



It's all about... OUTCOMES !

Safety Care Variation eMeasures Quality Service Medication Errors
Clinical Decision Support Antimicrobial Stewardship
Length of Stay Readmissions
Cost of Care Process Improvement
Consumer Engagement EHR Adoption
Data Warehousing Efficiency Mortality Value Realization Optimization
Informatics Excess Days Blood Utilization Analytics Patient Satisfaction

Driving Quality Improvement: *Looking
beyond eCQMs*





Conflict of Interest Disclosure

Susan McBride, PhD, RN-BC, CPHIMS, FAAN
Texas Tech University Health Sciences Center

Kimberly M. Bodine, DNP, RN
Tenet Healthcare

Donna M. DeBoever, MA, RN-BC
JPS Health Network

*have no real or apparent
conflicts of interest to report*



Session Objectives

- Describe the purpose, goals, outcomes of the DQIC and expected next steps
- Identify key milestones in the evolution of the eCQMs
- Identify strategies to drive quality improvement





Driving Quality Improvement Collaborative Overview and Next Steps

Susan McBride, PhD, RN-BC, CPHIMS, FAAN
Texas Tech University Health Sciences Center



It's all about... **OUTCOMES !**

Excess Days Mortality Blood Utilization EHR Adoption Length of Stay Informatics Readmissions Safety
Process Improvement Antimicrobial Stewardship Cost of Care Quality Data Warehousing Efficiency Care Variation Analytics
Consumer Engagement Clinical Decision Support Value Realization Service Medication Errors eMeasures

History & Goals of DQIC

- History

- The DQI Collaborative originated from December 2014 Kaizen focused on improving eCQM process from concept to execution out of the workgroup:
eCQM Implementation Workflow Workgroup

- Goals

- The DQI Collaborative considers the clinician/implementer perspective to inform how to design workflows, streamline data capture, ensure data quality, and improve usability while ensuring a high quality of care
- An outgrowth of this exploration was to generate useful insights into enhancements to quality improvement approaches that achieve helpful and accurate performance measurement and effective improvement in patient outcomes and provider effectiveness in a manner that enhances and does not disrupt clinical workflow and care





HITECH: Catalyst for Transformation

We cannot improve what we cannot measure,..

Paper records



Pre 2009

A system plagued by inefficiencies

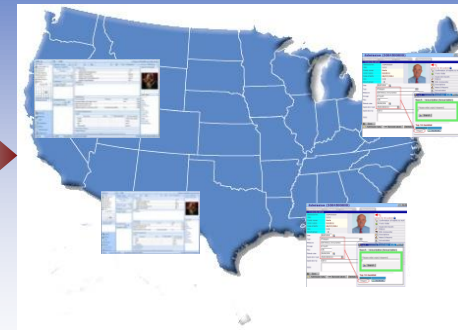
HITECH Act



2009

EHR Incentive Program and 60 Regional Extension Centers

EHRs & HIE



2015

Widespread adoption and meaningful use of EHRs

eCQMs

2016

2018

Realizing the Triple Aim requires ability to measure cost, quality and population health!

Methods

- 100 participants including, broken into work streams:
 - *Clinician/implementers*
 - *Federal agency representatives*
 - *Provider and health data exchange organizations*
 - *HIT developers*
 - *And QI content developers*
- All participants were be asked to consider the issues facing clinician/implementers as a primary goal, with other stakeholder needs and improvement opportunities as supplementary considerations



Work Streams/Work Groups

1. Implementation Management (IMWG)
2. Work/Data Flow: (Inpatient and Outpatient Subgroups)
3. Data and Information Governance: Data Provenance, Mapping, Reporting, and Asset Management
4. Electronic Clinical Quality Measure (eCQM) and Clinical Decision Support (CDS) Development
5. User Interface and Experience





Recommendations and Considerations from the DQIC

- Align and create opportunities to share best practices
- Develop standards that facilitate sharing of best practices
- Provide resources to support continuing quality improvement
- CDC, ONC and CMS continue working on strategies to automate workflow and CDS with ability to capture valid eCQMs and public health reporting





Commonality between eCQMs and Public Health Reporting

ZIKA: A Family Affair

S. Hoelscher¹, D. Hoelscher², K. King³, Z. Mulkey⁴
Texas Tech University Health Sciences Center School of Medicine¹, University Medical Center²

SIGNIFICANCE:

- Zika virus is spread mostly by the bite of an infected mosquito species. They are active both day and night.
- Zika can be passed from a pregnant woman to her fetus.
- Infection during pregnancy can cause certain birth defects.
- There is NO vaccine or medicine for Zika.
- Sexual exposure between Zika virus-infected persons has been reported in the continental United States¹.
- Zika can be transmitted between sexual partners².

BACKGROUND:

- Within the past few months, the increasingly palpable impact of the Zika virus has become more and more obvious.
- Under the guidance of the Centers for Disease Control and Prevention (CDC), the Office of the National Coordinator (ONC), and Texas' Department of Health, a coalition was developed and implemented within an electronic health record (EHR) to assist providers with clinical decision support and guidance for the care of pregnant female patients and/or sexual partners that may have been exposed to Zika.
- Planning and build was followed by various testing of all algorithms and possible patient scenarios.
- Education was provided to all intake staff (nurses) and providers of patients exposed to possible Zika exposure, prior to implementation, or "go-live". Post go-live monitoring was maintained to ensure efficacy of build.

Workflow Design for Electronic Documentation

Validation and Results:

- After build of an alert and education system for providers in the EHR, the build rules were tested and validated for accuracy within many scenarios.
- The integration of inclusion or exclusion of certain patient populations was performed to make the system work efficiently, while also not contributing to "alert fatigue", a problem with which providers already struggle significantly. The work by assessing all patients, then state including patients that are not applicable.
- After testing and implementation, the alert's volume and accuracy was monitored continuously for four months. After which the monitoring was assessed subsequently.
- The process was found to have assisted providers in identifying the first sexual related Zika case in a pregnant patient in Lubbock County.

Future Development

CONCLUSION:

- There are still many unanswered questions as to how this will impact patient's health in the future.
- Ultimately, the future is the one most impacted by the infection. But as the medical is the first responder, currently there is significant concern for women who are or who may become pregnant.
- The inclusion of education regarding effective safe sex and birth control methods, sexual information, and accurate risk calculation between pregnancies. This applies to both male and female patients.
- Currently we are re-evaluating the process to start including not only pregnant women, but also any female of childbearing age, males, and infants and children, according to CDC guidelines.
- Automation of the laboratory testing process.

REFERENCES:

1. *Zika Virus (ZIKV)*. CDC.gov. Retrieved 3 October 2016. <http://www.cdc.gov/zika/index.html>
2. *Zika with Zika (ZIKV)*. CDC.gov. Retrieved 12 August 2016. <http://www.cdc.gov/zika/index.html>
3. *Chikungunya, Dengue, Zika, and Zika*. CDC.gov. Retrieved 12 August 2016. <http://www.cdc.gov/zika/index.html>
4. *Zika virus: For healthcare providers (ZIKV)*. CDC.gov. Retrieved 12 August 2016. <http://www.cdc.gov/zika/index.html>

TESTING INFORMATION

Example of paper orders for Zika testing, as recommended by the Centers for Disease Control and Prevention (CDC.gov, 2016).

OBJECTIVES

1. Analyze the technical needs in developing and implement an electronic EHR assessment process within an EHR, based on the need to use CDC guidelines^{1,2}.
2. Appropriately test and adjust rules and alerts as needed to fine tune process and ensure that no potential patients would be missed during the implementation.
3. Provide nurses and providers up-to-date clinical support and guidance in decision making regarding the care of a patient with potential Zika infection/exposure.
4. Maintain flexibility in the EHR system for future expansion or changes in recommended guidelines.

Unitwide Executive Clinical group was positive for this project.

TECHNICAL STRATEGY:

- Review current literature and consult with CDC/ONC representatives to discuss clinical needs for patient type, level, gender, age, exposure, asymptomatic or related to Zika³.
- Review CDC recommendations with local subject matter experts to design a process applicable to the Texas area.
- Assess current emergency clinical codes EHR, including state away, rules, alerts, education.
- Design and build usable and functional clinical decision support system in EHR to aid providers in the testing and care of Zika possible Zika patient populations.

Patient Intake Documentation



National Development Underway to Address Standards

Objective To determine a viable, sustainable approach to workflow portability, building upon existing standards, to support sharing across and among healthcare organizations

“The Work” Two workstreams have been initially identified and launched: Field Guide & workflow pilot

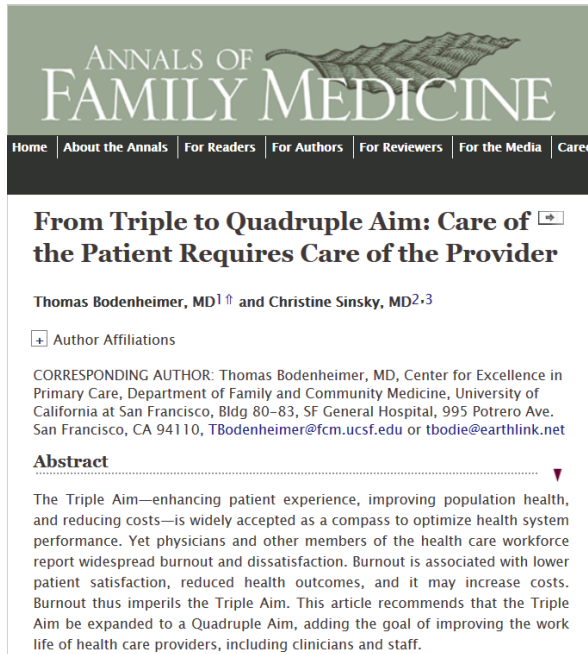
The Approach

- Intent is to leverage existing industry standards (Business Process Modeling Notation, Case Management and Modeling Notation, and Decision Management notation) languages
- Define extension mechanisms within the standard to address gaps adversely affecting modeling work
- Identify early adopter organizations to develop, share, and consume workflow models
- Collect lessons learned and feedback into the Guide
- Promulgate the Guide among content developers, including professional societies, clinical colleges, and healthcare providers
- Extend the work to focus on institutional adoption / implementation





A call to action: “the quadruple aim”: Health and Well-being of the Clinical Team



Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. Ann Fam Med. 2014;12(6): 573-576.

“The joy of practicing medicine is gone.”

“I hate being a doctor...I can’t wait to get out.”

“I can’t tell you how defeated I feel...The feeling of being punished for delivering good care is nerve-racking.”

“I am no longer a physician but the data manager, data entry clerk and steno girl... I became a doctor to take care of patients. I have become the typist.”

“Yes, the documentation of “quality standards” has greatly improved, but patient care and patient safety has not.

In fact nurses have to enter false information sometimes and work around the system (I use vendor X, Y and Z) and all have similar issues.

I know first hand of 2 sentinel events caused by the systems (X and Y). Also systems audits are being used to evaluate and discipline nurses; this is a big ethical issue as nurses are charting stuff for the wrong reasons ...creating a conflict of interest”

<http://www.annfammed.org/content/12/6/573.full>



Important Considerations for Organizations

- Focus on improved data standards and reliability of data within EHRs
- Interoperability within and across care settings and usability can present challenges for eCQMs
- Workflow redesign with clinical teams and quality improvement specialists are critical to success
- Enterprise Data Warehouse (EDWs) and Business Intelligence tools that capitalize on electronic data to track and trend process and outcomes are important particularly for validating eCQMs
- **eCQMs are foundational to improvement efforts**
- **eCQMs set us up for ethical dilemmas** (Harman & Cornelius, 2017, p. 185)
- **Just Culture are critical** throughout the organization





Evolution of Electronic Clinical Quality Measures

Kimberly M. Bodine, DNP, RN
Tenet Healthcare



It's all about... **OUTCOMES !**

Excess Days Mortality Blood Utilization EHR Adoption Length of Stay Informatics Readmissions Safety
Process Improvement Antimicrobial Stewardship Cost of Care Quality Value Realization Data Warehousing Efficiency Care Variation eMeasures Analytics
Consumer Engagement Clinical Decision Support Service Medication Errors



Delivery of the First eCQMs



- Retooled chart abstracted measures
- National Quality Strategy Domains
 - *Patient Safety*
 - *Care Coordination*
 - *Population and Public Health*
 - *Clinical Process/Effectiveness*
 - *Efficient Use of Healthcare Resources*
 - *Patient and Family Engagement*
- Conditions represent national public health priorities



The Early Days

Healthcare Information
Quality Measures Technical
Note: April 30, 2010

IF THEN ELSE NULL
OR AND NOT
DATA ELEMENT PROCEDURE PERFORMED DERIVED DATA
Active Diagnosis
Exclusion
Problem
Code
VALUE SET



Excess Days Mortality It's all about... Blood Utilization EHR Adoption Length of Stay Informatics Readmissions Safety
Process Improvement Antimicrobial Stewardship Cost of Care Quality OUTCOMES! Data Warehousing Efficiency Care Variation eMeasures Analytics
Consumer Engagement Clinical Decision Support Value Realization Service Medication Errors

Health Quality Measures Format (HQMF)

Header Metadata

Measure Name	Venous Thromboembolism (VTE) Prophylaxis	EMeasure Id	1.3.6.1.4.1.33895.1.2.16000.1.1 STK-1
Version number	1	Set Id	1.3.6.1.4.1.33895.1.2.16000.1.1.1 Stroke (STK)
Available Date	No information	Effective Date Range	October 1, 2009 to March 31, 2010
Author	Joint Commission		
Verified by	Joint Commission		
Verified by	National Quality Forum		
Description	Ischemic and hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission		
Measure scoring	Proportion		
Measure type	Process		
Rationale	Stroke patients are at increased risk of developing venous deep vein thrombosis in more than a third of patients with vary depending on the type of screening used. Prevention risk patients is a noted recommendation in numerous clinical who are confined to bed, thromboprophylaxis with low-molecular weight unfractionated heparin is recommended. This recommendation is not recommended for patients who are not recommended for thromboprophylaxis.		

Body

Population

Data Criterion

Stratification

Observation

Population

```

/** IF Patient Class of Inpatient Encounter THEN 'Y' ELSE 'N' */
IF PatientClass contains ValueSet (Joint Commission Inpatient Encounter Value Set) THEN 'Y' ELSE 'N'

```

Denominator

Denominator Inclusion

```

***** Ischemic or hemorrhagic stroke patients */
IF "Principal Diagnosis of Ischemic or hemorrhagic stroke " THEN 'Y' ELSE 'N'
Principal Diagnosis of Ischemic or hemorrhagic stroke " */
Diagnoses CONTAINS ValueSet (Joint Commission Ischemic Stroke Value Set) OR Diagnoses CONTAINS ValueSet (Joint Commission Hemorrhagic Stroke Value Set) AND Problem Status CONTAINS ValueSet (Joint Commission Problem Status Active) AND Problem Status Priority EQ (1)
THEN 'Y' ELSE 'N'

```

Denominator Exclusion

```

*****

```

- Patients <18 years of age
- Patients who have a Length of Stay >120 days
- Patients who have a Length of Stay < 2 days
- Patients with Comfort Measures Only documented on day of or day after hospital arrival
- Patients enrolled in Clinical Trial
- Patients admitted for Elective Carotid Intervention





2014 eCQM Specifications

eMeasure Title	Initial Antibiotic Selection for Community-Acquired Pneumonia (CAP) in Immunocompetent Patients		
eMeasure Identifier (Measure Authoring Tool)	188	eMeasure Version number	3
NQF Number	0147	GUID	8243eae0-bbd7-4107-920b-fc3db04b9584

Measurement Period	January 1, 20xx through December 31, 20xx
Measure Steward	Centers for Medicare & Medicaid Services
Measure Developer	Oklahoma Foundation for Medical Quality
Endorsed By	National Quality Forum
Description	(PN-6) Immunocompetent patients with Community-Acquired Pneumonia (CAP) during the first 24 hours that is consistent with current guidelines. (Population 1) Immunocompetent ICU patients with CAP receive an initial antibiotic regimen during the first 24 hours that is consistent with current guidelines. (Population 2) Immunocompetent non-Intensive Care Unit (ICU) patients receive an initial antibiotic regimen during the first 24 hours that is consistent with current guidelines.
Copyright	Measure specifications are in the Public Domain CPT(R) is a trademark of the American Medical Association. All rights reserved. Not included in CPT. The AMA assumes no liability for the use of the AMA logo or name to government use.

Population criteria


----- Population Criteria 1 -----

• Initial Patient Population 1 =

- AND: "Occurrence A of Encounter, Performed: Encounter Inpatient (discharge datetime)" during "Measurement Period"
- AND: "Patient Characteristic Birthdate: birth date" >= 18 year(s) starts before start of "Occurrence A of Encounter, Performed: Encounter Inpatient"
- AND: "Occurrence A of Encounter, Performed: Encounter Inpatient (length of stay <= 120 day(s))"
- AND:
 - OR: "Diagnosis, Active: Hospital Measures-Pneumonia (ordinality: 'Hospital Measures - Principal') starts during "Occurrence A of Encounter, Performed: Encounter Inpatient"
 - OR:
 - AND: "Diagnosis, Active: Hospital Measures-Septicemia (ordinality: 'Hospital Measures - Principal') starts during "Occurrence A of Encounter, Performed: Encounter Inpatient"
 - AND: "Diagnosis, Active: Hospital Measures-Pneumonia starts during "Occurrence A of Encounter, Performed: Encounter Inpatient"
 - OR:
 - AND: "Diagnosis, Active: Hospital Measures-Respiratory failure acute or chronic (ordinality: 'Hospital Measures - Principal') starts during "Occurrence A of Encounter, Performed: Encounter Inpatient"
 - AND: "Diagnosis, Active: Hospital Measures-Pneumonia starts during "Occurrence A of Encounter, Performed: Encounter Inpatient"

• Denominator 1 =

- AND: "Initial Patient Population 1"
- AND:

 Value Set Authority Center
U.S. National Library of Medicine

	CMS ID	Value Set Name	Value Set OID	Code	Description	Code System
Disclaimer	CMS100v3	Discharge To Another Hospital	2.16.840.1.113883.3.117.1.7.1.87	306699001	Discharge to hospital (procedure)	SNOMEDCT
Measure Score	CMS100v3	Discharge To Another Hospital	2.16.840.1.113883.3.117.1.7.1.87	306701001	Discharge to community hospital (procedure)	SNOMEDCT
Measure Type	CMS100v3	Discharged to Health Care Facility for Hospice Care	2.16.840.1.113883.3.117.1.7.1.207	428371000124100	Discharge to healthcare facility for hospice care (procedure)	SNOMEDCT
	CMS100v3	Discharged to Home for Hospice Care	2.16.840.1.113883.3.117.1.7.1.209	428361000124107	Discharge to home for hospice care (procedure)	SNOMEDCT
	CMS100v3	Left Against Medical Advice	2.16.840.1.113883.3.117.1.7.1.308	445060000	Left against medical advice (finding)	SNOMEDCT
	CMS100v3	Patient Expired	2.16.840.1.113883.3.117.1.7.1.309	371828006	Patient deceased during stay (discharge status = dead) (finding)	SNOMEDCT
	CMS100v3	Principal	2.16.840.1.113883.3.117.1.7.1.14	63161005	Principal (qualifier value)	SNOMEDCT
	CMS102v3	Discharge To Another Hospital	2.16.840.1.113883.3.117.1.7.1.87	306699001	Discharge to hospital (procedure)	SNOMEDCT
	CMS102v3	Discharge To Another Hospital	2.16.840.1.113883.3.117.1.7.1.87	306701001	Discharge to community hospital (procedure)	SNOMEDCT
	CMS102v3	Discharged to Health Care Facility for Hospice Care	2.16.840.1.113883.3.117.1.7.1.207	428371000124100	Discharge to healthcare facility for hospice care (procedure)	SNOMEDCT
	CMS102v3	Discharged to Home for Hospice Care	2.16.840.1.113883.3.117.1.7.1.209	428361000124107	Discharge to home for hospice care (procedure)	SNOMEDCT
	CMS102v3	Discharged to Rehabilitation Facility	2.16.840.1.113883.3.117.1.7.1.132	433591000124103	Discharge to rehabilitation facility (procedure)	SNOMEDCT
	CMS102v3	Left Against Medical Advice	2.16.840.1.113883.3.117.1.7.1.308	445060000	Left against medical advice (finding)	SNOMEDCT
	CMS102v3	Patient Expired	2.16.840.1.113883.3.117.1.7.1.309	371828006	Patient deceased during stay (discharge status = dead) (finding)	SNOMEDCT
	CMS102v3	Principal	2.16.840.1.113883.3.117.1.7.1.14	63161005	Principal (qualifier value)	SNOMEDCT
	CMS104v3	Discharge To Another Hospital	2.16.840.1.113883.3.117.1.7.1.87	306699001	Discharge to hospital (procedure)	SNOMEDCT
	CMS104v3	Discharge To Another Hospital	2.16.840.1.113883.3.117.1.7.1.87	306701001	Discharge to community hospital (procedure)	SNOMEDCT





The Office of National Coordinator Issue Tracking System

The ONC Issue Tracking System
The Office of the National Coordinator for Health Information Technology

[Home](#) [Learning Resources](#) [Create an Issue Ticket](#) [Track an Issue Ticket](#) [Create an Account](#) [Request](#)

[Log In](#)

If you require accessibility assistance, please send an email to onc-jira-questions@healthit.gov

ONC Issue Tracking System

The ONC Issue Tracking System is a collaboration platform that supports the implementation of health information technology by providing a space in which internal and external users can transparently report, prioritize, and discuss issues with appropriate subject matter experts on a host of topics.

[MU Policy/Program question](#) [PQRS and IQR Policy Program question](#) [Quality Payment Program question](#)

[CQM-1428] [Incorrect medication on Lipid-Lowering Agent listing](#) Created: 02/Jan/15, Updated: 23/May/16

Status:	Resolved		
Reporter:	Kimberly M. Bodine	Assignee:	Mathematica EH CQM Team
Description:	CMS105v3 STK6, Lipid-lowering agent value set OID: 2.16.840.1.113883.3.117.1.7.1.217 contains Clopidogrel (Plavix) 75 MG oral tablet and 300 MG oral tablet. This medication is not a lipid-lowering agent and should be removed.		
Solution:	Thank you for raising this issue. You are correct, the Lipid Lowering Agent value set (2.16.840.1.113883.3.117.1.7.1.217) includes the following RXNORM codes in error: 749196 Clopidogrel 300 MG oral tablet, 309362 Clopidogrel 75 MG oral tablet, 313406, Ticlopidine 250 MG oral tablet . These medications are not lipid lowering agents and will be removed from the value set in the 2015 annual update.		



2016: A Year of Change

- eCQMs recognized as future of quality reporting
- Required for Hospital Inpatient Quality Reporting Program
- Alignment of reporting periods to CY for hospitals
- Inclusion of new operators
- Submission using Quality Reporting Data Architecture Category 1

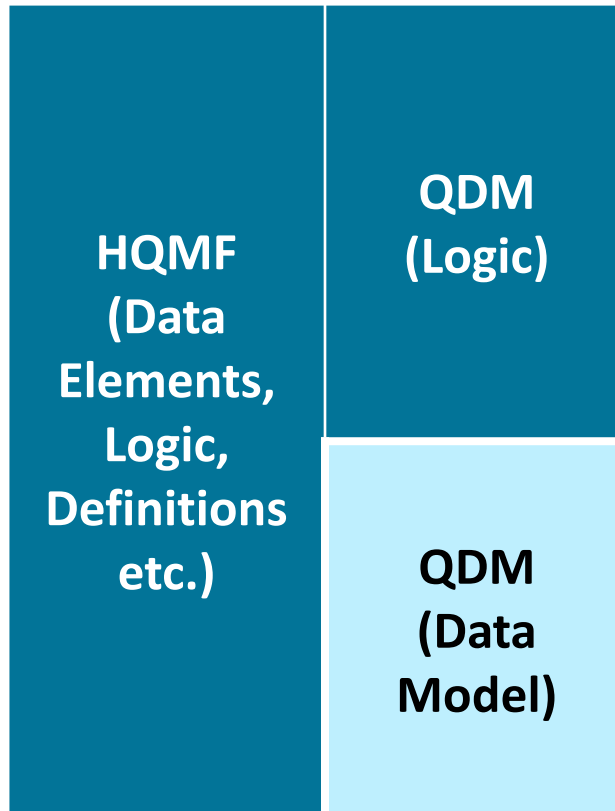
Population Criteria

- **Initial Population** =
 - AND: Age >= 18 year(s) at: Occurrence A of \$EncounterInpatientNonElective
 - AND: Union of:
 - "Diagnosis, Active: Hemorrhagic Stroke (ordinality: Principal)"
 - "Diagnosis, Active: Ischemic Stroke (ordinality: Principal)"
 - starts during Occurrence A of \$EncounterInpatientNonElective
- **Denominator** =
 - AND: Initial Population
- **Denominator Exclusions** =
 - OR: Intersection of:
 - Occurrence A of \$EncounterInpatientNonElective
 - "Encounter, Performed: Non-Elective Inpatient Encounter" satisfies any
 - (discharge status: Discharge To Acute Care Facility)
 - (discharge status: Left Against Medical Advice)
 - (discharge status: Discharged to Home for Hospice Care)
 - (discharge status: Patient Expired)
 - (discharge status: Discharged to Health Care Facility for Hospice Care)
 - OR: \$InterventionComfortMeasures starts during Occurrence A of \$EncounterInpatientNonElective
 - OR: \$InterventionComfortMeasures starts during
 - "Encounter, Performed: Emergency Department Visit" <= 1 hour(s) ends before or concurrent with start of Occurrence A of \$EncounterInpatientNonElective
- **Numerator** =
 - AND:
 - OR: Union of:
 - "Procedure, Performed: Rehabilitation Assessment"
 - "Procedure, Performed: Rehabilitation Therapy"
 - "Procedure, Performed not done: Patient Refusal" for "Rehabilitation Assessment"
 - starts during Occurrence A of \$EncounterInpatientNonElective
 - OR: Intersection of:
 - Occurrence A of \$EncounterInpatientNonElective
 - "Encounter, Performed: Non-Elective Inpatient Encounter (discharge status: Discharged to Rehabilitation Facility)"
- **Numerator Exclusions** =
 - None
- **Denominator Exceptions** =
 - None
- **Stratification** =
 - None





Current State

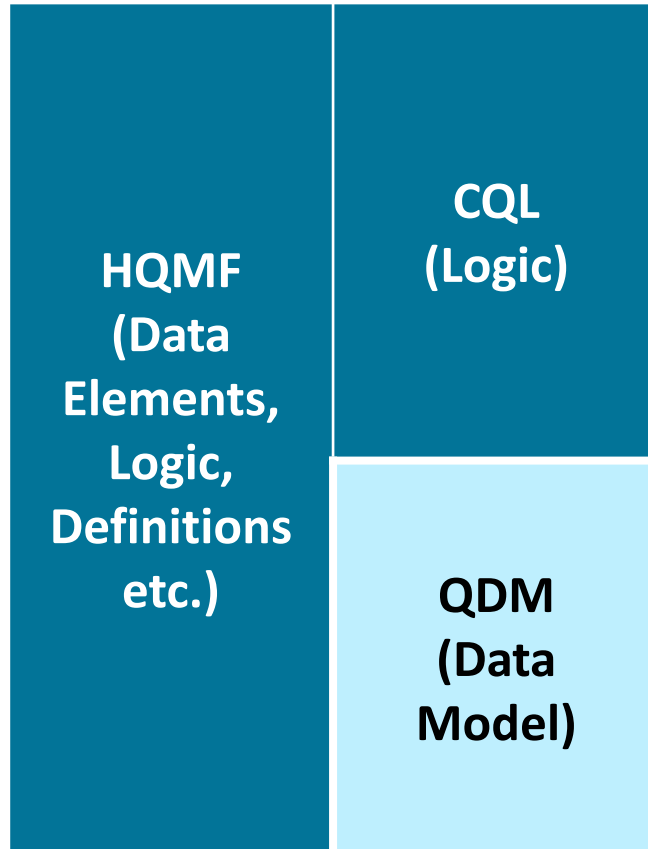


- Quality Data Model (QDM) defines relationships between patients and clinical concepts as structure data
- Limitations
 - *Vague*
 - *Unable to derive data*
 - *Requires a complex calculation engine*
 - *Cannot perform comparisons necessary to assess outcomes*
 - *Unable to compare results to determine an improvement over time*

Retrieved from: https://ecqi.healthit.gov/system/files/Benefits_of_CQL_May2017-508.pdf



Future State



- Clinical quality language (CQL) is HL7 standard expression logic eCQMs and clinical decision support (CDS)
- Benefits
 - *Precise*
 - *Simplifies time relationships*
 - *Performs calculations necessary to assess patient outcomes*
 - $LDL = (Total\ cholesterol - HDL + (Triglycerides/5))$
 - *Identifies components of assessments, examinations and test procedures*

Retrieved from: https://ecqi.healthit.gov/system/files/Benefits_of_CQL_May2017-508.pdf

Clinical Quality Language (CQL)

CQL allows for the expression of components of clinical care, i.e. assessment, evaluation or test procedure

Example 1

- Ophthalmology examination measurements
 - *Cup/Disc ratio*
 - *Retinal hemorrhage*

Example 2

- Labor and delivery room assessment
 - *Infant gestational age*
 - *Mothers choice to exclusively breast feed*

Example 3

- Ensure systolic and diastolic blood pressure results are from same blood pressure reading
 - *Calculation of mean arterial pressure*

Retrieved from: https://ecqi.healthit.gov/system/files/Benefits_of_CQL_May2017-508.pdf

Engagement is Necessary





Driving Quality Improvement Initiatives

Donna M. DeBoever, MA, RN-BC

JPS Health Network



Excess Days Mortality It's all about... Blood Utilization EHR Adoption Length of Stay Informatics Readmissions Safety
Process Improvement Antimicrobial Stewardship Cost of Care Quality OUTCOMES ! Data Warehousing Efficiency Care Variation eMeasures Analytics
Consumer Engagement Clinical Decision Support Value Realization Service Medication Errors



The Problem: How Do We Drive Quality Improvement?

- Provider organizations need substantial support to be successful in applying patient-centric quality improvement approaches to achieve the quadruple aim (better: health, care, satisfaction, costs)
- Provider organizations need to move beyond a focus on configuring and reporting eCQMs to a focus on quality improvement activities based on the data generated by the eCQMs



Principles

- Focus on achieving the [quadruple aim](#)
- There is a need for adopting Value as the core of the healthcare system
- Value is defined as the health outcomes achieved that matter most to patients relative to the cost of achieving those outcomes
- Whole-organization buy-in is required for success



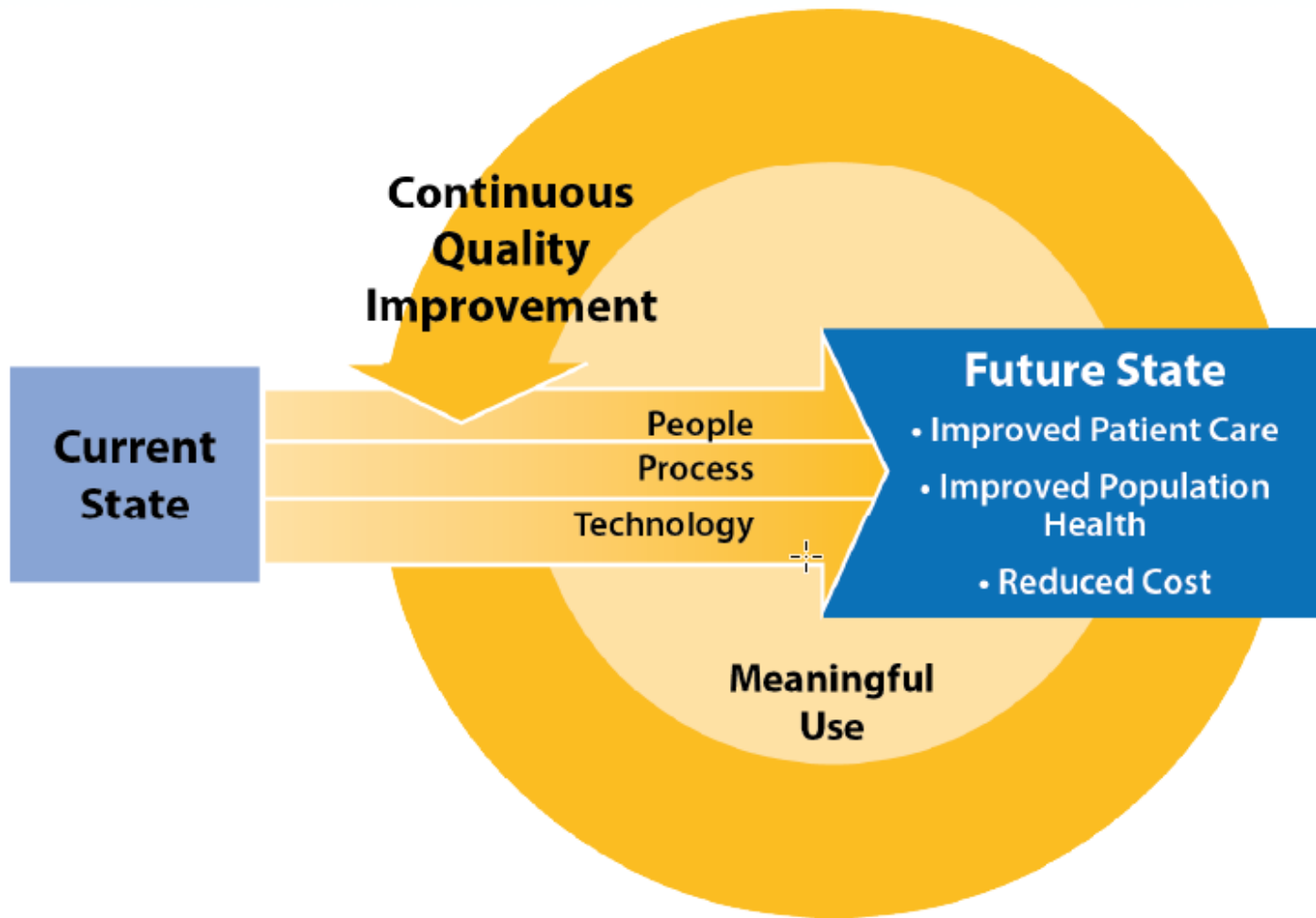


The Solution

- Guide the implementation of effective and high value quality improvement and value-increasing projects that are aligned with explicit organizational priorities that support the quadruple aim
- Provide resources to support implementers as they develop a quality improvement plan that serves as a road map for all quality activities, both clinical and operational
- Outline formal processes by which an organization will utilize quality measures to monitor and evaluate the quality of care provided to patients
- Identify various conceptual frameworks to consider when implementing quality improvement techniques



Using QI to Move From Current State to Future State



Excerpted from the National Learning Consortium
Continuous Quality Improvement (CQI) Strategies to Optimize your Practice





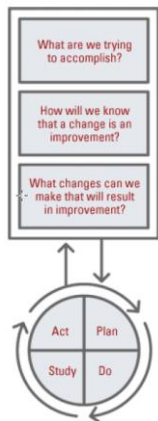
Steps for Implementing a Successful QI Strategy

- Define/refine your organization's mission, vision, and values for clinical care
- Define your organizations value-related goals and objectives
- Use a vetted QI approach to implement target-focused initiatives
- Select and coordinate relevant and impactful quality improvement initiatives to achieve the goals
- Identify the group who will serve as the center of excellence for determining evidence-based outcome measurements for your organization
- Employ Analytics and Business Intelligence tools that support this process and enable your Healthcare Organization to measure and predict the Value they are providing to their patients
- Identify Areas for Improvement
 - *Analyze data to determine if it meets the desired quality level*
 - *Interpret that data to evaluate and improve activities, identify gaps, and plan for improvement*

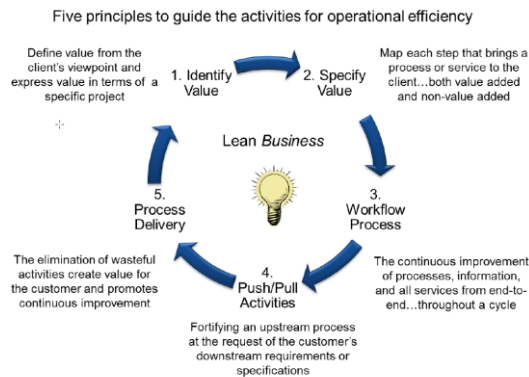


Leading Strategies for Quality Improvement

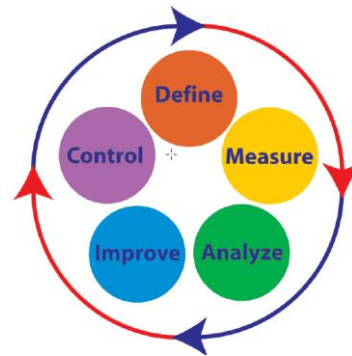
IHI Model for Improvement



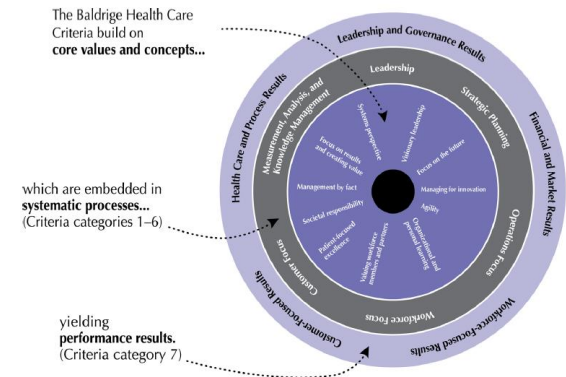
Lean



Six Sigma



Baldrige Core Values and Concepts



From Baldrige Performance Excellence Program, 2013, 2013-2014 Health Care Criteria for Performance Excellence (Gaithersburg, MD: U.S. Department of Commerce, National Institute of Standards and Technology, http://www.nist.gov/baldrige/publications/hc_criteria.cfm).

Excerpted from the National Learning Consortium
Continuous Quality Improvement (CQI) Strategies to Optimize your Practice



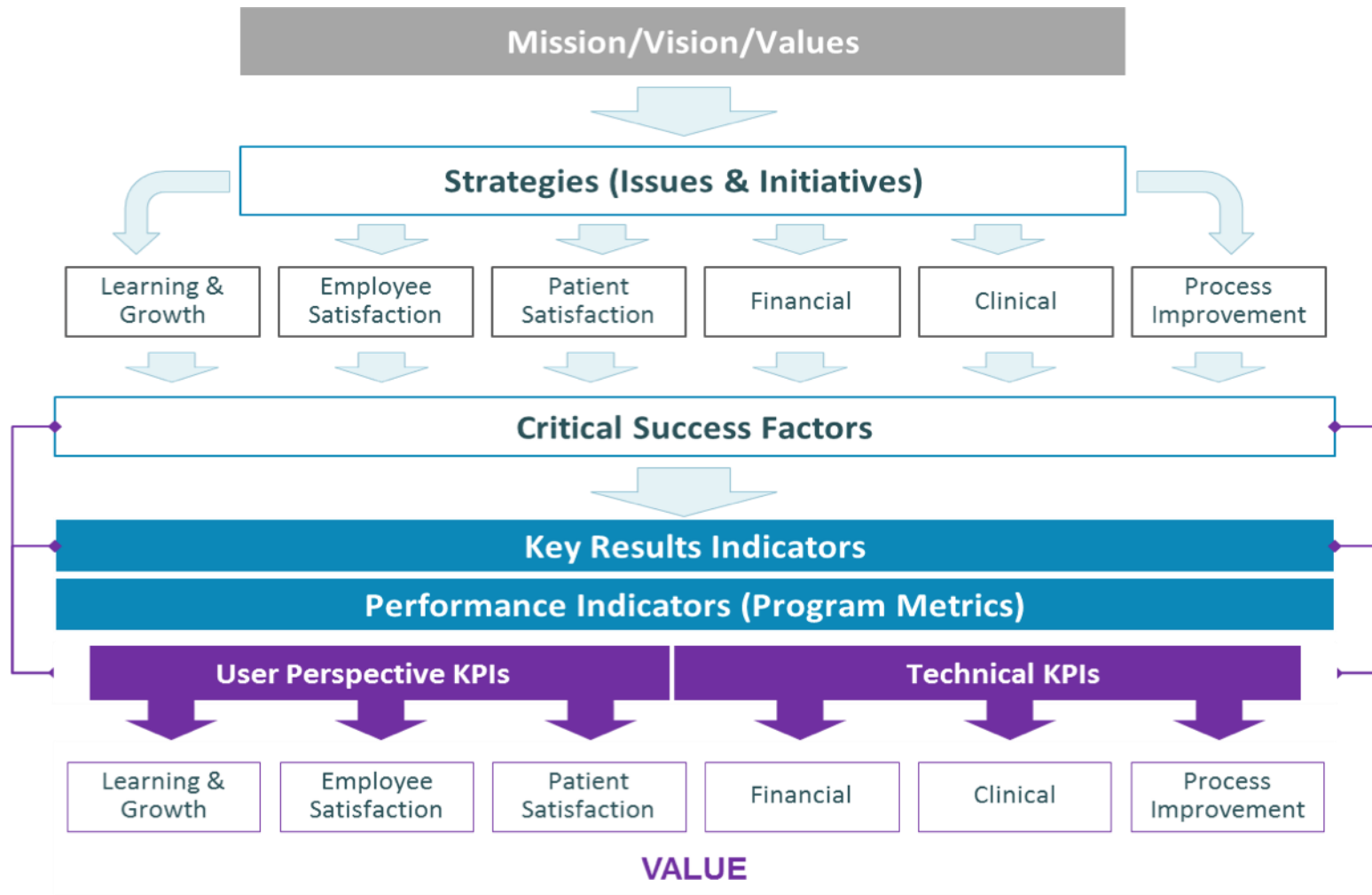
It's all about... **OUTCOMES!**

Excess Days, Mortality, Blood Utilization, EHR Adoption, Length of Stay, Informatics, Readmissions, Safety, Analytics, Efficiency, Care Variation, eMeasures, Medication Errors, Data Warehousing, Service, Value Realization, Clinical Decision Support, Cost of Care, Antimicrobial Stewardship, Consumer Engagement, Process Improvement.

Value Management Framework

- The Value Management framework: (Value=Outcomes[Results that matter]/Cost) provides the methodology to align mission, vision and values with strategies to determine if the organization is achieving desired goals
- Value Management provides organizations with the tools and methodologies to define and measure Value for their patients moving from the old world (volume-based) to the new world (value-based)
- The components of the value equation are assessed by analyzing measurements taken in the context of technical, patient health and programmatic considerations. Costs are assessed by calculating time and materials, to include using time-driven activity-based costing methods

Value Management





Resources

- (HRSA) [Guide to Improving Care Processes and Outcome in Health Centers](#)
- (HIMSS) [Guidebooks on Improving Outcomes with Clinical Decision Support](#)
- (ONC) [Planning and Implementing Improved Care Processes](#)
- (ONC) [Health IT Playbook](#)
- National Learning Consortium Continuous Quality Improvement (CQI) Strategies to Optimize your Practice
https://www.healthit.gov/sites/default/files/tools/nlc_continuousqualityimprovementprimer.pdf
- The Strategy That Will Fix Health Care HBR Article, references the hierarchy:
<https://hbr.org/2013/10/the-strategy-that-will-fix-health-care>
- National Academy of Medicine (NAM/IOM) Best Care At Lower Cost/Learning Health System:
<http://www.nationalacademies.org/hmd/Reports/2012/Best-Care-at-Lower-Cost-The-Path-to-Continuously-Learning-Health-Care-in-America.aspx>



It's all about... OUTCOMES !

Safety Care Variation eMeasures Quality Service Medication Errors
Clinical Decision Support Antimicrobial Stewardship
Length of Stay Readmissions
Cost of Care Process Improvement
Consumer Engagement EHR Adoption
Data Warehousing Efficiency Mortality Value Realization Optimization
Informatics Excess Days Blood Utilization Analytics Patient Satisfaction

Discussion, Questions & Answer





Contact Information

Susan McBride, PhD, RN-BC, CPHIMS, FAAN

Professor

Texas Tech University Health Sciences Center

School of Nursing

susan.mcbride@ttuhsc.edu

Kim Bodine, DNP, RN

Senior Director, Applied Clinical Informatics

Tenet Healthcare

kim.bodine@tenethealth.com

Donna DeBoever, MA, RN-BC

Director, IT Regulatory Reporting

JPS Health Network

ddeboever@jpshealth.org

