Clinical Decision Support (CDS) & Meaningful Use
Frequently Asked Questions
April 2010

CDS Background

- Q: What is Clinical Decision Support (CDS)?
- A: Clinical Decision Support, or CDS
  - Per the CMS Notice of Proposed Rule Making (NPRM), CDS is described as “health information technology functionality that builds upon the foundation of an EHR to provide persons involved in care processes with general and person-specific information, intelligently filtered and organized, at appropriate times, to enhance health and health care.”
  - CDS interventions include: alerts and reminders; clinical guidelines; order sets; patient data reports and dashboards; documentation templates; diagnostic support; reference information delivered; and other tools to support decisions within clinical workflow.²,³,⁴

- Q: What are the goals of CDS?
- A:
  - Provide the right information, to the right person, in the right format, through the right channel, at the right point in clinical workflow to improve health and healthcare decisions and outcomes.² This ‘CDS Five Rights’ approach is also a framework for setting up and optimizing CDS interventions to address priority objectives.
  - CDS interventions can:
    - Detect potential safety and quality problems and help prevent them;
    - Detect inappropriate utilization of services, medications, and supplies;
    - Foster the greater use of evidence-based medicine principles and guidelines;
    - Organize, optimize and help operationalize the details of a plan of care;
    - Help gather and present data needed to execute this plan; and
    - Ensure that the best clinical knowledge and recommendations are utilized to improve health management decisions by clinicians and patients.

CDS and Meaningful Use

- Q: What are the five clinical decision support rules that must be implemented to meet Meaningful Use requirements?
- A: Per CMS’s NPRM:
  - Objective: Implement five clinical decision support rules relevant to specialty or high clinical priority, including for diagnostic test ordering, along with the ability to track compliance with those rules.
  - (i) Measure: Implement five clinical decision support rules relevant to the clinical quality metrics reported under this subpart.
A: There are not five specific rules that must be followed.

The five rules that are deployed must be focused on specific quality metrics that are included in the various tables of the NPRM that outline quality measures that must be reported to CMS. Please note that the details of such measures that must be reported are under public comment and will likely be modified with publication of the final rule:

- The overall meaningful use requirements (including the one on the five CDS rules) are in Table 2.
- The Eligible Hospital clinical measures on which the five CDS rules must be focused are in Table 20.
- The Eligible Professional clinical measures on which the five CDS rules must be focused are Table 4, and Tables 5-19 (specialty tables).

Q: Does drug-drug, drug-allergy checking count as two of the five clinical decision support rules?

A: No –

- Although these are required as part of computerized practitioner order entry (CPOE), the five CDS rules are focused on high-clinical priority areas, aligned with the quality metrics in Tables 4, 5-19, 20, and 21.

Q: How do I decide what five rules to implement, and ensure that once deployed these rules do more good than harm?

A:1

- Visit the HIMSS CDS wiki for an interactive discussion on these issues by the HIMSS CDS Task Force and other subject matter experts at [http://himssclinicaldecisionsupportwiki.pbworks.com/Implement-five-clinical-decision-support-rules](http://himssclinicaldecisionsupportwiki.pbworks.com/Implement-five-clinical-decision-support-rules) to understand their approach, including:
  - What topics are being considered for the five CDS rules in your organization?
  - What is the process for getting there, e.g., governance around selecting rules?
  - Who is driving the process (CMIO, CMO, IT, other)?
  - What are the criteria for selecting the specific rules on which you will focus?
  - How will these rules for meaningful use integrate with other quality improvement/reporting activities already underway?
  - How will your organization ensure that the rules do more good than harm, e.g., avoiding alert fatigue?

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1 This fact sheet will continue to be modified based on new information from ONC and CMS. The HIMSS CDS Task Force welcomes your feedback on additional suggested resources and other questions/answers to include.
CDS Resources

Q: What resources are available to support content development for the specific rules?

A:
- Look at rules you have already deployed to see if they will address the quality measures required for meaningful use.
- Talk to your clinical information system and CDS vendors to see if they have content to support rule deployment.
- Talk with other organizations deploying the same clinical information system about sharing CDS rules.
- Visit organizational resources such as the AMDIS list serve and the HIMSS CDS wiki at [http://himssclinicaldecisionsupportwiki.pbworks.com](http://himssclinicaldecisionsupportwiki.pbworks.com).
- Note also, an AHRQ-funded project (“Structuring Care Recommendations for Clinical Decision Support”) is developing structured, coded logic statements - from strongly evidence-based and widely accepted clinical recommendations - that implementers can further process and deploy as CDS rules.
  - Several of the logic statements provided by this project will deal with clinical recommendations corresponding to the meaningful use clinical measures noted in the tables above.
  - This material will be publicly available by 10/2010.
  - See the HIMSS CDS wiki “CDS and Meaningful Use” home page and access the discussion on “Implement five clinical decision support rules” for additional detail.

Q: How can I learn more about CDS and its implications under the proposed Meaningful Use regulations?

A:
Four available HIMSS publications and resources:
  - For more information visit [www.himss.org/cdsguide](http://www.himss.org/cdsguide)
- Visit the HIMSS CDS wiki at [http://himssclinicaldecisionsupportwiki.pbworks.com](http://himssclinicaldecisionsupportwiki.pbworks.com) to participate in ongoing discussions including issues such as:
Problem lists, Meaningful Use and CDS

Use of high-risk medications in the elderly (cf, Beers criteria)

Considerations for implementing five clinical decision support rules

VTE prevention, a clinical meaningful use measure and a major focus for national improvement efforts. A CDS Task Force workgroup has gathered many insights and tools for applying CDS to VTE prevention, visit http://himssclinicaldecisionsupportwiki.pbworks.com/Table-of-Contents to access "Key Lessons" of the CDS/VTE work in progress.

