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May 20, 2013

Senators Thune, Alexander, Roberts, Burr, Coburn and Enzi
US Senate
Washington, DC

RE: Reboot: Re-Examining the Strategies Needed To Successfully Adopt Health It

Dear Senators Thune, Alexander, Roberts, Burr, Coburn and Enzi,

On behalf of AMIA (American Medical Informatics Association), I am pleased to thank Senators
Thune, Alexander, Roberts, Burr, Coburn and Enzi for issuing Reboot: Re-Examining the
Strategies Needed to Successfully Adopt Health IT (*Reboot*).   On May 1, 2013 AMIA members
had several very thoughtful and wide-ranging discussions with a number of Congressional and
Committee staff, including HELP Committee staff involved in drafting *Reboot*. During our
meetings, several staff asked AMIA to provide comments on the report.

AMIA (www.amia.org) is the professional home for biomedical and health informatics
professionals. We are dedicated to the development and application of informatics in support of
patient care, public health, teaching, research, administration, and related policy. AMIA plays a
leading role in moving basic research findings from bench to bedside, evaluating interventions
across communities, assessing the effects of health innovations on public policy, and advancing
the field of informatics. Our intent as an association of committed healthcare informatics
professionals is to drive the effective and intelligent use of information to dramatically improve
health and healthcare.

General Comments

We begin by noting that oversight of federal spending on health information technology (health
IT) is important, and that asking questions about the nation's investment is reasonable. In fact,
as a multi-disciplinary organization, AMIA and its members who are clinicians, practitioners,
scientists, researchers, educators, and analysts have raised similar questions:

- Is the meaningful use (MU) program on the right glide path?
- How might the adoption and implementation of electronic health record (EHR) systems
  proceed more smoothly?
- Why has progress toward interoperability been slower than we would like?
- Are we doing enough research on the design and use of EHRs?
- Is the healthcare workforce adequately trained to implement health information
  technology (health IT)?

Reboot asserts that the goal of the grants and incentive payments of the HITECH Act was to promote the use of EHRs so that ultimately "providers can share patient health data nationwide." AMIA agrees that interoperability is important to improving the nation's healthcare system and advancements in interoperability are needed; however, we urge the authors to not make the ultimate goal (i.e. interoperability) the enemy of the necessary prerequisite (i.e. investment in information technology infrastructure). There is no doubt that incentives paid to hospitals and doctors have been an extraordinarily effective lever that has moved EHR adoption to a projected 85% of providers by 2015 from a baseline of slightly less than 15% a mere four years ago. Simply, advancements in interoperability must be accompanies by broad adoption of certified EHR technology and the HITECH Act has been effective in driving us toward that objective.

AMIA notes that EHRs were first deployed about 40 years ago, yet adoption was minimal through 2009. The market was small, so industry investment was minimal and EHRs improved very slowly, never becoming sufficiently usable and valuable to overcome the initial costs and reluctance to adopt EHRs. Thus, the market stayed small. By 2009, after 40 years of slow growth, the systems became sufficiently usable and safe to warrant an investment in adoption. With recent success in deployment and adoption and the large increase in the market size, we expect increased investment by industry into making even better products, which will in turn lead to more usable, safer products. AMIA believes that the government's meaningful use and EHR certification programs helped propel the industry to break out of the 40-year stagnation.

In the comments below, we address the five "implementation deficiencies" about which *Reboot* raises concerns:

Lack of Clear Path Toward Interoperability

AMIA believes that interoperability must be a critical focus as we seek to advance health information technology's ability to improve health care. We strongly concur that interoperability and health information exchange (HIE) are necessary to achieve the vision of higher quality, safer health care delivery at lower cost – the triple aim. [1] [2] [3]

Achieving interoperability is not solely an issue of technology. Rather, at the first level – the capability to exchange health information – is more about standards and nomenclature/vocabularies. All stakeholders including vendors, practitioners, and providers need to adopt and use standard data to allow for efficient automated data sharing. There are a number of ongoing and current efforts to develop standards, but more work needs to be done to

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[1] Health-information exchange: why are we doing it, and what are we doing?
Gilad J Kuperman J Am Med Inform Assoc. 2011 Sep-Oct; 18(5): 678–682. Published online 2011 June 14.

[2] Approaching semantic interoperability in Health Level Seven Robert H Dolin, Liora Alschuler J Am Med Inform Assoc. 2011 Jan-Feb; 18(1): 99–103. Published online 2010 November 24.

[3] Direct2Experts: a pilot national network to demonstrate interoperability among research-networking platforms
Griffin M Weber, William Barnett, Mike Conlon, David Eichmann, Warren Kibbe, Holly Falk-Krzesinski, Michael Halaas, Layne Johnson, Eric Meeks, Donald Mitchell, Titus Schleyer, Sarah Stallings, Michael Warden, Maninder Kahlon, Members of the Direct2Experts Collaboration
J Am Med Inform Assoc. 2011 December; 18(Suppl 1): i157–i160. Published online 2011 October 28.

achieve broad adoption of standards. The ONC Standards and Interoperability Framework has created a solid foundation and should be the basis for continued progress. To help advance the work of the Standards and Interoperability Framework, AMIA recommends the creation of a public-private partnership that would include vendors, payers, providers, standards-setting organizations and government to develop consensus standards that could be adopted broadly across the healthcare enterprise. In fact, as an association that has traditionally been viewed as a neutral resource, AMIA is actively pursuing such an initiative.

Beyond the adoption of standards, achieving interoperability will rely on development of: a) a business case for information sharing; b) appropriate organizational relationships and governance; and c) interoperability-enabled workflow applications that produce benefits for patients, providers and payers alike.

On the whole, we do not believe that current policy prevents healthcare providers from sharing electronic health data. At the same time, though, providers need to feel comfortable that the electronic health data they capture, store, and manage about the patients they care for will be: a) protected by those with whom they share their data; b) used to improve care; c) not misused to improve a competitive position in the market; and, d) serve the needs of patients and populations by facilitating the appropriate use and re-use of data.

In any market there is a natural distrust among competitors, and that distrust must be addressed. For example, the Indiana Network for Patient Care (INPC) – a large health information exchange (HIE) in central Indiana – explicitly restricts the HIE from being used to "directly compare the participants or providers themselves." Again, the key issue is trust and trust is best won by establishing conditions for trusted exchange of data such as those above.

We do have some concerns that, while HHS is focusing on the goal of an information-rich healthcare environment, the formats that are being established by the requirements for Meaningful Use (MU) stages 1 and 2 are too often "data rich but information and knowledge/insight poor." AMIA believes that the focus of the Centers for Medicare and Medicaid Services (CMS) and the Office of the National Coordinator for Health Information Technology (ONC) should not be on the volume of data exchanged but rather on the extent to which data that are collected add value.

We also believe that assuming a correlation between healthcare providers having a larger quantity of clinical data about each patient and patients having improved health may be incorrect. In fact, it is possible that data overload could overwhelm providers and result in adverse consequences for patient care unless provider health IT systems have the functionalities required to effectively manage and present incoming data before the data begin to flow. Even with new tools to manage the processes, the additional overhead will become a significant unreimbursed expense.

As AMIA has previously noted, the federal government should take a leadership role in assuring that HIT is seen as a strategic driver of health system strengthening, but not the entire solution. Federal efforts should avoid fostering "technology for technology's sake" but, rather encourage

system designers and implementers to focus on the use of health IT to contribute to the ultimate goal of improvement in outcomes.[4]

We believe that incentives and penalties should not be directed exclusively at physicians and other clinicians and professionals involved in population health management, because they cannot directly control whether and how health information is exchanged. Incentives and penalties should be focused on other stakeholders as well, such as EHR developers and third-party content/service providers, to take actions necessary to provide the functionalities, work flow support, and value necessary for the exchange processes.

Increased Costs

While there have been reports of increased billing, some purportedly resulting from the improper practice of records "cloning", a portion of the increased billing observed since the implementation of HITECH may simply be a result of EHRs that better capture services provided (rather than the lost-in-the-shuffle system of paper-based claims). Regardless of the true source of increased costs, records cloning and similar practices should be further scrutinized.

However, under the current environment, with genuine "meaningful use" of adequately certified EHR systems, there is far less excuse for unnecessary or duplicative tests or procedures within a care setting, whether provided by an individual doctor's office, a hospital or an Accountable Care Organization (ACO). As the ability to share data both within and across providers and sites of care becomes more widespread in practice, unnecessary or duplicative tests or procedures should be reduced even across settings of care. And, at that point CMS could audit care across practice settings and move to reduce or eliminate payments for the estimated 20 percent of tests that are repeated needlessly. Again, further scrutiny and research is needed in this area.

Lack of oversight

Taking into account that dollars spent to drive the purchase/adoption of EHRs constitute a necessary pre-requisite for interoperability, we agree that "dollars spent" is an insufficient metric for success in relation to the HITECH incentives and grants programs. We agree further that because there is a perception that some EHR vendors may create obstacles to interoperability, ranging from contractual "gag" clauses to refusals to implement crosswalks between systems, CMS and ONC should very carefully scrutinize these types of activities. Believing that the compliance burdens imposed by the MU program are already significant for providers, we do not agree that "self-attestation" is inherently problematic, but we do believe that it would be appropriate for CMS to consider developing measures to better assess "meaningful use" of eligible EHR systems going forward.

Patient Privacy at Risk

AMIA notes that this section of the white paper addresses multiple issues related to privacy, security and patient safety. AMIA strongly believes that compared to paper records, EHRs are much more secure, more auditable, and more usable to detect data breaches, waste, fraud, and

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[4] http://www.amia.org/sites/amia.org/files/Shortliffe-HIT-policy-testimony-feb2010.pdf

abuse. We note the *Reboot* comment that, "problems with data entry, computer programming errors, and other unforeseen complications can affect the security of patient data and have the potential to jeopardize patient care." To address issues of health IT and patient safety, AMIA convened a Usability Task Force of researchers, practitioners and scholars from diverse stakeholder organizations including academia, industry and providers. [5] Focusing attention on critical usability issues that can adversely affect patient safety and the quality of care, we recommended:

- Establishing an adverse event reporting system for health IT-related adverse event reporting ,
- Accelerating the research agenda to support broad adoption of improved usability practices among EHR developers and users ,
- Developing a core set of measures for adverse events related to health IT use,
- Developing a common user interface style guide for select EHR functionalities,
- Performing formal usability assessments on patient safety-sensitive EHR functionalities,
- Including usability concerns in terminology standardization and interoperability across EHR systems,
- Developing and disseminating an educational campaign on the safe and effective use of EHR; and,
- Adopting best practices for EHR system implementation and ongoing management.

As EHR adoption increases, health IT and EHR usability issues must be addressed along with a growing body of evidence and concerns about patient safety. We recommend that usability be considered in the context of each health care delivery setting in addition to the proposed focus on vendor/supplier organizations.

We strongly urge the development of a safety reporting system that includes EHR users, vendors and payers. A voluntary reporting process could leverage the AHRQ patient safety organizations (PSO), and would investigate and report on adverse events and medical errors related to usability. Again, as noted above, a "public-private partnership" – in our estimation – is an appropriate mechanism for fostering the use of a national safety reporting system. PSO could assume responsibility and accountability for establishing a health IT-related voluntary error measurement and public reporting system. PSO governance bodies can convene relevant stakeholders to determine best practices for end-user and vendor product anonymity, appropriate levels of data aggregation, report details and frequency, and what summary data are made public.

Program Sustainability

AMIA does not believe that long-term funding of EHR systems by government is required. Rather, the combination of widespread adoption of EHRs, movement toward genuine

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[5] Enhancing patient safety and quality of care by improving the usability of electronic health record systems: recommendations from AMIA Blackford Middleton, Meryl Bloomrosen, Mark A Dente, Bill Hashmat, Ross Koppel, J Marc Overhage, Thomas H Payne, S Trent Rosenbloom, Charlotte Weaver, Jiajie Zhang J Am Med Inform Assoc doi:10.1136/amiajnl-2012-001458 AMIA Board Position Paper
http://jamia.bmj.com/content/early/2013/01/24/amiajnl-2012-001458.full?sid=ba934369-6981-411c-bed9-3d705a986a1c

interoperability that improves care, incorporation of the EHR into clinical workflow, and patient expectations of an interconnected and responsive healthcare system will drive HIT use in the marketplace. Providers and hospitals are investing enormous amounts of their own resources on HIT and real program sustainability will happen as all stakeholders recognize returns on those investments.

In fact, we believe that we are at the formative stages of genuine 'meaningful use' of health information technology. To date, the focus has been on the deployment of records keeping systems, which is an essential first step toward fostering efficiency and effectiveness. However, the digitalization of the data is only the first step. It will now be important for incentives to be put in place that allow healthcare organizations to "mine" the data through analytics. The appropriate use of analytics will, in fact, be the next major initiative that will support better outcomes, improved quality and enhanced service thereby reducing costs.

AMIA thanks the Senators for their efforts to address this critical and complex topic. We appreciate the opportunity to offer these comments and feedback. Please feel free to contact me or Meryl Bloomrosen, AMIA's Vice President for Public Policy if you desire additional information.

Finally, AMIA is prepared to be of assistance in any capacity related to the use of information technology for enhancing the quality of care for Americans. We look forward to assisting you as needed to further the national objectives of improving care for all citizens. With kindest regards, I am…

Sincerely,

Kevin Fickenscher, MD
AMIA President and CEO