Date: May 6, 2011

From: Clinical Decision Support Consortium

To: Agency for Healthcare Research and Quality

Re: Recommendations for Medical Specialty Societies Regarding Adoption and Use of State-of-the-Art Electronic Health Records with Point-of-Care Clinical Decision Support

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Introduction

Along with the United States (U.S.) Federal Government's intense push for adoption and meaningful use of electronic health records (EHRs) by all eligible health care providers will come an equally intense push to identify and develop real-time, point-of-care, clinical decision support (CDS). This type of CDS is necessary if we are to achieve both the Meaningful Use[1] targets as well as transformational improvements in patient safety, quality, and efficiency of care. For maximum benefit, however, EHRs must be paired with CDS to effectively influence physician behavior and impact health care processes and outcomes. The full value of EHRs will not be achieved without effective integration of CDS.

On March 1, 2008, the Agency for Healthcare Research and Quality (AHRQ) funded two CDS demonstration projects: The Guidelines Into Decision Support (GLIDES) project headed by Richard Shiffman, MD, based at Yale University in New Haven, Connecticut, and the Clinical Decision Support Consortium headed by Blackford Middleton, MD, MPH, MSc, based at the Brigham and Women's Hospital in Boston, Massachusetts. The goal of these projects was the "development, implementation and evaluation of demonstration projects that advance understanding of how best to incorporate CDS into the delivery of health care…with the overall goal to explore how the translation of clinical knowledge into CDS can be routinized in practice and taken to scale in order to improve the quality of health care delivery in the U.S." A major objective has been identification of CDS-related standards that will be necessary if these goals are to be achieved.

We strongly believe that all medical specialty societies should be encouraging and supporting their membership in the adoption and utilization of state-of-the-art EHR systems with embedded, point-of-care CDS. They should also either work to develop clinical guidelines and eMeasures or partner with clinical guideline and eMeasure development organizations and health information technology vendors to improve the design and development of their products. Finally, the medical professional societies should work with other health care policy groups to formulate new policies that encourage adoption and meaningful use of state-of-the-art EHR systems.

Specific Recommendations for Medical Specialty Societies Regarding Adoption and Use of State-of-the-Art EHRs with Point-of-Care CDS

The following are our specific recommendations:

Recommendation 1: Encourage members to adopt a high-quality, certified EHR system that allows for Meaningful Use. In addition, all medical specialty societies should strongly encourage their members to implement both basic CDS (e.g., drug-drug interaction checking, drug-allergy warnings, etc.) and specialty specific CDS (e.g., for pediatrics – weight-based dosing; for primary care – preventive health services reminders).

Recommendation 2: Develop a specialty-specific, EHR assessment process that is based on requirements that are specific to their members' needs [see, for example, references 2, 3, and 4]. In addition, each society should periodically publish their evaluations of all the leading certified EHR vendor products along with those EHRs that have been widely adopted by members of their specialty [5,6].

Recommendation 3: Include creation and/or implementation of state-of-the-art, point-of-care CDS that is designed to improve the efficiency, safety, or quality of the care they deliver in their quality improvement programs [7] or other re-certification requirements.

Recommendation 4: Encourage and provide opportunities, such as trainings, for members who are interested in learning more about the application of health information technology, in general, and CDS, in particular, to gain additional education. For example, the American College of Emergency Physicians and the American College of Physicians have partnered with the American Medical Informatics Association to create courses designed to transition interested emergency and internal medicine physicians into thought leaders in their respective specialties related to clinical informatics [see: 8,9]. As the adoption and use of EHRs with advanced CDS capabilities increases, there will be a substantial need for more clinicians trained in clinical informatics to help create the next generation of these systems and incorporate the latest research developments into practical tools and techniques for practicing clinicians.

Recommendation 5: Begin or continue developing and testing specialty-specific CDS interventions that members can easily download, customize and incorporate into EHRs [see references 10 and 11]. Further, this content should be developed in a standards-based manner. In addition, professional societies should make sure that all of their endorsed clinical practice guidelines include CDS content that can be readily incorporated as CDS interventions into existing EHR systems.

Recommendation 6: Review and contribute to the development of specialty-specific eMeasures. eMeasures are becoming the de facto standard for many of the federal government's and commercial payer's various pay-for-performance initiatives. Professional societies that participate in the

development and evaluation of eMeasures that are designed to measure various aspects of the quality of care their members deliver will be well positioned to participate fully in any of these programs.

Recommendation 7: Include creation and/or implementation of retrospective, state-of-the-art[*] CDS that is designed to be used by ancillary staff in the physician's office (e.g., RN Case Managers) to improve the efficiency, safety, or quality of the care that practices deliver by identifying patients in need of additional therapeutic interventions (e.g., poorly controlled hypertensives who are not being treated or only have a first line medication), monitoring (e.g., patients with depression taking lithium who have not had a lithium level checked in the past year), or checkups (diabetic patients who have not had a retinal exam in the past year). Specialty societies could develop the logic and algorithms to accurately identify specific condition-related cohorts.

Summary

The medical professional societies along with the U.S. Federal Government must continue their push for increased adoption of EHRs by all health care providers. These EHRs must also include the real-time, point-of-care CDS that is necessary for completing transformational improvements in patient safety, quality, and efficiency of care.

We strongly believe that all medical specialty societies should encourage and support their membership in the adoption and utilization of state-of-the-art EHR systems with embedded, point-of-care CDS. They should also work with both clinical guideline development organizations and health information technology vendors to improve the design of their products. Finally, the medical professional societies should work with other health care policy groups to formulate new policies that encourage adoption and meaningful use of state-of-the-art EHR systems.

In summary, the Clinical Decision Support Consortium recommendations include:

- Adopt a high-quality, certified EHR system that allows for meaningful use
- Develop a specialty-specific, EHR assessment process that is based on requirements that are specific to their members' needs
- Include creation and/or implementation of state-of-the-art, point-of-care CDS in quality improvement programs or other re-certification requirements

[*] State-of-the-art implies the highest level of development at a particular time.
This is required in order to ensure that the recommendation is still valid regardless of any other new CDS that would be developed later.

- Encourage and provide opportunities for members who are interested in learning more about the application of health information technology, in general, and CDS, in particular, to gain additional education

- Begin or continue developing and testing specialty-specific CDS interventions that members can easily download, customize and incorporate into EHRs

- Review and contribute to the development of specialty-specific eMeasures

- Include creation and/or implementation of retrospective, state of the art CDS that is designed to be used by ancillary staff in the physician's office

List of Acronyms

AHRQ Agency for Healthcare Research and Quality

CDS Clinical decision support

EHR Electronic health record

GLIDES Guidelines Into Decision Support

References

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