Humetrix Addendum

Policymaking should reflect that patients also share data
June 17, 2015, 12:30 pm
By Bettina Experton, MD, MPH

Patients are using their own health information. The husband who uses his smartphone to download his wife's health records after she's in a car accident. The veteran who saves his own life by noticing a critical medication error in his Blue Button record. The adult daughter who uses her cell phone to share her mother's updated Medicare health history with each of the different doctors her mother sees for her multiple chronic conditions.

These are just examples of situations across the country where patients and family caregivers are using mobile tools to help them manage their own health and health care, as well as that of their loved ones. According to a 2014 poll conducted by the Pew Research Institute, 64 percent of American adults now own a smartphone, and 62 percent of these adults have used their devices to look up information about a health condition in the past year.

Given the ubiquity of smartphones and their growing adoption among seniors, as well as their high rates of use among low-income populations, it is clear that these devices are transformational tools that can be used by Americans to manage their health and be engaged in their care whenever and wherever they may be. For at-risk populations, the ability to more actively engage with their own care can be truly revolutionary.

Empowered with their mobile devices, Americans have the power to completely by-pass the lack of information sharing between health systems. Despite a $30B investment by taxpayers, business barriers to data sharing - more so than a lack of system interoperability – continue to affect providers' ability to communicate with one another. With mobile devices, patients can now take control of the data-sharing process and "bring their own" to every care interaction.

Patients are also now able to track and share information about their lifestyle (such as nutrition, physical activity, etc.), their experience with prescribed treatment,

specific health condition monitoring (such as hypertension or diabetes), and in some instances, aggregate it with their health record data. Seeing the whole picture of a person's health through this type of data aggregation, under the direct control of the individual, can greatly improve outcomes by delivering the right care at the right time, avoiding medical errors and redundant care and realizing the promise of value-based care as we move away from fee-for-service payment.

Yet, despite the important role of consumer mobile tools in helping to transform health care, much of the public dialogue about health IT to date has centered on system-to-system health information exchange (HIE) and interoperability using 90s technology. This is an outdated worldview that ignores the unparalleled impact that an engaged and technology-empowered consumer can have in driving health care quality and reducing costs in the short-term.

In fact, many of the barriers experienced in system-to-system exchange (i.e., business barriers, privacy and security issues) are not present with "consumer-mediated" exchange. Patients have a legal right to access their own data so there is no need to worry about HIPAA privacy requirements when sending a patient his/her own record.

Mobile tools – like Humetrix's iBlueButton and several others – already exist to help patients access and share their records with their providers as they choose. These tools also help providers make better use of the costly taxpayer investment in certified EHRs by making it easy to transmit health records to their patients' mobile applications of choice. Meaningful use standards ensure that these transmissions can be made in a standardized and secure way so that records can be read and assembled by their patients' mobile applications for them to share with their next provider.

Patient-supported exchange through mobile applications is a near-term solution that is immediately available to facilitate greater health information exchange. Truly value-based care cannot be achieved without greater rates of patient engagement, and tools are available now to help patients access and share their health data. Policymakers and providers alike should leverage these tools to the greatest extent possible to both advance interoperability and ensure patient safety.

New technologies are making existing policies for both providers and patients easy to implement. This is not the time to relax these policies by only considering system-to-system means of health information exchange when the world has evolved to widely adopt user-friendly mobile technology. With their own mobile devices, patients are unlocking information throughout the healthcare system and using it to improve their health. Isn't that a win for everyone?

Experton is the CEO of Humetrix.
http://thehill.com/blogs/congress-blog/healthcare/245222-policymaking-should-reflect-that-patients-also-share-data

This App Is Helping Veterans Manage Their Health Records
May 26, 2016
By Bronwyn Flores

On Monday, people across the United States will observe Memorial Day by honoring the men and women who have served in the U.S. armed forces. For one California-based tech startup though, veterans and military personnel are top of mind every day of the year.

Humetrix, which stands for "human metrics," uses sensor technologies and personalized algorithms to allow patients to access health records via their mobile devices. More specifically, their iBlueButton software lets veterans safely aggregate and store records from the U.S. Department of Veterans Affairs, Department of Defense and private providers.

We spoke with Humetrix CEO Bettina Experton to learn more about what her company is doing in health tech space to support veterans.

You recently exhibited at CES on the Hill. Tell us a little about your experience.
CES on the Hill is a unique experience, offering an intimate venue for companies to interact with legislators and their staff. Because technology is so central to our lives today, it is important that they engage with tech leaders and experience firsthand the wide range of transformational technologies that affect their constituents.

Because healthcare issues are so important, we were excited about the opportunity to demo our mobile health technology for legislators and talk about how information technology is directly impacting the lives of all Americans.
Our participation has resulted in some follow-up meetings on Capitol Hill with legislators who are keenly interested in improving the safety and cost-effectiveness of our healthcare system by empowering patients.

How does Humetrix's iBlueButton help veterans?
While healthcare is obviously important for everyone, our veterans in particular should get the best treatment – and the best tools for managing their health. Some vets come home with severe injuries and conditions, many requiring lifelong care and management.

As a result, veterans are often at much higher risk of medical errors both because they often have multiple health issues and because they access health care services from multiple places – in both Veterans Affairs (VA) and military system facilities and civilian doctors and clinics. More than 50 percent of the care vets receive comes from outside of the VA.

iBlueButton is the only software available that lets any veteran get and store records from the VA and Department of Defense health systems, as well as private providers; aggregate all of the information in an actionable format; and store it securely on the user's mobile device so he or she can easily share it with doctors and other caregivers.

Armed with this data, they can much more effectively ensure that every doctor they see is armed with all relevant information about their medical history to prevent deadly medical errors.

What measures does your company take to protect veterans' medical records?
Your mobile device is actually one of the most secure places to store your data because you control it. That is why we have chosen to secure this very private information on the user's own device — and nowhere else.
Humetrix is unique in the fact that individual data is never seen or stored on our servers. Veterans' medical records are downloaded directly from the VA or military health systems or Medicare and securely encrypted on the veteran's own smartphone. It can't be hacked or stolen from "the cloud" because it isn't stored there.

Besides helping veterans streamline their medical records, what else is Humetrix working on?

We're going beyond just providing anytime access to medical information — which is critically important — to the next step, which is using analytics and medical intelligence to help individuals better use their own data to manage chronic care conditions. For example, our TENSIO app uses analytics, medical intelligence, sensor data and the user's own health record to coach patients on the best way to monitor hypertension – high blood pressure. We can tell them how different medications will affect their blood pressure, remind them to take medication, and make recommendations regarding diet and exercise to manage their blood pressure.
In the future, we'll be rolling out additional apps on this same platform that assemble biometric and medical data and use medical intelligence and smart analytics to help coach patients through managing a range of other chronic conditions.

https://www.cta.tech/News/Blog/Articles/2016/May/This-App-Is-Helping-Veterans-Manage-Their-Health-R.aspx

Humetrix Blog Post
From Fitness to Health – How the Next Generation of Software Powered Devices is Changing the Health Tech Industry
June 3, 2016
By Dr. Bettina Experton

When we talk about health tech for consumers – we are really looking at an industry that is rapidly evolving from fitness to health. What does that mean?

Fitness technology appeals to a very specific segment of the population. Users are overwhelmingly young and active and very focused on exercise and diet. But a much larger population of consumers are interested in improving and maintaining their health – beyond tracking steps, heart rate, or sleep. The consumer health tech industry is learning that growth means appealing to this broad universe of potential users.

Good examples of this move are mobile technologies for the management of chronic conditions, like Humetrix's own Tensio mobile patient coaching platform for managing hypertension. These new products use the consumer's own health information and apply data analytics and algorithms to coach and guide them toward making healthy lifestyle choices, and complying with their doctor's medication treatment and care plan.

These new approaches require a much more complex offering than simple fitness biometric products that count steps or measure heart rate. When managing a chronic condition, the value of the device itself can be greatly magnified if it is embedded with or connected to intelligent software that applies smart analytics and algorithms on a comprehensive set of personal health data.

Until now, connecting to the critical health information that will power these new coaching solutions has been a challenge – so progress has been stalled. Today, new HIPAA laws give consumers the right – and the means – to access electronic versions of their own health records and port it to the mobile applications that are powering these new health-coaching platforms.

This development, along with growth among devices that allow consumers to digitally monitor their own blood pressure, blood glucose, and other health parameters, has made it possible for intelligent software solutions to bring health applications and devices to the next level of personalized chronic care management.

There is a revolution taking place today – consumers are no longer passive patients, but rather, active participants in their own healthcare. They need more intelligent and smarter devices that help them take control of their own health. The tracking device on its own is not enough. It is the device connected software that guides and informs us and helps us make smart decisions that can improve health outcomes.

The health tech industry is on an interesting path toward putting medical intelligence and powerful computing technology in the hands of consumers so they can better manage their health in consultation with their physicians. We must also focus on educating everyone about their right to access and use their own health records – and clearly illustrate the benefits of doing so. With the right information at our fingertips everyone will now be able to use this next generation of tracking devices to take control of their health and make meaningful changes in how they take care of themselves.

http://www.humetrix.com/post-be-34.html

Humetrix Blog Post
At HIMSS 2016, Let's Remember that Patient-Mediated Exchange Can Drive Interoperability
February 25, 2016
By Dr. Bettina Experton

As we approach HIMSS 2016, I feel compelled to remind the health IT community that when tackling interoperability, we must remember that patient-mediated health information exchange is an important means to not only engage patients in their care but also to help providers receive and use health information when and where it is needed. I hope to see discussions at HIMSS center on how we can capitalize on our existing EMR infrastructure and available patient facing tools to encourage not just provider-to-provider communication, but communication between providers and their patients.
Health information exchange between providers and patients was the main recommendation called for by EMR industry leaders and echoed by patient facing organizations and developers like Humetrix during the ONC "Interoperability Governance Roundtable" last March. Now is the time to refocus our attention as the HIT community reconvenes in Las Vegas next week.

DIRECT secure messaging is part of all certified EMRs and can be used in combination with individual PHR tools, including mobile PHRs like Humetrix's own iBlueButton, or other standard-based solutions developed by NATE members like

NoMoreClipBoard or GetRealHealth, to achieve broad interoperability and health information exchange, especially with and via patients. If we want to make meaningful progress in our quest to improve interoperability and data flow, it is critical that we make the existing standard-based technologies that are prevalent on the provider side put to use for data exchange with patients and for consumer-mediated health information exchange. By opening provider-to-patient data flow, we not only allow patients to exercise their new HIPAA rights to access their personal health records, give them tools to ensure their safety across our disjointed healthcare system, but also help data flow between providers via consumer-mediated exchange.

The recent Senate HELP Committee draft HIT bill has brought the critical role of the patient to the forefront. Among the important provisions in the bill is: Empowering Patients and Improving Patient Access to Their Electronic Health Information, which supports the certification and development of patient-centered health record technology. The goal is to ensure that patients can access their health information through secure and user-friendly software so that their up to date medical history can be communicated to their physicians wherever they receive care. Making health information available via mobile devices – which are far more portable and ubiquitous than a PC – should be a key component of the strategy for care coordination and interoperability. More than 100,000 providers who use SureScripts' HISP service with their Epic EMRs, and scores of hospitals using Cerner EMRs can use DIRECT today to securely transmit EMR data and transition of care summaries to their patients' mobile devices via iBlueButton.

It is time to stop allowing the challenge of interoperability to delay broad deployment of patient-centric solutions. Using DIRECT and iBlueButton, patients can assemble their own comprehensive, longitudinal healthcare record from disparate systems, and annotate, share and update it, right on their own mobile devices, that they always carry with them, at any point of care. Turning on DIRECT, which is embedded in any certified EMR system is easy to do. So why aren't more health care institutions doing this? And why aren't they being incentivized to do so? It's a simple fix that can make a huge difference in improving care for any patient whether they are being discharged after a procedure, continuing their care at another facility, or managing their own health at home.

We will only succeed in transforming healthcare to a value-based system when we achieve true patient empowerment, giving patients access and control over their health records. At HIMSS 2016, I look forward to hearing from my colleagues in the HIT community about their initiatives to drive the use of technology that puts the patient at the center of their care and HIT team.

http://www.humetrix.com/post-be-33.html

Humetrix Blog Post
"iBlueButton Saved My Father's Life!"
March 7, 2013
By Dr. Bettina Experton

Healthcare Informatics journalist Gabe Perna reported in a March 6th blog post the true story of Pennsylvania resident Beth Schindele, who says she saved her father's life by using the medical information in iBlueButton on her smartphone.

According to the blog post, Schindele used iBlueButton during her father's recent hospitalization to prevent doctors from discharging him with a prescription for Coumadin, a medication which had been prescribed to his father in error and which had been discontinued for over two years. The drug is a blood thinner often prescribed for atrial fibrillation, a heart disorder closely associated with stroke, a condition which Schindele's father had suffered from two years prior this last hospitalization. Schindele who directs a Delaware program that helps physicians implement electronic health records, argued that the drug showing on her father's chart should not be prescribed again, as it was erroneously done during a prior hospitalization. Standing in her father's hospital room, she called up three years' worth of his Medicare health records using iBlueButton on her smartphone. The app helped reveal that her father had previously had an EKG with a normal diagnosis associated with the test and not that of Atrial Fibrillation, and that he had not been treated with Coumadin in the last two years.

Confronted with this information, her father's doctors reluctantly admitted their error and canceled the prescription. It's a good thing they did. Just five hours after being discharged from the hospital, Schindele's father fell while trying to maneuver his walker up the stairs at home, lacerating his head and wrist. Had he been taking Coumadin at the time, Schindele is convinced, he may have died from uncontrolled bleeding (a hazard associated with the drug).

"Because I had the data in my hands (with iBlueButton), I was… instrumental in saving his life," Schindele says. You can read Beth Schindele's full story here:
http://www.healthcare-informatics.com/blogs/gabriel-perna/when-blue-button-saved-life
http://www.humetrix.com/post-be-03.html

http://www.humetrix.com

http://www.ibluebutton.com

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