



*Agency for Healthcare Research and Quality*

*Advancing Excellence in Health Care*

[www.ahrq.gov](http://www.ahrq.gov)

# **AHRQ Quality Indicator Software Version 4.1 – Additional Detail**

Jeffrey Geppert, EdM, JD, Battelle Memorial Institute

John Bott, MSSW, MBA, Contractor, Agency for Healthcare Research and  
Quality

**January 25 and 27, 2010**

**2:00 to 4:00 pm ET**

**Toll Free: 1-877-939-8827; Passcode AHRQ QI**



# Agenda

- Tracking the indicators
  - What indicators were added, deleted, re-named, moved or materially refined
- Incorporating new data elements
  - POA and point of origin
- Incorporating new codes
  - ICD-9-CM and MS-DRG
  - Special emphasis: pressure ulcers and central venous catheter-related bloodstream infections



# Agenda (continued)

---

- Incorporating new data
  - Using a one-year reference population
  - Applying the software using more recent data



# Tracking the Indicators

- Indicators that were added
  - Neonatal Quality Indicators
    - NQI #2 - Neonatal Mortality
    - NQI #3 - Bloodstream infection in neonates
- Indicators that were deleted
  - Patient Safety Indicators
    - PSI #1 - Complications of anesthesia
    - PSI #20 - OB Trauma: Cesarean Delivery
- Indicators that were re-named
  - Patient Safety Indicators
    - PSI #3 – Decubitus Ulcer → Pressure Ulcer



# Tracking the Indicators

- Indicators that were re-named (continued)
  - Patient Safety Indicators
    - PSI #7 – Selected Infection due to Medical Care → Central Venous Catheter-related bloodstream infections
- Indicators that were re-named and moved
  - Pediatric Quality Indicators
    - PDI #4 – Iatrogenic Pneumothorax in Neonates → NQI #1 in the Neonatal Quality Indicators



# Tracking the Indicators

- Indicators that were moved (SAS Only)
  - Patient Safety Indicators
    - PSI #17 – Birth Trauma: Injury to Neonate
  - Prevention Quality Indicators
    - PQI #9 – Low Birth Weight
- No change to the Windows application (WINQI)
  - Indicators appear in the same module “tab” as in Version 3.2



# Tracking the Indicators

- Indicators that were materially refined
  - Inpatient Quality Indicators
    - IQI #1 and #8 – Esophageal Resection Volume and Mortality
      - ◆ New Code (43.99)
  - Patient Safety Indicators
    - PSI #3 – Pressure Ulcer
      - ◆ New Staging Coding (I-IV)
    - PSI #7 – Central Venous Catheter-related bloodstream infections
      - ◆ New Code (999.31)



# Incorporating New Data Elements

- Present on Admission (POA)
  - UB-04 Coding (FL 67)
    - Y – Present on admission
    - N – Not present on admission
    - U – Unknown, not documented
    - W – Clinically undetermined
    - E – Exempt





# Incorporating New Data Elements

- Point of Origin (FL 15)
  - When Admission Type is not “newborn”
    - 4 – Transfer from a Hospital
    - 5 – Transfer from a Skilled Nursing Facility (SNF)
    - 6 – Transfer from another Health Care Facility
  - When Admission Type is “newborn”
    - 4 – Not used
    - 5 – Born inside this Hospital
    - 6 – Born outside of this Hospital



# Incorporating New Codes

- Incorporating new codes
  - ICD-9-CM
  - MS-DRG
    - CMS no longer supports Version 24 (CMS-DRG)
- The AHRQ QI team proposed coding changes & clarifications to ICD-9 to enhance accuracy & use of some indicators
  - Retinopathy of prematurity
  - Necrotizing enterocolitis
  - Disruption of postoperative wound
  - Deep vein thrombosis
  - Transfusion reaction



# Incorporating New Data

- Using a one-year reference population
  - 2007 State Inpatient Data
    - Adult has 27,369,746 observations
    - Pediatric has 5,546,905 observations
    - Pediatric defined as age < 18 and MDC not 14
- Applying the software to a “population of interest”
  - Different years
  - Different population
  - Different hospitals



# Version 4.1 – Selected Topics: Approximately monthly webinars

- Draft list of topics
  - Provider level risk-adjustment model
    - Incorporating POA into the outcome of interest and comorbidities
    - What the model does when POA is not available
    - Accounting for bias and uncertainty
  - Using the AHRQ QI composites
  - Using the area-level AHRQ QIs
  - Update: NQF and CMS
  - Planned future development
  - Other ideas? At this time (next slide), or via email:
    - [support@qualityindicators.ahrq.gov](mailto:support@qualityindicators.ahrq.gov)



# For more information...

## AHRQ QIs

- Web site: <http://qualityindicators.ahrq.gov/>
  - AHRQ QI documentation and software are available at the AHRQ QI web site
  
- Staff:
  - Mamatha Pancholi
    - [Mamatha.Pancholi@ahrq.hhs.gov](mailto:Mamatha.Pancholi@ahrq.hhs.gov)
  - John Bott
    - [John.Bott@ahrq.hhs.gov](mailto:John.Bott@ahrq.hhs.gov)

# Questions?

