Last week, the EHR Association hosted a discussion of key issues related to health IT and the transition towards value-based care, led by Sasha TerMaat, EHRA Chair and Director at Epic, and Peter Wallace, Chair of the Association’s Public Policy Leadership Workgroup and Director of Government Affairs at Varian Medical Systems.

An expert panel discussed progress being made by providers and EHR vendors to improve patient care, increase interoperability, and reduce physician burden while leveraging EHRs as a clinical tool. We’ve drafted a brief summary of the key points made during the panel for those unable to join us.

**EVOLUTION OF ELECTRONIC HEALTH RECORDS**

Dr. Sarah Corley, a primary care physician and health IT clinical advisor to the MITRE Corporation, educated attendees on several important elements that contribute to the usability of EHRs, including the history of how they were first used and the impact of data collection requirements on the clinician’s experience.

Dr. Corley reminded attendees that, when EHRs were first developed, they were a free-form tool designed to improve the productivity and efficiency of a physician’s practice, largely mirroring a paper record. Over the years, EHRs have evolved to be much more than a tool to document patient care to now provide extensive documentation needed for billing purposes and quality improvement efforts. They now must support public health surveillance and tracking efforts, quality improvement efforts, patient safety efforts, and advanced payment models. But as data expectations have grown and more and more fields have been added to EHR screens to satisfy certification requirements, workflows have become much more structured to incorporate coding, reporting, and interoperability efforts along with patient care data.

These changes and data collection requirements, occurring in the setting of a rapid expansion of EHRs to the broader physician community, predictably have led to complaints, including assertions of decreased productivity and increased cognitive burden. To address this challenge, industry and academia have been undertaking research to identify best practices in human factors and user-centered design.

Unlike development for web sites where the intent is to grab attention and drive clicks, EHRs must be designed to present the most relevant information necessary for a caregiver to make the best clinical decisions without a lot of distraction.

Also, Dr. Corley notes that EHR developers’ efforts are complementary to professional and federal government-level efforts to minimize documentation burdens, which were mandated in the 21st Century Cures Act and demonstrated in the recently released Quality Payment Program proposed rule.
MOVING TOWARD INCREASED INTEROPERABILITY

Micky Tripathi, President & Chief Executive Officer of the Massachusetts eHealth Collaborative (MAeHC), predicted that with the major private sector progress on infrastructure, such as the Carequality, CommonWell, and eHealth Exchange networks, we will have real interoperability across the U.S. within two years.

He reminded attendees that EHRs are necessary for an interoperable healthcare system, and that just ten years ago most doctors didn’t have them; widespread adoption of EHR technology wasn’t until around 2014/2015. Because EHRs are so new, he suggested that it’s important not to set expectations and timelines for technology that have not been put on other industries. He used the example that healthcare is often compared to banking but said that it’s simply not an apt analogy.

Another step toward nationwide interoperability is the recent wide adoption of FHIR (Fast Healthcare Interoperability Resources), a standard for exchanging healthcare information electronically, specifically addressing the type of APIs common on the internet. An example may be the use of the Google Maps API in a myriad of applications needing a map.

Tripathi raised a concern that the 21st Century Cures Act, with provisions on common agreement and information blocking, may inadvertently impede progress toward interoperability if it results in a prescriptive response. The law, he suggested, tends to promote a top-down regulatory approach rather than a market-encouraging one, which he believes is gaining significant ground on its own after years of investment.

QUALITY MEASUREMENTS

Dr. Jennifer Bolduc, a pediatrician and strategic clinical adviser at Allscripts, discussed quality measures and how they relate to the shift to value-based care.

Clinical quality measures are mechanisms for measuring how well care is delivered to patients, with an eye toward evidence of too much treatment, too little treatment, or misused treatment. However, many of the measures are confusing, requiring clinicians to stay on top of a myriad of exceptions in order to effectively use them to track their activity and report it accurately to the payer.

A decade ago, many doctors in private practice still relied on paper charts. Today, most use an EHR; and, since implementation of Meaningful Use, they now must measure and report quality measures. Yet because it can take upwards of a year and a half for measure developers (CMS or clinical entities) to develop new quality measures and see them incorporated into EHRs, doctors sometimes face choices between respecting the latest medical guidelines for best practices and satisfying the measure guidelines coded in their EHRs, which can sometimes end up misaligned. And when new quality measures are introduced, physicians often aren’t immediately trained so that they’re aware of the new measures or documentation requirements in support of the measure, so they score poorly on something they didn’t know they were being graded on. As these measures tie ever more closely to the physician’s payments, they are paying increasingly closer attention.

Providers often blame the EHR when faced with frustrations like this, and the software development community takes very seriously the challenge of improving this area. There has been increased collaboration in the area of measures development to ensure that vendors are involved from the early stages and contributing to the promulgation of high quality new clinical measures, and there has been significant investment made in the area of Natural Language Processing by many to better map the collection of important data to the workflow used by providers every day when seeing patients.
It's anticipated that this effort will soon result in a smoother process for clinicians using EHRs every day to participate in new value-based care models.

RECENT FEDERAL LAWS IMPACTING HEALTH IT
Christopher Emper, President of Emper Healthcare Advisors, provided attendees with a historical review of the four key laws most directly impacting health IT:

- HITECH, which provided stimulus funding to accelerate providers’ adoption and “meaningful use” of electronic health records
- The Affordable Care Act, which codified several value-based payment models that are now providing new incentives for the adoption of such models in the future
- MACRA, which accelerates implementation and incentives for value-based care and introduced the Merit-based Incentive Payment System, or MIPS
- 21st Century Cures Act, about 10 percent of which is focused on health IT, including promotion of interoperable health records

Emper noted that, in addition to government incentives, payers, providers and patients are also applying pressure on the healthcare system to transition to value-based care. Health IT is crucial to this transition, providing healthcare professionals with the ability to aggregate data, and measure and report outcomes.

For additional resources on electronic health records, please visit www.himssehra.org.
Examining the Role of Health IT in Value-Based Care

Panelists’ Biographies

Dr. Jennifer Bolduc
Clinical Advisor, Allscripts

Dr. Jennifer Bolduc is the Principal Clinical Advisor for Allscripts, Office of Strategy Management and Marketing. In this role, she established and leads a companywide Clinical Solution Review Board, which provides clinical guidance for solution development and marketing efforts.

Prior to joining Allscripts, Dr. Bolduc served as Chief Medical Information Officer and pediatrician at the Walla Walla Clinic (Walla Walla, Washington, U.S.A). Dr. Bolduc completed her medical training at the University of Vermont in Burlington prior to her four years as a Navy pediatrician, where she served in Yokosuka, Japan and Bremerton, Washington.

For more information, please contact Dr. Bolduc at Jennifer.Bolduc@allscripts.com.

Dr. Sarah Corley
Senior Physician Informaticist, MITRE Corporation

Sarah Corley is Senior Physician Informaticist for the MITRE Corporation where she works on health IT related projects in the public interest. Prior to joining MITRE, she served as Chief Medical Officer for NextGen Healthcare for more than 11 years. She served 2 terms as Vice Chair of the Electronic Health Record Association (EHRA) and as Chair of the EHRA Patient Safety Workgroup. She served as a member of the American Medical Informatics Association (AMIA) EHR 2020 task force and on the Health IT Standards Committee’s Implementation, Certification, and Testing workgroup.

Dr. Corley served a four-year term as Governor of the Virginia Chapter of the American College of Physicians (ACP) and a 6-year term on their National Medical Informatics Subcommittee. She represents the ACP on the Physicians Electronic Health Record Coalition. She received post-graduate training in Medical Informatics at OHSU. She practices part time as a primary care Internist in the metropolitan Washington, DC area. She has used electronic health records for the past 23 years and has spoken extensively on the subject.

For more information, please contact Dr. Corley at scorley@mitre.org.
Chris Emper  
*President, Emper Healthcare Advisors*

Chris Emper, JD, MBA, is President of Emper Healthcare Advisors, a health IT industry advisory and consulting services firm in Washington, D.C. that specializes in helping healthcare providers and technology companies successfully navigate and comply with complex regulations and value-based reimbursement models. Prior to forming Emper Healthcare Advisors in 2016, Chris was Vice President of Government Affairs at NextGen Healthcare and Chair of the Electronic Health Record Association (EHRA) Public Policy committee.

An expert in *The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA)*, Chris is a frequent speaker at industry conferences and has written or appeared in articles in publications such as *Politico, Health Data Management, Accountable Care News*, and *Medical Economics*. Chris also currently serves as Chair of the HIMSS Government Relations Roundtable, a leading coalition of health IT government affairs professionals.

Prior to joining NextGen Healthcare in 2013, Chris served as a Domestic Policy Advisor for former Massachusetts Governor Mitt Romney’s 2012 Presidential Campaign, where he advised the campaign on policy issues including healthcare, technology, and innovation. He holds a law degree and an MBA from Villanova University and a BA from Boston College.

For more information, please contact Chris Emper at chris@emperadvisors.com.

Micky Tripathi  
*President & CEO, Massachusetts eHealth Collaborative*

Micky Tripathi is President & Chief Executive Officer of the Massachusetts eHealth Collaborative (MAeHC), a non-profit collaboration of leading Massachusetts provider, payer, and purchaser organizations. He is also Chair of the Information Exchange Working Group and Co-Chair of the Privacy and Security Tiger Team (both part of the federal Health Information Technology Policy Committee); a Director of the New England Health Exchange Network (NEHEN), a regional health information exchange based in Waltham, Massachusetts; and a Director and past Board Chair of the eHealth Initiative, a national health information technology education and advocacy organization.

Prior to joining MAeHC, Mr. Tripathi was a manager in the Boston office of the Boston Consulting Group, a leading strategy and management consulting firm. While at BCG, he served as the founding President and CEO of the Indiana Health Information Exchange, an Indianapolis-based non-profit company partnered with the Regenstrief Institute to create a state-wide health information infrastructure in the state of Indiana. As a manager in BCG’s health care practice, Mr. Tripathi also served a variety of US and international clients in the non-profit sector as well as in the bioinformatics, biotechnology, and pharmaceutical industries.

He holds a Ph.D. in political science from the Massachusetts Institute of Technology, a Master of Public Policy from Harvard University, and an AB in political science from Vassar College. Prior to receiving his Ph.D., he was a senior operations research analyst in the Office of the Secretary of Defense in Washington, DC, for which he received the Secretary of Defense Distinguished Civilian Service Award.

For more information, please contact Micky Tripathi at mtripathi@maehc.org.
About the Electronic Health Record Association

Established in 2004, the Electronic Health Record Association brings together companies that develop, market, and support electronic health records (EHRs). Through EHRA, member companies collaborate on issues that impact our businesses and our collective customers – hospitals and providers that represent the majority of EHR users in the US. We work together to speak with a unified voice on these topics in a non-competitive, collegial effort to understand, educate, and collaborate with all stakeholders engaged with EHRs and health information technology.

The Association operates on the premise that the rapid, widespread adoption of EHRs is essential to improve the quality of patient care, as well as the productivity and sustainability of the healthcare system as a key enabler of healthcare transformation. The EHR Association and its members are committed to supporting safe healthcare delivery, fostering continued innovation, and operating with high integrity in the market for our users and their patients and families.

Our core objectives focus on collaborative efforts to accelerate health IT adoption, advance interoperability, and improve the quality and efficiency of care through the use of these important technologies. We strive to engage the EHR software developer community and other stakeholders regarding EHR and health IT standards development, EHR certification processes and criteria, interoperability, patient safety, EHR usability, privacy and security, electronic performance and quality measures (eCQMs), health IT-focused public policy, and other EHR-related issues that are the subject of increasing government, payer, and provider focus.

EHRs have become essential to the delivery of quality patient care and, ultimately, the transformation of our healthcare system. We recognize the importance to all stakeholders of promoting a set of transparent industry principles that reflect our continued commitment to support safe healthcare delivery and the value that EHRs have for patients and families. Therefore, in June 2013, the EHR Association introduced the EHR Developer Code of Conduct (www.ehra.org/ASP/codeofconduct.asp). In February 2016, members updated the Code of Conduct and Version 2 was made available to the industry. The Association will continue to maintain and update the Code as needed, and provide a forum for educating EHR developers on the importance of its principles. We encourage all EHR developers, regardless of membership in the EHR Association, to adopt the Code.

For more information on the Electronic Health Record Association, including a list of members, please visit www.himssehra.org.

More Than Ten Years of Advocacy, Education & Outreach
2004 - 2017
Usability
The members of the Electronic Health Record Association (EHRA) strongly support continued work to enhance the usability of EHR technology, and to eliminate usability-related barriers to adoption and use of this technology, in order to improve the safety and quality of patient care. A developer focus on usability is one of the central elements of the EHR Developer Code of Conduct, sponsored by the EHRA. We believe that health information technology (IT) has the potential, when carefully designed and properly implemented, to materially improve how healthcare is delivered and the quality of clinical outcomes. At the same time, we have consistently expressed our concerns about the unintended consequences of attempting to broadly regulate EHR usability or more detailed and prescriptive certification of EHR developer usability practices:

- EHR software offers provider organizations extensive flexibility to craft the workflows that best match the way care is delivered locally, and to quickly introduce new methods and techniques. More prescriptive usability certification of an EHR could leave provider organizations with a mistaken sense of security in their certified product if their exact configuration is not the one that was certified.

- Research has shown that usability results can vary dramatically based on the metrics and testing methodology used. Even when consistent methodologies are used, there is significant disagreement among usability experts on which usability issues are the most serious.

An overly prescriptive approach to usability and design will stifle innovation and the user experience improvements that EHR developers compete on every day. As system developers, we have every incentive to continue to improve our products where it really matters – in the hallways of the hospitals and exam rooms of physicians’ offices where they are used to deliver patient care.

Standards and Interoperability
Interoperability is essential to enable data to follow the patient, to assist providers at the point of care and support the coordination of care, and to contribute data to public health officials, registries, and research in order to enable a learning health system.

Robust standards and implementation guidance, with timely availability of associated testing tools, provide the foundation to enable consistent and predictable data exchange at a national level. These must cover syntax, semantics, and transport, and be unambiguous. These standards should support incremental roll-out of new and enhanced interoperability capabilities, where advances can be made without developers and providers all having to migrate/upgrade at the same time; they should also be backwards compatible to the greatest extent possible to ease upgrades.

The 21st Century Cures Act (Cures) broadly defines information blocking. The EHRA strongly encourages that its members and other stakeholders not engage in information blocking, and requires this commitment by adopters of the EHR Developer Code of Conduct.

Consistent with a requirement in Cures, we encourage the Department of Health and Human Services (HHS) to expeditiously define “reasonable and necessary” activities that would otherwise be considered “information blocking,” and for any enforcement related to information blocking to be delayed until after completion of final regulatory definition of these factors, with a subsequent grace period to allow non-disruptive transition to compliance by all affected parties.
Electronic Clinical Quality Measures (eCQMs)
The EHRA strongly believes that increasing adoption of EHRs has provided the opportunity to dramatically advance electronic quality measurement and reporting by improving the efficiency and accuracy of quality data collection.

Through the use of health IT and electronic clinical quality measures (eCQMs), the transition from fee-for-service to value-based care, using alternative payment models (APMs) and other delivery reform models, has accelerated the need for a more consistent and streamlined approach to measuring clinical performance and quality.

The EHRA strongly supports the alignment of eCQM requirements across Centers for Medicare and Medicaid Services (CMS) programs, other federal and state government programs and, eventually, across private sector programs. Such alignment includes using the same set of measures to meet multiple programs’ requirements and recommended clinical protocol improvements. CMS and the Office of the National Coordinator for Health IT (ONC) should continue to invest in quality measure alignment, infrastructure, and standards.

The EHRA looks forward to working collaboratively with provider organizations, measures developers, and regulators to promote innovation, while reducing redundant and burdensome data collection for providers. Fundamentally, new eCQMs must be developed that are suitable for implementation in EHRs and consistent with, not additive to or in conflict with, clinical workflows.

Delivery System Reform, MACRA and Meaningful Use
EHRA members have supported their customers’ participation in the Meaningful Use (MU)/EHR Incentive Program since its inception in 2011. We have also actively provided feedback to CMS, ONC, and the Health IT Policy and Standards Committees on the implementation and evolution of the program. More recently, we have advised policymakers and our members on development and implementation of the 2016 MACRA legislation and its MIPS and APM components, which replace MU for Medicare clinicians and seek to accelerate a shift to value-based care.

That extensive experience informs the Association’s positions on policies to ensure the success of health IT in advancing delivery system reform. Our key recommendations are:

- **Ensure consistency across programs.** Harmonize technology and eCQM requirements across all federal and state government (and ideally private sector) programs. Additionally, all Advancing Care Information (ACI)/MU requirements for eligible clinicians (ECs) and eligible providers (EPs) should be harmonized to the greatest extent possible.

- **Implement programs judiciously.** Provide adequate timelines, limit mid-stream program changes, and ensure that MU, MIPS and APM program requirements are reasonable and achievable.

- **Promote health IT involvement in innovation models.** Technology should be considered an essential asset for improving care coordination and quality. To ensure success with new payment models, involve vendors and other stakeholders prior to launch to ensure requirements are achievable and advance model objectives.

The EHRA fully supports the goals of value-based care and believes that if policymakers work with vendors on the above recommendations, health IT will be an integral part of alternative payment models and help ensure their success.