Stage 2 Meaningful Use Fact Sheet

Public Health Reporting Objectives

Background

One of the stated goals of the American Recovery and Reinvestment Act (ARRA), enacted in February 2009, is to increase the Meaningful Use (MU) of Electronic Health Record (EHR) technology among medical providers. The Centers for Medicare and Medicaid Services (CMS) established incentive programs using ARRA funds to encourage eligible professionals (EPs), eligible hospitals (EHs), and critical access hospitals (CAHs) to adopt and use EHR technology.

To receive the EHR MU incentives, participating providers and facilities must meet various operational and public health criteria established by CMS with the Office of the National Coordinator for Health Information Technology (ONC). The Medicare and Medicaid EHR Incentive Programs are staged in three steps over several years with increasing requirements for participation. On September 4th 2012, CMS published a final rule that specifies the Stage 2 criteria that EPs, EHs, and CAHs must meet in order to continue to participate in the EHR Incentive Programs. Also on this date, ONC published a final rule adopting the certification criteria that establish the technical capabilities and specify the related standards and implementation specifications that Certified Electronic Health Record Technology (CEHRT) will need to include to support the achievement of meaningful use by EPs, EHs, and CAHs beginning with the EHR reporting periods in fiscal year and calendar year 2014. All providers must achieve meaningful use under the Stage 1 criteria before moving to Stage 2.

- **CMS Stage 2 Final Rule EHR Incentive Program** (http://www.gpo.gov/fdsys/pkg/FR-2012-09-04/pdf/2012-21050.pdf)
  (Stage 2 Correction Notice: http://www.gpo.gov/fdsys/pkg/FR-2012-10-23/pdf/2012-25975.pdf)

- **ONC Final Rules Health Information Technology: Standards, Implementation Specifications, and Certification Criteria for Electronic Health Record Technology, 2014 Edition; Revisions to the Permanent Certification Program for Health Information Technology** (http://www.gpo.gov/fdsys/pkg/FR-2012-09-04/pdf/2012-20982.pdf)

MU includes both a core set and a menu set of objectives that are specific to EPs or EHs and CAHs. The five public health objectives in the Stage 2 are submission of electronic data to public health in the context of 1) Immunizations, 2) Reportable Laboratory Results (EHs and CAHs only), 3) Syndromic Surveillance, 4) Cancer (EPs only), and Specialized Registries (EPs only). Unless an EP, EH, or CAH meets an exclusion criteria it is mandatory for them to complete the public health objectives in the core set, as part of their demonstration of being a meaningful user of EHR technology. Three of the six objectives in the menu set for EPs are public health related objectives. EPs must select three from the menu set, but they are not required to select the public health objectives. For EHs and CAHs, all the public health objectives are in the core set and there are no public health objectives in the menu set. A tabular listing of the public health objectives is provided in **Table 1**.

Public Health Objective	Eligible Professional *(Objective Set: Menu or Core)*	Eligible Hospital / Critical Access Hospital *(Objective Set: Menu or Core)*
Immunization	Core	Core
Reportable Laboratory Results	-	Core
Syndromic Surveillance	Menu	Core
Cancer	Menu	-
Specialized Registries	Menu	-

Table 1: List of the Stage 2 Meaningful Use Public Health Objectives

Public Health Objectives

Immunization Facts and Details

Item	Fact and Details
Objective	Capability to submit electronic data to immunization registries or immunization information systems except where prohibited, and in accordance with applicable law and practice.
Measure	Successful ongoing submission of electronic immunization data from CEHRT to an immunization registry or immunization information system for the entire EHR reporting period.
Exclusion	Any EP/EH/CAH that meets one or more of the following criteria may be excluded from this objective: (1) the EP/EH/CAH does not administer any of the immunizations to any of the populations for which data is collected by their jurisdiction's immunization registry or immunization information system during the EHR reporting period; (2) the EP/EH/CAH operates in a jurisdiction for which no immunization registry or immunization information system is capable of accepting the specific standards required for CEHRT at the start of their EHR reporting period; (3) the EP/EH/CAH operates in a jurisdiction where no immunization registry or immunization information system provides information timely on capability to receive immunization data; or (4) the EP/EH/CAH operates in a jurisdiction for which no immunization registry or immunization information system that is capable of accepting the specific standards required by CEHRT at the start of their EHR reporting period can enroll additional EPs/EHs/CAHs.
Certification Criteria	*§ 170.314(f)(2) Transmission to immunization registries:* EHR technology must be able to electronically create immunization information for electronic transmission in accordance with: (i) The standard and applicable implementation specifications specified in *§ 170.205(e)(3);* and (ii) At a minimum, the version of the standard specified in *§ 170.207(e)(2).*

Item	Fact and Details
Standard(s)	*§ 170.205(e)(3)* HL7 2.5.1 (incorporated by reference in *§ 170.299*). Implementation specifications. HL7 2.5.1 Implementation Guide for Immunization Messaging, Release 1.4, (incorporated by reference in § 170.299). • HL7 Version 2.5.1: Implementation Guide for Immunization Messaging, Release 1.4, Published and Posted Aug1, 2012 (http://www.cdc.gov/vaccines/programs/iis/technical-guidance/downloads/hl7guide-1-4-2012-08.pdf). This document replaces the previous HL7 Version 2.5.1 Implementation Guide for Immunization Messaging, Release 1.3. It contains minor updates and corrections. • Conformance Clarification for EHR Certification of Immunization Messaging, VXU MESSAGES V04, HL7 Version 2.5.1, Release 4. Published and Posted Nov 30, 2012, (http://www.cdc.gov/vaccines/programs/iis/technical-guidance/downloads/hl7-clarification-R4.pdf) **Note:** This addendum consolidates the Implementation Guide information that clarifies the conformance requirements for EHR certification for Meaningful Use 2. This supplement does not specify additional requirements; it just clarifies existing ones. Conformance statements and conditional predicates that clarify message requirements for EHR certification are presented. Value set requirements, general clarifications, and Immunization Implementation Guide errata are also provided in this addendum *§ 170.207(e)(2)* Immunizations HL7 Standard Code Set CVX -- Vaccines Administered, updates through July 11, 2012 (incorporated by reference in *§ 170.299*).
NIST Test Procedure	Test Procedure for §170.314(f)(2) Transmission to immunization registries (http://www.healthit.gov/sites/default/files/170.314f2transmissiontoimmunizationregistries_2014_tp_approved_v1.3.pdf)
NIST Validation Tool	Immunization Validation Suite HL7v2 Validation Tool – Meaningful Use 2014 Edition Certification Testing (http://hl7v2-iz-testing.nist.gov/mu-immunization/)
Additional Information	http://www.cdc.gov/ehrmeaningfuluse/immunization.html http://www.cdc.gov/vaccines/programs/iis/meaningful-use/index.html

Reportable Lab Results Facts and Details

Item	Fact and Details
Objective	Capability to submit electronic reportable laboratory results to public health agencies, where except where prohibited, and in accordance with applicable law and practice.
Measure	Successful ongoing submission of electronic reportable laboratory results from Certified EHR Technology to a public health agency for the entire EHR reporting period.
Exclusion	Any eligible hospital or CAH that meets one or more of the following criteria: (A) Operates in a jurisdiction for which no public health agency is capable of receiving electronic reportable laboratory results in the specific standards required for Certified EHR Technology at the start of their EHR reporting period. (B) Operates in a jurisdiction for which no public health agency provides information timely on capability to receive electronic reportable laboratory results. (C) Operates in a jurisdiction for which no public health agency that is capable of accepting the specific standards required by Certified EHR Technology at the start of their EHR reporting period can enroll additional eligible hospitals or CAHs.

Item	Fact and Details
Certification Criteria	*§ 170.314(f)(4) Transmission of Reportable Laboratory Tests and Values/Results:* EHR technology must be able to electronically create reportable laboratory tests and values/results for electronic transmission in accordance with: (i) The standard (and applicable implementation specifications) specified in 170.205(g); and (ii) At a minimum, the versions of the standards specified in 170.207(a)(3)and (c)(2).
Standard(s)	*§ 170.205(g)* HL7 2.5.1 (incorporated by reference in § 170.299). Implementation specifications. HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 (US Realm) (incorporated by reference in § 170.299) with Errata and Clarifications, (incorporated by reference in § 170.299) and ELR 2.5.1 Clarification Document for EHR Technology Certification, (incorporated by reference in § 170.299) *§ 170.207(a)(3)* IHTSDO SNOMED CT® International Release July 2012 (incorporated by reference in § 170.299) and US Extension to SNOMED CT® March 2012 Release (incorporated by reference in § 170.299). *§ 170.207(c)(2) Laboratory tests* Logical Observation Identifiers Names and Codes (LOINC®) Database version 2.40, a universal code system for identifying laboratory and clinical observations produced by the Regenstrief Institute, Inc. (incorporated by reference in § 170.299).
NIST Test Procedure	Test Procedure for §170.314(f)(4) Inpatient setting only – transmission of reportable laboratory tests and values/results (http://www.healthit.gov/sites/default/files/170.314f4transmissionreportablelabs_tp_2014_approved_v1.3.pdf)
NIST Validation Tool	Electronic Lab Reporting (ELR) Validation Suite HL7 2.5.1 Validation Tool – Meaningful Use 2014 Edition Certification Testing http://hl7v2-elr-testing.nist.gov
Additional Information	N/A

Syndromic Surveillance Facts and Details

Item	Fact and Details
Objective	Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice.
Measure	Successful ongoing submission of electronic syndromic surveillance data from Certified EHR Technology to a public health agency for the entire EHR reporting period.
Exclusion	Any EP, eligible hospital or CAH that meets one or more of the following criteria may be excluded from this objective: (1) the EP is not in a category of providers that collect ambulatory syndromic surveillance information on their patients during the EHR reporting period; the eligible hospital or CAH does not have an emergency or urgent care department; (2) Operates in a jurisdiction for which no public health agency is capable of receiving electronic syndromic surveillance data in the specific standards required by Certified EHR Technology at the start of their EHR reporting period; (3) Operates in a jurisdiction where no public health agency provides information timely on capability to receive syndromic surveillance data; or (4) Operates in a jurisdiction for which no public health agency that is capable of accepting the specific standards required by Certified EHR Technology at the start of their EHR reporting period can enroll additional EPs, eligible hospitals or CAHs.

Item	Fact and Details
Certification Criteria	*§ 170.314(f)(3) Transmission to public health agencies – syndromic surveillance* EHR technology must be able to electronically create syndrome-based public health surveillance information for electronic transmission in accordance with: A. The standard specified in § 170.205(d)(2). B. Optional. The standard (and applicable implementation specifications) specified in § 170.205(d)(3).
Standard(s)	*§ 170.205(d)(2)* Eligibility inquiry and response transactions between dispensers and Part D sponsors for Part D prescription drugs must be conducted in accordance with 42 CFR 423.160(b)(3)(ii). (3) Standard and implementation specifications. A health care claims or equivalent encounter information transaction as defined at 45 CFR 162.1101 must be conducted in accordance with 45 CFR 162.1102(b) or for the period on and after January 1, 2012, in accordance with 45 CFR 162.1102(c). *§ 170.205(d)(3)* HL7 2.5.1 (incorporated by reference in § 170.299). Implementation specifications. PHIN Messaging Guide for Syndromic Surveillance (incorporated by reference in § 170.299) and Conformance Clarification for EHR Certification of Electronic Syndromic Surveillance, Addendum to PHIN Messaging Guide for Syndromic Surveillance (incorporated by reference in § 170.299).
NIST Test Procedure	Test Procedure for §170.314(f)(3) Transmission to public health agencies – syndromic surveillance http://www.healthit.gov/sites/default/files/170.314f3transmissiontopubhealthsyndsurv_2014_tp_approved_v1.3.pdf
NIST Validation Tool	Syndromic Surveillance Validation Suite – HL7 V2 Validation Tool – Meaningful Use 2014 Edition Certification Testing http://hl7v2-ss-testing.nist.gov/mu-syndromic/
Additional Information	N/A

Cancer Facts and Details

Item	Fact and Details
Objective	Capability to identify and report cancer cases to a public health central cancer registry, except where prohibited, and in accordance with applicable law and practice.
Measure	Successful ongoing submission of cancer case information from CEHRT to a public health central cancer registry for the entire EHR reporting period.
Exclusion	Any EP that meets at least 1 of the following criteria may be excluded from this objective: (1) The EP does not diagnose or directly treat cancer; (2) The EP operates in a jurisdiction for which no public health agency is capable of receiving electronic cancer case information in the specific standards required for CEHRT at the beginning of their EHR reporting period; (3) The EP operates in a jurisdiction where no public health agency provides information timely on capability to receive electronic cancer case information; or (4) The EP operates in a jurisdiction for which no public health agency that is capable of receiving electronic cancer case information in the specific standards required for CEHRT at the beginning of their EHR reporting period can enroll additional EPs.

Item	Fact and Details
Certification Criteria	*§ 170.314(f)(5) Cancer case information* *§ 170.314(f)(6) Transmission to cancer registries* EHR technology must be able to electronically create cancer case information for electronic transmission in accordance with: (i) The standard (and applicable implementation specifications) specified in § 170.205(i); and (ii) At a minimum, the versions of the standards specified in § 170.207(a)(3) and (c)(2).
Standard(s)	*§ 170.205(i)* HL7 Clinical Document Architecture (CDA), Release 2.0, Normative Edition (incorporated by reference in § 170.299). Implementation Guide for Ambulatory Healthcare Provider Reporting to Central Cancer Registries, HL7 Clinical Document Architecture (CDA), (incorporated by reference in § 170.299). *§ 170.207(a)(3)* IHTSDO SNOMED CT® International Release July 2012 (incorporated by reference in § 170.299) and US Extension to SNOMED CT® March 2012 Release (incorporated by reference in § 170.299). *§ 170.207(c)(2)* Logical Observation Identifiers Names and Codes (LOINC®) Database version 2.40, a universal code system for identifying laboratory and clinical observations produced by the Regenstrief Institute, Inc. (incorporated by reference in § 170.299).
NIST Test Procedure	Test Procedure for §170.314(f)(5) Cancer case information – ambulatory setting only http://www.healthit.gov/sites/default/files/170.314f5cancercaseinformation_2014_tp_approved_v1.2.pdf Test Procedure for §170.314(f)(6) Transmission to cancer registries – ambulatory setting only http://www.healthit.gov/sites/default/files/170_314f6transmissiontocancerregistries_tp_approved_v1_3.pdf
NIST Validation Tool	Meaningful Use Cancer Registry Report Validation http://hit-testing.nist.gov/cda-validation/muCr.html
Additional Information	http://www.cdc.gov/cancer/npcr/meaningful_use.htm

Specialized Registries Facts and Details

Item	Fact and Details
Objective	Capability to identify and report specific cases to a specialized registry (other than a cancer registry), except where prohibited, and in accordance with applicable law and practice.
Measure	Successful ongoing submission of specific case information from CEHRT to a specialized registry for the entire EHR reporting period.

Item	Fact and Details
Exclusion	Any EP that meets at least 1 of the following criteria may be excluded from this objective: (1) The EP does not diagnose or directly treat any disease associated with a specialized registry sponsored by a national specialty society for which the EP is eligible, or the public health agencies in their jurisdiction; (2) The EP operates in a jurisdiction for which no specialized registry sponsored by a public health agency or by a national specialty society for which the EP is eligible is capable of receiving electronic specific case information in the specific standards required by CEHRT at the beginning of their EHR reporting period; (3) The EP operates in a jurisdiction where no public health agency or national specialty society for which the EP is eligible provides information timely on capability to receive information into their specialized registries; or (4) The EP operates in a jurisdiction for which no specialized registry sponsored by a public health agency or by a national specialty society for which the EP is eligible that is capable of receiving electronic specific case information in the specific standards required by CEHRT at the beginning of their EHR reporting period can enroll additional EPs.
Certification Criteria	N/A
Standard(s)	N/A
NIST Test Procedure	N/A
NIST Validation Tool	N/A
Additional Information	N/A

Key Points

1. Ongoing Submission

All of the Stage 2 measures for the public health objectives specify successful ongoing submission of electronic data from CEHRT to a public health agency (PHA) or registry for the entire EHR reporting period. EPs, EHs, and CAHs may satisfy the measure through any of the following general public health criteria:

- Ongoing submission was already achieved for an EHR reporting period in a prior year and continues throughout the current EHR reporting period using either the current standard at 45 CFR 170.314(f)(1) and (f)(2) or the standards included in the 2011 Edition EHR certification criteria adopted by ONC during the prior EHR reporting period when ongoing submission was achieved.
- Registration with the PHA or other body to whom the information is being submitted of intent to initiate ongoing submission was made by the deadline (within 60 days of the start of the EHR reporting period) and ongoing submission was achieved.
- Registration of intent to initiate ongoing submission was made by the deadline and the EP or hospital is still engaged in testing and validation of ongoing electronic submission.
- Registration of intent to initiate ongoing submission was made by the deadline and the EP or hospital is awaiting invitation to begin testing and validation.

The measure will not be met if the provider—

- Fails to register their intent by the deadline; or
- Fails to participate in the on-boarding process as demonstrated by failure to respond to the PHA written requests for action within 30 days on two separate occasions.

The four criteria to satisfy a measure are shown in **Figure 1**

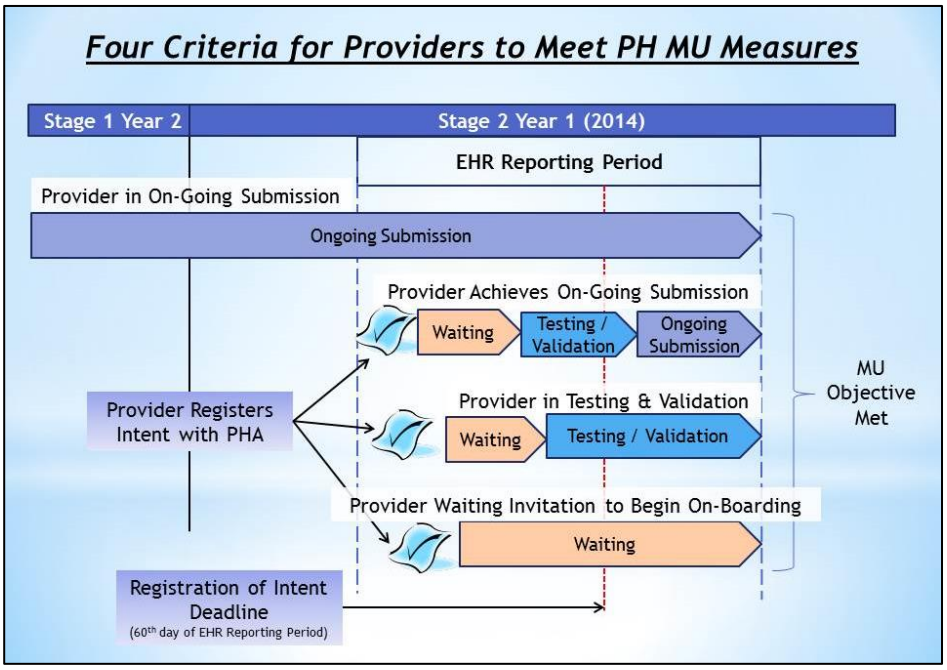

Figure 1: The four general public health criteria for EPs, EHs, and CAHs to meet public health measures (example 2014 EHR reporting period shown).

The CMS regulations describe successful ongoing submission "*as electronic submission of reportable data during the normal course of a provider's operations. This is not to say all data that is reportable is sent to the PHA. A provider who is submitting any reportable data during their normal course of their operations is engaged in ongoing submission. A provider that can only submit reportable data in a test environment or other circumstance that is not part of their normal operations would not be engaged in ongoing submission."*

2. "Except Where Prohibited" Phrase

The Stage 2 public health objectives include the phrase "except where prohibited". The phrase was added encourage reporting if a provider is authorized to do so, such as, a provider in a jurisdiction where reporting to the public health agency or registry is allowed but not required by law. This phrase allows exemptions from reporting for providers who cannot by law report to the public health

authority or registry within their jurisdiction. For example, a sovereign Indian Nation may not be permitted to report immunization registry data to the public health authority in their jurisdiction.

3. Grandfathering Providers

In Stage 1, both the HL7 2.3.1 and HL7 2.5.1 standards were included in the certification criteria for the immunization and syndromic surveillance reporting objectives. In Stage 2, only the HL7 2.5.1 standard is included and HL7 2.3.1 is no longer an option. The Stage 2 regulations allow EPs, EHs, and CAHs who achieved ongoing submission in Stage 1, using the HL7 2.3.1 standard, to continue the submission from EHR technology certified to the 2011 Edition EHR certification criteria and meet the measure for as long as the public health agencies or immunization registries to continue to accept HL7 2.3.1. This provision allows PHAs to grandfather providers that are submitting data using the HL7 2.3.1 standard. Providers in jurisdiction where the PHA allows grandfathering, will still need EHR technology certified to the 2014 Edition EHR certification criteria in order to meet the CEHRT definition beginning with the FY/CY 2014 EHR reporting period.

4. Public Health Agency Readiness

The public health objectives in the Stage 2 regulations provide opportunities for PHAs to improve their surveillance capabilities. PHAs that decide to support one or more of the public health objectives, will need to ramp-up their MU capabilities and establish new processes to receive the public health data from EPs, EHs, and CAHs. The new administrative processes for PHAs in Stage 2 are:

- **Declaration of Readiness** – Provide information, to a CMS centralized PHA capacity repository, indicating which public health objectives the PHA will support
- **Registration of Intent** – Accept registrations from provides who intent to submit data to the PHA for a public health objective
- **Onboarding** – Perform the necessary steps to onboard providers so providers are able to achieve ongoing submission of data to the PHA
- **Acknowledgement** - Provide written communication(s), which may be in electronic format, to providers that have achieved ongoing submission of data relevant to the PHA.

A Stage 2 Meaningful Use Public Health Reporting Task Force (Task Force) was established to help provide guidance to PHAs regarding the Stage 2 regulations. The Task Force is a collaborative effort between the Centers for Disease Control and Prevention (CDC), national non-profit public health associations, and public health practitioners from around the country. This Task Force has developed several guidance documents for PHAs. These documents are available at: http://www.phconnect.org/group/ph-reporting-task-force.

5. Transport

The Stage 2 regulations require EPs, EHs, and CAHs, to utilize the transport method or methods supported by the PHA in order to achieve meaningful use. In the absence of a consensus transport standard that PHAs use for the reporting, ONC believes that it is appropriate for EHR technology developers to have the flexibility to include in their EHR technology and implement the transport

standards that permit EPs, EHs, and CAHs to report to their PHA. ONC did not include a transport standard in the 2014 Edition EHR certification criteria for the public health objectives.

Additional information on transport standards for public health and meaningful use is available in an issue brief developed by the Stage 2 Meaningful Use Public Health Reporting Task Force. The document is titled, "Issue Brief: Electronic Health Information Transport for Public Health and Meaningful Use". This document is available at: http://www.phconnect.org/group/ph-reporting-task-force.