The Value and Impact of CAHPS

Paul D. Cleary, Ph.D.
Yale School of Public Health
Among dozens of studies examined in a recent systematic review, the vast majority found either positive or null associations between patient experiences and best practice clinical processes, lower hospital readmissions, and desirable clinical outcomes.

Patient Experience and Patient Behavior

- **Better patient-reported provider communication is related to higher:**
  - Diabetics’ adherence to hypoglycemic medication
  - Veterans’ diabetes self-management
  - Blacks’ hypertension medication adherence
  - Breast cancer patients’ adherence to tamoxifen
  - Rates of colorectal cancer screening
  - Preventive health screening and health counseling services

- **Greater patient trust in physician is related to:**
  - Better adherence to diabetes care recommendations
  - More preventive services among low-income Black women
  - Higher nonadherence among patients whose physicians communicate poorly
  - Substantial improvements in adherence among patients whose physician participated in communication skills training

Patient Experience and Clinical Processes

• Hospitals with highest HCAHPS scores do better on clinical processes of care measures, including those for related to the care of acute myocardial infarction (AMI), congestive heart failure (CHF), pneumonia, and surgery, than hospitals with lowest scores.

• Patients’ overall ratings of hospitals positively associated with hospital performance on pneumonia, CHF, AMI, and surgical care, and process indicators for 19 different conditions.

• Overall ratings and willingness to recommend hospital lower in hospitals that consistently perform poorly on cardiac process measures.

References: Jha et al. (2008); Isaac et al. 2010; Llanwarne et al. 2013; Girota et al. 2012.
Patient Experience and Efficiency

- Longer waits for primary care pediatric visits (access) related to more non-urgent emergency department (ED) visits
- Children with asthma whose physician reviewed long-term therapeutic plan have fewer ED visits, urgent office visits, and hospitalizations
- Higher overall patient ratings of hospitals’ care and discharge planning associated with lower 30-day readmission rates for AMI, heart failure, and pneumonia

References: Brousseau et al. (2004); Clark et al. (2008); Schulman and Staelin (2011)
Patient Experience and Safety

- More positive patient experiences associated with fewer inpatient care complications, especially pressure ulcers, post-operative respiratory failure, and pulmonary embolism or deep venous thrombosis
- Better patient-reported cleanliness of hospital environment strongly related to lower prevalence of infections due to medical care in the hospital
- Significant relationship between better patient-reported hospital staff responsiveness and decreased likelihood of central line-associated blood stream infections
- Hospitals whose patients report better experiences also have employees with more positive perceptions of patient safety culture

References: Isaac et al. (2010); Saman et al. (2013); Lyu et al. (2013); Sorra et al. (2012)
Patient Experience and Clinical Outcomes

- Positive patient experiences may provide unique benefit to clinical outcomes for AMI patients over and above clinical quality performance:
  - Better patient-centered hospital care associated with better 1-year survival, controlling for comorbidity, clinical, and demographic factors. (Meterko et al. 2010)
  - Higher patient ratings associated with lower hospital inpatient mortality, controlling for hospitals’ clinical performance. (Glickman et al. 2010)
- Providers may pay greatest attention to patients near the end of life, which would lead to paradoxical negative association between patient-provider communication and patient outcomes
Veterans Administration (VA) Study of Heart Attack Patients

- Replication of New Hampshire study of heart attack patients with better health status measures and measures of the technical quality of care

- Finding: Patient-centered care had a statistically significant positive effect on survival, after controlling for technical quality of care, patient demographics, patient co-morbidities, and process of care

Reanalysis of Fenton Study

• Fenton and colleagues (2013) found better patient ambulatory care experiences associated with much higher mortality rates

• This led some to question the value of patient-centered care

• This finding contradicted a majority of studies on the same topic

Source: Xu, Buta, Price, Elliott, Hays, Cleary; HSR 2014
Concerns about Fenton Analyses

- **Validity**
  - Effect was implausibly large; good patient experience claimed to be more dangerous than major chronic conditions
  - Only some deaths can be prevented or delayed by medical care; effect should only be seen on amenable deaths

- **Timing**
  - Patient experiences with care vary over time and the relationship may be sensitive to when assessments are conducted

- **Confounders/Direction of causality**
  - Unadjusted patient-level associations may be driven by other factors, such as poor health
  - Elliott et al. (2013 in JAGS) found better patient experience/more intensive care in last year of life
Reanalysis Methods

- Used same data as Fenton: 2000-2005 Medical Expenditure Panel Survey data linked to National Health Interview Survey and National Death Index
- Used same models as Fenton: Cox proportional hazards models with mortality as the dependent variable and patient experience measures as independent variables
- Unlike Fenton:
  - Divided data into non-amenable and amenable deaths
  - Considered timing of patient experience and death
  - Disaggregated the composite into individual items to better understand the association of experience and mortality
Results of Reanalysis

• Only patients who received more of a physician’s time were more likely to die, and only for deaths that were not amenable to medical care.

• Fenton findings likely reflect intensive end-of-life care.

• The data do no support the assertion that meeting patient needs is related to worse care; certainly not mortality.
Frequently Raised Issues

1. Does Providing Unwelcome Advice Lead to Lower Patient Care Scores?

2. Can Patient Experience Be Improved?
Background on Concerns about Unwelcome Medical Advice

• Advice to quit smoking is a patient-reported experience of care measure in Medicare
  • Used in pay-for-performance for Medicare Advantage
  • Publicly reported

• Smokers may not want to hear smoking cessation advice

• Concern about receiving poor experience of care scores may lead providers to not provide recommended advice
  • Relevant for opioids and antibiotics, too
Ratings and Reports of Patient Experience are Higher for those Advised to Quit

No evidence to support providers’ concerns of potential negative patient experience ratings when giving unwelcome medical advice:

- Providing regular advice to quit smoking
- Not providing opioids to those who are addicted (Sjoerd et al. 2014, Maher et al. 2014)
- Not receiving expected antibiotics when explained (Mangione-Smith et al. 1999, Linder & Singer 2003)

Summary of Findings

• Awareness of patient experiences helps providers to appropriately address patients’ requests

• There are effective strategies to promote positive experiences even when patients’ requests require discussion

• Patient assessments of care are more strongly associated with the nature of provider communication than with patients’ receipt of desired treatment

• No evidence to support policy-maker concerns of perverse incentives of pay-for-performance
Frequently Raised Issues

1. Does Providing Unwelcome Advice Lead to Lower Patient Care Scores?

2. Can Patient Experience Be Improved?
Patient Experience Improvement Inventory


Aligning Forces for Quality

Improving Health & Health Care in Communities Across America

TOOL/UTILITY

Patient Experience of Care: Inventory of Improvement Resources

Updated: July 2014
Updates to the CAHPS Ambulatory Care Improvement Guide

Newest strategies include:

- OpenNotes
- On-Demand Advice, Diagnosis, and Treatment for Minor Health Conditions
- Cultivating Cultural Competence
- Price Transparency
Can CAHPS Scores Be Improved?

- Previous research found small, uniform improvement in HCAHPS scores in the first year of public reporting among ~2,700 initially participating hospitals
  

- Study assessed the extent and uniformity of improvement in HCAHPS scores in the 2nd through 4th years of public reporting among 3,691 participating hospitals
  
  Elliott, Cohea, Lehrman, Goldstein, Cleary et al.; HSR 2015

**Overall Improvement, Year 2 to Year 4**

<table>
<thead>
<tr>
<th>Year</th>
<th>HCAHPS Summary Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2</td>
<td>80.0%</td>
</tr>
<tr>
<td>Year 3</td>
<td>81.0%</td>
</tr>
<tr>
<td>Year 4</td>
<td>82.0%</td>
</tr>
<tr>
<td>Year 5</td>
<td>83.0%</td>
</tr>
</tbody>
</table>
Additional Findings

• Improvement varied across hospitals
  • After accounting for regression-to-the-mean, changes from Year 2 to Year 4 ranged from a 4.4% loss to a 6.5% gain for the middle 95% of hospitals (z=-1.3 to +1.9 in hospital-level SDs)
  • Larger and for-profit hospitals improved more than counterparts
    • 200+ bed hospitals had lower mean scores in Year 2, but they improved more than smaller hospitals
    • For-profit hospitals had lower mean scores in Year 2, but they improved more than non-profit hospitals
  • Independent trends; additive effects
HCAHPS Experience to Date: Accelerating but Varied Improvement

• Public reporting (from March 2008) and anticipation of Hospital Value-Based Purchasing (Patient Protection and Affordable Care Act enacted March 2010) focused attention on HCAHPS and may have motivated hospitals to improve
  • Especially among hospitals whose scores had lagged initially

• Larger and for-profit hospitals have greater resources to implement quality improvement efforts
Upward 10-Year Trend in Medicaid and Medicare Health Plan Scores

Source: 2017 CAHPS Health Plan Survey Database Chartbook
Can the Patient Experience be Improved?

• CAHPS surveys provide information about aspects of patient-centered care that providers can, and do, improve

• Improving patient experiences does not lead to inappropriate and inefficient care or result in trade-offs with high-quality clinical care
To Ask a Question

To submit a question, type your question here and hit submit.

Click on the “Q&A” icon to get the Q&A window to appear.