Website Display of Summary Ratings

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- Young Joo, HCQCC policy intern
- Afsana Akhter & Medullan

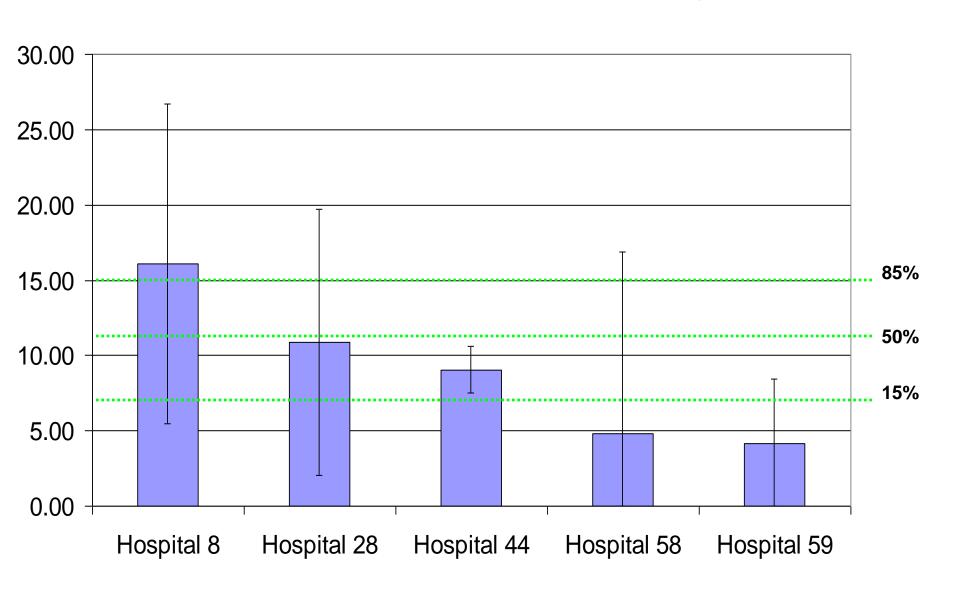
Review

- Many options exist for summary data display
- Summary, or simplified, display intended to ensure information is understandable to average consumer
- Interest by Council in reducing risk of misclassification
 - By reducing the number of rating categories
 - By applying a statistical comparison

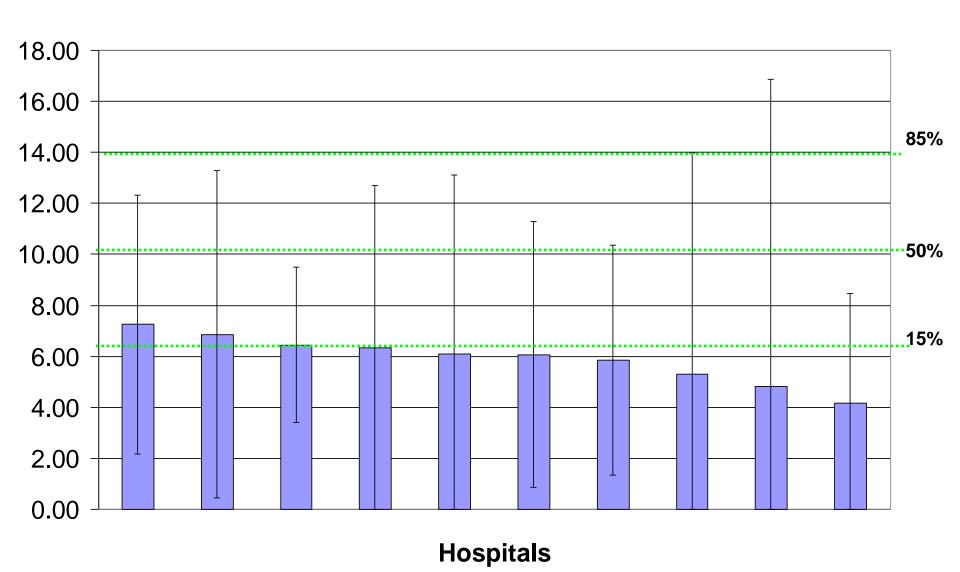
Review

- Communication & Transparency Committee reviewed 4 specific options, using actual data:
 - Option 1 4 categories based on percentile ranking (15th/50th/85th percentiles as dividing points)
 - Option 2 3 categories based on percentile ranking (15th/85th percentiles as dividing points)
 - Option 3 3 categories based on 95% confidence intervals
 - Option 4 3 categories based on 68% confidence intervals (equal to 1 standard deviation)

Example: Issues of Percentile Rank vs. Confidence Intervals (for Stroke Mortality)



Top 10 Hospitals for Stroke Mortality with 95% confidence intervals



Respiratory: Pneumonia

Option 3: 95% CI

8	Hospital 21	Hospital 22	Hospital 38	Hospital 42	State Wide
95% CI	南南	盦	命合合	南 南	
Provided Recommended Care (higher is better)	88.1%	88.4%	92.3%	92.5%	90.4%
Volume	407	2049	1557	1081	

Hybrid Option 2: 15/85 with 95% CI

	Hospital 21	Hospital 22	Hospital 38	Hospital 42	State Wide
15/85	会会	会会	会会	南南	
Statistical Significance		1	1		
Provided Recommended Care (higher is better)	88.1%	88.4%	92.3%	92.5%	90.4%

Hybrid Option 1: 15/50/85 with 95% CI

2000	Hospital 21	Hospital 22	Hospital 38	Hospital 42	State Wide
15/50/85	会会	食食	由会会	食食食	
Statistical Significance		1	4		
Provided Recommended Care (higher is better)	88.1%	88.4%	92.3%	92.5%	90.4%

Approved by Committee

Recommendation: Hybrid Method
Display both percentiles and statistical significance based on 95% CI

- Easy to understand; intuitive for non-statisticians
- Maintains rank order
- Mitigates effects of small differences between hospitals
- Allows for indication of statistical significance
- Less discrimination between large and small hospitals

Recommendations

Quality Measure	Hybrid: Percentile Stars + Cl Indicator	Percentile Stars only (CI not available)	Do not display summary rating
 Stroke & Hip Fx mortality Hospital Compare (AMI, CHF, Pneumonia) Leapfrog Patient Safety Practices 	X		
Heart Valve & Wt. Loss Surgery (Leapfrog)Hospital Compare (Patient Experience)		X	
•Mass-DAC (Bypass & Angioplasty)•Hip Replacement Mortality			X

What Will It Look Like?

Most Recent Website Displays

- Hospital Comparison Reports
 - Summary View (Stars, Dollars)
 - Detailed View (Actual Measures/Values)

- Single Hospital Reports
 - Summary View (Stars, Dollars)
 - Detailed View (Actual Measures/Values)

□ Comparison of Providers



Summary Information

About the Provider Patient Safety Patient Experience Surgical Safety

Heart Care

Angioplasty.

Bypass Surgery Cardiac Valve Surgery Heart Attack Heart Failure Stroke

Digestive System

Gall Bladder Intestinal Surgery Weight-loss Surgery

Joint Care

Back Procedure Hip Fracture Hip Replacement Knee Replacement

Heart Care: Angioplasty

Quality and cost of angioplasty varies by hospital. The reason to know about this is that someday you, or someone you care about, may need to decide which hospital to go to for angioplasty. You can make a more informed choice when you know about quality and cost and then discuss this with your doctor, (more)

Diagnostic classification: Percutaneous cardiovascular proc without ami, heart failure or shock (APR-DRG 175)

Quality of Care (show detail)

Delta Community Hospital	Echo Teaching Hospital	Golf Ambulatory Care Center	Kilo Emergency Clinic	Lima Medical Center
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Legend: ☆

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Hospitals have a mortality rate in the bottom 15%. Their mortality rate is worse than 85% of all	
hospitals in the state.	

Hospitals are below average, but not in bottom 15%. Their mortality rate is above 15% but below 50% of all hospitals in the state.

Hospitals perform better than average but are not in the top 15%. Their mortality rate is above 50% but below 85% of all hospitals in the state.

Hospitals have a mortality rate in the top 15%. Their mortality rate is better than 85% of all hospitals in the state.

N/A Not enough information was reported

Cost of Care (show detail)

Delta Community	Echo Teaching	Golf Ambulatory Care	Kilo Emergency	Lima Medical
Hospital	Hospital	Center	Clinic	Center
\$	\$\$\$\$	\$\$\$	\$\$	\$\$\$\$

Rankings based on median amount paid per patient, adjusted for severity of patient illness

Legend:

\$ The hospital is among the least costly. This cost is lower than 85% of all hospitals in the state.
 The hespital cost is help a greage. This post is above 45% but help 50% of all hespitals in the

The hospital cost is below average. This cost is above 15% but below 50% of all hospitals in the **SS** state. The hospital cost is above average. This cost is above 50% but below 85% of all hospitals in the

\$\$\$ \$\$\$\$

The hospital is among the most costly. This cost is higher than 85% of all hospitals in the state.

□ Comparison of Providers

Start a New Search

Summary Information

About the Provider
Patient Safety
Patient Experience

Heart Care

Heart Attack Heart Failure

Stroke

Joint Care

Hip Fracture
Hip Replacement
Knee Replacement

Heart Care: Angioplasty

Quality and cost of angioplasty varies by hospital. The reason to know about this is that someday you, or someone you care about, may need to decide which hospital to go to for angioplasty. You can make a more informed choice when you know about quality and cost and then discuss this with your doctor. (more)

Diagnostic classification: Percutaneous cardiovascular proc without ami, heart failure or shock (APR-DRG 175)

Quality of Care (hide detail)

	Delta Community Hospital	Echo Teaching Hospital	Golf Ambulatory Care Center	Kilo Emergency Clinic	Lima Medical Center	State-wide Average
Death rate (lower is better)	0.7	1.1	1.3	0.9	0.8	1.0

MA Division of Health Care Finance and Policy and the US Agency for Healthcare Research and Quality, 2006

Cost of Care (hide detail)

	Delta Community Hospital	Echo Teaching Hospital	Golf Ambulatory Care Center	Kilo Emergency Clinic	Lima Medical Center	State-vvide Average
Median cost (lower is better)	\$6,000	\$10,000	\$8,000	\$7,000	\$9,500	\$8,000
High cost (seventy-fifth percentile)	\$9,000	\$15,000	\$12,000	\$10,500	\$ 14,250	\$12,000
Low cost (twenty-fifth percentile)	\$5,100	\$8,500	\$6,800	\$5,950	\$8,075	\$7,000

Massachusetts Health Care Quality and Cost Council health care claims dataset, 2007

Other Important Factors

	Delta Community Hospital	Echo Teaching Hospital	Golf Ambulatory Care Center	Kilo Emergency Clinic	Lima Medical Center	State-wide Average
Total number of patients (higher is better)	280	350	45	130	675	170
Percent of patients whose severity of						

□ Comparison of Providers



Choose A Topic

Patient Safety
Patient Experience
Surgical Care

Bone and Joint Care

Back Procedure Hip Fracture Hip Replacement Knee Replacement

Digestive System

Gall Bladder Intestinal Surgery Weight-loss Surgery

Heart Care

Angioplasty Bypass Surgery Heart Attack Heart Failure Heart Value Surgery Stroke

Obstetrics

Cesarean Section Normal Newborn Vaginal Delivery

Respiratory

COPD Pneumonia

Heart Care: Angioplasty

Quality and cost of angioplasty varies by hospital. The reason to know about this is that someday you, or someone you care about, may need to decide which hospital to go to for angioplasty. You can make a more informed choice when you know about quality and cost and then discuss this with your doctor.

Diagnostic classification: Angioplasy only (APR-DRG 174); Angioplasty with heart attack, heart failure or shock (APR-DRG175)

Quality of Care

	Alpha Community Hospital	Beta Teaching Hospital	Delta Ambulatory Care Center	Omega Emergency Clinic	Theta Medical Center
	会会会	会会	*	会会会	*
Number of Patients	456	455	76	98	120
Significance	not significant	significant	significant	not significant	not significant

Data provided by Massachusetts Data Analysis Center (Mass-DAC) .

Cost of Care

	Alpha Community Hospital	Beta Teaching Hospital	Delta Ambulatory Care Center	Omega Emergency Clinic	Theta Medical Center
Significance	significant	significant	not significant	not significant	significant

Heart Care Angioplasty Bypass Surgery Heart Attack Heart Failure

Heart Value Surgery

Stroke

Obstetrics

Cesarean Section

Normal Newborn

Vaginal Delivery

Cost of Care

Respiratory COPD

Pneumonia

Radiation Treatment

Radiation Treatment

Outpatient Diagnostic Procedure

Cardiac Testing CT Scan Mammogram MRI Ultrasound

X-ray

Not Below Above Different Below Above Statistical Average from Average Average Average Significance Quality Quality Quality Quality Average Quality

Data provided by Massachusetts Data Analysis Center (Mass-DAC).

Alpha Beta Delta Omega Theta Medical Ambulatory Community Teaching Emergency Center Hospital Hospital Care Center Clinic

\$\$\$ \$5 555 **\$**\$\$ Above Not Different Above Below Above Statistical Average Average Average Average from Average Significance Cost Cost Cost Cost Cost

Alpha Community Beta Teaching Delta Ambulatory Omega Theta Medical Hospital Care Center **Emergency Clinic** Hospital Center remove remove remove remove remove

Legend

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Hospitals are below average, but not in bottom 15%. Their rate is above 15% but

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Hospitals perform better than average but are not in the top 15%. Their rate is above 50% but below 15% of all hospitals in the state.

Hospitals have a rate in the top 15%. Their rate is better than 85% of all hospitals in the state.

Not enough information was reported.

N/A

Insert Text Here that explains what 'Above Average Quality' means. Above Average Quality

Insert Text Here that explains what 'Below Average Quality' means. Below Average Quality

Draft Legend Text - Quality

Quality of Care

- Above Average Quality: It is 95% certain that the hospital's performance is above the median state performance.
- Not Different from Average Quality: The hospital's performance is within the average range. Even if the hospital's score is high or low, it is not 95% certain that the hospital's performance is truly different from the median state performance.
- Below Average Quality: It is 95% certain that the hospital's performance is below the median state performance.

Draft Legend Text - Cost

Cost of Care

- Above Average Cost: It is 95% certain that the hospital's cost is above the median state cost.
- Not Different from Average Cost: The hospital's cost is within the average range. Even if the hospital's cost is high or low, it is not 95% certain that the hospital's cost is truly different from the median state cost.
- Below Average Cost: It is 95% certain that the hospital's cost is below the median state cost.

Today's Recommendation to Council

 Adopt Hybrid method and design as presented