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Disclaimer: All information presented at this conference is the express opinion of the presenters, moderators and/or participants regarding various subjects of healthcare policy, patient engagement, value purchasing and healthcare overutilization.

JUDGING THE QUALITY OF HEALTHCARE

- Many methods are now used to judge healthcare quality. These methods give different results and use different types of measurements.

STRUCTURE MEASURES

- The facility has the needed resources to deliver the care. Examples of these include
 - Nursing Turnover Rate.
 - Nurse Practice Environment.

STRUCTURE MEASURES

Table 2. Examples of Nursing Sensitive Structure Measures

| Measure | NQF measure reference number | NDNQI-endorsed indicator |
|---|------------------------------|--------------------------|
| Voluntary turnover rate (nurse retention) | 207 | x |
| RN, LPN, and UNA skill mix | 204 | x |
| Practice Environment Scale | 206 | x |
| Nursing hours supplied by temporary staff | | x |
| Hours of nursing care per patient day | 205 | x |

Note. NQF = National Quality Forum; NDNQI = National Database of Nursing Quality Indicators; RN = registered nurse; LPN = licensed practical/vocational nurse; UNA = unlicensed nursing assistant.

STRUCTURE MEASURES

KEY

| | |
|--------------------------|--|
| Better than U.S. average | # = too few eligible cases to calculate a reliable statistic |
| Near U.S. average | <i>italics</i> = no comparative data |
| Worse than U.S. average | blank = does not apply |
| | *0* or *100* = best score possible |

Desired performance
 Norton Audubon Hospital
 Norton Brownsboro Hospital
 Norton Hospital
 Norton Suburban Hospital
 Kosair Children's Hospital
 Norton Healthcare
 Kentucky
 U.S.

| Nursing staff turnover - percent of nursing staff who choose to leave each year | | | | | | | | | | |
|---|------|------|------|-------|-------|------|-------|--|--|--|
| RN | low | 4.65 | | 7.18 | 8.06 | 3.98 | 6.01 | | | |
| LPN | low | *0* | | 20.83 | # | # | 12.31 | | | |
| UAP | low | 8.77 | | 9.77 | 10.43 | 9.09 | 9.57 | | | |
| RN survey - practice environment scale | | | | | | | | | | |
| avg. nurse answer 1-4 survey, all questions | high | 2.92 | 3.03 | 2.88 | 2.90 | 2.97 | 2.92 | | | |
| avg. nurse answer 1-4 survey, participation subscale | high | 2.94 | 3.01 | 2.86 | 2.84 | 2.94 | 2.89 | | | |
| avg. nurse answer 1-4 survey, foundations subscale | high | 3.06 | 3.13 | 3.02 | 3.03 | 3.11 | 3.06 | | | |
| avg. nurse answer 1-4 survey, leadership subscale | high | 2.96 | 3.23 | 2.86 | 2.94 | 2.95 | 2.93 | | | |
| avg. nurse answer 1-4 survey, staffing subscale | high | 2.73 | 2.77 | 2.74 | 2.70 | 2.77 | 2.74 | | | |
| avg. nurse answer 1-4 survey, MD collaboration subscale | high | 2.92 | 3.00 | 2.89 | 3.00 | 3.04 | 2.97 | | | |
| Miscellaneous | | | | | | | | | | |
| Is the hospital in a clinical database registry for nursing care? | high | yes | yes | yes | yes | yes | yes | | | |

Figure 1. Public reporting of structure measures by Norton Healthcare.

PROCESS MEASURES

- These measures are debated with many recent articles showing a poor correlation with overall quality.

Jha A K, Joynt KE, Orav EJ & Epstein AM. The long-term effect of premier pay for performance on patient outcomes. *New England Journal of Medicine*, 2012::366(17), 1606-1615.

Ingraham AM, Cohen ME, Bilimoria KY, Dimick JB, et al. Association of surgical care improvement project infection-related process measure compliance with risk-adjusted outcomes: Implications for quality measurement. *Journal of the American College of Surgeons*, 2010:211(6), 705-714.

Ryan AM, Nallamotheu BK, & Dimick JB. (2012). Medicare's public reporting initiative on hospital quality had modest or no impact on mortality from three key conditions. *Health Affairs*, 2012:31(3), 585-592.

OUTCOME MEASURES

- Infections
- Pressure Sores
- Mortality

These are highly dependent upon proper staffing.

OUTCOME MEASURES

Table 1. Examples of Nursing-Sensitive Outcome Measures and the Estimated Annual Cost for the Adverse Events in Hospitals That These Measures Are Designed to Decrease

| Outcome measures | NQF-endorsed measure reference number* | NDNQI indicator | CMS VBP | Annual cost of adverse events in hospitals |
|-----------------------------------|--|-----------------|---------|--|
| Infections | | | | |
| SSIs | 130 and 753 | | x | \$3.45–10.07 billion (U.S. cost; Scott, 2009) |
| VAP | 140 | x | | \$1.03–1.50 billion (U.S. cost; Scott, 2009) |
| CLABSIs | 139 | x | x | \$0.67–2.68 billion (U.S. cost; Scott, 2009) |
| CAUTIs | 138 | x | x | \$0.39–0.45 billion (U.S. cost; Scott, 2009) |
| Decubitus ulcers, Stage III and V | 337 | x | x | \$11.11 billion (Medicare cost; CMS, 2008) |
| Falls and falls with injury | 141 and 202 | x | x | \$6.56 billion (Medicare cost, including burns; CMS, 2008) |
| Failure to rescue | 352 and 353 | | | |
| Patient mortality | 231, 343, 347, 358, 530, 703, 730, and 733 | | x | |
| Length of stay in ICU | 702 | | | |
| Readmissions | 1768, 1551, 330, 335, 505, 506, and 695 | | x | \$15 billion (Medicare cost, Hackbarth, 2009) |

Note. NQF = National Quality Forum; NDNQI = National Database of Nursing Quality Indicators; CMS = Centers for Medicare and Medicaid Services; VBP = value-based purchasing; SSI = surgical site infection; VAP = ventilator-associated pneumonia; CLABSI = central line-associated bloodstream infection; CAUTI = catheter-associated urinary tract infection; ICU = intensive care unit. *Additional metrics than those listed have been defined by NQF.

Kavanagh KT, Cimiotti JP, Abusalem S, Coty MB. Moving Healthcare Quality Forward With Nursing-Sensitive Value-Based Purchasing. *J Nurs Scholarsh.* 2012 Oct 15. doi: 10.1111/j.1547-5069.2012.01469.x. [Epub ahead of print]

CONSUMER UNION

- ◉ Ranking method includes “as many hospitals as possible, areas that **had the greatest effect on patient safety**, measures that were focused on outcomes, instead of processes...”
- ◉ Rankings include infections, readmissions, unnecessary testing and communication with patients.

Source: Ashish Jha. Hospital rankings Get Serious.
An Ounce of Evidence | Health Policy Blog. Aug 14, 2012

Consumer Reports accompaniment to “Hospital Rankings Get Serious. Aug 14, 2012. John Santa, MD, MPH.

LEAPFROG GROUP

- ◉ Focuses on chances of getting hurt or killed in a facility from adverse events.
- ◉ Composite Safety Score: Comprises Infections, Staffing, and Structure Measures.

Source: Ashish Jha. Hospital rankings Get Serious.
An Ounce of Evidence | Health Policy Blog. Aug 14, 2012

US NEWS & WORLD REPORT

- Based 32.5% On Reputation.
- 5% on Patient Safety.
- Survival Scores 32.5%.
- Other Care Related Indicators 30% (Technology, Nurse Staffing).

<http://health.usnews.com/health-news/best-hospitals/articles/2012/07/16/best-hospitals-2012-13-how-they-were-ranked?page=2>

COMPARISON - RANKING SYSTEMS

| | Consumer Reports | | Leapfrog | | US News |
|---------------------------|---------------------------|--------------------------|------------------------------------|-------------------------|---------------------------------|
| | Worst N=287 (25.0%) | Best N=286 (25.0%) | "C" or worse N=1,159 (46.8%) | "A" N=682 (27.5%) | Top Hospitals* N=67 (100.0%) |
| Small Size | 7% | 13% | 20% | 22% | 0% |
| Medium Size | 66% | 70% | 59% | 61% | 8% |
| Large Size | 28% | 16% | 20% | 17% | 93% |
| Northeast Region | 31% | 19% | 18% | 20% | 24% |
| Midwest Region | 26% | 36% | 21% | 25% | 33% |
| South Region | 21% | 15% | 40% | 34% | 31% |
| West Region | 22% | 30% | 21% | 21% | 12% |
| Major Teaching | 24% | 7% | 12% | 12% | 93% |
| Minor Teaching | 24% | 35% | 27% | 28% | 6% |
| Not Teaching | 52% | 56% | 61% | 61% | 2% |
| Safety-net Hospital | 43% | 13% | 31% | 19% | 46% |
| Proportion Black Patients | 16% | 5% | 11% | 9% | 16% |

*In the specialties of cardiology and pulmonology

Note: 99% of facilities which received a Top Hospital ranking in Cardiology and Pulmonology by US News and World report were Major or Minor Teaching Hospitals.

Source: Ashish Jha. Hospital rankings Get Serious.
An Ounce of Evidence | Health Policy Blog. Aug 14, 2012

HOSPITAL COMPARE

- ◉ The User Can Compare
 - Outcome Measures (Infections & Mortality).
 - Process Measures.
 - Readmissions.
 - Patient Survey.
- ◉ Can compare individual hospitals. Most results are also related to the national average.
- ◉ Infections are related to an SIR and “National Benchmark” the accuracy of which is in question and a topic for a presentation later today.

VALUE PURCHASING

- ◉ Obtaining the best healthcare at an affordable cost.
- ◉ The Center's for Medicare and Medicaid (CMS) are actively involved in this process.

CMS- VALUE PURCHASING

- For 2013:
 - 30% HCAHPS (Patient Survey).
 - 70% Process Measures.

Weight Given To Measure



CMS- VALUE PURCHASING

2014 Measures Will Comprise Of:

- - 13 Core Measures
- - 8 HCAHPS
- - 3 Mortality
- - 8 Hospital Acquired Conditions
- - 2 Composite PSI
- - 1 Efficiency (cost per beneficiary)

CMS- VALUE PURCHASING

Efficiency Domain: 20%

Patient Experience Domain: 30%

Outcomes Domain: 30%

Clinical Process Domain: 20%

Domain Weighting

