Leveraging the EHR Certification Program for Clinical Data Extraction

State Innovation Model Program
Health IT Resource Center

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Agenda

25 min
• Context – Mark Monterastelli, ONC Consultant SME
• How Data Extraction fits into the Resource Center HIT Stack for Value Based Payment
• Overview of the ONC EHR Certification Program
• Certification vs. Meaningful Use
• Certified Functions for Data Extraction
• Data Available and Formats
• Certification Validation
• Information Blocking and Surveillance

25 min
• Real world stories – Dr. David Kendrick – MyHealth Access & ONC Consultant SME

10 min
• Questions and Discussion
Conflict of Interest Disclosures
Health IT Infrastructure to create a state wide (or regional) **Shared Services** to support payment reform models

**Shared Services**
Gain efficiency through reusable shared technical services
Techniques and tactical options for extracting **clinical data** from electronic health records.

- HL7 messaging integration
  - Primary Source – ~90% of clinical data exchange
- Direct database interface (reverse engineering)
  - Practical for larger IDNs with reasonable IT budgets and relatively few EHR systems
- Certified functions for data exchange and measurement
  - Emerging method, more highly structured and coded, context oriented
  - Potentially less overall cost
• The HITECH Act of 2009 gave ONC the authority for a permanent certification program for health information technology.

• Certification provides assurance to purchasers and other users that a system meets the technological capabilities, functionality and security requirements adopted by HHS.

• Vendors have their products tested by an Accredited Testing Lab and once certified the products are posted to the Certified Health IT Product List (CHPL).
**Certification** defines and tests the functions of health information technology deemed by ONC to be important.

**Meaningful Use** pays incentive dollars to use certified health information technology in specific ways deemed by CMS to be in the best interest of the delivery system.

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### Certification vs. Meaningful Use

<table>
<thead>
<tr>
<th>MEANINGFUL USE</th>
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<th>2014 Edition EHR CERTIFICATION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>42 CFR 495.6(j)-(m)</strong> Stage 2 Objective</td>
<td><strong>42 CFR 495.6(j)-(m)</strong> Stage 2 Measure</td>
<td><strong>45 CFR 170.314</strong></td>
</tr>
<tr>
<td><strong>CORE</strong> EP EH</td>
<td><strong>CORE</strong> EP EH</td>
<td>§170.314(a)(11)</td>
</tr>
</tbody>
</table>

**Record smoking status for patients 13 years old or older.**

More than 80% of all unique patients 13 years old or older seen by the EP or admitted to the EH’s or CAH’s inpatient or emergency department (POS 21 or 23) during the EHR reporting period have smoking status recorded as structured data.

*Exclusions apply: see CMS rule for details*

**Smoking status. Enable a user to electronically record, change, and access the smoking status of a patient in accordance with the standard specified at § 170.207(h).**

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[https://www.healthit.gov/sites/default/files/meaningfulusetablesseries2_110112.pdf](https://www.healthit.gov/sites/default/files/meaningfulusetablesseries2_110112.pdf)
### Certified Functions for Data Extraction

<table>
<thead>
<tr>
<th>Function Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>170.314(a)(15)</td>
<td>Patient-Specific Education Resources</td>
</tr>
<tr>
<td>170.314(b)(1)</td>
<td>Transitions of Care - Receive, Display, and Incorporate Transition of Care/Referral Summaries</td>
</tr>
<tr>
<td>170.314(b)(2)</td>
<td>Transitions of Care - Create and Transmit Transition of Care/Referral Summaries</td>
</tr>
<tr>
<td>170.314(b)(3)</td>
<td>Electronic Prescribing</td>
</tr>
<tr>
<td>170.314(b)(4)</td>
<td>Clinical Information Reconciliation</td>
</tr>
<tr>
<td>170.314(b)(5)</td>
<td>Incorporate Laboratory Tests and Values/Results</td>
</tr>
<tr>
<td>170.314(b)(7)</td>
<td>Data Portability</td>
</tr>
<tr>
<td>170.314(c)(1)</td>
<td>Clinical Quality Measures - Capture and Export</td>
</tr>
<tr>
<td>170.314(c)(2)</td>
<td>Clinical Quality Measures - Import and Calculate</td>
</tr>
<tr>
<td>170.314(c)(3)</td>
<td>Clinical Quality Measures - Electronic Submission</td>
</tr>
<tr>
<td>170.314(d)(1)</td>
<td>Authentication, Access Control, and Authorization</td>
</tr>
<tr>
<td>170.314(d)(2)</td>
<td>Auditable Events and Tamper-Resistance</td>
</tr>
<tr>
<td>170.314(d)(3)</td>
<td>Audit Reports</td>
</tr>
</tbody>
</table>
Create and Transmit Transition of Care/Referral Summaries

§170.314(b)(2) Transitions of care - create and transmit summary care records.

(i) Create. Enable a user to electronically create a transition of care/referral summary formatted according to the standard adopted at §170.205(e)(3) that includes, at a minimum, the Common MU Data Set and the following data expressed, where applicable, according to the specified standard(s):

C-CDA
HL7 Implementation Guide for CDA Release 2: IHE Health Story Consolidation
https://www.law.cornell.edu/cfr/text/45/170.205
§170.314(b)(7) Data portability. Enable a user to electronically create a set of export summaries for all patients in EHR technology formatted according to the standard adopted at §170.205(a)(3) that represents the most current clinical information about each patient and includes, at a minimum, the Common MU Data Set and the following data expressed, where applicable, according to the specified standard(s):

C-CDA
HL7 Implementation Guide for CDA Release 2: IHE Health Story Consolidation
https://www.law.cornell.edu/cfr/text/45/170.205
§170.314(c) Clinical quality measures.

(ii) **Export.** EHR technology must be able to electronically export a data file formatted in accordance with the standards specified at §170.205(h) that includes all of the data captured for each and every CQM to which EHR technology was certified under paragraph (c)(1)(i) of this section.

**QRDA**

HL7 Implementation Guide for CDA® Release 2: Quality Reporting Document Architecture

Renamed “Common Clinical Dataset”

<table>
<thead>
<tr>
<th>Patient name</th>
<th>Lab values/results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Vital signs</td>
</tr>
<tr>
<td>Date of birth</td>
<td>Procedures</td>
</tr>
<tr>
<td>Race</td>
<td>Care team members</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Immunizations</td>
</tr>
<tr>
<td>Preferred language</td>
<td>Unique device identifiers for implantable devices</td>
</tr>
<tr>
<td>Problems</td>
<td>Assessment and plan of treatment</td>
</tr>
<tr>
<td>Medications</td>
<td>Goals</td>
</tr>
<tr>
<td>Medication allergies</td>
<td>Health concerns</td>
</tr>
<tr>
<td>Lab tests</td>
<td></td>
</tr>
</tbody>
</table>
C-CDA and QRDA

- Two formats are specified:
  - C-CDA
  - QRDA Category 1
    - Difference between Cat 1,3

Both are based on the Clinical Document Architecture

Terminology Warning
“CCD”
- Continuity of Care Document
- Clinical Care Document
- Common Clinical Dataset
- Consolidated Clinical Document

“C-CDA”
- Consolidated Clinical Document Architecture
Certified Health IT Product List

Validate Certification using CHPL

Use Search Filters Below

- **CERTIFICATION EDITION**
  - 2014
- **PRACTICE TYPE**
  - Ambulatory
  - Inpatient
- **CLASSIFICATION**
  - Modular EHR
  - Complete EHR
- **CERTIFICATION CRITERIA (58)**
  - 170.314(e)(1)
  - 170.314(e)(2)

**PRODUCT** | **VERSION** | **PRACTICE TYPE** | **CLASSIFICATION** | **CERTIFICATION EDITION** | **VENDOR** | **CHPL PRODUCT NUMBER**
--- | --- | --- | --- | --- | --- | ---
Amazing Charts | 8.1 | Ambulatory | Complete EHR | 2014 | Amazing Charts | 02052015-2391-6
Amazing Charts | 8.0 | Ambulatory | Complete EHR | 2014 | Amazing Charts | 09302014-2390-9
Amazing Charts | 8.2 | Ambulatory | Complete EHR | 2014 | Amazing Charts | 04232015-2392-6
Amazing Charts | 7.0 | Ambulatory | Complete EHR | 2014 | Amazing Charts | 05222014-2389-9
Amazing Charts | 7.1 | Ambulatory | Complete EHR | 2014 | Amazing Charts | 05222014-2389-9

Additional certification criteria may need to be added in order to meet submission requirements for Medicaid and Medicare programs.

http://oncchpl.force.com/ehrcert
Report to Congress April 2015 - if the behavior of provider organizations or vendors meets the following three criteria, they are considered to be engaging in information blocking:

• **Interference.** There must be “an act or course of conduct that interferes with the ability of authorized persons or entities to access, exchange, or use electronic health information.”

• **Knowledge.** “The decision to engage in information blocking [must be] made knowingly.”

• **No Reasonable Justification.** Conduct must be “objectively unreasonable in light of public policy.

**Registering Complaints**

If you are having difficulty with your vendor providing the function they are certified to perform there is a process for issuing a complaint.
**Issue Reporting Steps for Providers with Certified EHR Technology**

**STEP 1**
Contact Developer

Work with developer to resolve issue.

If issue remains unresolved AND is related to a certified capability contact ONC-ACB at Step 2.

**STEP 2**
Contact ONC-ACB
ONC-Authorized Certification Body

The ONC-ACB will check to see if the reported issue is applicable to one or more certified capabilities.

The ONC-ACB will work with the provider and developer to get more information. It may also perform surveillance to determine if non-conformities exist.

If non-conformities are found, the ONC-ACB will require the developer to implement a corrective action plan.

**STEP 3**
Contact ONC

ONC will check to see if product in question is certified. If it is, we will refer the matter to the appropriate ONC-ACB at Step 2.

**Resources**

- **HEALTH IT PRODUCT COMPLAINTS:** http://healthit.gov/healthitcomplaints
- **CERTIFIED HEALTH IT PRODUCT LIST:** http://healthit.gov/chpl
- **ONC-AUTHORIZED CERTIFICATION BODY (ACB) (PRODUCT COMPLIANCE):**
  - ehr@infogard.com
  - ehr@iscalabs.com
  - ehrcomplaints@drummondgroup.com
- **ONC.Certification@hhs.gov**
Surveillance of Certified Health IT

• New requirements for “in-the-field” surveillance under the ONC Health IT Certification Program

• ONC-ACBs should ensure that certified Health IT Modules can perform certified capabilities in a production environment (when implemented and used)
  - Reactive surveillance (e.g., complaints)
  - Randomized surveillance (2% of annually certified health IT at one or more location)

• Enhanced surveillance of mandatory transparency requirements

• Non-conformity and corrective action reported to the CHPL beginning in CY 2016
David C. Kendrick, MD, MPH
Chair, Department of Medical Informatics, University of Oklahoma
CEO, MyHealth Access Network
Tulsa, OK

Final Thoughts

• The ONC EHR Certification ensures that functionality exists that can be used to extract data

• The ONC Surveillance program can be used for conformance and enforcement of certified functions

• Data extracted need additional work to be useful in your notification or analytics system
Next Steps

• Listening Event
  o Tomorrow January 27\textsuperscript{th} at 4:00pm EST
  o Dial in: 1-877-501-8576 (P: 3385-3955)

• Potential Affinity Group on Data Extraction

• Additional questions or needs contact your project officer for a TA request
Contact Information

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  • David-Kendrick@ouhsc.edu