REPORT OF THE BOARD OF TRUSTEES

B of T Report 19-A-18

Subject: Health Information Technology Principles (Resolution 218-I-17)

Presented by: Gerald E. Harmon, MD, Chair

Referred to: Reference Committee B
(R. Dale Blasier, MD, Chair)

INTRODUCTION

At the 2017 Interim Meeting Resolution 218-I-17, “Health Information Technology Principles,” was referred by the House of Delegates. Resolution 218-I-17, introduced by the Organized Medical Staff Section, asks the American Medical Association (AMA) to adopt and promote the development of effective electronic health records (EHR) in accordance with the following health information technology principles:

1. Whenever possible, physicians should have direct control over choice and management of the information technology used in their practices.
2. Information technology available to physicians must be safe (e.g., electronically secure, and in the case of distributed devices, physically so), effective, and efficient.
3. Information technology available to physicians should support the physician’s obligation to put the interests of patients first.
4. Information technology available to physicians should support the integrity and autonomy of physicians.
5. Information technology should support the patient’s autonomy by providing access to that individual’s data.
6. There should be no institutional or administrative barriers between physicians and their patients’ health data.
7. Information technology should promote the elimination of health care disparities.
8. The cost of installing, maintaining, and upgrading information technology should be specifically acknowledged and addressed in reimbursement schedules on an ongoing basis; payments should ensure sustainability of such systems in practice.

This resolution was referred for report back at the 2018 Annual Meeting.

BACKGROUND

Health information technology (HIT), specifically EHRs, has been plagued with numerous usability, flexibility, and security issues that have negatively impacted the end-user experience. These issues have contributed to high levels of physician burnout and a diminished patient-physician relationship.¹ ² Physicians have been vocal about their frustration with these systems and their lack of input into the decision process when purchasing and implementing them in practice. To successfully implement and gain widespread adoption of HIT, physician input and buy-in is crucial.² ³
Data issues are commonly cited as a point of dissatisfaction. Physicians are often unable to find the data they need when they need it. It is also not delivered in a way that fits within their workflow or documentation procedures. Another common complaint is that their documentation practices are established in response to external drivers versus what is truly necessary and important to the care of the patient.²

Lack of interoperability is also a source of discontent for many physicians. This is a multifactorial, complex issue that involves cooperation and dedication from many key stakeholders including government, vendors, and health systems. Cost, competing priorities, and misaligned incentives contribute to barriers in achieving full interoperability across health care, negatively impacting the front-line of care.³

The AMA has been successful in making progress toward improving and advancing EHRs and HIT through advocating for policy and collaborating with stakeholders. This resolution proposes further allegiance to this work through formal adoption of clear and concise principles for technology-enabled solutions to ensure physician input is included in the development and use of HIT, specifically EHRs, to improve both the physician and patient experiences.

AMA POLICY

The AMA is committed to working with federal and state agencies, policymakers, and other relevant stakeholders to improve EHRs and advance HIT. The AMA encourages physician involvement in defining, evaluating, and implementing EHRs for improved usability, access, and security (Policy H-480.971, “The Computer-Based Patient Record”).

The AMA is steadfast in its efforts to improve EHR usability and enhance access to data for both physicians and patients. The AMA works with the Office of the National Coordinator for Health Information Technology (ONC) and EHR vendors to support interconnectivity and interoperability enabling the efficient and cost effective use and sharing of data across all care settings (Policy D-487.995, “National Health Information Technology”). The AMA also continues to support and encourage Congress to eliminate unnecessary data blocking to improve and expand the exchange of data (Policy D-478.972, “EHR Interoperability”).

The AMA is committed to actively engaging with federal and state agencies, EHR vendors, and other stakeholder groups in their efforts to reduce the cost burdens often associated with EHRs. The AMA promotes EHR vendor cost transparency around implementation, maintenance, and interface production (Policy D-478.973, “Principles of Hospital Sponsored Electronic Health Records”). The AMA advocates for flexibility related to the adoption and use of HIT across versions and editions as to not cause disproportionate financial burden or penalization to physicians and practices (Policy D-478.996, “Information Technology Standards and Costs”). Additionally, the AMA supports legislation that provides positive incentives for physicians to acquire HIT (Policy D-478.994, “Health Information Technology”).

DISCUSSION

Lack of physician voice in the development, evaluation, and implementation of HIT has contributed to high rates of physician dissatisfaction with HIT, specifically EHRs. Dissatisfaction among EHR end-users has contributed to physician burnout, a diminished patient-physician relationship, and unrealized cost savings.⁵
This resolution proposes eight HIT principles for the development of effective EHRs. The AMA released eight EHR usability priorities in 2014, many of which are closely aligned with the principles proposed in Resolution 218-I-17. These priorities were developed by the AMA Advisory Committee on EHR Physician Usability. Members included former president of the AMA Steven Stack, MD, chief medical information officers, practicing physicians, and medical professors. The priorities identified in 2014 by the AMA’s Advisory Committee on EHR Physician Usability are as follows:

1. Enhance physicians’ ability to provide high-quality patient care.
2. Support team-based care.
4. Offer product modularity and configurability.
5. Reduce cognitive workload.
6. Promote data liquidity.
7. Facilitate digital and mobile patient engagement.
8. Expedite user input into product design and post-implementation feedback.

These priorities outline and support the need for better usability, interoperability, and access to data for both physicians and patients. In addition, they reaffirm the importance of considering patient care and physician input in the build and implementation related to EHRs. The AMA works to advance these goals through key stakeholder engagement (i.e., EHR vendors, health systems, and researchers), advocacy, and education. The AMA actively promotes these priorities and several vendors, including athenahealth and MEDITECH, have publicly acknowledged how their products align with these priorities.

Furthermore, these priorities have guided the AMA in its advocacy efforts to adopt and promote the development of effective HIT. For example, these efforts are demonstrated in statutory and regulatory changes made by the federal government:

**21st Century Cures Act**
- Creating information blocking provisions against EHR vendors including an up to $1,000,000 civil monetary penalty;
- Requiring Certified EHR IT (CEHRT) to incorporate application programing interfaces (API);
- Requiring real-world testing of EHRs;
- Prohibiting restrictions on user communications about EHR usability, interoperability, security, and developer business practices;
- Requiring EHRs to exchange data with clinician-led clinical registries;
- Prompting patient access to their longitudinal health record; and
- Requiring the reduction of regulatory or administrative burdens (such as documentation requirements) relating to the use of EHRs.

**ONC Enhanced Oversight and Accountability Rule**
- Increasing federal oversight of EHR functionality post-certification.
- Holding health IT developers accountable to certification non-conformities including allowing for ONC corrective action plans and CEHRT certification suspension and/or termination.

**ONC 2015 Edition Health IT Certification**
- Requiring HIT vendors to disclose fees for EHR functions, including connecting to health information exchanges (HIE) and clinical registries;
- Increasing user-centered design (UCD), i.e., usability requirements, in CEHRT development; and
- Requiring HIT developers to use and test against advanced interoperability standards (which improves data liquidity).

The AMA’s robust research agenda drives its pursuit of a strong evidence base to inform industry-wide HIT innovation and the improvement of EHR development and implementation. The AMA in 2013 partnered with the RAND Corporation to study factors that affect physician professional satisfaction, which resulted in quantitative and qualitative evidence that EHRs are a major source of dissatisfaction for physicians. The AMA led a comprehensive time-motion study that demonstrated for every one hour of face-to-face time with patients, physicians spend nearly an additional two hours doing EHR and administrative deskwork. The AMA has also published multiple journal articles on the topic of EHRs and their contributions to physician dissatisfaction, burnout, and undue administrative burden. In addition to this established work, the AMA is currently collaborating with multiple partners to execute research planned for publication in 2018. These efforts include an observational study aimed at tracking physician actions during EHR use; an evaluation of barriers and facilitators to adoption of digital health solutions; and research aimed at identifying opportunities to improve the usability and safety of EHRs. The AMA will continue to pursue research to help stakeholders, including physicians, payers, regulators, health system leadership, and EHR vendors, make informed improvements to the EHR user experience.

In collaboration with the American Heart Association, HIMSS, and DHX Group, the AMA founded Xcertia in 2016. This collaboration is dedicated to developing guidelines that foster safe, effective, and reputable health technologies. Through engagement from a diverse group of industry stakeholders, Xcertia aims to reduce burden on providers/health care sponsors, give consumers confidence, and help technology developers bring better solutions to the market. Xcertia has already published preliminary guidelines covering four major areas—operability, privacy, security, and clinical content. As HIT solutions continue to evolve, the guidelines provided by Xcertia will be further developed to align with and be applicable to additional forms of HIT, resulting in an inclusive set of guiding principles.

The AMA has established partnerships with the SMART Initiative, AmericanEHR Partners, and Medstar Health’s National Center for Human Factors in Healthcare to help foster innovative HIT design and transparent testing solutions which will ensure EHRs are designed and implemented with physicians and patients in mind. In addition, the AMA actively participates in The Sequoia Project, Carequality, and the CARIN Alliance, all aimed at enhancing interoperability in health care. The AMA is also working to address specific cost drivers, such as connecting to clinical data registries and prohibitive fees that amount to data blocking. The AMA’s Physician Innovation Network is also connecting physicians and health tech entrepreneurs to ensure that the physician voice is integrated into health care technology solutions coming to market.

The AMA is the founder and sole shareholder of Health2047, a Silicon Valley-based innovation enterprise focused on developing and commercializing solutions in the areas of data liquidity, chronic care, productivity, and payments to significantly change U.S. healthcare at the system level. Building on initial work performed within Health2047, including a collaboration with Celgene Corporation, Health2047 created Akiri Switch, a newly spun-off company that will commercialize a blockchain-based private network that enables secure permissions-based sharing of health data among patients, physicians, providers, payers, pharma and other healthcare enterprises. Through this work the AMA further demonstrates its commitment to seeking out and developing HIT solutions for the future and long-term sustainability of health care.
The AMA’s eight EHR usability priorities provide clear and concise requirements for the development of effective EHRs, very similar to this resolution’s proposed principles for the development of effective EHRs. Principles one through five proposed in Resolution 218-I-17 closely align with the direction provided in these established priorities.

The sixth proposed principle states that in the development of effective EHRs “there should be no institutional or administrative barriers between physicians and their patients’ health data.” Administrative and institutional barriers most often stem from decisions made at the organizational level, not in the development of the EHR system. Therefore, it is not recommended that AMA adopt a principle that may misrepresent the extent to which EHR developers influence or control barriers that exist between users and their administrations or institutions.

The proposed principle seven states “information technology should promote the elimination of health care disparities.” Numbers one, three and seven of the eight established EHR usability priorities are “enhance physicians’ ability to provide high-quality patient care; promote care coordination; and facilitate digital and mobile patient engagement.” These priorities, if followed in the development of EHRs and other HIT, will enable the technology to support access to care, facilitate better patient interactions, and ultimately help address health care disparities. Since the proposed principle offers direction similarly provided in the priorities, it is not recommended to adopt this principle as separate policy.

Principle eight of this resolution asks the AMA to provide data that will convince payers to increase payment rates, essentially asking the AMA to take a position that payers are responsible for reimbursing physicians for the costs associated with implementing IT systems. Given the many facets of HIT implementation, systematic compilation of this data would be difficult given the complex state of payment models, ongoing changes with reimbursement, and variations in practice types and their unique IT needs and related costs. Additionally, the AMA previously elected to not adopt a similar resolution (813-I-16), instead resolving to focus on encouraging vendors and payers to actively work toward better, more user-friendly and cost-effective solutions that do not overburden physicians and practices.

As evidenced by the preceding discussion, the AMA currently dedicates significant resources to improving usability, enhancing interoperability, and bringing value into EHRs and HIT. The AMA’s already established eight EHR usability priorities provide clear and concise requirements for the development of effective EHRs. In using these priorities, AMA has successfully advocated for the adoption and promotion of the development of effective EHRs as can be seen in the 21st Century Cures Act, ONC Enhanced Oversight and Accountability Rule, ONC 2015 Edition Health IT Certification, and in many other rules and guidance documents from the Department of Health and Human Services. Additionally, Xcertia is currently developing broader guidelines for health care technologies in the areas of content, usability, privacy, security, and operability, inclusive of many key stakeholders across the health technology landscape. Through its current work, the AMA recognizes the value of established standards and guiding principles for many aspects of health care. The AMA will continue its efforts to further develop research, content and guidance for physicians, and will regularly ensure those resources are relevant, timely, and easily accessible.
RECOMMENDATION

The Board of Trustees recommends that our American Medical Association adopt the following in lieu of Resolution 218-I-17, and the remainder of this report be filed:

1. That the following policies be reaffirmed:
   - H-480.971, “The Computer-Based Patient Record”
   - D-478.972, “EHR Interoperability”
   - D-478.973, “Principles for Hospital Sponsored Electronic Health Records”
   - D-478.994, “Health Information Technology”
   - D-478.995, “National Health Information Technology”
   - D-478.996, “Information Technology Standards and Costs” (Reaffirm HOD Policy)

2. That our AMA promote the development of effective electronic health records (EHRs) in accordance with the following health information technology (HIT) principles. Effective HIT should:
   1. Enhance physicians’ ability to provide high quality patient care;
   2. Support team-based care;
   3. Promote care coordination;
   4. Offer product modularity and configurability;
   5. Reduce cognitive workload;
   6. Promote data liquidity;
   7. Facilitate digital and mobile patient engagement; and
   8. Expedite user input into product design and post-implementation feedback. (New HOD Policy)

3. That our AMA utilize HIT principles to:
   1. Work with vendors to foster the development of usable EHRs;
   2. Advocate to federal and state policymakers to develop effective HIT policy;
   3. Collaborate with institutions and health care systems to develop effective institutional HIT policies;
   4. Partner with researchers to advance our understanding of HIT usability; and
   5. Educate physicians about these priorities so they can lead in the development and use of future EHRs that can improve patient care. (New HOD Policy)

Fiscal note: Modest – Between $1,000 - $5,000
REFERENCES