DATA CONSISTENCY INITIATIVE 2016

Our role: to ensure data supports our members to prevent patient harm
Authorization: NMHA Board Quality Committee Recommendation December 2015

Representatives:
Artesia
Eastern New Mexico Medical Center (CHS)
Gerald Champion
Holy Cross Taos
Lovelace
Memorial Medical Center (LP)
Presbyterian
University of New Mexico Hospital
Hospitals collect myriad quality indicators

- Many member hospitals have a zero error rate for select quality indicators.
- Effectiveness of improvement efforts is limited.
- Difficult to showcase in our state individual and members successes due to reporting differences in measure specifications. Different denominators become “apples and oranges”

Example:
- 13 different definitions of Adverse Drug Event
- 2 different denominators for CAUTI, CLABSI (device days vs. pt days)
WIIFM?
*(what’s in it for me?)*

**ARE YOU GOOD, ARE YOU LUCKY, OR ARE YOU JUST NOT LOOKING??**

**OUR PATIENTS COUNT ON US TO BE SAFE IN OUR HOSPITALS**

**WILL YOU BE THEIR CHAMPION?**
• SNCP Hospital Quality Improvement Incentive (HQII) program (29 hospitals)
  - funding allocations based on improvements from baseline. Original intent of payment based on *high* vs *low* performing hospitals compared to state/national average – currently not possible for several measures***
  - Due to inconsistent technical specs for measures, difficult to measure improvement
• CMS Partnership for Patients Hospital Engagement Network
  - Standardization, reporting, and improvement of these measures is an expectation of participation in the initiative.
APPLICABILITY?

- Voluntary for all NM hospitals
- Affects funding or penalties for many NM acute care hospitals (CAHs excluded from some measures)
- Falls, CAUTIs, Adverse Drug Events applicable for specialty hospitals (behavioral health, long-term acute care, acute rehabilitation)

CAN WE IMPROVE FURTHER AND FASTER?
Already required for quality improvement reporting: Aligns with most Value Based Purchasing, Readmission Reduction, Hospital Acquired Condition, IP Quality Report

How Quality Impacts Your Bottom Line

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Measures selected are available through New Mexico Dept. of Health Hospital Inpatient Discharge Data (use definitions from Agency for Healthcare Research and Quality AHRQ, National Healthcare Safety Network NHSN, or Hospital Compare)

http://www.qualityindicators.ahrq.gov/
www.cdc.gov/nhsn

Exception: Adverse Drug Events ...more on that later
Selected Quality Measures

1. Adverse Drug Events (self report)
2. Catheter Associated **Urinary Tract Infections** (CAUTI) *(NHSN)*
3. **Central Line Associated Blood Stream Infections** *(NHSN)*
4. Injuries from **Falls** and Immobility Rate *(HIDD)*
5. **Obstetrical Adverse Events** Rate (OB vaginal laceration w/ and w/o instrumentation *(HIDD)*
6. **Pressure Ulcers** 3+ Rate *(HIDD)*
7. **Surgical Site Infections** *(NHSN)*
8. **Venous Thromboembolism/Post-Op PE Rate** *(HIDD)*
9. **Ventilator** Associated Events *(NHSN)*
10. All Cause **Readmissions** Rate *(HIDD)*
1. Adverse Drug Events

• Lacks a national definition
• Most problematic for comparison or improvement
• If CMS develops standard measure, hospitals will eventually have compliance requirement
1. Adverse Drug Events

DATA COLLECTION METHOD: Self-report

A. Hypoglycemia in Inpatients Receiving Insulin
Numerator – Hypoglycemia in inpatients receiving insulin or other hypoglycemic agents
Denominator - Inpatients receiving insulin or other hypoglycemic agents

Rate = \frac{\text{Numerator}}{\text{Denominator} \times 100}

Plasma glucose <50, but each hospital may identify their own as long as they are consistent – Partnership for Patients
1. Adverse Drug Events (cont.)

B. Adverse Drug Events due to Opioids
Numerator – number of patients treated with opioids who received naloxone
Denominator - number of inpatients who received an opioid agent

Rate = \frac{\text{Numerator}}{\text{Denominator}} \times 100 \text{ patients}

C. Excessive anticoagulation with Warfarin – Inpatients
Numerator – Inpatients experiencing excessive anticoagulation with warfarin
Denominator - Inpatients receiving warfarin anticoagulation therapy

Rate = \frac{\text{Numerator}}{\text{Denominator}} \times 100

Resources online at the following link:

INR >5, but each hospital may identify their own as long as they are consistent – Partnership for Patients
2. Catheter-Associated Urinary Tract Infections (CAUTI) (NHSN)

Numerator – total number of observed healthcare associated CAUTI among patients in bedded inpatient locations
Denominator - total number of indwelling urinary catheter days for each location under surveillance for CAUTI

Rate = \( \frac{\text{Numerator}}{\text{Denominator} \times 1,000} \)

Specifications available from
http://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf
3. Central Line Associated Blood Stream Infections (CLABSI) (NHSN)

Numerator – total number of observed healthcare associated CLABSI among patients in bedded inpatient locations
Denominator - total number of central line days for each location under surveillance for CLABSI

Rate = \frac{\text{Numerator}}{\text{Denominator} \times 1,000}

Specifications available from
4. Injuries from Falls and Immobility/Trauma HAC 05 CMS (HIDD)

Numerator – total number of hospital acquired occurrences of fracture, dislocation, intracranial injury, crushing injury, burn and other injury (codes within the CC/MCC list)
Denominator - inpatient discharges
Rate = \[
\frac{\text{Numerator}}{\text{Denominator}} \times 1,000
\]

https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Hospital-Acquired_Conditions.html

NOTE: PFP HEN measure is different: NQF 0202 – manual data collection or other surveillance system
5. Obstetrical Adverse Events (HIDD)

OB Trauma – Vaginal Delivery with Instrumentation PSI 18

Numerator – discharges, among cases meeting the inclusion and exclusion rules for the Denominator, with any listed diagnostic codes for third and fourth degree obstetric trauma

Denominator - all vaginal delivery discharges with any procedure code for instrument-assisted delivery

Rate = \[
\text{Numerator} \div \text{Denominator} \times 1,000
\]

Specifications available from

5. Obstetrical Adverse Events (HIDD)

OB Trauma – Vaginal Delivery without Instrumentation PSI 19
Numerator – discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any listed diagnostic codes for third and fourth degree obstetric trauma
Denominator - vaginal deliveries identified by DRG or MS-DRG code

Rate = Numerator
Denominator x 1,000

Specifications available from
6. Pressure Ulcers Stage III & IV rate PSI 3 (HIDD)

Numerator - discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM or ICD-10-CM diagnosis codes for pressure ulcer and any secondary ICD-9-CM or ICD-10-CM diagnosis codes for pressure ulcer stage III or IV (or unstageable).

Denominator – inpatient adult discharges

Rate = Numerator
Denominator x

Specifications available from
7. Surgical Site Infections (NHSN)

Colon, abdominal hysterectomy, total knee replacement, or total hip replacements

Numerator – total number surgical site infections based on CDC NHSN definition
Denominator - all patients having any of the procedures included in the selected NHSN operative procedures category(s)

Rate = \( \frac{\text{Numerator}}{\text{Denominator}} \times 100 \)

8. **Venous Thromboembolism (VTE)**

**post-operative PSI 12 (HIDD)**

Numerator – Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with a secondary ICD-9-CM diagnosis code for deep vein thrombosis or a secondary ICD-9-CM diagnosis code for pulmonary embolism.

Denominator - all patients having any of the *procedures included in the selected NHSN operative procedures category(s)*

Rate = \[
\frac{\text{Numerator}}{\text{Denominator} \times 1,000}
\]

9. Ventilator –Associated Events  (NHSN)

**Ventilator Associated Condition (VAC)**
Numerator – number of events that meet the criteria of VAC; including those that meet the criteria for infection-related ventilator associated complication (IVAC) and possible/probable ventilator-associated pneumonia (VAP)
Denominator - number of ventilator days

Rate = \[
\frac{\text{Numerator}}{\text{Denominator} \times 1,000 \text{ vent days}}
\]

**Infection-Related Ventilator Associated Complication (IVAC)**
Numerator – number of events that meet the criteria of infection-related ventilator-associated condition (IVAC); including those that meet the criteria for possible/probable ventilator-associated pneumonia (VAP)
Denominator - number of ventilator days

Rate = \[
\frac{\text{Numerator}}{\text{Denominator} \times 1,000}
\]


*NOTE: VAE is currently not included in CMS Hospital Inpatient Quality Reporting. Current NHSN recommendations for “appropriate public reporting” include*
- Overall VAE rate = rate of all events meeting at least the VAC definition
- “IVAC –plus” rate = rate of ALL events meeting at least the IVAC definition

According to NHSN, only 44% of the experts can correctly identify a VAE/IVAC/VAC, PVAP
10. All Cause Preventable Readmissions (NQF 1789) (HIDD)

Numerator - inpatient admission to any acute care facility which occurs within 30 days of the discharge date of an eligible index admission. All readmissions are counted as outcomes except those that are considered planned.
Denominator – adult admissions to acute care facility (minus Denominator exclusions)

Rate = \frac{\text{Numerator}}{\text{Denominator} \times 100}
Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

*Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?*

**Advantages:**
- All acute care hospitals (CAHs too) eligible, not limited to Medicare patients
- Publicly available within the past year; hospitals may get soon after end of each quarter
- Standard definitions, easily comparable from year to year.
- NOT designed for *intra-hospital* comparison, only for *inter-hospital* comparison
- CMS uses in VBP calculation and in determination of STAR ratings.
Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?

Disadvantages:
-mode bias issues
-controversy about whether surveys themselves lead to better hospitals and care; some questions out of a hospital’s control; is our goal to “make patients happy” or “do the right thing?”
-some hospitals cannot reach statistical reliability (at least 300 per 12 mo. period)
How Could Hospital Data Be Used?

- Aggregate data to show improvement (more timely than Hospital Compare or HCAHPs)
- Not used as facility-level data without hospital permission (i.e. could be used to support Hospital Quality Improvement Incentive Data submission for 29 SNCP hospitals)
- Analyze overall data to establish goals for state-wide improvement initiatives
Questions and Issues??

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