

The Role of the Librarian in Achieving Compliance for Meaningful Use Stage 2 Core Measure 5



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Goal



Eligible Professionals	Eligible Hospitals and CAHs
<p>Use computerized provider order entry (CPOE) for radiology, laboratory and laboratory orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state regulations</p>	<p>Use computerized provider order entry (CPOE) for radiology, laboratory and radiology orders entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines</p>
<p>Generate and without dispensing prescriptions record the following demographics: • Preferred language • Sex • Race • Ethnicity • Date of birth</p>	<p>Record the following demographics: • Preferred language • Sex • Race • Ethnicity • Date of birth • Date and preliminary cause of death in the event of mortality on the eligible hospital or CAH</p>

Highlight the experiences of a publisher and librarians from an academic medical center and a community hospital system, as they interact with understanding, planning, and implementation of Meaningful Use Stage 2, Core Measure 5.

Eligible Hospital and Critical Access Hospital Meaningful Use Core Measures Measure 5 of 16

Stage 2
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Clinical Decision Support Rule

Objective Use clinical decision support to improve performance on high-priority health conditions.

Measure

1. Implement five clinical decision support interventions related to four or more clinical quality reporting per hospital or CA interventions suggested that related to im
2. The eligible h drug-allergy i

Certification and Standards Criteria

Below is the corresponding certification and standards criteria for electronic health record technology that supports achieving the meaningful use of this objective.

Certification Criteria

**§ 170.314(a)(8)
Clinical Decision Support**

(i) Evidence-based decision support interventions. Enable a limited set of identified users to select (i.e., activate) one or more electronic clinical decision support interventions (in addition to drug-drug and drug-allergy contraindication checking) based on each one and at least one combination of the following data:

- (A) Problem list;
- (B) Medication list;
- (C) Medication allergy list;
- (D) Demographics;
- (E) Laboratory tests and values/results; and
- (F) Vital signs.

(ii) Linked referential clinical decision support.

(A) EHR technology must be able to:

- (1) Electronically identify for a user diagnostic and therapeutic reference information; or

Standards Criteria

§ 170.204(b) Reference source	HL7 Version 3 Standard: Context-Aware Retrieval Application (Infobutton) (incorporated by reference in § 170.299).
§ 170.204 (b)(1) or (2) Implementation specifications	HL7 V3 IG: URL-Based Implementations of Context-Aware Information Retrieval (Infobutton) Domain; or HL7 V3 IG: Context-Aware Knowledge Retrieval (Infobutton) Service-Oriented Architecture Implementation Guide.

Core Measure 5 in Layman's Terms

- A clinician's use of evidence-based point-of-care information resources in a contextually relevant manner.
- "Contextual relevancy" is the manner in which an information resource is searched from within an EHR to access patient-specific information to optimize the quality of care provided.

Amanda King
 Date of Birth: 01/13/05
 Gender: Female

Problem List

- Asthma
- Peanut Allergy
- Fever

Asthma in children

Treatment overview:

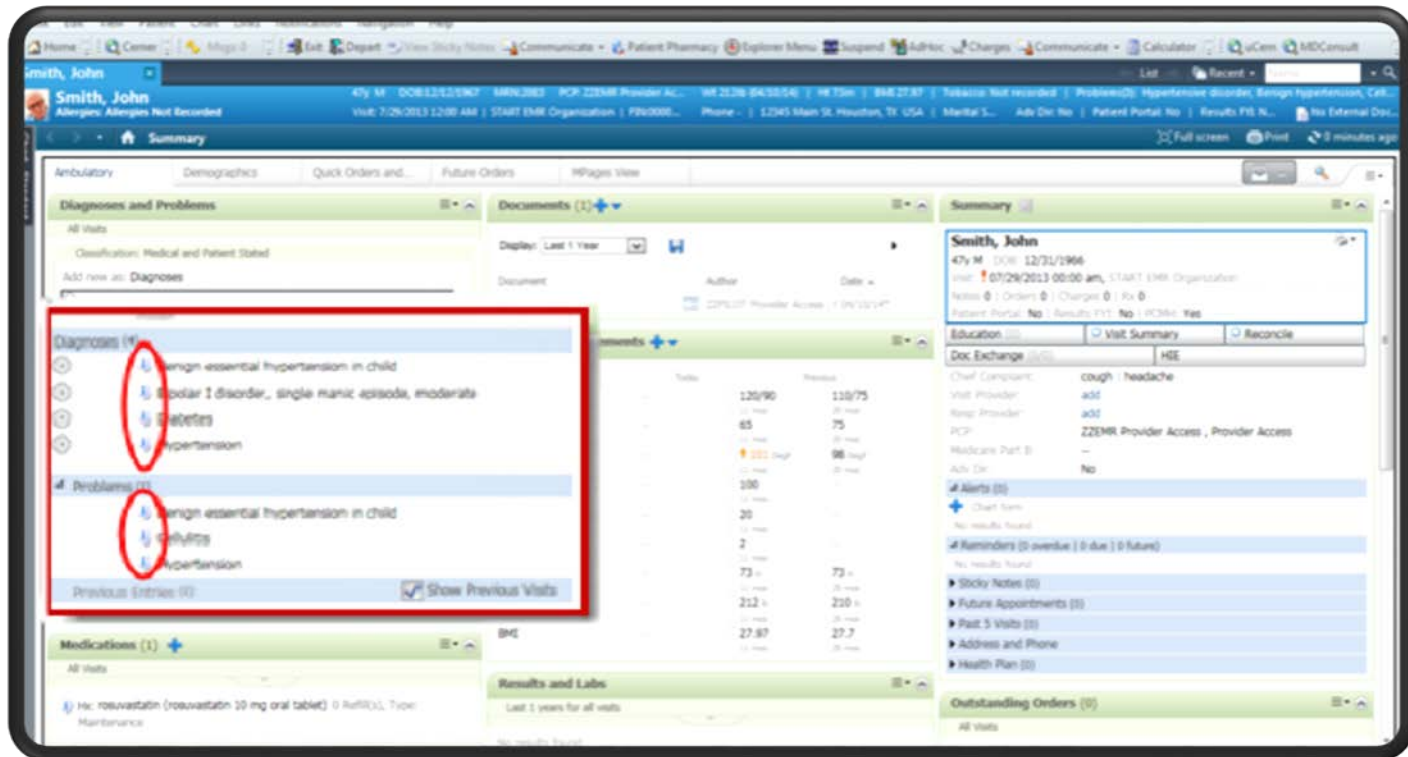
- see also
 - [Asthma exacerbation in children](#)
 - Exercise-induced bronchoconstriction
- every asthma patient should have inhaled [short-acting beta agonist](#) (SABA) available (NHLBI Evidence A)
- [stepwise treatment](#) approach to asthma management is based upon classification of asthma severity and age of patient
 - initial therapy based on [asthma severity](#)
 - intermittent asthma - Step 1
 - mild persistent asthma - Step 2
 - moderate persistent asthma in patients ≥ 5 years old - Step 3 (medium-dose inhaled corticosteroids option) and consider short course of oral corticosteroids
 - severe persistent asthma in patients ≥ 5 years old - Step 3 (medium-dose inhaled corticosteroids option) or Step 4 and consider short course of oral corticosteroids
 - moderate or severe persistent asthma in patients < 5 years old - Step 3 and consider short course of oral corticosteroids
 - empiric SABA treatment of infants and young children with acute wheezing and no definitive asthma diagnosis may be attempted, but no
 - [evaluate level of asthma control](#) in 2-6 weeks and increase step if asthma inadequately controlled
 - follow-up with patient in 1-6 month intervals, considering 3-month interval if step down in therapy is anticipated (NHLBI Evidence D)
 - inhaled corticosteroids may be reduced by 25%-50% every 3 months to lowest dose needed to maintain control (NHLBI Evidence D)

Preferred Options in Stepwise Approach:

Steps	Children < 5 Years Old
Intermittent asthma (Step 1)	SABA as needed
Mild persistent asthma (Step 2)	Add daily low-dose ICS (NHLBI Evidence A)
Moderate persistent asthma (Step 3)	Increase to medium dose ICS (NHLBI Evidence D)

HL7 Infobutton Technology

- HL7 Infobutton technology is built into all EHR systems certified for Stage 2 Meaningful Use
- Drawback: The technology may not support all information resources/clinical decision support systems selected by the provider



Recent Informal Survey

Results from a few listservs (MEDLIB, HSLANJ, etc) revealed:

- Most librarians do not have user access to their institutions' EHR systems
- Some librarians didn't see why that would be necessary

"Our hospital is currently on Step 2 of MU...I'm trying to locate a point of contact for our hospital system to be able to integrate library services with EHRs...."

"As much as I try to read about meaningful use, infobuttons, etc. and would like to be involved.... It is very difficult to find the correct party with whom to connect..."

"I don't know why it is necessary to have access to our EHR"

What is EHR Access for Librarians?

Many Different EHR End-user Roles

- A Philadelphia pediatric hospital has defined many different types of end user roles
- Examples include: Physician, Nurse Practitioner, Nurse, Counselor, Therapist, Technician, Clerk, Environmental Services, Billing, Report Analyst, Finance, Research & more

Roles for Medical Librarians

- Access to the EHR “playground” to get an understanding of how the EHR works
- Subject matter expert for clinicians on how to access clinical reference content from within the EHR

Is there a user role for “librarians at your institution?”

Why is EHR Access Important?

- The librarian can:
 - Provide Infobutton training on content resources
 - Observe the information retrieval
 - Evaluate the results of the retrieval
 - Contribute additional information
 - Provide suggestions for links to the medical literature
- Allows librarian access to the patient's clinical encounter on the "fly"
 - This opportunity may be especially crucial during clinical rounding

Beverly's Lessons Learned



Get buy-in from all parties involved

- Library, IT, EHR, vendors, etc.
- Bring everybody to the table for a meeting



Use Your Subject Expertise

- Determine what resource(s) are critical for compliance
- Use those criteria in your purchasing decisions



Walk the walk so you can talk the talk

- Learn everything you can about how the MU EHR works
- Play in the sandbox – EHR playground, Practice Fusion, etc.
- Install & experiment with Infobutton open source software



Push It! Push It Real Good!

- If at all possible, push for Library access to the EHR
- For testing, experience, determining limitations, feedback, etc.

Donna's Lessons Learned



Vendors can be a tremendous source of support and inspiration



When you encounter a roadblock to implementing additional EHR Infobutton functionality, try a different road, or try the same road at a different time





Continue to promote your accomplishments in the EHR on an ongoing basis, otherwise usage declines




Working with the hospital's IT team to suggest additional Infobutton functionality elevates the librarian's status

Deb's Lessons Learned

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- ## Watch your Language and Be Social
- To an IT person, words like “integration” & “implementation” mean “major time consuming project”
 - When communicating to IT, use basic terms to convey what you want to achieve and let them assign the technical lingo

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- ## Communicate your Value
- For most IT people, the role & value of the librarian as it relates to the EHR is unclear – need to clarify
 - As the buyer of clinical reference content, Librarians have a key role to play in achieving Objective 5!

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- ## Leverage your Vendor Relationships
- Content vendors speak the language of IT & EHR
 - Reach out and ask for help, guidance & training

Helpful Resources

General EHR Resources

- “On the Trail of an EHR,” Persko L. Grier Jr. and Beverly Murphy, *Journal of Hospital Librarianship*, 15(1):99-108, 2015
<http://dx.doi.org/10.1080/15323269.2015.982039>
- HIMSS Analytics U.S. hospital statistics on stages of the EHR adoption model
<http://www.himssanalytics.org/emram/emram.aspx>
- EHR Usability Toolkit - integrated toolkit for usability evaluation, testing, measurement, and design of EHR systems: <https://sbmi.uth.edu/nccd/turf>
- HIMSS Computerized Provider Order Entry (CPOE) Wiki –Provides detailed material to assist in EHR implementation and optimization
<https://himsscpoewiki.pbworks.com/w/page/10258531/%20Table%20of%20Contents>
- PubMed - Electronic Health Record search focuses on all aspects of the EHR, including implementation, attitudes, beliefs and use, data privacy, health data standards and consumer access to the EHR and personal health records (PHRs)
<http://www.nlm.nih.gov/services/queries/ehr.html>

Helpful Resources

Meaningful Use

- Centers for Medicare & Medicaid (CMS) - Official site for information on Meaningful Use
<http://www.cms.gov/Regulations-and-guidance/Legislation/EHRIncentivePrograms/index.html?redirect=/ehrincentiveprograms>
- HealthIT.gov - Meaningful Use objectives and definitions
<http://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives>

HL7 Infobutton

- Epic ClinKB - Clinical Knowledge Base (ClinKB) activity in Epic uses the HL7 Infobutton standard to allow clinicians to retrieve targeted information provided by third parties, specific to the context of the patient: <http://open.epic.com/Clinical/HL7v3>
- Open Infobutton - Open source suite of Web services that enable Infobutton capabilities within EHR systems: <http://www.openinfobutton.org>
- EBSCO Health - FAQ Infobutton Configuration with EBSCO products
http://support.epnet.com/knowledge_base/detail.php?id=6876

Thank You!



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