

Analysis of 2015 eCQM Data Submitted

Pioneers in Quality Webinar: Initial Data Analysis
August 23, 2016

Stephen Schmaltz, MPH, PhD
Associate Director, Quality Measurement
Division of Healthcare Quality Evaluation

Roadmap

- ▶ Background
- ▶ Aggregate and hospital-level results with comparisons to chart-based data
- ▶ Summary of reasons for discrepancies
- ▶ Implications for 2016 reporting

Background

- ▶ In 4Q2015, The Joint Commission received eCQM data for the first time
- ▶ 34 hospitals transmitted data using six vendors covering 19 eCQMs (out of 21 available) based on 2015 discharges to meet their 2015 ORYX flexible reporting requirements
 - For 2015 HCOs could send either 1st Quarter 2015 and/or 2nd Quarter 2015 and/or 3rd Quarter 2015 data but majority of data is for 3rd Quarter

Background

- ▶ Of the eCQM data transmitted:
 - 32 transmitted measures in the Emergency Department (ED) measure set (continuous data)
 - 16 transmitted one or more of the following measure sets: Surgical Care (1), Children’s Asthma Care (1), Perinatal Care (7), Stroke (9) and VTE (14) (proportion data)

Background continued

- ▶ In addition 6 hospitals transmitted data for both the eCQM and chart-based stroke measures, giving the opportunity to compare the eCQM and chart data directly for each patient

Prior work on validation of eCQMs

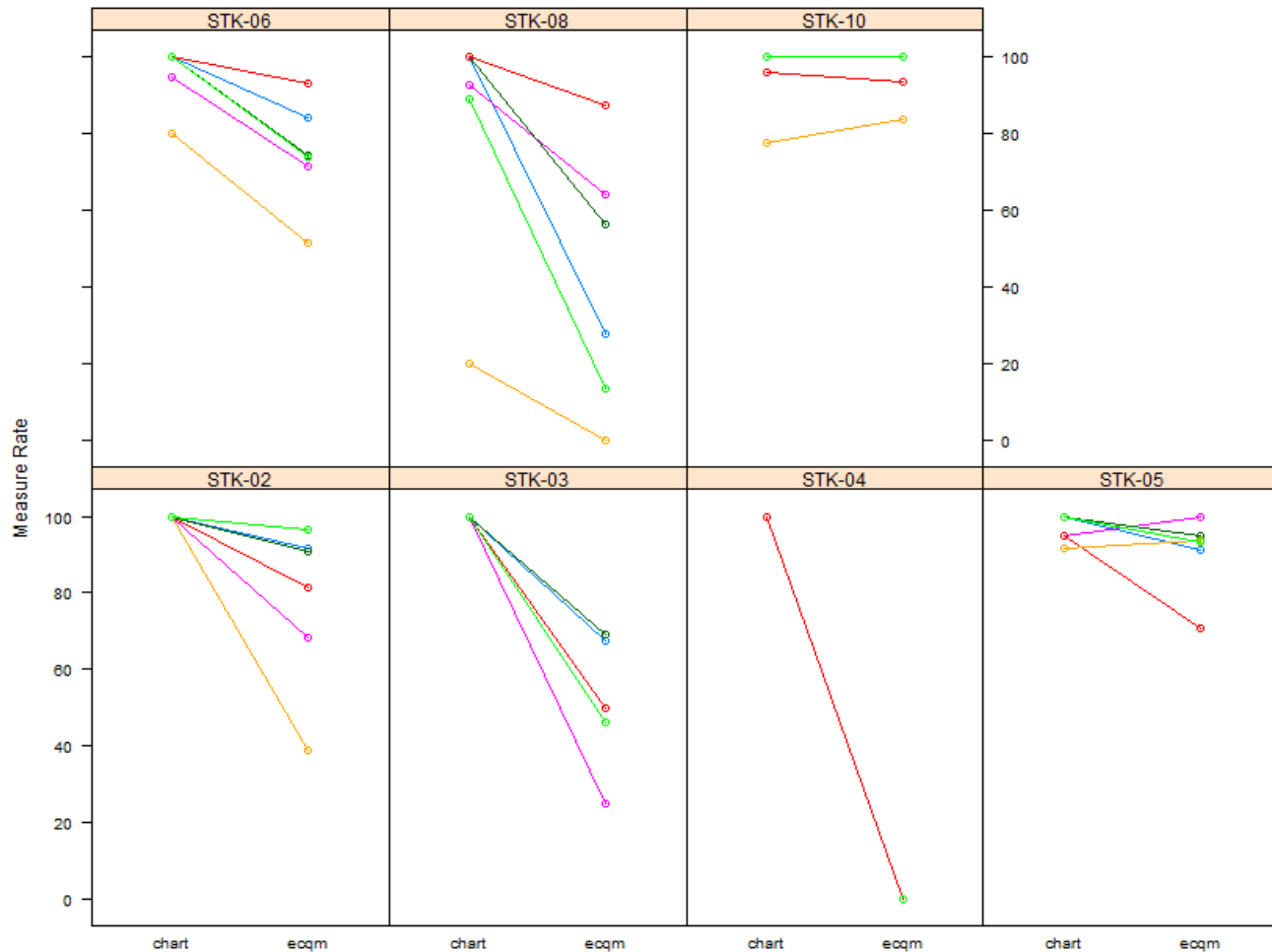
- ▶ In 2015, CMS conducted a validation pilot test for eCQMs, comparing data from the medical record to that obtained from the eCQM
- ▶ Matching rates were less than 50 percent for all of the measures reported, mainly due to data missing in the eCQM rather than actual differences in reported versus abstracted values

Goals of the eCQM data analysis

- ▶ Describe the aggregate eCQM results, comparing them to the aggregate chart-based measures for 3Q2015
- ▶ Compare the stroke eCQM results to the chart-based results for those hospitals transmitting both eCQM and chart data for the same patients
- ▶ Identify underlying causes of the discrepancies

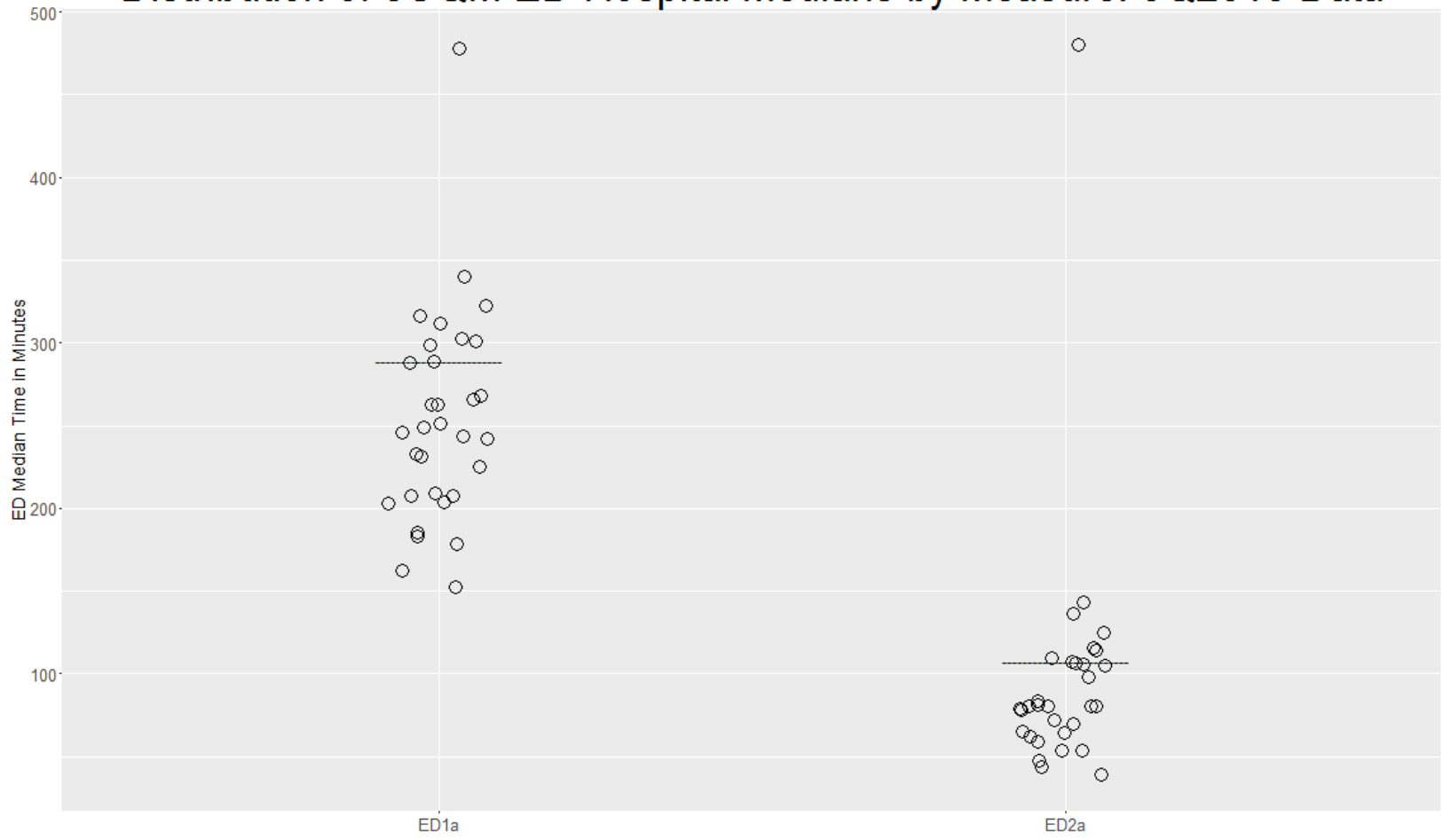
eCQM versus Chart for Stroke Measures

Comparison of Chart and eCQM 3Q2015 Data



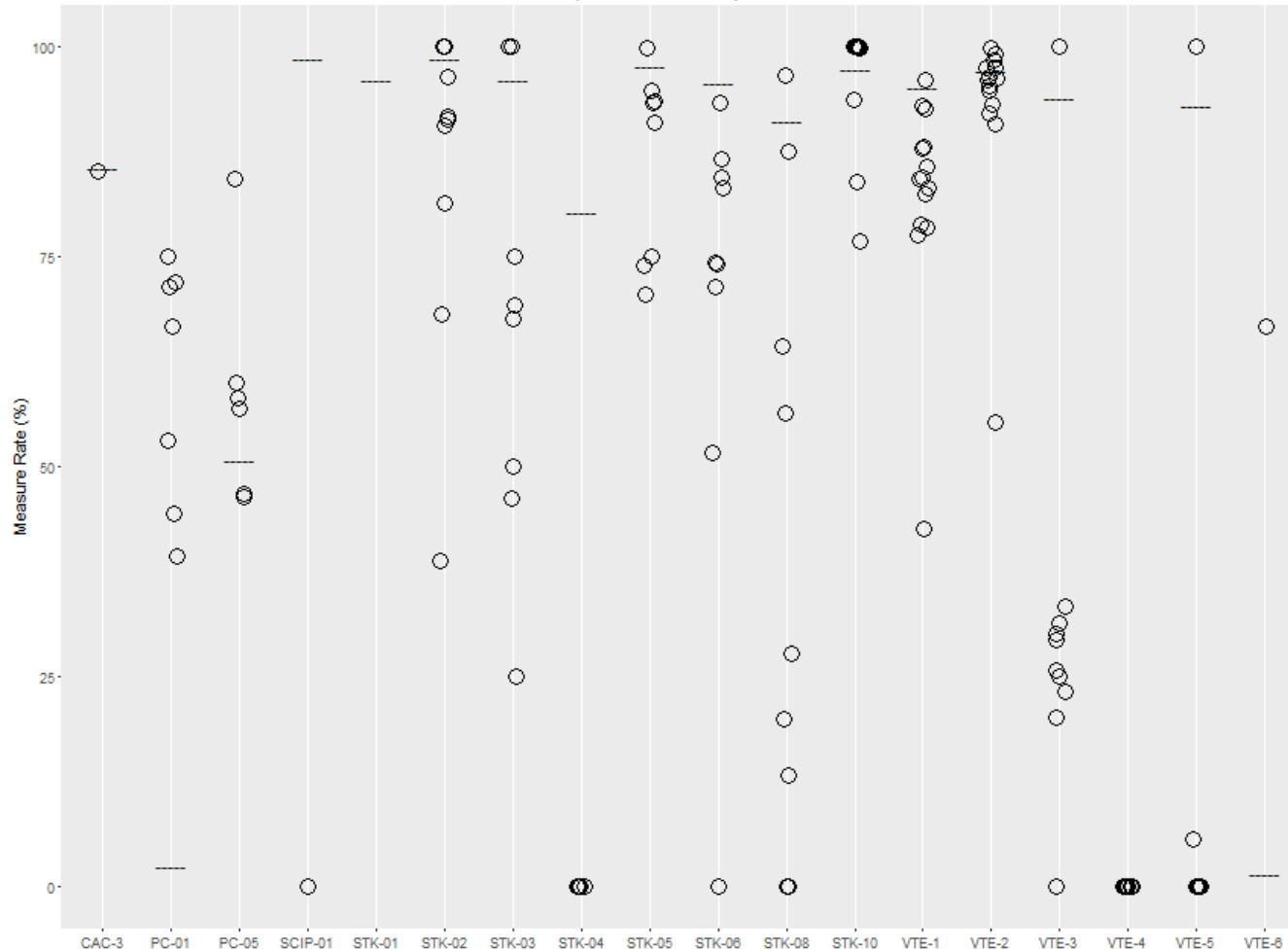
Aggregate results for ED measures

Distribution of eCQM ED Hospital Medians by Measure: 3Q2015 Data



Aggregate results for selected measures: eCQM results do not correspond to those of chart

Distribution of eCQM Hospital Rates for Proportion Measures: 3Q2015 Data



Patient-level Analysis – Stroke measures

- ▶ The chart-based data elements were mapped to equivalent quality data model (QDM) data elements
 - Values for each chart-based data element can then be directly compared to that of its corresponding QDM data element
 - Need to be cautious since the two types of data elements aren't always 1:1

Analysis approach – other measures

- ▶ Using the chart-based patient data from a previous quarter for the same hospital
 - Compare the missing data rates for the chart data elements to the corresponding EDM data elements
 - Compare measure population sizes
 - Using the chart-based measure algorithm, look at exit points and compare to the eCQM

Findings – reasons for discrepancies

- ▶ Missing data/data capture is by far the primary cause of the discrepancies
- ▶ Differences in specifications between the chart-based and eCQM measures
 - Identified a few issues with the specifications that have been corrected for the 2016 version

Differences between eCQM and chart specifications

- ▶ PC-01 (Elective Delivery) is intended to capture births for patients delivering newborns with ≥ 37 weeks and < 39 weeks gestation completed but the eCQM did not include an upper limit for gestation
 - Consequently there were too many cases identified in the numerator and denominator of the eCQM resulting in much higher measure rates
 - This error has been fixed for the most recent version of the PC-01 eCQM specifications

Missing data examples

- ▶ STK-4 (Thrombolytic Therapy)
 - Missing data on medication route
- ▶ VTE-4 (VTE Patients Receiving UFH)
 - Use of wrong template ID: used ID for **Medication Administered** instead of **Medication order**
- ▶ VTE-5
 - **Diagnosis Active** is missing which puts the case in denominator

Missing data

- ▶ eCQM data are not being captured for the stroke and PC measures that we know are being captured in the chart data
- ▶ Chart data has the advantage that the reviewer can find the data in many different places in the medical record, the corresponding eCQM data is only captured from a restricted number of places in the EHR
- ▶ The assumption is made that if the data is missing, the service was not done or the patient does not have the condition

Implications for 2016 data

- ▶ Sending data to The Joint Commission
 - Meets some or all of the hospital reporting requirements
 - Not used for reporting or accreditation
 - Can use trial mode to test data formats, measure calculations, etc.
 - Sending data for both the chart and eCQMs for the same measures gives the opportunity for a detailed data analysis to improve the eCQMs
- ▶ Use of solutions exchange

Questions?

pioneersinquality@jointcommission.org

