#### Performance Report Overview



### Background

- Accurate, reliable data is the cornerstone of every successful surgical collaborative
  - Identify problems by assessing current performance and identifying gaps
  - Enables accurate assessment of change on pre-determined performance measures
  - Allows for continued assessment of sustained improvement



#### Outcome-Based Quality Improvement



OF WISCONSIN

Adapted from Centers for Medicare and Medicaid Services, Outcome-Based Ouality Improvement (OBOI) Manual, 2010.

# Assessing Data Needs for SCW Projects

- Assess data elements/measures needed to accurately measure performance and judge improvement for specific project
- Determine number of cases over measurement period to produce robust estimates (min of 10/yr)
- Available Data
  - Must be accurate, reliable, timely
  - Must be measured consistently to capture current state & improvements
  - Minimize data collection burden



#### Wisconsin Health Information Organization (WHIO)

"Dedicated to improving the quality, affordability, safety and efficiency of health care in Wisconsin"

Contribution to SCW:

- All-payer claims database (Commercial, Medicaid FFS, Medicare)
- Includes ~80% of WI population
- Leader in quality measurement and reporting
- Identified Uses: Inpatient/ Outpatient Use (diagnosis & procedure codes); Pharmacy; Comorbidity (important to risk adjustment)

WISCONSIN



Wisconsin Hospital Association (WHA)

"Advocating for the ability of its members to lead in the provision of high quality, affordable, and accessible health care services, resulting in healthier Wisconsin communities."

#### Contribution to SCW:

- Inpatient and outpatient discharge data (quarterly)
- Committed to facilitating collaboration between hospitals
- Identified Uses: Hospital Use Over Time (diagnosis & procedure codes)



# Data Flow for Initial Performance Reports





#### Data Accuracy & Reliability

Type of Measure (Examples)	Hospital Discharge Data (WHA)	Insurance Claims (WHIO)	Primary Data Collection
Surgery	X	X	
Hospital Use (ED; Readmission; Length of Stay)	X	X	
Outpatient Services, including Pharmacy		X	
Complications; SSI; VTE			X
Labs			X



#### **Quality Initiative Timeline**



Importance of Risk & Reliability Adjustment

- Comparing estimates between hospitals or surgeons requires accurately and fairly accounting for differences in
  - Risks of outcomes based on patient population differences ("risk adjustment" for case mix)
  - Number of cases available ("reliability adjustment")



1 complication; 10 patients



1 complication; 50 patients

SURGICAL OLLABORATIVE

#### Performance Report Core Common Elements

- Hospital-level unadjusted and risk- and reliability-adjusted estimates
  - Comparators: All Wisconsin hospitals; SCW participating hospitals; Society-endorsed targets when available
  - Confidence intervals around estimates to facilitate comparisons

WISCONSIN

- Hospital level case volume & brief patient sociodemographic & clinical characteristics
- Graphical representation of the range of performance across hospitals

#### **Performance Report**

**Project:** Reducing Repeat Operations for Women with Breast Cancer

- Measures
  - 60-Day Re-excision Rate
  - Mastectomy Rate





#### **Performance Report**

**Project:** Enhanced Recovery after Colorectal Procedures

#### Measures

- Median/mean length of postoperative stay
- All-cause 30-day readmission
- Predicted probability of prolonged length of stay (>75<sup>th</sup> percentile)





#### Percent with prolonged length of stay

# **Performance Report**

Project: Reducing Opioid Prescribing

- Measures
  - Mean number of hydrocodone, codeine, tramadol, oxycodone, hydromorphone tablets filled postoperatively by procedure
  - Mean morphine equivalent dose (MED) filled within 30 days of procedure

Postoperative MED filled within 30 days





#### Future Report Enhancements

- Confidential surgeon-level reports when possible
- Assessing changes in measures over time
- Assessing potential for secure e-report delivery

