EHRA Briefing on Maximizing Health IT in the Fight Against the Opioid Crisis

About EHRA

The Electronic Health Record Association’s 34 member companies serve the vast majority of hospitals and ambulatory care organizations that use electronic health records (EHRs) and other health information and technology to deliver high quality, efficient care to their patients. The Association operates on the premise that the rapid, widespread adoption of health information and technology (IT) has and will continue to help improve the quality of patient care as well as the productivity and sustainability of the healthcare system.

Event summary

On June 6, 2018, EHRA was pleased to host a Capitol Hill briefing for Congressional staff and other stakeholders to share data and insights from EHRA's Opioid Crisis Task Force. Health information and technology, such as electronic health records (EHRs), electronic prescribing of controlled substances (EPCS), Prescription Drug Monitoring Programs (PDMP), information exchange solutions, and patient portals are already playing a role in addressing the opioid crisis, but EHRA members know that more can be done to support the clients that they partner with day in and day out.

The Opioid Crisis Task Force was created in early 2018 to identify how EHRs and other health IT can play a larger role in assisting providers and public health professionals addressing the opioid epidemic, and which policy changes and adoption patterns are needed to maximize the capacities of health IT in this fight.

Three task force sub-groups were formed, with a focus on providing technology-specific recommendations and solutions to address variation, improve efficiency, and reduce costs of information sharing within and among states:

- POLICY – Provide policy and technical input and insights to legislators and policymakers – including CMS, ONC, and CDC – on available solutions within EHRs, including identification of opportunities and barriers to leveraging health IT to identify, quantify, and minimize opioid abuse, and using data and analytics to detect potentially problematic behaviors.
- STANDARDS & TECHNOLOGY – Develop a state-level landscape of the wide variations in PDMP and EPCS policies and standards, and consider recommendations to educate EHR developers, stakeholders, and policymakers on ways that system-to-system and state-to-state information-sharing can be improved in order to support clinicians on the front lines of the opioid epidemic.
- CLINICIAN IMPACT – Focus on the intersection of clinicians and technology – tools and methods for increasing provider wellness by reducing burdens and optimizing workflow, such as identifying methods for and impediments to EPCS and PDMP interface within the EHR workflow,
and providing evidence-based information regarding best prescribing practices through clinical decision support (CDS) tools.

At the briefing, task force chairperson Leigh Burchell pointed out that EHR developers are aligned in many ways with provider organizations on recommendations related to the opioid crisis. She shared EHRA’s policy recommendations for opioid bills currently being considered by Congress (details below), noting that it’s clear a lot of work and compassion went into drafting these bills. Some very good concepts exist, she said, and EHRA is pleased to see support for solutions including improved PDMP connectivity and information exchange, EPCS expansion, and making actionable information available to providers.

Also speaking at the briefing were David Bucciferro and Alan Staples, who led the Standards & Technology and Clinician Impact subgroups of the EHRA Opioid Crisis Task Force, respectively.

Bucciferro and his Standards & Technology subgroup reached out to all 50 states to identify how each one uses PDMPs and EPCS. Their findings confirmed what EHR developers already knew: laws and regulations vary widely from state to state, requiring 50+ sets of complex codes. The full set of findings is available here, and EHRA has created an infographic highlighting key data, which may be viewed here.

Representing the Clinician Impact subgroup, Alan Staples noted that there are many opportunities to empower clinicians to help alleviate the U.S. opioid crisis. “Family physicians, emergency department doctors, behavioral health counselors, surgeons, nurses, pharmacists etc. are all at the front line of the US opioid crisis and are in the best position to help the 2.1 million people in our country struggling with opioid use disorder and to prevent the next 42,000 deaths from opioid overdose, as we experienced in 2016.”

**Policy Recommendations**

Burchell pointed to Congress’ focus on the opioid epidemic as a tremendous opportunity – a massive piece of legislation that can truly help patients. However, EHRA believes that while provider challenges are addressed around the edges, there are holes that need to be filled for real efficacy. If key pieces are left unaddressed at this time, said Burchell, it is hard to see when there will be another effort to readress, so we are hopeful that Congress will carefully consider EHRA’s recommendations. She shared specific input on several opioid-related bills:

**Every Prescription Conveyed Securely Act (HR 3528 and S 2460)**
EHRA is supportive of this effort to require that prescriptions for controlled substances covered under Medicare Part D be transmitted electronically, starting on January 1, 2021. Because EPCS functionality is widely available within EHRs, EHR developers stand ready to support implementation. While we would like to see required use of EPCS extended beyond Medicare Part D, we are hopeful the market will naturally take care of that over time.
Medicaid Providers Are Required To Note Experiences in Record Systems to Help In-need Patients (PARTNERSHIP) Act (HR 5801)
This bill would address some state-to-state inconsistencies by requiring providers who are permitted to prescribe controlled substances and who participate in Medicaid to query PDMPs before prescribing controlled substances to Medicaid patients. EHRA supports this legislation.

While EHRA believes that ensuring providers have access to information regarding a patient’s history with controlled substances is critical to efforts to increasingly and rapidly address this crisis, this bill can be improved by recognizing the need for a minimum data set to ease exchange of PDMP information between states and to ease provider workflow by integrating patients’ prescription drug history into the EHR.

We propose that an effective way to work positively on the minimum data set and the need for workflow integration into EHRs is to ask the Office of the National Coordinator for Health IT (ONC) to develop best practices, in partnership with the CDC, NIH and SAMHSA, and to share those best practices with states to guide their decision-making.

Noted Burchell, “Many in the states want that guidance and help. They are under pressure to move quickly but don’t always have all the answers.”

Overdose Prevention and Patient Safety Act (HR 5795/HR 6082)
EHRA strongly supports this important bipartisan legislation to align 42 CFR Part 2, the 40-year-old law governing substance abuse records, with the HIPAA Administrative Simplification provisions focused on privacy of health data.

The limitations on information exchange imposed by Code 42 CFR Part 2 are an obstacle well-recognized throughout healthcare, both by behavioral health providers and those in other areas of the industry seeing the same patients. The bill would improve patient care by allowing doctors to more easily exchange substance abuse records for the purposes of treatment, payment, or operations, by addressing some of the consent and content discrepancies while strengthening privacy protections.

Effective care coordination depends on providers having access to their patients’ full medical history, which is possible today due to the widespread adoption of EHRs. Not having access to relevant segments of a patient’s story because of regulatory obstacles can adversely impact the care they receive.

EHRA suggests that the bill should explicitly align 45 CFR Part 2 with HIPAA’s financial penalties because those have been largely effective to date, as compared to 42 CFR’s criminal structure.

Burchell also pointed out that safe harbor de-identification technology is inadequate, given the risk of re-identification with newer technologies available to bad actors. There are more effective methods of de-identification, such as Expert Determination, but EHRA recognizes that this would represent a de facto adjustment to HIPAA, which is outside the scope of this bill, so Burchell’s intent in raising it at the briefing was to inform future conversations.
Jessie’s Law (**HR 5009** and **S 581**)
EHRA supports this bill to require HHS, in collaboration with outside experts, to develop and disseminate best practices for prominently displaying information about opioid use disorder in a patient’s electronic health record. This is a form of clinical decision support (CDS) that can be very useful to clinicians.

Burchell explained that EHRA has some concerns regarding the conditional language specified in the bill, which specifies that this alert be implemented when requested by the patient. We recognize the tenuous conversation around privacy when it comes to the topic of opioid use disorder, but we note that this language conflicts privacy rules in some states, which are built on an opt-in model. It seems likely that patients who want to work around the system would not want to allow this type of alert in their record.

This “requested by the patient” element may need to be revisited to avoid allowing drug seekers to game the system, and also to ensure that loved ones – caregivers for the patient with opioid use disorder – have an opportunity to engage in that decision to apply an alert to their record.

While we have several other concerns with how this bill is worded, EHRA strongly supports adoption of clinical decision interventions because we know from experience that they can have a direct, positive effect on clinician decision making.

A number of bills addressing payment reform, such as the **Medicare and Opioid Safe Treatment Act of 2018** (**MOST Act**) and the **Preventing Overdoses While in Emergency Rooms Act of 2018** (**POWER Act**), would apply payment levers toward the goal of changing clinician behavior. EHRA notes that implementing a robust pain management strategy, extending beyond or excluding opioid prescriptions, is more time intensive for the prescriber. Payment model adjustments are a very important step. In a fee-for-service environment, clinicians simply are not paid to spend that necessary time with the patient, in the eight or 10 minutes they have, and CMS and Medicaid fee structures need to be adjusted in order for real change to take place.

Because of its importance to payment and delivery system reform, we also support the **Combating Opioid Abuse for Care in Hospitals (COACH) Act** (**HR 5774**), which provides for opioid quality measures development, including the application of a consensus-based entity, such as NQF, to review new quality measures related to opioids and opioid use disorder. However, we would like to see the focus expanded beyond just the surgical setting and perioperative opioid use because we think the rigor suggested by the bill is something that could have benefit more broadly.

EHRA also notes that when it comes to clinical quality measures, it is important to focus on their value, and not quantity. Burchell spoke of “a real rush right now to come up with eCQM in this area because of the urgency of the crisis, but we are concerned that a bunch will be churned out that don’t mean a great deal to our clients, clinically, and cause us challenges as technologists if they are technically buggy.” It is possible, she said, that we need new measures or measures specific to certain environments, such as the emergency room or oncology, but generally we suggest that this bill emphasize the development of clinically-relevant, workflow-sensitive quality measures.
Standards and Technology Recommendations

Bucciferro and other EHRA volunteers focused their initial efforts on creating a landscape of the current state and federal technology efforts being used to fight the opioid epidemic and identifying gaps and inconsistencies across states with regard to PDMP and EPCS. The workgroup will be taking a deeper dive into additional areas of the PDMP and EPCS over the next few months.

They also identified the issues/consequences created by these gaps and inconsistencies, and potential changes that could improve the tools and make them more effective. Their data to-date is available here.

For PDMPs, the survey answers important questions:

- Does the state have a PDMP mandate?
- Who must enroll in PDMP?
- When must the PDMP be queried?
- When must data be reported to PDMP?
- What drugs are included in the mandate?
- Additional notes on PDMP
- What data is required in the PDMP?
- How long is the data retained in the PDMP?
- Does the law require any data be excluded from PDMP reporting?
- Who can access the PDMP?
- Interstate Sharing of PDMP data
- Who is PDMP hosted and operated by?
- Does PDMP support EHR integration?

For EPCS use in the states, the information gathered includes:

- Mandated Status
- Effective Date
- Drugs included in mandate
- State Electronic Prescribing Rates for Controlled Substances

Bucciferro acknowledged that most U.S. states have adopted PDMPs, which are databases to which clinicians and pharmacists report prescriptions of controlled substances, and can query prior to prescribing or dispensing a controlled substance to a patient. However, the systems are hampered by inconsistencies, lack of standardization and ambiguous guidance that limits the effectiveness of these potentially lifesaving tools.

Specifically, the review of state PDMPs found varying requirements as to who can and who must report to the PDMP, and who can and who must query the PDMP; different timeframes when information must be submitted to the PDMP; a lack of a common data set and reported schedule of medications; and inconsistencies in national PDMP registries. No two states have the exactly the same set of PDMP standards and requirements.
Additionally, while EHRA found that 38 states use the same vendor to maintain their PDMP data, most providers are unable to access PDMP data from neighboring states. Differing regulations among states permit patients with substance abuse disorders to cross state lines seeking a clinician who has no ability to see their past prescription history.

EHRA found similar inconsistencies with EPCS. EPCS is software-driven technology which allows physicians to securely transmit prescriptions of controlled substances to pharmacies electronically, cutting off opportunities for forged paper prescriptions. According to Surescripts, 90 percent of pharmacies in the U.S. can accept e-prescriptions, yet only 17 percent of physicians are using the technology, although the capability is included in most EHR technology. Bucciferro and Staples both highlighted the need to expand use of EPCS.

EHRA’s state landscape review found that EPCS is mandated in few states. Among the states with no EPCS mandate, 76 percent have e-prescription rates of under 20 percent, and 21.5 percent see less than 10 percent of their prescriptions electronically submitted. In the few states with mandates, there is wide variety in what information must be provided, and in who must use e-prescribing and when.

While EHR developers recognize the need for flexibility, said Bucciferro, consistency and data-sharing among the states is important in order to minimize doctor-shopping. There is no state or U.S. territory in which clinicians can comprehensively see where and when a patient has filled an opioid prescription.

EHRA members feel strongly that the U.S. needs nationwide standards in order to realize the full benefits of PDMPs and EPCS, including:

- A common national reporting timeframe for PDMPs. [EHRA’s research](#) shows that only one state requires real-time reporting (within five minutes), and some states allow up to seven or eight days for reporting.
- A minimum common data set based on clinical relevance. The current situation of wide state-to-state variation in required and shareable PDMP data sets creates increased clinician burden and difficulty identifying opioid “frequent flyers.”
- Mandated query of PDMPs prior to prescribing included in the clinician’s EHR workflow. Some states require PDMP query every time an opioid is prescribed, others recommend it.
- Because a key challenge is that many providers do not have access to PDMP data directly within the patient’s chart, but must log into a separate system, we encourage states to support the cost of licensing PDMP integration within EHR workflows.
- Mandated use of e-prescribing for controlled substances. EPCS benefits include improved security, accuracy, workflows, and reduced prescription tampering.

**Clinician Impact Recommendations**

Staples’ remarks focused on how EHRs as well as state and federal governments can play critical roles in improving the status quo by supporting clinical decision making when it comes to pain management and opioid prescriptions. PDMPs, EPCS, and clinical decision support (CDS) are three tools that can be more effectively leveraged.
For example, Staples explained, “most doctors, surgeons, pharmacists etc. that we work with want to leverage the PDMP. They recognize it as a source of valuable information in many instances, at least when implemented appropriately by the state. But there are reasons it doesn’t work this way yet.”

One reason PDMPs are not meeting their potential is that many providers do not trust the data because it does not reflect prescriptions the person may have filled across state lines. As noted by Bucciferro, because of the variety of implementation models, a lack of a minimum data set to be exchanged, and the ongoing challenge with patient identification, there is no state or US territory in which physicians can see comprehensively where and when a patient has filled opioid prescriptions.

Another challenge is that many providers do not have access to PDMP data directly within a patient’s chart, but must log in via a separate system. Many states do not support the cost of licensing PDMP integration within EHRs, and state variation again causes delays here. As a result, and given the time pressures and in the absence of any reason to doubt the patient’s stated medication history, many providers decide to forgo accessing their state’s PDMP.

EHR developers are working to give healthcare providers simpler, more efficient ways to know whether a person is at risk of opioid use disorder or overdose, even without requiring a clinician to log in to a PDMP, but currently the variance in state restrictions over who can access or store PDMP data impedes our ability to maximize clinical benefit.

Another opportunity is for more clinicians to adopt EPCS, which benefits both clinicians and patients. When it comes to opioid prescriptions, providers want to know things like when they submitted a prescription, and did the patient pick it up, which is another benefit of e-prescribing. This is an important step in helping patients with adherence and in identifying troublesome behavior.

However, while EPCS is integrated into most EHR systems as well as most pharmacies, provider utilization is low. Clinicians have expressed concern about identity verification requirements, for example the need for multi-factor authentication, which some find burdensome. Multi-factor authentication does require an extra step; however, it has already been accepted in other industries and is in use daily in other industries, such as banking. We see the identity verification requirement for EPCS as the greater burden to both the practitioner as well as the provider organization, which is compounded for practitioners who work in multiple locations. We ask policymakers to consider ways to alleviate the regulatory burden of adopting EPCS given its potential benefits.

Clinical decision support integrated into the EHR can be an important tool for physicians. Staples explained that EHRA has identified two opportunities to expand the use of predictive tools and analytics in the effort to alleviate the opioid crisis:

1. Clinicians already have access to predictive tools that can help predict substance use disorder, or a propensity for addiction should the provider decide to prescribe an opioid. These are regularly used by behavioral health providers, but very rarely by emergency department doctors, primary care physicians, or surgeons prior to deciding to prescribe opioids, which could lead to safer prescribing behaviors and fewer exacerbations of addiction.
2. There are opportunities to develop new predictive tools, such as population health data models that can help identify risky opioid prescribing or opioid abuse behaviors across a state or within a community. EHRA members are actively developing these capabilities, but progress is again impeded based on what we can and cannot do with PDMP data, and by the relatively low adoption of EPCS technology.

We recommend policymakers consider ways to incentivize clinicians to utilize these invaluable, readily available tools prior to prescribing opioids to a patient for the first time.

There is also an opportunity to increase adoption of evidence-based guidelines for pain management. Guidelines for management of chronic pain and for tapering off opioids already exist, for example the 2016 CDC Guidelines, the joint VA/DoD Clinical Practice Guidelines, and from private industry Intermountain Healthcare’s Care Process Models for opioid prescribing. Yet many healthcare providers do not yet leverage evidence-based practice for the management of chronic pain or the management of chronic opioid use, and this variance leads to variations in clinical outcome. EHR developers will help make best practice guidance available within the EHR, but it is important to identify and implement non-burdensome incentives for providers to utilize these guidelines.

Finally, we recommend that the Substance Abuse and Mental Health Administration (SAMHSA) be directed to spend a portion of its grant funding to utilize commonly-accepted industry standards (e.g. SMART) to integrate its excellent treatment location service into the EHR so that clinicians can be aware of and utilize this tool within their workflow. Many emergency department providers, for example, are not aware that they have a resource to identify convenient substance abuse treatment locations for their patients, yet SAMHSA’s treatment location tool is freely available on its website, and should be more widely utilized.

**Conclusion**

EHRA sees many hopeful signs of progress in the fight against opioid abuse, particularly in the improved awareness of the medical community and the public, and in states taking thoughtful and proactive steps in issuing and enforcing guidelines. Information and technology, such as EHRs, information exchange solutions, patient portals, EPCS and PDMPs are already playing key roles in addressing the opioid epidemic.

EHRA believes that health information and technology in general, and EHRs in particular, can play an important role in enabling access to all relevant data, thus improving clinical decision making by the clinician, as well as the patient. Improved access to all such data is critical, while still being able to respect the privacy of patient’s data as they see fit, with necessary security technology and processes to prevent data breaches.
David Bucciferro  
*Senior Advisor*  
_Foothold Technology*

David Bucciferro is Senior Adviser and an Information Security team lead with Foothold Technology, a New York-based company supporting human service providers across the country with a web-based electronic record, behavioral health Electronic Health Record (EHR) and Homeless Management Information System (HMIS). David emphasizes best practices for data collection and evaluation protocols, including those incorporating quality measures using data-informed decision making.

Prior to joining Foothold Technology, David worked as a Director in the New York State Office of Mental Health adult behavioral health services sector for nearly 30 years. His accomplishments include creation of the first fully Medicaid-funded program in the nation dedicated to delivery of Psychiatric Rehabilitation Services (IPRT), as well as an innovative person-centered, recovery-focused benefits package (PROS) incorporating multiple Evidence Based Practices including “Integrated Treatment for Co-Occurring Disorders.”

David is a member of the EHRA Membership Committee and serves as co-lead for the EHRA Opioid Crisis Task Force’s Technology and Standards subgroup.

David graduated from Siena College with a BS in Chemistry and was trained in Psychiatric Rehabilitation by the Boston University Center for Psychiatric Rehabilitation. He is a recipient of the NYAPRS President’s Award and serves on the Board of Education in New York’s Albany Capital Region.

Alan Staples  
*Senior Strategist, Patient Safety & Quality Outcomes*  
_Cerner Corporation*

Alan Staples is a senior strategist with the Cerner Corporation with 12 years of experience in Healthcare Information Technology. His professional experience in serving clinicians and care teams in surgical venues, and his background in designing and implementing clinical decision support lend a unique perspective to his work on the opioid crisis. His focus and passion is to help healthcare provider organizations in their role of preventing patient harm and in providing hope and treatment to individuals struggling with opioid use disorder.
Leigh Burchell  
**VP, Strategic Health Policy & Industry Affairs**  
Allscripts  

Leigh Burchell leads the Policy & Industry Affairs function for Allscripts, including legislative advocacy and regulatory response. Her role includes speaking on behalf of the company’s almost 50,000 ambulatory practices and 4,500 hospitals to ensure that new legislation and administrative policies are supportive of the most efficient paths towards healthcare improvement. A particular focus is the best way to maximize the volumes of newfound data captured in health IT today, including topics such as interoperability, chronic care management, population health, patient data ownership, and precision medicine.

Before assuming her current role in the company, Burchell was Executive Director of an Allscripts organization focused on the collection of best practices and dissemination of thought leadership materials on practical EHR adoption and sustainable health information exchange. She has been with Allscripts since 2000.

Burchell is active in many collaborative industry organizations, including the Electronic Health Record Association (EHRA); the AHRQ-funded Patient-Centered Clinical Decision Support Learning Network and the PCCDS’ separate Opioid effort; the HIMSS Nominating and Public Policy Committees; the eHealth Initiative; and the Global Alliance for Genomics and Health.

Prior to Allscripts, Burchell worked for a major Connecticut health plan where she managed a preventive medicine project focused on increasing member compliance with key wellness exams in an aim to assist with chronic disease management, as well as promotion and marketing for the country's first alternative medicine program to be launched by an insurer.

Burchell graduated from Wesleyan University in Middletown, Connecticut, with a Bachelor of Arts in Constitutional History.

Mari Savickis  
**VP, Federal Affairs**  
College of Healthcare Information Management Executives (CHIME)  

At CHIME, Mari Savickis’ focus is on translating how federal policy mandates impact the day-to-day lives of healthcare chief information officers, and positioning CIOs and other health IT leaders as a key constituency for policymakers.

Prior to joining CHIME in 2015, Savickis spent nine years as assistant director of federal affairs for the American Medical Association (AMA), where she led the organization’s interactions with the federal agencies concerning health IT policy. Prior to joining the AMA, Savickis worked at the Centers for Medicare & Medicaid Services (CMS) and the Office of the National Coordinator for Health Information Technology (ONC).
Integration of prescription drug monitoring programs (PDMPs) and electronic prescribing of controlled substances (EPCS) within the electronic health record (EHR) is critical to ensuring clinicians are able to easily access the data and tools they need at the point of care. Variation in the implementation and use of PDMPs and EPCS at the state level has created a barrier for the effective use of EHRs and other health information technology in the fight against the opioid epidemic.

**Your action is needed:** Support legislation that encourages ONC—in partnership with the CDC and SAMHSA—to provide best practices to states on a consistent approach to implementation and integration of PDMPs and EPCS, including reporting timelines, a minimum data set, and a standards-based approach to information exchange, along with access to the national PDMP registry.

**VARIATION = COMPLEXITY = COST**

**PROBLEM:** EHR developers have to code 50 different flavors of systems connectivity to respond to state-to-state variation = obstacle to interoperability between states and public health research opportunities

- SLOWER response to patients visiting multiple clinicians
- **BARRIER TO** cross-state or national data comparisons
- INCREASES cost to Health Systems and/or States

**SOLUTION:** Ask ONC to produce best practices recommendations to states.

**PROVIDER CONFUSION**

**PROBLEM:** Massive state-to-state variation in required and shareable data sets = increase in clinician burden and identifying “frequent flyers” is more difficult

- PHARMACY, PATIENT, DISPENSING RECORDS AND PRESCRIBER DATA (i.e. Patient ID, Name, Gender, Rx Number, Days Supply, etc.)
- Who is allowed to access the information and who must report the information?

| 0 STATES | share the same requirements across all data categories |
| 38 STATES | use APRISS as PDMP vendor |
| 13 STATES | do not have a PDMP query mandate |

**SOLUTION:** Establish a common minimum data set based on clinical relevance.
TIMELINESS AND RESPONSIVITY

PROBLEM: Inconsistent reporting timelines to PDMP systems = clinical decision workflow is hampered without real-time data

REPORTING TIMEFRAMEs

- 2% 3 DAYS (1 STATE)
- 2% 5 MINUTES (1 STATE)
- 2% 8 DAYS (1 STATE)
- 12% 7 DAYS (6 STATES)
- 82% 24 HOURS OR NEXT BUSINESS DAY (42 STATES)

SOLUTION: Establish a consistent reporting timeline across the country to equip providers with real-time information at the point of prescription

ePRESCRIBING OF CONTROLLED SUBSTANCES (EPCS)

PROBLEM: Lack of EPCS mandates = low realization of EPCS benefits, including improved security, accuracy, workflows, and reduced prescription tampering

EPCS MANDATES

- NONE
- PASSED
- PROPOSED
- IN EFFECT

- 5 states have none
- 4 states have mandates
- 12 states have mandate proposed
- 30 states have mandate in effect

42 states do not mandate EPCS

SOLUTION: Mandate that all states utilize EPCS consistent with clinically established best practices.

To learn more about EHRA's Opioid Crisis Task Force and its work, please contact Sarah Willis-Garcia at swillis@himss.org.

www.ehra.org