Perspectives and Updates on
Health Care Information Technology

HIT Perspectives Biopharma Insights

1 **Part 1:** Exciting Changes Ahead in 2015 for HealthIT

2 **Part 2:** New York Leads Way in Electronic War Against Opioid Abuse

3 **Part 3:** EHRs: A Tool to Improve Vaccine Use

About the newsletter

HIT Perspectives Biopharma Insights is published by Point-of-Care Partners. Individuals at the leading management consulting firm assist healthcare organizations in the evaluation, development and implementation of winning health information management strategies in a rapidly evolving electronic world. The team of accomplished healthcare consultants, core services and methodologies are focused on positioning organizations for success in the integrated, data-driven world of value-based care.

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1 Part 1: Exciting Changes Ahead in 2015 for HealthIT

By Tony Schueth, Editor-in-Chief

Change is the hallmark of health care and health information technology (healthIT). This year promises to be another with tectonic shifts. On one hand, healthIT will continue to respond to evolving changes in the health care ecosystem by building on what has been in the pipeline. On the other, several new entrants into that ecosystem will significantly affect health care and healthIT going forward.

With that in mind, here are the top 10 trends we see ahead in 2015 for healthIT.

EHRs: Will only the strong survive as this market consolidates? In 2015, we could see increased consolidation in the electronic health record (EHR) market, mostly involving integrated delivery networks (IDNs). The emergence of value-based reimbursement and other market forces have fostered a migration of physicians and small groups into large group practices. The gamut of individual EHR systems represented by acquired practices will be abandoned or gradually swapped out as these merged entities focus on an enterprise solution. Not surprisingly, enterprise systems favor large, well-established vendors.

Nonetheless, opportunities do exist for small- and medium-sized firms. Those focused on meeting specialists' unmet needs will have an advantage. EHRs offering cloud-based platforms will continue to increase market share.

Population health: Why we'll finally see it pop. Payers, policy makers and IDNs will have population health on their minds in 2015 more than ever before. Why? Because it makes sense from a business perspective and promises a fairly quick return on investment (ROI). Part of meaningful use (MU) and the federal strategic plan for healthIT for 2015 to 2020, population health represents a tectonic shift away from treating episodes of care for individual patients to managing the health of specific populations, such as the chronically ill or members of IDNs.

Part of this is driven by a renewed focus on value-based reimbursement, with the recent announcement that Medicare will move away from fee-for-service medicine and transition toward payment through such "alternative" reimbursement models as bundled payments, patient-centered medical homes (PCMHs) and accountable care organizations (ACOs). This new way of doing business — based on value-based reimbursement — will require changes to healthIT infrastructures and EHRs to capture clinical, administrative, cost and outcomes data. EHRs and health information exchanges (HIEs) will be needed to gather and report data, both internally and externally, to payers such as Medicare.

Another driver is the business case for population health, represented by ROI. According to a survey by KPMG, half of health care organizations could recoup their population health investment within a short four-year window, many within the first 1 to 2 years.

Clinical decision support: Docs will learn to love it. This year will mark a turning point in the provider community, which will come to perceive clinical decision support (CDS) as a value-add and must-have rather than simply an annoyance. MU stage 2 includes several CDS requirements, but some providers consider these to be too much and too heavy handed. Others — especially early adopters — will be rethinking it. Savvy physicians have become comfortable with basic CDS and are now looking to expand beyond the basics to more advanced features.

These physicians, along with IDNs and ACOs, have realized that effective use of CDS means patients receiving the correct tests and preventive services, appropriate medications, and proper treatment, particularly for chronic conditions. This translates to better outcomes, which lead to successful value-based reimbursement. As a result, clinician demand for more and improved CDS will stimulate EHR vendors to respond. They will be adding such CDS tools as documentation templates, diagnostic support, condition-specific order sets, focused patient data reports and summaries and evidence-based guidelines — all of which may be deployed on a variety of platforms (e.g., mobile, cloud based or locally installed). Look also for CDS tools to

enhance clinicians' quality of patient care in PCMHs and ACOs, as well as remote patient monitoring.

Patient engagement: It will lead to innovative market marriages. Engaging patients in their care has been disappointingly slow despite its being part of MU, significant noise coming out of Washington and increased demand by some patients and IDNs. This could be the year patient engagement begins to take off. Under pressure to reduce costs and improve outcomes — both within value-based reimbursement systems and outside — payers and providers will be looking for patient engagement solutions, particularly those that are technology-based, to drive action and get results.

Moreover, the need for better patient engagement is an opportunity that investors and entrepreneurs will jump on in 2015. This should not be surprising given low interest rates, increased availability of venture capital and growing awareness throughout the business community of the need to cut health care costs while promoting wellness. That should translate into a wider range of wearables, mobile devices and applications to monitor patients and help them meet clinical and lifestyle targets customized to their age, health status, conditions and insurance coverage. Expect to see greater innovation in electronic patient/provider messaging that provides targeted actionable information across various patient populations as well as meaningful feedback.

Data sharing is another area that is ripe for opportunity, particularly regarding ways patients can contribute information to their EHRs and how caregivers can be included. Both entrepreneurs and institutions are looking to leverage technology to educate patients about their care and conditions. Innovative healthIT solutions are needed to reach the elderly and many minorities, who tend to be underserved and have multiple chronic illnesses that are costly to treat.

Electronic health records: Will they be easier to use? Washington is abuzz these days with the perceived need for better healthIT interoperability. We heartily support ongoing work by the industry and federal government for improvements in this area. Take, for example, suggestions in the new draft Roadmap recently issued by the Office of the National Coordinator for Health Information Technology (ONC) and its 2015 Interoperability Standards Advisory (the Advisory). To be sure, these initiatives will drive interoperability, but newly announced payment reforms will be the game changer. (Learn more in our related article in this issue of HIT Perspectives.)

While ONC's interoperability recommendations are being finalized, the industry in 2015 will be building on MU requirements and processes that have already left a core of basic interoperability supported across many EHR vendors. MU's cookie-cutter approach has created usability gaps that vendors will be working to address. Physicians want systems that are straightforward to use, more easily and securely integrated into their work flows, and customized to the unique needs of their specialties. Many will be replacing hastily purchased EHRs because they desire enhanced functionalities, such as specialty-specific work flows. That lesson is underscored in a recent survey by the American Academy of Family Practice, which found that 59% of family physicians who switched EHRs got better functionality — the top reason for the change in the first place. Other physicians will be implementing new EHRs because they will be joining IDNs that require use of a particular system. IDNs, ACOs and even large group practices will need expanded data capture, analytics and reporting capabilities.

Biosimilars: They will be blinding us with science. One of the newest trends is the entrance of biosimilar pharmaceuticals into the US market. The Food and Drug Administration is poised to begin approving these drugs, which are similar to, but not identical copies of, the originator biologic and are not generic alternatives. (For a more detailed primer on biosimilars, see our article in the December 2014 issue of HIT Perspectives.) We expect that the trickle of approved biosimilars soon will turn into a flood, creating numerous challenges and opportunities for healthIT in terms of standards and changes to EHRs and dispensing systems. Many of these will be driven by the need to add the manufacturer name and lot number to the drug ecosystem in response to provisions of the Drug Quality and Security Act of 2013. These changes will be needed to "track and trace" adverse drug events potentially associated with biosimilars and other medications. That is easier said than done as normal industry practices, and the standards used for electronic communication between prescribers and pharmacists, don't typically contain lot number or manufacturer information.

Specialty medications: ePrescribing will be the prescription for success. Specialty medications will continue to be of intense interest by payers and providers as their costs and share of the nation's drug spend continue to rise. The rise in biosimilars also will contribute to the focus on specialty meds. As a result, emphasis will be placed on using electronic prescribing (ePrescribing) and prior authorization (PA) to improve management of the prescribing and distribution processes of these medications and reduce the significant overhead costs associated with today's paper/phone/fax processes.

In fact, ePrescribing of specialty medications is already in use today on a limited basis. One barrier to wider use of ePrescribing for specialty medications is that the data transmitted do not contain

vital information — such as height, weight and PA approvals — needed by the specialty pharmacy. This means the pharmacy must request additional information from the prescriber and revert back to paper- and fax-based processes. The industry is aware of these gaps and will continue to work on filling them. Examples include the wider integration of electronic prior authorization (ePA) into EHRs and modification of the prescription transaction standard to accommodate this information. We will also see more robust integration of pharmacy and medical benefits, thus allowing plans to better track the usage of specialty drugs across beneficiaries. This will necessitate major changes in ePrescribing, standards and payer and pharmacy systems.

EPCS: Adoption will be getting a shot in the arm. Electronic prescribing of controlled substances (EPCS) will continue to gain traction in 2015. Part of this is because EPCS is the final frontier of ePrescribing and it is natural that market forces will try to fill the void. Pharmacies are ready for EPCS. So are EHR vendors, which are increasingly bringing EPCS-compliant products to market now that demand has been demonstrated. In addition, the process for accrediting EPCS-compliant products will be streamlined now that the Electronic Healthcare Network Accreditation Commission (EHNAC) is exclusively handling certification. This should result in more EPCS-compliant products hitting the market sooner and will stimulate adoption by providers. The move toward interoperability and value-based care by public and private payers also should stimulate EPCS adoption in 2015. (Read more in this issue of HIT Perspectives.)

Another major driver for EPCS is the war against substance abuse being led by the federal and state governments. One example is the I-STOP Program in New York, which requires ePrescribing of all medications in March 2015 and the consultation by most prescribers of the state's Prescription Drug Monitoring Program (PDMP) Registry when writing prescriptions for Schedule II, III, and IV controlled substances. The PDMP Registry provides practitioners with direct, secure access to view dispensed controlled substance prescription histories for their patients. This information will allow practitioners to better evaluate their patients' treatment with controlled substances and determine whether there may be abuse or nonmedical use. Many states are considering following New York's lead, which would not be that difficult since all states have a monitoring program that is authorized or already up and running. A challenge to more widespread adoption, however, is that while providers are adopting EPCS-compliant ePrescribing systems, PDMP data are not yet integrated into the EHR. This represents an opportunity for EHR vendors to fill a market gap with a feature that will yield significant patient safety benefits.

Electronic prior authorization: Health care will just say yes. Vendors in 2015 will increase their implementations of ePA. Despite availability of the standard, its integration into EHRs has been slow. That should change as demand for ePA continues to grow. Some will be due to the entry of biosimilars entering the market, coupled with the increasing demand for specialty medications spurred by the continued rise of chronic diseases. All of these will require PA, eventually creating a tipping point for ePA away from the traditional paper/phone/fax PA methods.

In addition, look for payers' renewed interest in medical electronic preauthorization. This shift in payer mind-set is fairly easy to understand. Payers are beginning to see the success in ePA for medications now that the standard has become more widely adopted. Paper/phone/fax PA processes for medical procedures, lab tests and devices have been a long-standing and expensive pain point for both payers and providers, and the success in ePA may point to relief for that.

Real-world evidence: Data and methods will be making it real. Wider use of real-world evidence (RWE) will be a major transformational trend in 2015. Expect to see payers, regulators, pharmaceutical companies and others increasingly look at RWE as a new way to assess patient outcomes and create value. Analyses of large sets of anonymized patient-level data, or real-world data (RWD), can yield an assessment of the true effectiveness, risks, safety and cost benefits of a drug, procedure or device. As a result, RWE provides an unprecedented window into how a particular product is used — by whom, under what circumstances and yielding what outcomes. Drug manufacturers are now using large data sets and sophisticated analytics to see how their existing drugs actually perform in the real world. This increases their understanding of how drugs actually perform — on top of the knowledge gained from the narrow confines and small populations of the gold standard of randomized, controlled clinical trials.

RWE will also become increasingly important to payers, providers and regulators. Using RWE, they can have an accurate and advance assessment of the risks and benefits of treatments and actual health outcomes in large patient populations. RWE further can be translated into action-oriented messaging for patients and health care providers at the point of care. Additionally, RWE creates opportunities for healthIT infrastructure vendors to provide the RWD needed for the analyses. Vendors can create value for payers and regulators by collecting and aggregating clinical data from EHRs, as well as by linking claims and registry data.

2 Part 2: New York Leads Way in Electronic War Against Opioid Abuse

By Brian Bamberger, Life Sciences Practice Lead

There is a new war on drugs being waged by the federal government and states. This time, the focus is prescription opioid abuse and the battles are being fought electronically. New York is leading the way with its I-STOP legislation, which will create opportunities for pharmaceutical manufacturers with physicians.

Misuse and abuse of prescription opioids in the United States (US) constitute a public health crisis that has grown to epidemic proportions over the past decade. The Centers for Disease Control and Prevention (CDC) has identified prescription drug abuse and overdose as being among the top five health threats in 2014. According to the CDC, deaths by drug overdose (mostly from opioid abuse) have risen steadily over the past two decades to become the leading cause of injury death in the United States. Everyday, 120 people in the US die as a result of drug overdose and nearly 7,000 more end up in the emergency department due to misuse or abuse of drugs (again, mostly due to opioid abuse). More than 2.4 million Americans were considered opioid abusers in 2010, a number the CDC believes has since grown exponentially.

Recognizing the threat, New York took action with the I-STOP Program, which offers a multipronged approach. First, it requires electronic prescribing (ePrescribing) of all medications beginning March 27, 2015 (although that implementation date may be delayed). How will this help fight prescription opioid abuse? To start, it takes paper prescriptions out of patients' hands. This will drastically eliminate a major opportunity for substance abusers to forge prescriptions on their computers or alter drug names and quantities on legitimately issued prescriptions. In addition, ePrescribing can help clinicians recognize substance abuse at the point of dispensing through medication history checks, which identify both controlled and noncontrolled medications that have been paid by a patient's insurance. ePrescribing systems, as well as pharmacy systems, can also flag potentially deadly prescription errors and drug interactions related to opioid use, thus preventing accidental deaths and overdoses. Refill request monitoring can also be used to help flag abuse and diversion.

I-STOP's second prong requires prescribers to electronically consult the state's Prescription Drug Monitoring Program (PDMP) Registry when writing prescriptions for Schedule II, III and IV controlled substances. The PDMP Registry provides practitioners direct, secure access to view dispensed controlled substance prescription histories for their patients. This information will allow practitioners to better evaluate their patients' treatment with controlled substances and determine whether there may be abuse or nonmedical use.

In addition, I-STOP requires the creation of the Prescription Pain Medication Awareness Program and a consumer program for the safe disposal of controlled substances.

The federal government, states and stakeholders (such as physician groups) are watching I-STOP with interest. Several states (including California, Illinois, Oklahoma, Texas and Utah) are considering similar legislation.

All of this activity will open doors for pharmaceutical manufacturers and their representatives as physicians scramble to implement I-STOP in New York. They will need assistance adopting ePrescribing systems over the first few months — either ePrescribing in general or for controlled substances. For example, I-STOP provides an avenue for Pharma companies to assist practices in creating efficiencies with "Favorites" and reducing pharmacy calls with corrected prescriptions. Writing electronic prescriptions for non-tablet products, even familiar ones, can be confusing to new ePrescribers and pose a risk to patient safety. Practices need to understand how to use these unfamiliar systems for more difficult-to-prescribe products.

Learnings from the New York experience can help Pharma position itself in other states considering similar legislation. Going forward, it will be imperative that drug makers understand how to assist prescribers in adapting to the new technology.

The war on opioid abuse is far from over, but electronic tools show promise for fighting this deadly epidemic. Moreover, stakeholders are creating educational materials for physicians, which can be leveraged by sales reps as prescribers adopt systems that are not intuitive to them. Point-of-Care Partners (POCP) has allied with CVS Caremark to create a series of webinars and educational materials (available at http://info.caremark.com/istop) to help providers as the March 27 go-live date nears. Let POCP position your firm and sales reps to take advantage of this unprecedented opportunity to help physicians adapt to using electronic health records and ePrescribing.

3 Part 3: EHRs: A Tool to Improve Vaccine Use

By Brian Bamberger, Life Science Practice Lead

Broad adoption of electronic health records (EHRs) holds promise to promote the use of vaccines. The recent measles epidemic is an instructive example.

Federal investigators got to the heart of the epidemic by identifying measles-infected people, most of whom were unvaccinated visitors to Disneyland in California or had been exposed to infected visitors at the theme park. Because of these exposures, the disease quickly spread to more than 100 cases in January alone. This is more than the entire country typically sees in a year, according to the Centers for Disease Control and Prevention (CDC).

As measles cases spread outside California to nearly 20 states plus the District of Columbia, officials scrambled to contain the disease by identifying those who had yet to be inoculated. According to the CDC, approximately 1 in every 12 children are either unvaccinated for measles and other diseases or have not kept their shots up to date.

Here is where the use of EHRs could come into play in such an epidemic and help promote vaccine use. First, EHRs can help physicians identify those needing shots by reviewing patient vaccination histories, even those who've been vaccinated in one state and have since moved to another. Vaccination histories include pertinent information regardless of a patient's insurance coverage. Patients who refuse vaccinations because of religious or other objections can be flagged. EHR data can then help public health officials and physicians identify unvaccinated individuals who might have been exposed to measles, so they can be asked to observe a voluntary quarantine in order to contain the disease's spread.

According to media reports, officials in Utah located more than 380 people who could have come in contact with two Disneyland vacationers who got the measles and asked many of them to quarantine themselves at home for 21 days.

EHRs undoubtedly were central to the process because of efforts by the IC3 Beacon Community, which is part of a federally funded initiative to build and strengthen local health information technology (healthIT) infrastructure, promote use of EHRs and test innovative approaches to improving outcomes and lowering costs. IC3 serves three counties in the center of Utah, including urban Salt Lake County and rural and frontier areas of Summit and Tooele. Among its goals, IC3 focuses on using technology to improve communicable disease reporting by replacing paper reports with electronic reporting capabilities. Utah is one of the nation's most wired states thanks to adoption of healthIT by the Intermountain Healthcare System. Based in Salt Lake, this nonprofit health care organization includes 22 hospitals and a medical group having more than 185 physician clinics — all of which utilize EHRs.

Factoring into this connected landscape are electronic immunization registries, which have become important tools toward improving the accuracy of vaccine documentation and facilitating outreach to patients (e.g., appointment reminders). EHRs provide most of the data for these registries, largely because the federal meaningful use EHR incentive program requires them to report such information to immunization registries. (Click here to learn more about a federally funded program in San Diego that uses a disease registry to improve pediatric immunization rates.)

Additionally, nearly all school systems require that students be up to date with shots before beginning a new school year. EHRs can provide students necessary vaccination records and help identify those with vaccination gaps that must be addressed.

Although vaccines are given early in childhood, college students and young adults need certain immunizations, too. The vast majority of states mandate that college students obtain

certain vaccinations or boosters on a regular basis, while many institutions have additional voluntary and mandatory vaccine requirements. For example, approximately 80% of states require meningococcal conjugate vaccine for college students or other students living in a dorm. The Tdap vaccine — which protects against tetanus, diphtheria, and pertussis — often is required for college students, especially athletes. Vaccines for hepatitis B and human papillomavirus (HPV) are highly recommended for high school and college students.

In short, EHRs can help identify unvaccinated students and have become an important tool in containing the spread of disease. They are key to helping physicians and public health officials promote the use of vaccines for millions of students at the start of every school year and in response to any disease outbreaks. Federal statistics indicate that nearly 50 million students attended public elementary and secondary schools in 2014, and roughly 21 million students were enrolled in American colleges and universities.

Naturally, EHRs also are useful in ensuring that adults are vaccinated. Opportunities include initial vaccinations for such highly communicable diseases as measles and HPV; boosters for a number of conditions, including tetanus; and recommended annual and periodic vaccinations for such maladies as flu, shingles and pneumonia. Certain jobs may also require employees be vaccinated; for example, those working in close quarters with others or who travel frequently to foreign countries. However, circumstances entailed with adult immunizations are more complicated than for children. Physicians must activate the immunization reminder feature of their EHR. They may have disabled this feature in response to alert fatigue or because of the perception that most people are immunized, so there would be little risks in turning off this reminder. That perception may change in the face of the current measles outbreak. In addition, physicians need an updated vaccine list (there are more additions) and an updated schedule. The practice also needs easy access to vaccine coverage rules from insurers.

Issues for pharmaceutical companies appear in practices with EHRs when a new vaccine or schedule change is approved. Updating practices takes time and may cause confusion. In some cases, new vaccines must be added manually by the practice. Getting a vaccine added to its EHR system not only ensures that the practice will bill for the activity, but will be able to transmit the vaccine information to its state immunization registry. Addition of a new vaccine also enables the EHR to automatically recognize that it satisfies the vaccination reminder function, helping to streamline that process.

Vaccine schedule changes may also cause problems. Most must be completed by the EHR vendor, with practices then downloading the content when available. Many pharmaceutical companies assume the EHR vendors update schedules quickly, but nothing could be further from reality. In fact, some EHRs wait for practices to inquire about missing or outdated schedule information before making an update.

Sales representatives will benefit from education that will enable them to address issues with practices and Point-of-Care Partners (POCP) is ready to help. POCP has researched the ways practices work with vaccines and vaccine schedule updates for the top 20 EHRs, as well as the features available for identifying and recalling patients who are candidates for vaccines. Let us know how we can help you put our expertise to use.