Measuring Organizational Communication Climate

The role of organizational factors in addressing health literacy

October 2009

Matthew Wynia, MD, MPH
Megan Johnson, MA
Thomas P. McCoy, MS
Leah Griffin, MS
Chandra Y. Osborn, PhD

With support from:

AMA

The California Endowment
Objective

• To assess whether organizational efforts to address health literacy improve patient experience of care measures
The fatal pedagogical error is to throw answers, like stones, at the heads of those who have not yet asked the question.

Paul Tillich
Background

- Effective communication is the foundation for quality health care

- Most measures of communication focus on the patient-clinician dyad.

- Communication might be affected by organizational factors, including a hospital or clinic’s internal environment (climate or culture) and infrastructure.

- Few studies address the relationship between an organization’s communication climate and quality of care.

- If organizations could assess the extent to which they promote (or hinder) effective communication, such assessments would be useful for quality monitoring, to focus QI interventions and, perhaps, for public reporting and benchmarking.
Patient-Centered Communication
Conceptual Framework

Effective Communication

- Health Literacy
- Language
- Culture

Organizational Micro-Climates
- Leadership, Resources, Commitment and Priorities
- Workforce Diversity and Training

Community Engagement
- Quality Improvement Infrastructure
Methods

Thirteen health care organizations nationally (6 hospitals, 7 health centers) administered an organizational assessment toolkit on communication climate between November 2006 and August 2007.

Toolkit includes several assessment tools, including patient and staff surveys.

Some patients also asked about quality of care, trust and understanding and confidence using information.
Assessment Tools Field-Test Sites

- Children's Hospital & Research Center, Oakland, CA
- Windham Hospital, Willimantic, CT
- University of Mississippi Medical Center, Jackson, MS
- University of Chicago Hospitals, Chicago, IL
- Rainbow Babies and Children’s Hospital, Cleveland, OH
- Sierra Kings District Hospital, Reedley, CA
- Golden Valley Health Center, Merced, CA
- Community Health Center, several cities across CT
- Geisinger Medical Center, Mount Pocono, PA
- George Washington University Hospital, Washington DC
- Hennepin County Medical Center, Minneapolis, MN
- Open Door Family Medical Center, Ossining, NY
- Louisville Oncology, Louisville, KY
- Family HealthCare, Visalia, CA
Methods: Defining Domains

• Combine related items from patient and staff surveys
• Example: Health Literacy Domain
  ➢ Patient survey items include:
    • Did educational materials meet your needs?
    • Things explained in a way you could understand?
    • Asked to repeat instructions?
    • Easy to ask questions/feel welcome?
  ➢ Staff survey items include:
    • How would you rate the understandability of patient education materials?
    • Have you received training on ways to check whether patients understand instructions?
    • How often do staff ask if patients want help filling out forms?
Results: Patients and Staff Surveyed

- **1763 patients**
  - 75% female
  - 21% 55 or older
  - 13% African-American
  - 40% Hispanic/Latino
  - 41% White
  - 16% Elem. school
  - 31% HS grads
  - 31% College
  - 8% Grad. school

- **698 Staff**
  - 76% female
  - 23% Hispanic/Latino
  - 6% Asian
  - 8% African-American
  - 56% White
  - 28% Nursing
  - 15% Physicians
  - 12% Reception
  - 5% Admin
Results: Domain Scores
**Results**

*Multivariate correlations of a 5-point change in performance on each domain and patient-reported quality and trust*

<table>
<thead>
<tr>
<th>Communication Domain</th>
<th><em>I receive high quality medical care</em> OR (95% CI)</th>
<th><em>My medical records are kept private</em> OR (95% CI)</th>
<th><em>If a mistake were made in my health care, the system would try to hide it from me</em> OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Org. Commitment</td>
<td>1.34 (1.22-1.54)</td>
<td>1.22 (1.05-1.40)</td>
<td>0.73 (0.66-0.86)</td>
</tr>
<tr>
<td>Data Collection</td>
<td>0.95 (0.90-0.95)</td>
<td>1.00 (0.95-1.05)</td>
<td>1.0 (1.00-1.05)</td>
</tr>
<tr>
<td>Develop Workforce</td>
<td>1.47 (1.28-1.69)</td>
<td>1.28 (1.10-1.47)</td>
<td>0.73 (0.62-0.86)</td>
</tr>
<tr>
<td>Engage Community</td>
<td>1.54 (1.28-1.76)</td>
<td>1.28 (1.10-1.54)</td>
<td>0.73 (0.59-0.86)</td>
</tr>
<tr>
<td>Engage Individuals</td>
<td>1.40 (1.22-1.61)</td>
<td>1.22 (1.05-1.40)</td>
<td>0.73 (0.62-0.86)</td>
</tr>
<tr>
<td>Health Literacy</td>
<td><strong>1.40 (1.22-1.61)</strong></td>
<td><strong>1.28 (1.10-1.47)</strong></td>
<td><strong>0.73 (0.62-0.86)</strong></td>
</tr>
<tr>
<td>Language Svcs</td>
<td>0.90 (0.82-0.95)</td>
<td>1.05 (0.95-1.16)</td>
<td>1.0 (0.90-1.16)</td>
</tr>
<tr>
<td>Cross-Culture</td>
<td>1.28 (1.16-1.40)</td>
<td>1.16 (1.05-1.28)</td>
<td>0.82 (0.73-0.90)</td>
</tr>
<tr>
<td>Perf. monitoring</td>
<td>1.40 (1.22-1.54)</td>
<td>1.22 (1.05-1.40)</td>
<td>0.73 (0.66-0.86)</td>
</tr>
</tbody>
</table>

Quality and trust items from Rose A. et al. *Journal of General Internal Medicine, 2004*
Conclusions

• Many of the 9 domains of organizational communication performance were significantly correlated with patients’ experiences of care.
  
• A 5-point increase in score on the health literacy domain raises the odds that patients will report that they receive high quality medical care by 40% (p<0.001)
  
• [In additional analyses (not shown), even after adjusting for language, race, age and gender, communication climate also has strong effects on patients’ reported levels of understanding written info and confidence filling out forms]
Limitations

- Select group of participating hospitals
  - Results might not reflect overall national performance
- Patient population over-represents minorities
- Correlation does not prove causality
  - Better communication might not lead directly to better quality
- No clinical measures of quality
  - Patient perceptions of quality are not always accurate (though still important)
Summary

- Organizations can undertake a valid 360° assessment on communication performance
  - Obtain discrete results in 9 important domains.
  - Results strongly correlated with patient perceptions of quality of care, trust and reported level of understanding.

- Assessment results may be useful for:
  - Tracking organizational performance
  - Benchmarking
  - To inform tailored quality improvement interventions
What questions do you have?

www.EthicalForce.org
Methods: Domain Scores

• Each survey item normalized to 0-1
• Domain score =

\[
\left( \frac{\text{Mean of relevant items from patient survey} + \text{Mean of relevant items from staff survey}}{2} \right) \times 100
\]

Internal Consistency
Reliability of Domains
Is Acceptable

<table>
<thead>
<tr>
<th>Content area</th>
<th>Coefficient Alpha Patient surveys</th>
<th>Coefficient Alpha Staff surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Org. Commitment</td>
<td>0.87</td>
<td>0.91</td>
</tr>
<tr>
<td>Data Collection</td>
<td>0.65</td>
<td>0.90</td>
</tr>
<tr>
<td>Develop Workforce</td>
<td>n/a</td>
<td>0.93</td>
</tr>
<tr>
<td>Engage Community</td>
<td>0.64</td>
<td>0.78</td>
</tr>
<tr>
<td>Engage Individuals</td>
<td>0.90</td>
<td>0.82</td>
</tr>
<tr>
<td>Health Literacy</td>
<td>0.88</td>
<td>0.86</td>
</tr>
<tr>
<td>Language</td>
<td>0.83</td>
<td>0.96</td>
</tr>
<tr>
<td>Culture</td>
<td>0.59</td>
<td>0.88</td>
</tr>
<tr>
<td>Perf. Monitoring</td>
<td>n/a</td>
<td>0.84</td>
</tr>
</tbody>
</table>