

January 19, 2011

Department of Health and Human Services
Office of the National Coordinator for Health Information Technology
Attention: Steven Posnack
Hubert H. Humphrey Building
Suite 729D
200 Independence Ave. SW
Washington, DC 20201

RE: FR Doc. 2010-31159

Dear Mr. Posnack:

The College of Healthcare Information Management Executives (CHIME) appreciates the opportunity to comment on the request for information regarding the President's Council of Advisors on Science and Technology (PCAST) Report entitled, *Realizing the Full Potential of Health Information Technology to Improve Healthcare for Americans: The Path Forward*. The request for information was published by the Office of the National Coordinator for Health Information Technology (ONC) in the Federal Register on December 10, 2010 [FR Doc. 2010-31159].

CHIME's 1,400 members represent chief information officers (CIOs) and other top information technology executives at many of the nation's largest hospitals. CHIME members have front-line experience in implementing clinical systems, and have learned by trial and error what works and what doesn't in implementing such electronic systems and optimizing the value derived from them. Healthcare CIOs share the vision of an e-enabled healthcare system as laid out by ONC and the Centers for Medicare & Medicaid Services.

One of CHIME's primary objectives is to provide educational and other resources to further the adoption of EHR systems across the health care continuum. To that end, we have offered numerous educational sessions in past years at our semi-annual meetings, enabling members to share their successes and lessons learned. We plan to intensify our educational efforts in the coming years to support accelerated adoption under the EHR incentive programs through venues such as our successful CIO Boot Camps and LEAD Forums, which facilitate information sharing among our members.

In this comment letter, we respond to specific requests for information issued by ONC in the Federal Register listing.

Challenges resulting from the development and implementation of a universal exchange language

The PCAST report's major finding is that "achieving the President's goals depends on accelerating and redirecting current Federal work laying the groundwork for health information exchange." Toward that end, the report proposes the creation, dissemination and use of a universal exchange language for healthcare information. That language would encompass capabilities that would facilitate the sharing of data among healthcare institutions, as well as enabling a patient's data to be located and accessed across institutional boundaries, "subject to strong, persistent, privacy preferences." (PCAST report, p. 13)

In general, we believe that metadata tagging, such as that, which would be required for the universal exchange language endorsed by the PCAST report, would be an appropriate architectural design. The report suggests that this type of universal language approach would work best by breaking down data into the smallest individual pieces that make sense to exchange or aggregate. It refers to these kinds of data as tagged data elements, because each unit of data is accompanied by a mandatory "metadata tag" that describes the attributes, provenance and required privacy protections of the data. (PCAST report, p. 23)

We are concerned about implied expectations that such a metadata tagging system could be quickly developed within healthcare information technology systems and that "ONC and CMS should focus meaningful use guidelines for 2013 and 2015 on the more comprehensive ability to exchange healthcare information." (PCAST report, p. 4) Required adoption by healthcare providers, as a requirement for achieving meaningful use of EHRs, would be complicated by the multiplicity of vendor systems now in use, and the great variance in capabilities of healthcare organizations to implement such systems.

The use of metadata tags will result in numerous operational issues for the healthcare industry. For example, if tags are used for granular patient privacy selection, what workflow would record the patient preferences? Would a physician interact with each patient and ask specifically if each granular element of their health medical record may be shared? How else could such granularity in patient preference be recorded? Will physicians be willing to diagnose and treat, not knowing whether the patient records shared with them through health information exchange are complete?

Without an all-encompassing strategy for tagging data, at least in regards to patient privacy preferences, the resulting patient record would carry a risk of being incomplete, and we are concerned that such fragmented records could not be used reliably for either patient care or research.

A universal exchange language based on metadata tagging does not resolve all issues

involved in achieving exchange of all types of healthcare information. For example, the report suggests that semantic aggregation of information can be achieved through a variety of applications, generally defined as data aggregation middleware, which is designed to extract data from disparate legacy systems and put them into a compatible format.

While this would be an approach to consider, timelines for implementing such complex technology will be demanding if the use of such technology is included in requirements for Stage 2 meaningful use objectives. Lead times will be required for healthcare organizations to compare products and make a selection, and the products will need to be certified, a requirement for organizations that want to qualify for stimulus funding under the HITECH Act.

A larger question is whether it's possible for semantic aggregation to truly replace standardization. If so, it's possible that the translational set of tables required to achieve semantic aggregation might be larger than the patient database itself (or so large as to be unwieldy and difficult to maintain). Many will question whether this goal is achievable by October -- can vendors build the software, can providers afford to buy it, and can the semantic dictionaries be developed and implemented in that time frame?

The report also contains suggestions that legacy systems could be bypassed by such an approach, because they are so difficult to change and interoperate. This begs the question of whether clinicians would be required to use two applications (the legacy system and the one using the metadata tagging methodology) during their normal patient care workflow.

Despite the push to higher levels of health data exchange, the plan envisioned does not require the use of a universal patient identifier. This undercuts efforts to facilitate the exchange of health data. One of our CIO members recently calculated an error rate of nearly 2.5 percent in matching incoming patient records in his organization. Extrapolating that experience to the entire nation, that could result in approximately 75 million matching errors annually. While healthcare interactions are regularly compared with banking transactions, it's doubtful that that level of inaccuracy would be accepted in the banking system or that, conversely, the ATM system would function without the use of standardized routing and account numbers.

In sum, while we believe that the development of a universal exchange language using metadata tagging is critically important to achieving the scope of data interchange that will be required in a healthcare system fully using digitized health records. Our concern is with the timing and attempting to force the industry to move forward too quickly in order to achieve artificially set timelines, such as the Stage Two and Stage Three compliance deadlines. Most healthcare organizations already face a difficult road ahead with first achieving Stage One meaningful use objectives, incorporating 5010 transactions, switching to ICD-10 code sets, and advancing EHR capabilities to achieve Stage Two and Stage Three of meaningful use objectives.

The industry's best chance for success in achieving the critically important universal exchange language will come if our vendors (or if applications are self-developed, hospital IT staff themselves) can focus their full attention on implementing this technology.

We hope these comments are helpful. If you have any questions about our comments or need more information, please contact Sharon Canner at scanner@cio-chime.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Correll', with a long horizontal flourish extending to the right.

Richard A. Correll, President & CEO