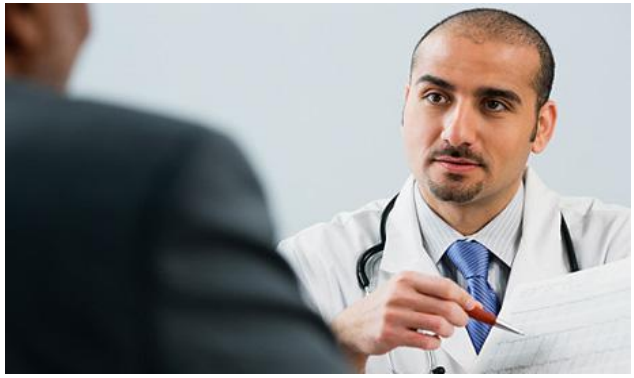
# *Patient-Reported Outcomes (PROs) as Quality of Care Measures*

**Ron D. Hays, Ph.D., UCLA**

June 2, 2016 (2:45-4:15 CT)

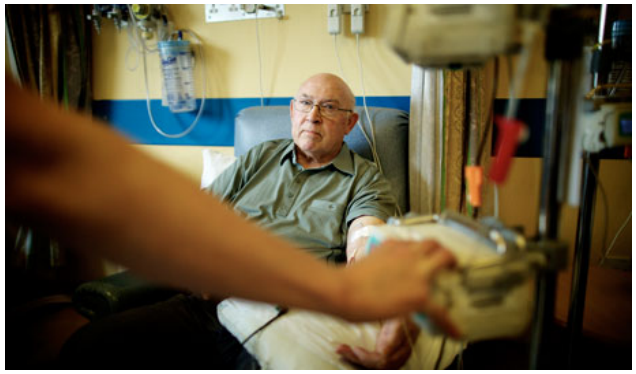
Hyatt Rosemont, Rosemont, Illinois

# We Measure Quality of Care to Improve It



**Providers** → **Find out how well they are doing**


**Government/ Private Insurers** → **Identify best/worst healthcare providers**



**Patients** → **Choose best health care for themselves**

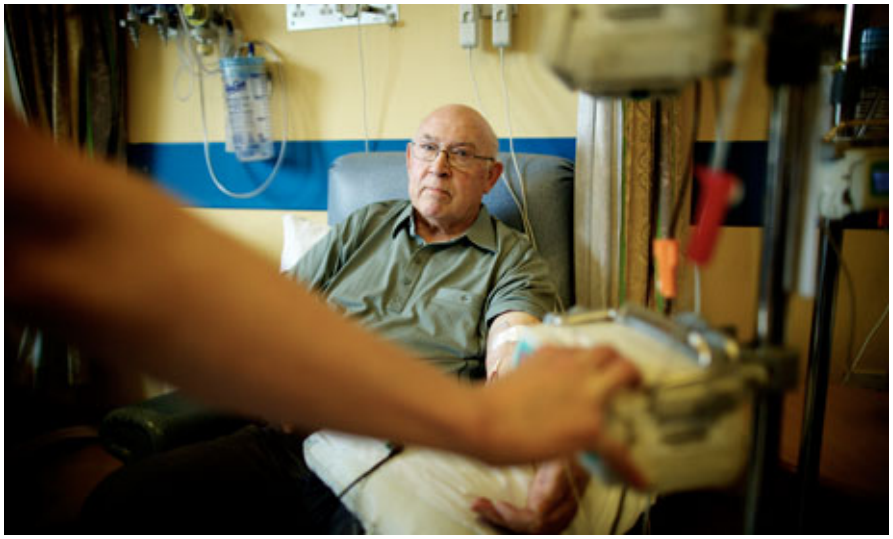
# How Do We Measure Quality of Care?

- Focus has been on expert consensus
- Variant of RAND Delphi Method

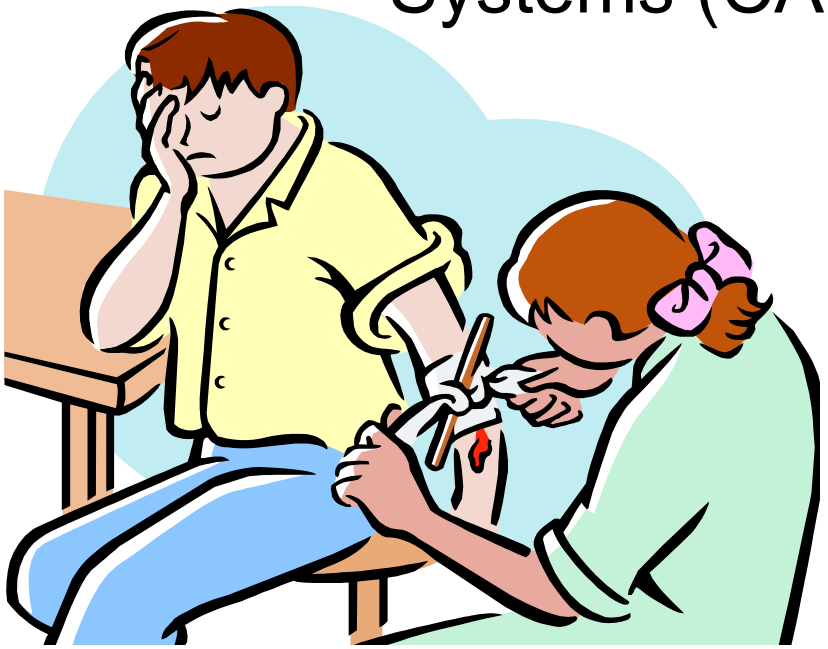
# How Do We Measure Quality of Care?

- Focus has been on expert consensus about clinical process
- Variant of RAND Delphi Method

- **But how patients perceive their care also important**
- **CAHPS® project measures patient experiences.**



# Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Approach



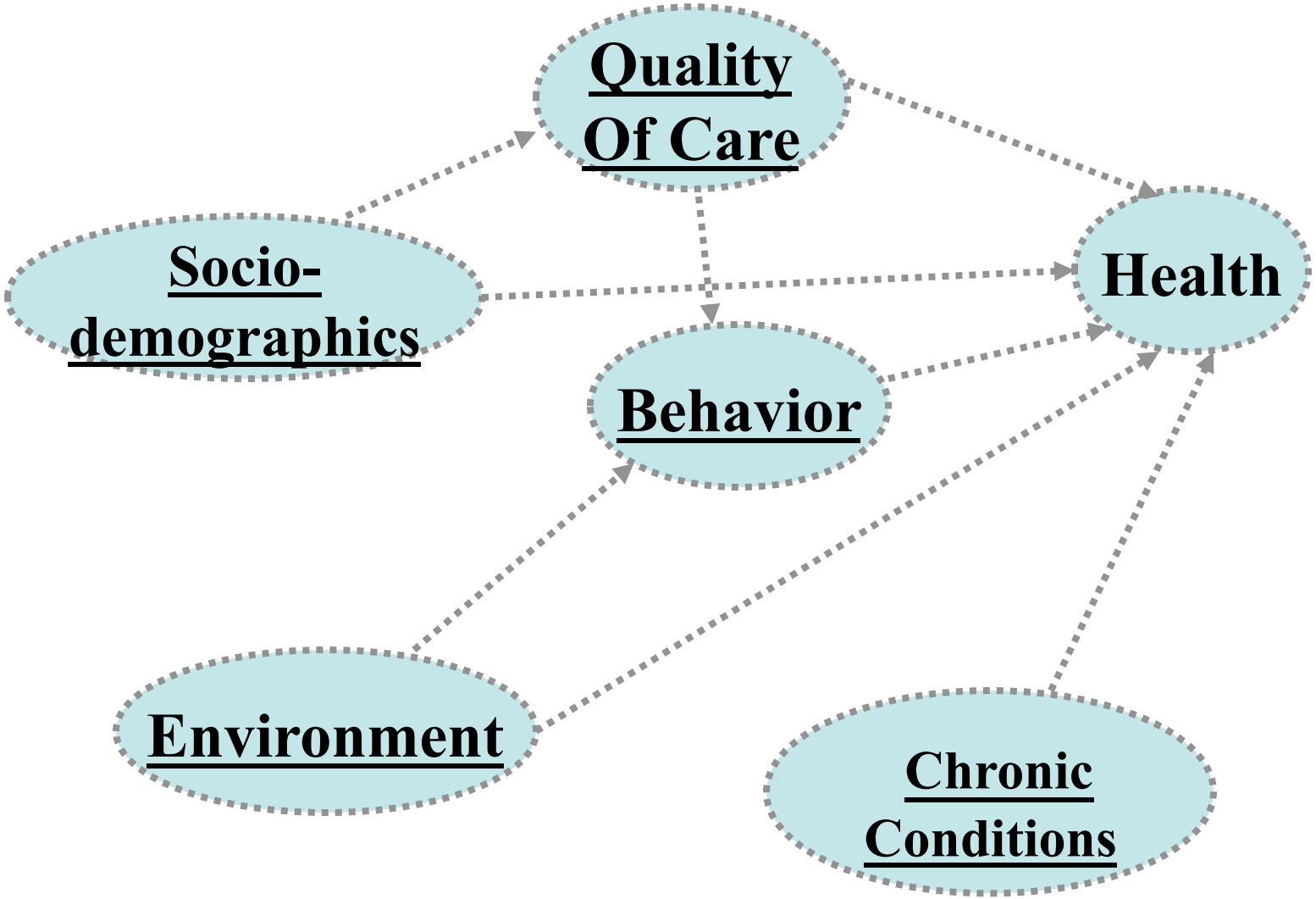
**Complements information from clinical process measures**

- Focus on what patients want to know about AND can accurately report about
  - Communication with health care provider
  - Access to care
  - Office staff courtesy and respect
  - Customer service

# Quality of Care Indicators

- Process of care
  - Clinical indicators (expert consensus)
  - Patient reports (CAHPS®, 1995)
- Health
  - Care maximizing probability of desired health outcomes.
  - Clinical indicators
  - Patient reports (PROMIS®, 2004)

# Multiple Factors Impact Health



# Rather than Assessing Patient Satisfaction, CAHPS Relies on Reports About Care

**19.** In the last 12 months, how often did this provider explain things in a way that was easy to understand?

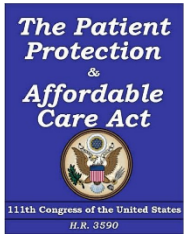
1 ☐ Never
2 ☐ Sometimes
3 ☐ Usually
4 ☐ Always

# CAHPS Tipping Point was its Widespread Adoption








*. . . and its link to payment through ACA*

# CAHPS Survey Implementation

- Develop surveys
  - Stakeholder input
- Train and oversee survey vendors
- Analyze and report plan-level data
  - Casemix adjustment
- Report to plans/providers for quality improvement


# Public reporting of CAHPS Data


- CMS reports MCAHPS data by plan and state
  - Mails booklets
  - Online tool
- Helps beneficiaries choose coverage
- Makes plan performance transparent

# Use of and importance of patient experience surveys has grown…

CAHPS Hospital Survey (HCAHPS) data accounted for 30% of hospitals' Total Performance Score in Value-Based Purchasing Program in FY2014

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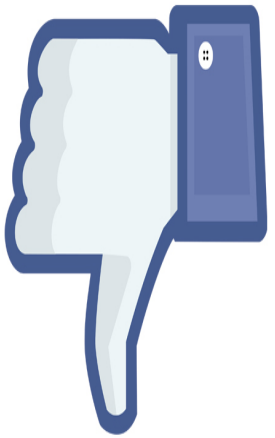
# Use of and importance of patient experience surveys has grown…

CAHPS Hospital Survey (HCAHPS) data accounted for 30% of hospitals' Total Performance Score in Value-Based Purchasing Program in FY2014

**…greater scrutiny**

**..and more misinformation**



# Patient surveys are subjective and do not provide valid information

- PROs are "subjective" and providers have concerns about their scientific properties (Boyce et al., 2014, Implementation Science)

- PROs are as reliable and valid as clinical measures
  - Hahn, E. A. et al., (2007). Precision of health-related quality of life data compared with other clinical measures. Mayo Clinic Proceedings, 82 (10), 1244-1254.

# PROs are Weakly Related to Clinical Indicators

# PROs are Weakly Related to Clinical Indicators

- **Systematic review (55 studies)**
- **Wide range of disease areas, setting, designs, and outcome measures**

**Consistent Positive Associations**

- **Patient experience**
- **Patient safety**
- **Clinical effectiveness**

# PROs are not actionable

- Patient surveys assess what is important to patients.
  - Patients want and need to know PRO information when choosing among providers.
- PROs used in quality improvement
  - While link between use of PROs and subsequent health is tenuous, their use improves communication between patients and providers.

# PRO data cannot be fairly compared across providers

- My patients are different (e.g., sicker) than patients of other providers
- PROs are determined by factors outside the control of the provider

  -> Patient characteristics that are systematically related to PROs and not indicative of care quality included in casemix adjustment.

# Because of low response rates, survey respondents are unrepresentative

- Maximize participation rates.
- Survey nonresponse does not necessarily lead to bias in comparisons.
- Casemix adjustment can compensate for nonresponse bias.

# Collecting PRO data is too burdensome and expensive

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- Patients are often more burdened by invasive medical tests than responding to surveys.
- Survey data collection is not free but newer technologies can reduce costs.




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# Bioethicists say patient-satisfaction surveys could lead to bad medicine

By Sabriya Rice | June 4, 2015

A new report by the Hastings Center suggests patient-satisfaction surveys that Medicare uses to assess healthcare providers are seriously flawed. The authors question whether the government should be relying on them in quality initiatives such as value-based purchasing.

"Good ratings depend more on manipulable patient perceptions than on good medicine," states the report, entitled Patient-Satisfaction Survey on a Scale of 0 to 10. "In fact, the pressure to get good ratings can lead to bad medicine.

The healthcare industry remains under pressure to boost transparency and

# Providers motivated to fulfill patient desires, regardless of appropriateness

- "Pressure to get good ratings can lead to bad medicine."
  - Dr. Stuart Younger, Professor of Bioethics and Psychiatry at the Case Western Reserve University (Hastings Center Report)

# Providers motivated to fulfill patient desires, regardless of appropriateness?

- Higher intensity care is not related to better outcomes
- Good communication is important in addressing unreasonable expectations

# Fenton et al. (2012)

"Patient satisfaction can be maintained in the absence of request fulfillment if physicians address patient concerns in a patient-centered way."

# Fenton et al. (2012)

“ In the ideal vision of patient-centered care, physicians deliver evidence-based care in accord with the preferences of informed patients, thereby improving satisfaction and health outcomes, while using health resources efficiently.”

# Fenton et al. (2012)

"However, patient-centered communication requires longer visits and may be challenging for many physicians to implement."

# Strategies to Address Resistance to PROs as Quality of Care Indicators

- Stakeholder involvement
  - Sponsor and provider feedback
  - Clinician opinion leaders
- Communication
  - Conference presentations
  - Webinars
  - Social media
    - e.g., Blogs and twitter
  - Letters to editor
  - Journal articles

# Podcast Addressing Concerns about CAHPS Surveys

Can patients really report on the quality of the care they receive?

Do patients' expectations affect how they respond to CAHPS survey questions about their providers?

Is there a tradeoff between positive patient experiences and favorable clinical outcomes?

To help users of CAHPS surveys address these and other questions, the Agency for Healthcare Research and Quality (AHRQ) released a podcast: "CAHPS Surveys: Sorting Fact From Fiction," featuring Rebecca Anhang Price, PhD.

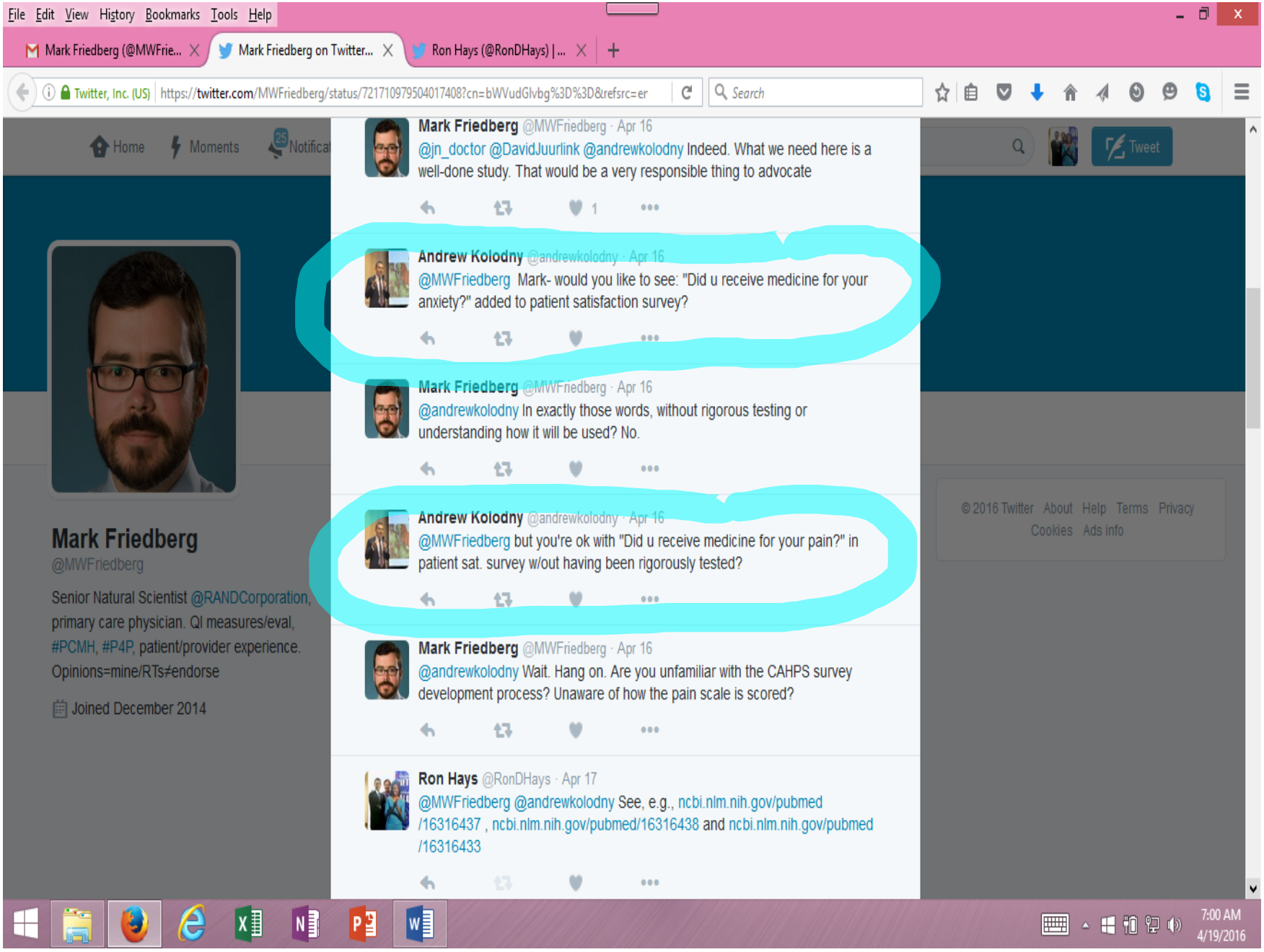
Listen to this podcast:
https://cahps.ahrq.gov/news-and-events/podcasts/cahps-surveys-podcast.html

# HCAHPS Survey, Pain Management, and Opioid Misuse: The CMS Perspective

## *Clarifying Facts, Myths, and Approaches*

CMS believes that effective communication with patients about pain and treatment, including options other than prescription medicine when appropriate, is the preferred way to improve patient experience of care. In the process of developing the HCAHPS Survey, we did not find that experience with pain dominated patients' overall assessment of the hospital experience.

http://www.qualityreportingcenter.com/wp-content/uploads/2016/02/IQR_20160126_QATranscript_vFINAL508.pdf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@andrewkolodny Wait. Hang on. Are you unfamiliar with the CAHPS survey development process? Unaware of how the pain scale is scored?
Ron Hays @RonDHays · Apr 17
@MWFriedberg @andrewkolodny See, e.g., ncbi.nlm.nih.gov/pubmed/16316437 , ncbi.nlm.nih.gov/pubmed/16316438 and ncbi.nlm.nih.gov/pubmed/16316433
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# CAHPS Articles

Price, R. A. et al. (2015). Should health care providers be accountable for patients' care experiences? JGIM, 30, 253-256.

Price, R. A. et al. (2014). Examining the role of patient experience surveys in measuring health care quality. Medical Care Research and Review, 71, 522-554.

Xu, X. et al. (2014). Methodological considerations when studying the association between patient-reported care experiences and mortality. Health Services Res, 50, 1146-1161.

# Some suggest patients can be "satisfied" to death.

http://www.ucdmc.ucdavis.edu/publish/news/newsroom/6223 — joshua fenton patient satisfacti... — Patient satisfaction linked t...

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Health System > Newsroom > Patient satisfaction linked to higher health-care expenses and ...

NEWS | February 13, 2012

# Patient satisfaction linked to higher health-care expenses and mortality

## Doctors may agree to patient requests for services to increase patient satisfaction

**Editor's note:** Read this press release [en español]

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**(SACRAMENTO, Calif.)** — A team of UC Davis researchers found that people who are the most satisfied with their doctors are more likely to be hospitalized, accumulate more health-care and drug expenditures, and have higher death rates than patients who are less satisfied with their care.

Published today in the *Archives of Internal Medicine*, the national study is believed to be the first to suggest that an overemphasis on patient satisfaction could have unanticipated adverse effects.

"Patient satisfaction is a widely emphasized indicator of health-care quality, but our study calls into question whether increased patient satisfaction, as currently measured and used, is a wise goal in and of itself," said Joshua Fenton, assistant professor in the UC Davis Department of Family and Community Medicine and lead author of the study.

**Media contact(s)**

Karen Finney
Send e-mail
Phone: 916-734-9064

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# Fenton et al. (2012) Archives of Internal Medicine

- Medical Expenditure Panel Survey
  - Nationally representative survey of U.S. civilian non-institutionalized population. Panel followed over 2 calendar years with 5 rounds of interviews.
- Five CAHPS item
  - 4 items from communication scale
  - 0-10 global rating of health care item
- Results interpreted as indicating that acceding to patient demands results in expensive and dangerous treatment.

# Five Concerns with Fenton et al.

1. Associations may be due to unmeasured variables (e.g., severity of illness).

   - Sicker patients may need more information
   - Clinicians may spend more time with them.

2. Estimated effect was implausibly large, suggesting good patient experience is more dangerous than having major chronic conditions.

3. Only amenable deaths can be prevented by health care.

   - Prognosis for those with end-stage pancreatic cancer is not modifiable by the type of care they receive.
   - Only 21% of the 1,287 deaths in the study were amenable to health care.

# Five Concerns with Fenton et al.

4. Patient experiences with care vary over time.

   - Used CAHPS data at MEPS round 2 to predict mortality 3 months to 6 years later.
   - > half of deaths occurred more than 2 years later.
   - Among those with best (quartile 4) experiences at round 2, > half had worse experiences 1 year later

5. Only looked at 5-item CAHPS aggregate

# Reanalysis of Fenton et al. (Xu et al., 2014)

- Same data used by Fenton et al.
  - 2000-2005 Medical Expenditure Panel Survey data
  - National Health Interview Survey
  - National Death Index
- Same statistical analysis
  - Cox proportional hazards models with mortality as the dependent variable and patient experience measures as independent variables
- But, unlike Fenton et al.
  - Separated non-amenable and amenable deaths
  - Considered consistency of patient experience and death
  - Looked at individual items to better understand the patient experience with mortality association

# Patient Experiences and Mortality: *Non-Amenable vs. Amenable Deaths*

| Patient Care Experience | Non-Amenable Mortality | | Amenable Mortality | |
|---|---|---|---|---|
| | Hazard Ratio | p-value | Hazard Ratio | p-value |
| Quartile 1 (reference) | (1.00) | | (1.00) | |
| Quartile 2 | 1.07 | 0.56 | 1.27 | 0.25 |
| Quartile 3 | 0.96 | 0.70 | 1.28 | 0.25 |
| Quartile 4 (most positive) | 1.26 | 0.03 | 1.23 | 0.32 |
| | | | | |
| Overall p-value for patient care experience quartiles | | 0.03 | | 0.59 |

Adjusted for age, gender, race/ethnicity, education, income, metropolitan statistical area, census region, access to usual source of care, insurance coverage, smoking status, number of chronic conditions, self-rated overall health, SF-12 PCS/MCS, number of drug prescriptions, medical care expenditures, number of office visits, any ER visits, any inpatient admissions, and survey panel.

# Patient Experiences and Mortality: *Consistency of Experiences Over Time*

| Patient Care Experience (baseline : 1 year later) | All-Cause Mortality | |
|---|---|---|
| | Hazard Ratio | p-value |
| Quartile 1 : Quartile 1 (reference) | (1.00) | |
| Quartile 2 : Quartile 2 | 0.89 | 0.42 |
| Quartile 3 : Quartile 3 | 1.13 | 0.57 |
| Quartile 4 : Quartile 4 | 1.09 | 0.54 |
| Different quartiles at baseline and 1 year later | 0.88 | 0.35 |

# Patient Experiences and Mortality: *Significant for Only One Item*

| Patient Care Experience Items | All-Cause Mortality | |
|---|---|---|
| | Hazard Ratio | p-value |
| Rating of healthcare 9-10 vs 0-8 | 1.10 | 0.15 |
| Listen carefully to you † | 0.98 | 0.76 |
| Show respect for what you had to say † | 1.05 | 0.44 |
| Explain things in a way that is easy to understand † | 1.09 | 0.17 |
| Spend enough time with you † | 1.17 | 0.03 |

† "Always" versus "Never"/"Sometimes"/"Usually"

# Thank you.


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*@RonDHays (twitter)*

**Powerpoint file at:**
http://gim.med.ucla.edu/FacultyPages/Hays/

# Is Receiving Better Technical Quality of Care Bad for Health?

Change in SF-12 PCS regressed on process of care aggregate


Hypothesized positive effect, but regression coefficient was NOT SIGNIFICANT

unstandardized beta = -1.41, p =.188

*Kahn et al. (2007), Health Services Research, Article of Year*