



**Task 4C: Technical Expert Panel Report
Continuity Assessment Record & Evaluation**

SOD #18.2

**Electronic Specification of Clinical Quality Measures & Support
Contract # HHSM-500-2011-00104C
Task Order #CMS-9302011-EQ**

TEP Meeting Date: November 27, 2012

**Prepared for:
Deborah Krauss
Division of Health Information Technology
Quality Measurement & Health Assessment Group
Center for Clinical Standards & Quality
Centers for Medicare & Medicaid Services
7500 Security Blvd., Bldg. S3-09-04
Baltimore, MD 21244-1850**

**Submitted by:
Lantana Consulting Group
PO Box 177
East Thetford, VT 05043**



© 2012 Lantana Consulting Group
All rights reserved.

Lantana Consulting Group

crystal.kallem@lantanagroup.com

liora.alschuler@lantanagroup.com

bob.dolin@lantanagroup.com

<http://www.lantanagroup.com>

Table of Contents

MEETING DATE AND PANEL COMPOSITION.....	5
PURPOSE AND OBJECTIVES.....	6
FINDINGS AND RECOMMENDATIONS.....	7
Vision for LTPAC EHR Adoption.....	7
Leveraging MU Stage 3: Conformance Criteria	9
Leveraging MU Stage 3: Clinical Quality Measures	10
SUMMARY.....	12
LIST OF ACRONYMS AND ABBREVIATIONS.....	13

Table of Figures

Figure 1: Vision for LTPAC EHR alignment with certified EHRs	8
Figure 2: LTPAC EHR adoption of templated CDA	9
Figure 3: Meaningful Use Stage 3 and Quality Reporting.....	11

Meeting Date and Panel Composition

The Continuity Assessment Record and Evaluation (CARE) Technical Expert Panel (TEP) met November 27, 2012, by telephone.

Nine TEP members participated:

Dana Alexander, RN, MSN, MBA, FHIMSS, FAAN—VP and Chief Nursing Officer, Caradigm, Monument, CO

Maria Arellano, RN, MS—Nurse Informatics Specialist/Clinical Software Designer, American Health Tech, Broomfield, CO

Dan Cobb—Chief Technology Officer, HealthMEDX, Ozark, MO

Yvonne Grant, PharmD, CGP—Pharmacist Care Manager, Kaiser Permanente, Panorama City, CA

Norma Lang, RN, PhD, FAAN, FRCN—Howe Endowed Chair for Healthcare Transformation, University of Wisconsin-Milwaukee College of Nursing and Aurora Health Care, Cedarburg, WI

Maria Moen—Healthcare Applications Director, Brookdale Senior Living, Brentwood, TN

Terrence O'Malley, MD—Internist-Geriatrician, Partners Healthcare System, Inc., Boston, MA

William M. Russell, MD—Independent Consultant

John Sheridan—CEO, eHealth Data Solutions, Cleveland Heights, OH

Nine eQuality team members attended:

Liora Alschuler—Lantana Consulting Group

Marte Carlson—Lantana Consulting Group

Bob Dolin—Lantana Consulting Group

Gaye Dolin—Lantana Consulting Group

Floyd Eisenberg—Lantana Consulting Group

Zabrina Gonzaga—Lantana Consulting Group

Diana Quaynor—Lantana Consulting Group

Maureen Tan—Lantana Consulting Group

Michael Tushan—Lantana Consulting Group

Three observers were present:

Debbie Krauss—eQuality COR, Office of Clinical Standards & Quality, CMS

Judy Tobin—Office of Clinical Standards & Quality, CMS

Jennie Harvell—Federal Listening Partner, Assistant Secretary for Planning and Evaluation, HHS

Purpose and Objectives

The CARE TEP was charged with reviewing scope and objectives for the upcoming year and providing information to the project team about how CARE data elements could be standardized for to support interoperability and clinical quality measurement across care setting and align with the Centers for Medicare and Medicaid Services (CMS) Medicare and Medicaid Electronic Health Record (EHR) Incentive Program (Meaningful Use).

The CARE TEP focused on two key points of discussion:

1. The eQuality team's vision and strategies for standardizing the full CARE data set
2. The relationship of EHR-generated post-acute care (PAC) clinical quality measures to MU Stage 3

Findings and Recommendations

The TEP reviewed the eQuality team's vision and transition plan for encouraging EHR adoption in long term post-acute care (LTPAC) settings and provided input on how the relationship of EHR-generated clinical quality measures (CQMs) and Meaningful Use (MU) Stage 3 requirements could be used to increase benefits of EHR use in PAC settings.

The TEP meeting began with a review of the purpose and objectives of the CARE TEP:

- Discuss the CARE vision and strategies for standardizing the full CARE data set.
- Evaluate the relationship of EHR-generated PAC CQMs to MU Stage 3 and beyond.

The Centers for Medicare and Medicaid Services (CMS) established the scope of PAC settings as those included in the Post Acute Care Payment Reform Demonstration PAC-PRD¹ from 2008-2010: skilled nursing facilities (SNFs), long-term care hospitals (LTCHs), home health agencies (HHAs), inpatient rehabilitation facilities (IRFs), and hospices. Assisted living settings are not within the scope of this work, but could benefit from transition-of-care information and possibly provide input when patients are transferred from assisted-living centers to long-term care. CMS would consider input from behavioral health settings. A CMS objective is that the CARE data set be patient-centered rather than setting- or payer-centered.

Vision for LTPAC EHR Adoption

The EHR vision session reviewed the overlap among EHRs in ambulatory, hospital, and LTPAC settings and the relationship of CQMs. The TEP considered LTPAC EHR capabilities including reporting, decision support, and templated Clinical Document Architecture (CDA):

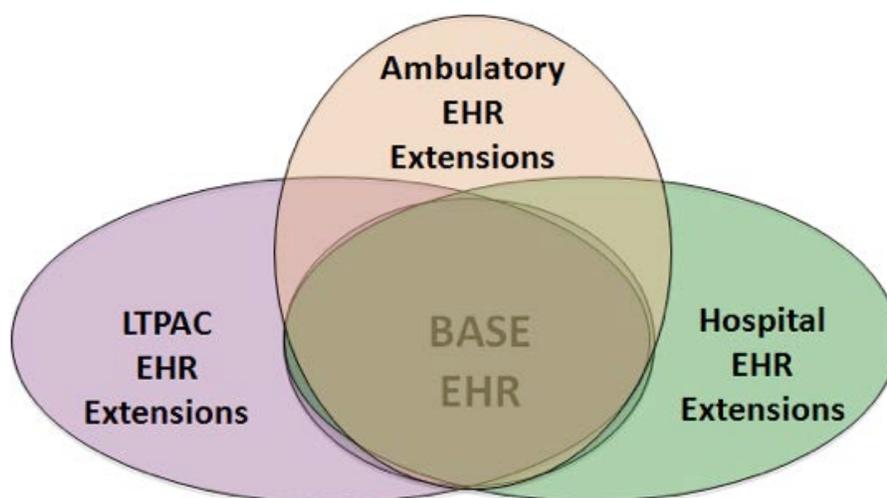
- EHRs have a common base capability across the three care settings, but ambulatory and hospital EHRs are certified for MU.
- CQMs overlap across settings, and several will be applicable across all settings; the primary concern is whether, not where, the measure is met.
- LTPAC EHRs have capabilities that can be leveraged to process quality measures.
- LTPAC EHRs will adopt templated CDA, and the CARE dataset will be used to generate additional templates.

The TEP discussed potential confusion around the concept of a “base” EHR (see Figure 1). A “Base EHR”, as defined by the Office of the National Coordinator for Health IT (ONC) under Meaningful Use, contains a very specific set of functionality. The group suggested that we clarify that “base” in this context didn't just mean functionality sufficient to run a LTPAC setting, but that it needed to include functionality required to meet the objectives of shared care across settings, from the perspectives of care transitions, setting neutral quality reporting, and decision support.

The overlap among the EHR types (ambulatory, hospital, and LTPAC) is closer to 80% than the 30% depicted in the graphic. Eighty percent represents patient-centeredness. Twenty percent

¹ RTI, 2008.

Figure 1: Vision for LTPAC EHR alignment with certified EHRs



represents the setting where the transitions of care data needs are defined, not who is transmitting the data.

The TEP supported measuring quality across settings and envisioned a library of quality measures derived from the Quality Data Model (QDM). Certain measures would apply across multiple settings. A set of dictionary items would allow creation of a meta-quality data set where quality measures could be grouped appropriately. The TEP observed that checking the status of diabetes, pressure ulcers, and flu vaccine is important, but addressing all three is most important. Quality measures should be grouped around what information the next site of care requires to maintain quality, and quality should be defined as transitioning and transmitting all elements necessary for safe and effective care. CMS has a library with metadata for all measures that a vendor can use to build the EHR (<https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/ClinicalQualityMeasures.html>).

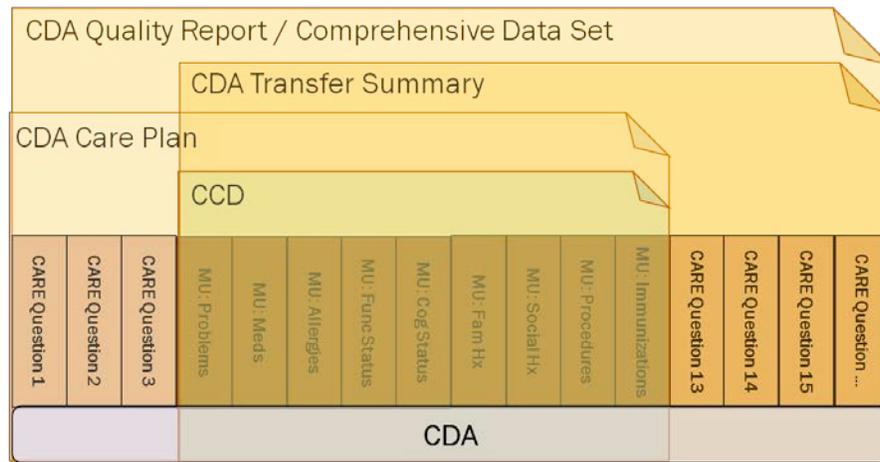
What is good for quality measurement is good for transition of care, clinical decision support, and patient care. The point of measuring quality is not to generate a report, but to improve quality. That requires that data flow back to the provider. The content in the base EHR must be of value from the perspectives of patient-centric quality of care, transition of care, and clinical decision support.

The data required for each of these use cases could be operationalized through a library of data elements that, in turn, could be represented as CDA templates (see Figure 2). HL7 CDA templates are modular (e.g., blood pressure, discharge diagnosis) building blocks that can be reused and provide for quicker implementation. Templates can be repackaged with others to form any number of CDA implementation guides. The templates could be relevant to various document types. The library of different documents would define which elements shall, should, or may be included. Some templates would be required for use in multiple settings; some would be relevant in a single setting (e.g., ambulatory).

The TEP discussed the value of making the transition data information more relevant. For example, medications and problems are more relevant than the concept of Chief Complaint. The TEP proposed the concept of “Health Concern”, a component of a CARE Plan that captures issues, such

as potential injury, illness and wellness concerns, and acute or chronic active medical problems that require management and prioritization by the patient². The data needed when transferring patients from one care setting to another will differ based on the recipient, raising the notion of a superset of transfer data. The TEP indicated that the recipient of the patient data should decide what data is needed to maintain quality care for the patient.

Figure 2: LTPAC EHR adoption of templated CDA



Leveraging MU Stage 3: Conformance Criteria

The TEP discussion on MU Conformance Criteria focused on the Health Information Technology Policy Committee (HITPC) request for comment on potential Stage 3 MU Certification Criteria. Comments are due back to the HITPC by January 14, 2013.

The TEP discussed concerns about how incentives in the current environment work against obtaining more information. The objective when transferring a patient into an acute care setting is to find an unassailable reason to admit the patient.

The eQuality team discussed research showing existing Stage 2 Certification Criteria with Stage 3 HITPC recommendations and offering possible eQuality additions or suggestions for the HITPC to consider when making its recommendations to ONC. The recommendations must be concrete and actionable, not high level vision, and must help create a technology trickle-down effect for LTPAC EHRs. The TEP indicated that anything requiring PAC participation will drive adoption and improve the transition of care.

The TEP expressed the need for clear and unambiguous definitions of Plans of Care and Care Plans. Although often used interchangeably, the terms “Plan of Care” and “Care Plan” are not synonymous. A Plan of Care is disease- or condition-specific and is associated with disease management. A Care Plan evokes a process; it is more comprehensive, covering multiple diagnoses, and captures goals and interventions, including lifestyle changes.

² Meaningful Use Requirements for: Transitions of Care & Care Plans for Medically Complex and/or Functionally Impaired Persons. Report to S&I Framework, Longitudinal Coordination of Care Work Group, August 2012. Accessed February 21, 2013.

The goal outlined by the eQuality team is to raise the bar for MU Stage 3 and assumes that doing so for ambulatory and hospital settings will impact LTPAC settings. The criteria would include the ability to create and transmit the Care Plan and ensure that EHRs can reconcile data allowing providers in different settings to manipulate a single care plan. The Standards and Interoperability (S&I) Framework and National Quality Forum (NQF) have each done work around care coordination that should be leveraged.

The eQuality team discussed the complexities affecting care coordination. The interoperability standards for coordinating care support the need to incorporate usable data directly into an EHR. Data Reconciliation currently addresses that process. The eQuality team asked what other features or capabilities might be needed.

The current focus of MU on information exchange must be expanded. Care Plans as exchange documents provide critical data for supporting transitions of care. A Care Plan is a broad, interdisciplinary plan that becomes a reference document amongst multiple Plans of Care. The Care Plan is more targeted toward lifestyle while a Plan of Care is targeted single diseases or conditions and is negotiated between a small number of physicians and the patient. With multiple providers, conflicts can arise amongst Plans of Care so a Care Plan is created that reconciles multiple Plans of Care. However, accessing, receiving, displaying and updating a Care Plan across multiple care settings is challenging. The TEP expressed concern about authoritarian issues with physicians involved in the Care Plan, particularly when the expectations of the PAC community are in conflict with those of the acute care community. For example, an acute care provider may prescribe a psychotropic medication for a patient when CMS is trying to reduce the use of such drugs in PAC settings. The concern is that management of psychotic behaviors in hospitals would be mistaken for a Care Plan.

Leveraging MU Stage 3: Clinical Quality Measures

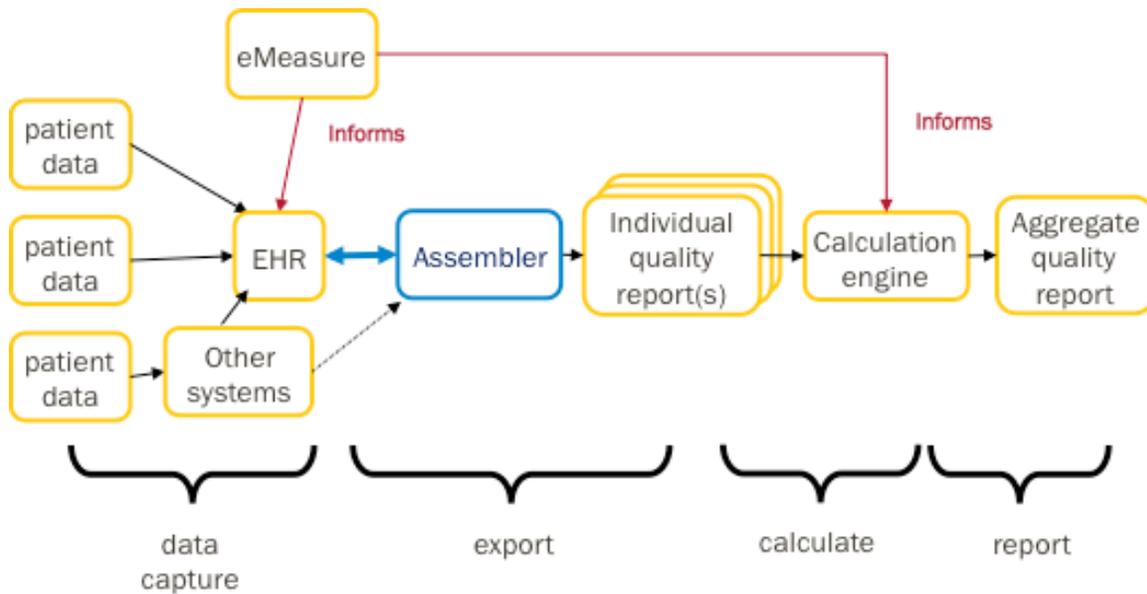
The TEP discussion of clinical quality measures focused on how CQMs could be used alongside MU Stage 3 to foster improved care coordination across settings. The eQuality team asked the TEP whether the model of quality measurement implicit in MU Stage 2 is sufficient to achieve the patient-centered quality objectives of the LTPAC community.

The model for quality reporting under MU Stage 2 may need modification under MU Stage 3 to address Accountable Care Organizations (ACOs), patient-centered care, and care coordination. Under MU Stage 2 rules, an EHR captures data, exports, calculates, and reports quality measures, and a calculation engine aggregates these activities. Other systems can provide data to the EHR that may feed directly into the quality reports. A single EHR is unlikely to contain all the needed data for quality reporting. This led the eQuality team to propose the concept of an “Assembler” that would allow other systems to contribute data to the EHR and support a clinical-decision support engine at the point-of-care (see Figure 3). The Assembler is a database process that accepts data from disparate sources, scrubs and transforms it to prepare it for reporting or other analytics needs.

The TEP stressed the importance of maintaining focus on patient-centeredness. Patients might also enter data into a portal or PHR, raising the issue of ownership of the Care Plan and how elements on the Care Plan are addressed. The TEP expressed concern about Assembler governance when events not based on patient encounters (e.g., patients entering data into a PHR or alerts triggered by birthdays) enter the Assembler.

Decision support can exist in the Assembler and in the EHR. Multiple systems of record exist in the absence of a comprehensive EHR. In the current model, CMS assembles the data and disseminates information to the states. The Health Information Exchange (HIE) approach is similar and could be an imposed infrastructure. The TEP cautioned against EHRs functioning as both transactional systems and data warehouses.

Figure 3: Meaningful Use Stage 3 and Quality Reporting



Summary

The TEP provided feedback on the eQuality team's vision and transition plan for LTPAC EHR adoption. The TEP clarified many of the barriers that have prevented a more rapid update of EHRs in LTPAC settings such as cost pressures, lack of funding and ineligibility for Meaningful Use incentive payments, and lack of meaningful information exchange (critical information such as active medications often fails to accompany patient transitions). The TEP provided valuable insight into the complexities of care coordination and transitions among LTPAC settings, hospitals, and ambulatory care settings.

The eQuality CARE TEP recommendations will inform feedback to the HITPC on how MU Stage 3 criteria could be tailored to improve transitions of care between LTPAC and acute care settings. Recommendations include:

- Refine the definition of “base EHR” since it is a concept with a specific meaning for MU.
- Update Figure 1: Vision for LTPAC EHR Alignment with Certified EHRs, to reflect an 80 percent overlap in functionality between acute, ambulatory and LTPAC EHRs.
- Clarify the difference between Care Plan and Plan of Care.
- Update Figure 3: Meaningful Use Stage 3 and Quality Reporting, to include the patient at the center of the data model.

List of Acronyms and Abbreviations

ACO	Accountable Care Organization
CARE	Continuity Assessment Record and Evaluation
CCD	Continuity of Care Document
CDA	Clinical Document Architecture
CMS	Centers for Medicare and Medicaid Services
CQM	Clinical quality measures
EHR	Electronic health record
HIE	Health Information Exchange
HITPC	Health Information Technology Policy Committee
HL7	Health Level 7
IG	Implementation Guide
IRF-PAI	Inpatient Rehabilitation Facilities-Patient Assessment Instrument
IRF	Inpatient Rehabilitation Facility
LTCH	Long term care hospitals
LTPAC	Long term post-acute care
MDS	Minimum Data Set
MU	Meaningful Use
NF	Nursing facility, certified by Medicaid
NQF	National Quality Forum
OASIS	Outcome & Assessment Information Set
ONC	Office of the National Coordinator
PAC	Post-Acute Care
PAC-PRD	Post-Acute Care Payment Reform Demonstration
QDM	Quality Data Measures
QDM	Quality Data Model
QRDA	Quality Reporting Document Architecture
S&I	Standards and Interoperability
SNF	Skilled nursing facility, certified by Medicare
TEP	Technical Expert Panel