



Pioneers in Quality™

The Joint Commission

eCQM Data Submission

October 25, 2016

Mitra Biglari, MS
Project Director

Division of Healthcare Quality Evaluation

Agenda

- 2016 – 2017 ORYX® Requirements
- The Joint Commission eCQM data Submission
 - 2016-2017: Data Submission
 - eCQM Data Expectations
 - eCQM Applications (ePop, eHCD)
 - CMS and The Joint Commission Differences
- 2016 Data: Important Notes
- 2015 Data: Lessons Learned
- Security and Support System

2016 ORYX Requirements

- Measures are selected by Hospitals
- eCQM system is open for trial data submission

2016 Flexible ORYX Performance Measure Reporting Options

<u>OPTION 1</u> → OR → <u>OPTION 2</u> → OR → <u>OPTION 3</u>		
Select and Report Data on:	Select and Report Data on:	Select and Report Data on:
Modified Sets of Chart-Abstracted Measures	eCQM Sets Only	Combination of Chart-Abstracted and eCQM Sets
<ul style="list-style-type: none"> Select and report on six of nine sets of chart-abstracted measures for calendar year 2016 applicable to the services provided and patient populations served by the hospital Perinatal Care will remain required as one of the six sets if applicable, i.e., at least 300 live births per year 	<ul style="list-style-type: none"> Select six of the eight eCQM sets applicable to the services provided and patient populations served by the hospital. Report on either or both 3rd and 4th quarters for calendar year 2016. Data MUST be reported on AT LEAST ONE eCQM in the eCQM SET(s) selected. Perinatal Care will remain required as one of the six sets if applicable, i.e., at least 300 live births per year 	<ul style="list-style-type: none"> Select and report on six sets of measures applicable to the services provided and patient populations served by the hospital Perinatal Care will remain required as one of the six sets if applicable, i.e., at least 300 live births per year Measure sets will be selected from among the available complement of core measure sets (See Options 1 chart-abstracted and 2 eCQM Sets) Hospitals wishing to select this option and that may be interested in reporting on the same set(s) of chart-abstracted and CQMs should contact Frank Zibrat at 630-792-5992 or via e-mail at fzibrat@jointcommission.org See notes under Option 2
Joint Commission Chart Abstraction Measure Sets	Joint Commission eCQM Measure Sets	
ED-1a, ED-2a	eAMI-7a, eAMI-8a	
PC-01, PC-02, PC-03, PC-04, PC-05	eCAC-3	
STK-4	eED-1a, eED-2a	
VTE-5, VTE-6	ePC-01, ePC-05/5a	
IMM-2	eSTK-2, eSTK-3, eSTK-4, eSTK-5, eSTK-6, eSTK-8, eSTK-10	
HBIPS-1, HBIPS-2, HBIPS-3, HBIPS-5	eSCIP-INF-1, eSCIP-INF-9	
SUB-1, SUB-2, SUB-3	eVTE-1, eVTE-2, eVTE-3, eVTE-4, eVTE-5, eVTE-6	
TOB-1, TOB-2, TOB-3	eEHDI-1a	
OP-1, OP-2, OP-3, OP-4, OP-5, OP-18, OP-20, OP-21, OP-23		

The Joint Commission/Mitra Biglari/eCQM Data Submission

2017 ORYX Requirements

- Detailed instructions will be sent to accredited hospitals in Late Nov/Early Dec

2017 ORYX Performance Measure Reporting Requirements

Hospital Accreditation Program Requirements														
<u>Chart-Abstracted Measures</u>	<u>Electronic Clinical Quality Measures (eCQMs)</u>													
Select and Report Data on:	Select and Report Data on:													
<ul style="list-style-type: none"> Five chart-abstracted measures applicable to the services provided and patient populations served by the hospital. <table border="1" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: center;">Joint Commission Chart Abstracted Measures</th> </tr> </thead> <tbody> <tr><td>ED-1, ED-2</td></tr> <tr><td>PC-01*</td></tr> <tr><td>VTE-6</td></tr> <tr><td>IMM-2</td></tr> </tbody> </table> <ul style="list-style-type: none"> *Four Additional Perinatal Care measures (PC-02, PC-03, PC-04, PC-05) are required for health care organizations with at least 300 live births per year. Collect and report data quarterly for calendar year (CY) 2017. May elect to report on additional measures relevant to services provided and patient populations served by the hospital – See Joint Commission measures effective January 1, 2017. <p><i>Please note: The Joint Commission has not adopted the CMS “sepsis management bundle” (SEP-1) for 2017.</i></p>	Joint Commission Chart Abstracted Measures	ED-1, ED-2	PC-01*	VTE-6	IMM-2	<ul style="list-style-type: none"> Six of thirteen available eCQMs applicable to the services provided and patient populations served by the hospital. <table border="1" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: center;">Joint Commission eCQM Measures</th> </tr> </thead> <tbody> <tr><td>eAMI-8a</td></tr> <tr><td>eCAC-3</td></tr> <tr><td>eED-1, eED-2</td></tr> <tr><td>ePC-01, ePC-05</td></tr> <tr><td>eSTK-2, eSTK-3, eSTK-5, eSTK-6</td></tr> <tr><td>eVTE-1, eVTE-2</td></tr> <tr><td>eEHDI-1a</td></tr> </tbody> </table> <ul style="list-style-type: none"> Report 4 quarters of data for calendar year (CY) 2017 by the annual submission date (3/15/2018). May elect to report on additional eCQMs relevant to services provided and patient populations served by the hospital – See Joint Commission measures effective January 1, 2017. 	Joint Commission eCQM Measures	eAMI-8a	eCAC-3	eED-1, eED-2	ePC-01, ePC-05	eSTK-2, eSTK-3, eSTK-5, eSTK-6	eVTE-1, eVTE-2	eEHDI-1a
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eCQM Data Submission

Discharged data	Submission Period	Deadline
3Q-4Q 2016	Oct 2016 to Mar 2017	Mar 15, 2017
1Q-2Q-3Q-4Q 2017	Oct 2017 to Mar 2018	Mar 15, 2018

eCQM Data Submission

- eCQM data submission is Quarterly:
 - Data in one patient file is from one calendar quarter
 - The eCQM files can be submitted in any order at any time during the submission period
- The upload site stays open during submission period
- Chart-based measure submission is also quarterly; however, the submission period is only 1 month to submit one quarter of the data

eCQM Data Expectations

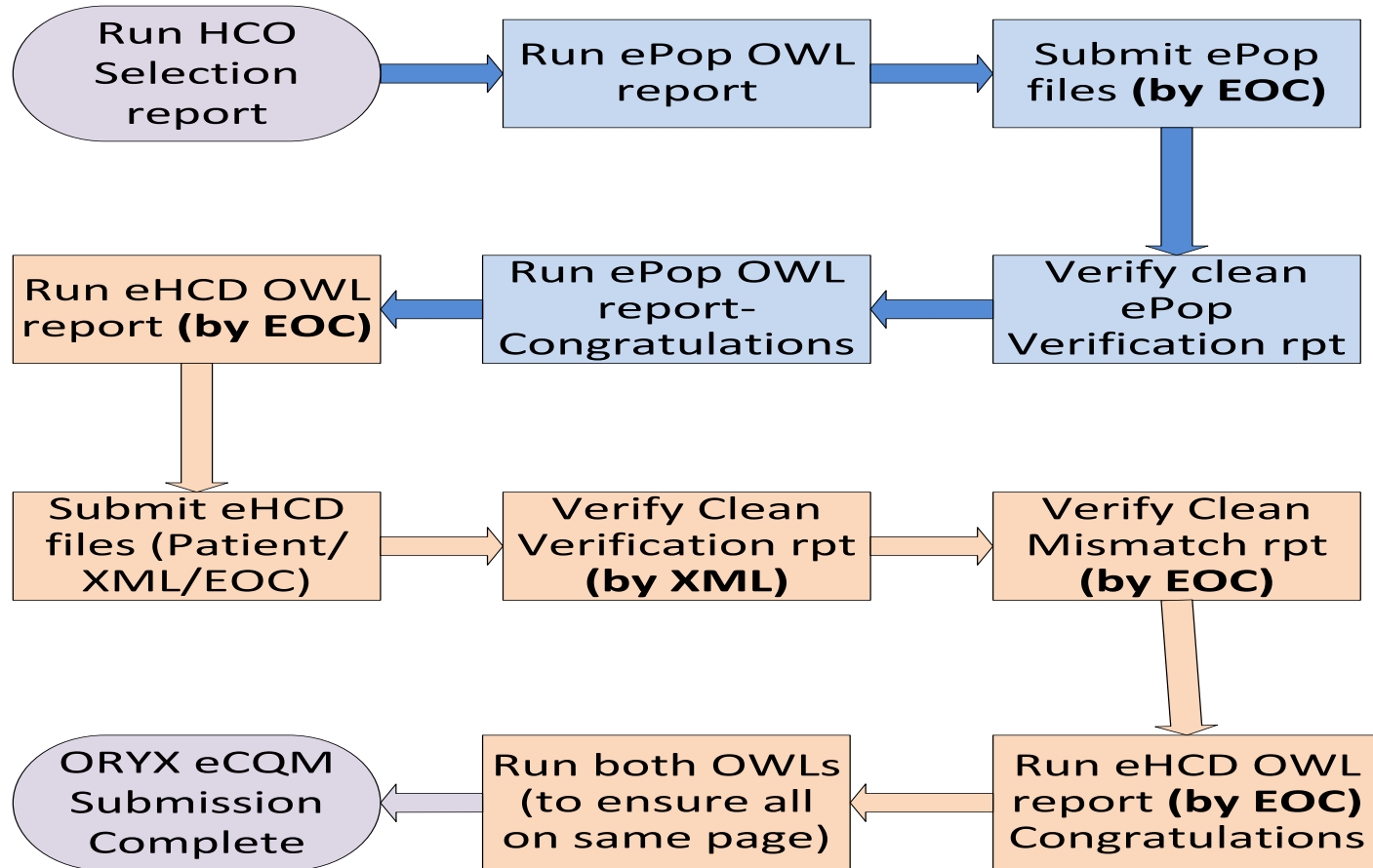
- The HCO selects their eCQMs
- Vendor completes the following:
 - Signs a contract with The Joint Commission and the hospital
 - Submits the data through secure Joint Commission Performance Measurement System Extranet Track (PET)
 - Uses tools on portal to verify the data
- HCO and Vendor work to meet expectations of data quality, integrity and accuracy requirements of submitted data
 - Schema errors, Rejection, Mismatches

eCQM Data Expectations

- Vendor's eCQM data submission tools:
 - **OMS** (ORYX Measure Selection) Application
 - **ePop OWL** (ORYX Worklist) Report
 - **eHCD OWL** (ORYX Worklist) Report
 - **ePop** (eMeasure Population) Application
 - **eHCD** (eMeasure Hospital Clinical data) Application

ORYX Submission

Expectation Overview – Flowchart



* EOC: Episode Of Care

eCQM Applications

Key Applications for eCQM Data Submission:

- ePop Application
- eHCD Application

ePop Application

- ePop application is The Joint Commission tool to collect hospitals' eCQM population size
- eCQM Population size is required by The Joint Commission
- Sampling is not allowed for eCQMs
- QRDA-III files are not accepted by The Joint Commission or CMS to report Hospital population size
- CMS collects population size using data entry on their website

ePop

Important Notes

- Hospital has the option to opt out of reporting Patient cases
 - If Denominator size is five or fewer for the entire quarter
 - The sum of all EOCs in 3 months in the quarter)
 - The vendor would set a flag in ePop file to submit to The Joint Commission
- Hospital must inform the vendor to use this option, otherwise clinical data must be submitted

ePop

Measure Selection Error

- All the errors in the ePop verification report must be cleared by the vendor
- Data Submitted for a measure that has not been selected by HCO is identified
 - Vendor needs to contact HCO to update their OMS selection, if necessary
 - After OMS selection is updated, data starts processing
 - If there are no OMS selection changes, data is purged (i.e. data not needed for submission)

ePop

Successful File Submission

- Reports available to Vendor to validate successful file submission:
 - **ePop Verification report** shows data was submitted with no errors and verifies all the measures with the correct number of data is submitted.
 - Successful ePop submission for all HCOs and measures is also denoted on **ePop OWL** report

eHCD: electronic Hospital Clinical Data

- The Joint Commission accepts QRDA-I files
- **eHCD** is The Joint Commission application that accepts eCQM clinical data (via QRDA-I file format)
- CMS conformed QRDA-I file is the base for the Joint Commission conformed file with minor changes
 - EHR vendors may provide CMS conformed QRDA-I files to the HCO
 - ORYX® vendors edit the QRDA-I file to meet Joint Commission conformance requirements

eHCD Requirement-IG

- The requirements for eHCD submission are provided in **The Joint Commission Implementation Guide (IG)**, and **Integrity Edit** documents and enforced by **The Joint Commission Schematron**
- The Joint Commission QRDA Implementation Guide is an extension of the CMS Guide
- The IG only provides extra guidance when new data/elements are needed or when The Joint Commission's guidance is different than CMS's
- Anything not mentioned, is expected as CMS requires it in their documentation

eHCD

Requirement-IG

- Few of the most important required changes for The Joint Commission QRDA-I as given in The Joint Commission IG are:
 - Removing the PHI related to Personal information,
 - Reporting HCO-ID in addition to or instead of CMS CCN
 - Replacing CMS Patient-Id with The Joint Commission Vendor Tracking ID
- eHCD also executes extra integrity checks.
 - Rejecting Discharge dates outside the Reporting period
 - Enforcing the rule to use Time Zone consistently
 - Enforcing the right order of start and end time in any event

eHCD Requirement-IG

- IG Provides the list of the elements that are considered PII (Personally Identifiable Information) must be removed, and their exact location from the file, i.e.

Patient Name (CONF: TJC-1001 ~ CONF: TJC-1004)

ClinicalDocument/recordTarget/patientRole/patient/name

ClinicalDocument/recordTarget/patientRole/patient/name/given

ClinicalDocument/recordTarget/patientRole/patient/name/family

ClinicalDocument/recordTarget/patientRole/patient/name/prefix

ClinicalDocument/recordTarget/patientRole/telecom @value

eHCD

Vendor-Tracking-ID

- Since patient ID is not acceptable to The Joint Commission system at this time, vendors must create a fictitious ID that can be mapped back to the patient by the vendor
- Vendor-Tracking-ID must be maintained and linked to the same patient across measures and quarters to use the same tracking-ID as long as that vendor is submitting data on behalf of the HCO.

eHCD Schematron

- The Joint Commission Schematron is the tool built upon the CMS Schematron to check The Joint Commission file structure and data such as:
 - Personally identifiable information (**PII**) removed
 - Patient ID replaced with Vendor Tracking ID
 - HCO-ID added to the QRDA-I
 - Valid formats for elements and values

eHCD

Value Set Requirements

- Reporting Value set is required whenever reporting a clinical code
- The data submitter must map the codes from EHR system to the codes required by the value sets used in eCQM definitions.
- Different measures use different value sets
- Integrity edits created in this regard ensure correct reporting of the encounters and value sets

eHCD

EOC Requirements

- File transmission:
 - One QRDA-I file/One patient/One reporting period (quarter)

i.e. all **Episodes Of Care** (EOC) and all measures/topics the patient belongs to and their applicable data in one quarter for one patient must be reported in one QRDA-I xml file

eHCD

EOC Requirements

- Each reported **Episode of Care (Inpatient Encounter)** must
 - Contain one and only one Primary Diagnosis code
 - Contain no more than one Primary Procedure code
 - Report one encounter code (discharge code)
 - Report one pair of start/end date-time (admit and discharge date)
 - The same EOC information must be used across all measures reported for that encounter
- Each EOC is used individually as the base time when processing a measure
- The rest of the data is processed **temporally** against that EOC in the measurement period.

eHCD

Reporting Measure Results

- IG also provides guidance on reporting measure outcome
- It ensures both organizations are aligned in processing the case and calculation of the outcomes
- The Joint Commission **Mismatch** report provides the incorrect reported outcomes
- Reporting outcome is optional but if not reported, mismatch report shows a mismatch of The Joint Commission's outcome to an empty outcome that could be ignored

eHCD

File Processing

- The tools or reports available to vendors during file processing:
 - **Schematron tool and report**
 - **Verification report:** reports integrity errors
 - **Mismatch Report:** reports outcome mismatches
 - **Rule Engine tool and report:** reports processing detail and results of the measures against the patient file

eHCD

Measure Calculations

- The Joint Commission will calculate a measure's outcome for a patient/file if:
 - Measure outcome is submitted in the QRDA measure section

OR

- Hospital has selected the measure in ORYX Measure Selection (OMS) tool AND patient data satisfies the Initial Patient Population (IPP) of that measure.

eHCD

The Joint Commission QRDA-I Examples

File with two EOCs: EOC 1 reporting eSTK-2
and eSTK-8; EOC 2 reporting eVTE-1:



eSTK2eSTK8-EOC1_eVTE1-EOC2.xml

File with one EOC: reporting eED-2:



eED2 Result.xml

eHCD

Delete & Style Sheet tools

- The Joint Commission also provides vendors with the following tools:
 - Delete tool: allows the vendor to delete QRDA-I cases that have been submitted erroneously but should have not
 - Stylesheet tool: allows the user to open The Joint Commission QRDA-I XML files in Internet Explorer to see the data in human readable fashion to find the problematic data easier

Style Sheet Example

Description	Encounter ID	Start Time	Stop Time	Code	Code Description	ValueSetOID	ValueSetDescription	CodeSystemOID	Attributes
Encounter Performed	2a620155-9d11-439e-92b3-5d9815ff4de8-ed	2016-03-22 09:00	2016-03-22 10:00	4525004	Emergency department patient visit (procedure)	2.16.840.1.113883.3.117.1.7.1.292		2.16.840.1.113883.6.96	
Encounter Performed	2a620155-9d11-439e-92b3-5d9815ff4de8	2016-03-22 10:40	2016-07-20 12:40	32485007	Hospital admission (procedure)	2.16.840.1.113883.3.117.1.7.1.424		2.16.840.1.113883.6.96	Discharge Status code: 306689006 codeSystem: 2.16.840.1.113883.6.96
Encounter Performed	3a620155-9d11-439e-92b3-5d9815ff4de8-ed	2016-08-09 10:00	2016-08-09 10:30	1111111	Emergency department patient visit (procedure)	2.16.840.1.113883.3.117.1.7.1.292a		2.16.840.1.113883.6.96	
Encounter Performed	3a620155-9d11-439e-92b3-5d9815ff4de8	2016-08-09 12:00	2016-08-20 12:00	183452005	Emergency hospital admission (procedure)	2.16.840.1.113883.3.666.5.307		2.16.840.1.113883.6.96	
Encounter Performed	3a620155-9d11-439e-92b3-5d9815ff4de8-icu	2016-08-10 09:00	2016-08-10 12:00	1111111	Admission to cardiac intensive care unit (procedure)	2.16.840.1.113883.3.117.1.7.1.292a		2.16.840.1.113883.6.96	

Observation

Description	Start Time	Stop Time	Code	CodeDescription	ValueSetOID	ValueSetDescription	CodeSystemOID	Attribute	Negation Rationale Code	Negation Rationale CodeSystem	Negation Rationale ValueSet	Not Done Start Time	Not Done Stop Time
Risk Category Assessment	2016-08-10 09:00	2016-08-10 12:00	1111111	Risk for venous thromboembolism	2.16.840.1.113883.3.117.1.7.1.292a		2.16.840.1.113883.6.1	Result code: 62482003 codeSystem: 2.16.840.1.113883.6.96 valueSet: 2.16.840.1.113883.3.117.1.7.1.400					
Laboratory Test Performed	2016-08-10 09:00	2016-08-10 12:00	1111111	INR in Platelet poor plasma by Coagulation assay	2.16.840.1.113883.3.117.1.7.1.292a		2.16.840.1.113883.6.1	Result value: 3.0					

Diagnosis

Description	Start Time	Stop Time	Code	CodeDescription	ValueSetOID	CodeSystemOID	Attribute
Diagnosis Active	2016-07-16 12:41	2016-07-16 12:41	195213000	Cerebellar stroke syndrome (disorder)	2.16.840.1.113883.3.117.1.7.1.247	2.16.840.1.113883.6.96	Ordinality code: 63161005 codeSystem: 2.16.840.1.113883.6.96
Diagnosis Active	2016-08-09 12:25	2016-08-20 12:00	I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	2.16.840.1.113883.3.666.5.3011	2.16.840.1.113883.6.90	Ordinality code: 63161005 codeSystem: 2.16.840.1.113883.6.96
Diagnosis Inactive	2016-08-10 12:25	2016-08-20 12:01	1111111	Unspecified atrial flutter	2.16.840.1.113883.3.117.1.7.1.292a	2.16.840.1.113883.6.90	
Diagnosis Active	2016-08-10 09:00	2016-08-10 12:00	1111111	Occlusion and stenosis of cerebellar arteries	2.16.840.1.113883.3.117.1.7.1.292a	2.16.840.1.113883.6.90	

Important TJC and CMS Differences

Subject	CMS	TJC
PII	Required	Rejected
Receiving organization Id	Required CMS OID	Required TJC OID
Hospital ID	CCN	HCO-ID
Reporting Measure Results	No	Yes
Patient identifier	Patient-id	Vendor-Tracking-id
Encounter validation performed	Yes	Yes
At least one valid measure and one encounter required	Yes	Yes

Important TJC and CMS Differences Extra Integrity Checks

Subject	CMS	TJC
Time zone consistency enforced	No	Yes
Encounters outside the reporting period rejected	No	Yes
One Principal DX/PX in Inpatient encounter enforced	No	Yes
Consistent reporting of Encounters used in different measures are enforced (use the same code/date-time/encounter-id)	No	Yes

2016 Data: Important Notes

- eED measures in eCQM 2016 Observation values are incorrect
 - Impacting 2016 discharge data
 - Effects the ED measure values (not comparable to prior years)
 - There is no proper way to address the eED eCQM 2016 issue without affecting other measures using ED visit, leaving it as incorrect
 - The Joint Commission acknowledges the issue and expects the ED Observation values to be skewed

2016 Data: Important Notes

- eCQM 2015 eED issue: inconsistencies between In Measure Population logic and Observation value calculation:
 - The Joint Commission will not calculate observation value when case is not **in measure population**
 - If a case satisfies the **In Measure Population** logic but the observation value is not able to be calculated due to missing data, The Joint Commission will take the **case out** of the **ED in Measure Population**

2016 Data: Important Notes

- Vendor/submitter must map codes used in EHR system to correct codes in value sets used in each eCQM for correct processing
- Vendor/submitter must ensure to report
 - One Encounter code/EOC
 - One Primary Diagnosis codes/EOC
 - One Primary Procedure Codes/EOC

2016 Data: Important Notes

- Mapping is required to convert different code types (Visit code/type, Admission code, or Discharge code) from hospital areas/screens to one valid Inpatient Encounter code (EOC)
- Inpatient Encounter code requires also mapping to ensure one code satisfies all reported measures' need, should it represent two (or more) different value sets

2016 Data: Important Notes

- All the mappings are usually done before submission to CMS (by EHR vendor or submitting vendor)
- Oryx vendors are responsible to make sure the mapping satisfies the Joint Commission Requirements as there are differences (Refer to The Joint Commission and CMS Difference Slide)

2015 Data: Lessons Learned

- PC-05 (Exclusive Breast Milk Feeding):
 - Missing Birth time resulted in all the cases being excluded

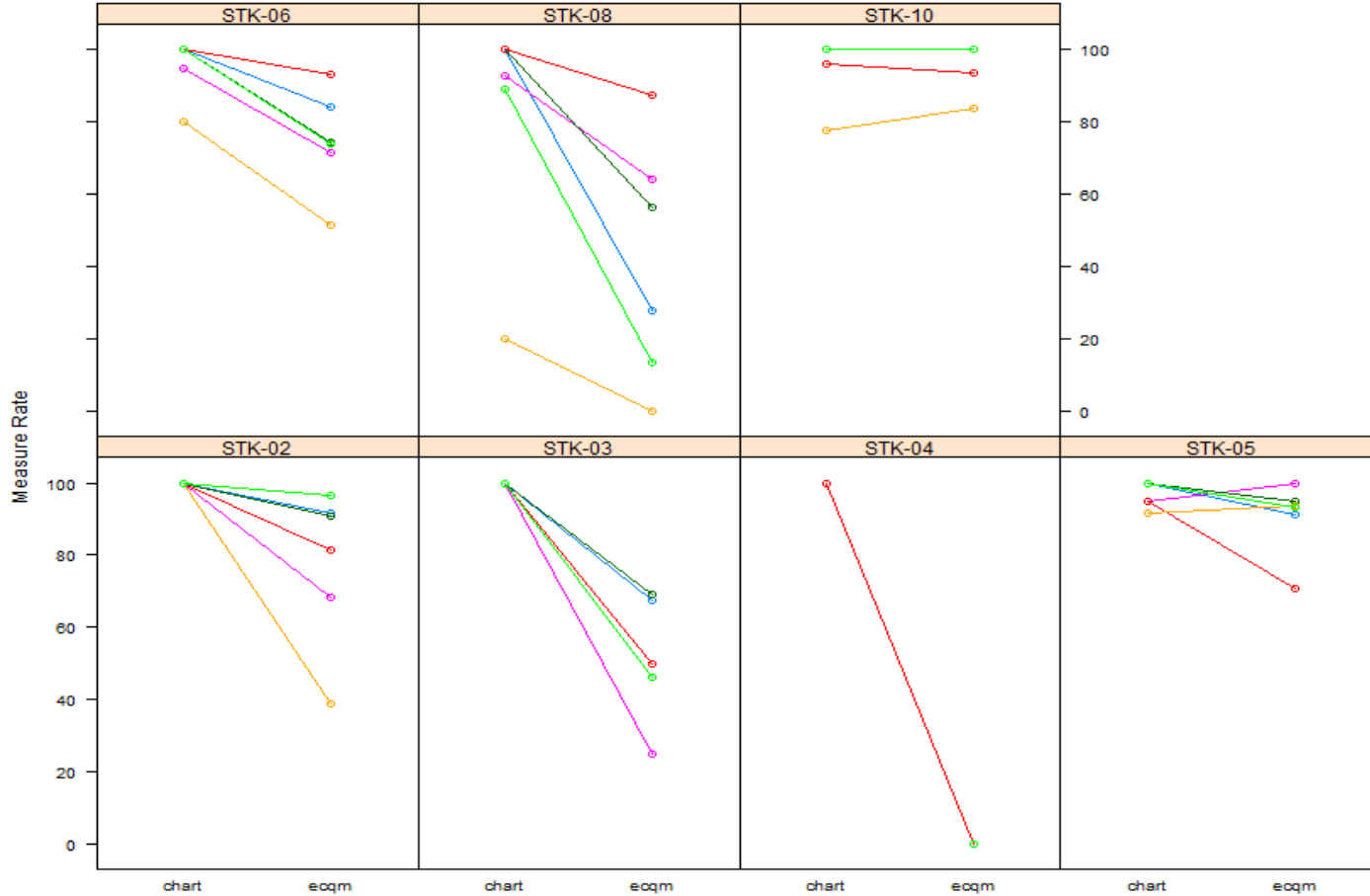
- Using Time zone inconsistently resulted in wrong calculations
 - The Joint Commission requires consistent use of time zones in one file for 2016 data

2015 Data: Lessons Learned

- Examples of when reporting time zone is necessary:
 - Patient transferred during the same episode to a site with different time zone and both sites belong to the same HCO-ID
 - The patient receives telemedicine consultation and the documentation is entered using the clinician's time zone instead of the patient's time zone

Investigating Discrepancies of 2015 eCQM data versus Chart for Stroke Measures

Comparison of Chart and eCQM 3Q2015 Data



The Joint Commission/Mitra Biglari/eCQM Data Submission

2015 Data: Lessons Learned

- Issues due to differences in eCQM definition and chart-base, Example
 - eSTK-2 (Discharged on Antithrombotic Therapy) codes in Discharge value set are slightly different from chart-based, resulting more cases to be excluded from eCQM
- Solutions: New version of eCQM addressed this issue by adding more granular codes to value sets, based on Hospitals or vendors providing feedback.

2015 Data: Lessons Learned

- Issues due to QRDA flexibility:
 - QRDA provides multiple valid locations to represent the same data or offers flexibility of the order of reporting
 - Examples:
 - Different Reason Templates
 - Different Date/Time fields available in same template
 - Multiple instances of a data can be entered in any order
- **Solutions:** The Joint Commission published document with exact address of expected data elements (XPath)

2015 Data: Lessons Learned

- Issue due to Vendor reporting errors: Simple mistakes on creation of the QRDA file:
 - Procedure**Performed** was submitted instead of Procedure**Ordered**
 - **IV Route** was not submitted as required, since medication name indicated IV Route

- **Solution:** The Joint Commission monitors the data more closely and more frequently before closing the transmission period to inform vendors

2015 Data: Lessons Learned

- Studying the results in-house by **hospital** might show the **same performance rate** using chart-base or eCQM data, however the calculated outcomes by The Joint Commission might be different
- Data submission adds many levels of complexity:
 - Data mapping
 - Reporting it by QRDA format
 - Processing by receiving organizations
- Each level, introduces new possible errors; therefore, false discrepancies

eCQM Data Security Assurance

Security Applied	
✓	Secured File Submission Site
✓	Secured Archived physical XML files
✓	Secured Data Saved in Database
✓	Staff HIPAA Trained Annually
✓	Role-Based Data Access Only
✓	Internal and External Audits of the systems
✓	Data behind firewall
✓	Encryption of Data

eHCD & ePop Production Support

- ❖ To post a question or report an issue visit **WIKI site**
<https://manual.jointcommission.org/>
- ❖ Login, and click on [Ask a new question](#)
- ❖ Select Category:
eHCD – eMeasure Algorithm Technical
- ❖ Write up your question
 - You can attach a file to a question, if a real patient data has triggered the issue or raised the question, we strongly suggest you do not attach the real patient file. Instead either create a test file that shows the issue or change all the dates in the real case, by advancing a fixed number to all dates and change the HCO-ID to a mock number

pioneersinquality@jointcommission.org

