile vs Lowest Quartile: p < 0.001 Myocardial Infarction: 95.3 – 93.4 Congestive Heart Failure: 86.0 – 82.7 Pneumonia: 90.8 – 88.5 Surgery: 85.7 – 82.8	Highest Quartile vs Lowest Quartile: p < 0.001 Length of Stay: 7.1 – 7.7 days SCIP Score: 96.5 – 95.5 Readmission Rate: 12.3 – 13.6% Mortality Rate: 3.1 – 3.6%	Highest Quartile vs Lowest Quartile: CI = 95% ED Visits: 14.3 – 17.6% Inpatient Admissions: 11.5 – 10.7% Total Expenditures: \$4,739 – 4,646 Drug Expenditures: \$1,142 – 1,005 Mortality Ratio: 1.26 – 1.00	Characteristics Associated with High Overall Patient Satisfaction: p < 0.001 • Large Hospitals • High Surgical Volume • Low Mortality Characteristics Not Associated with High Overall Patient Satisfaction: p > 0.05 • SCIP Compliance • Length of Stay • Presence of Complications • Increased Rates of Readmission	Characteristics Not Associated with High Overall Patient Satisfaction: p = 0.24 Antibiotic Prophylaxis: p = 0.24 Appropriate Hair Removal: p = 0.95 Foley Catheter Removal: p = 0.63 DVT Prophylaxis: p = 0.59 Overall Safety Culture Score: p = 0.11
Summary of Results	Positive Association	Positive Association	Negative Association	No Association	No Association

HOA – Healthcare Quality Alliance; MI – Myocardial Infarction; CHF – Congestive Heart Failure; SCIP – Surgical Care Improvement Project; CI – Confidence Interval; MEPS – Medical Expenditure Panel Survey; ED – Emergency Department; UHC – University Healthsystem Consortium; DVT – Deep Vein Thrombosis

Conclusion

Though the HCAHPS is the most widely utilized and researched patient care survey in the United States, its efficacy as an assessment of healthcare quality is still contentious. It has been demonstrated in this review that large, nationally representative studies have competing results on this topic. Given the importance attributed to high HCAHPS scores by The Patient Protection and Affordable Care Act of 2010, understanding the exact implications of high patient satisfaction scores is becoming increasingly critical. However, current studies have numerous limitations which make it impossible to provide a definite answer the question at hand. In order to determine a causal relationship between improvement in patient satisfaction and improvement in healthcare quality and outcomes, further research correcting for current limitations in measurement tools, is needed.

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