Healthcare CIO and CMO Perspectives on Innovation: Findings from Recent Research

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eHealth Initiative

Keeping Up with Innovation

Today's Discussion

- About us

- Executive perspectives on Innovation, Accountable Care and Telemedicine

- Recent Policy Impact

- Discussion

Overview of eHealth Initiative

- Since 2001, eHealth Initiative has conducted <u>research</u>, <u>education</u> and <u>advocacy</u> to demonstrate the value of technology in healthcare delivery.

- Our mission is to drive improvement in the quality, safety, and efficiency of healthcare through information and technology.

- Only national, membership organization comprised of 200 of most influential leaders from all health care sectors.

- Patient is at the center, not focusing on technology for technology's sake

Multi-Stakeholder Leaders in Every Sector of Healthcare

2015 Board of Directors

- **Paul Eddy**, Group Vice President and CIO Business Services, Walgreens

- **Daniel T. Garrett**, Principal and Health Information Technology Practice Leader, PwC

- **John Glaser, PhD**, Chief Executive Officer, Health Services, Siemens

- **Dan Haley,** Vice President of Government and Regulatory Affairs, Athenahealth

- **Sam Ho, MD**, Executive Vice President and Chief Medical Officer, UnitedHealthcare (Chair eHI Board of Directors)

- **Kristine Martin Anderson**, Partner, Booz Allen Hamilton

- **Edward Marx**, Senior Vice President and Chief Information Officer, Texas Health Resources **James Murray**, Vice President, Information Systems, CVS Caremark

- **Shawn Ramer, PhD**, Senior Vice President, Information Technology, Enterprise Services, Bristol-Myers Squibb

- **Richard Ratliff**, Global Managing Director, Connected Health IT Solutions, Accenture

- **Christopher Ross**, Chief Information Officer, Mayo Clinic (Chair of Foundation for eHealth Initiative)

- **Steven Stack, MD**, President-Elect Board of Trustees, American Medical Association

- **Russ Thomas**, Chief Executive Officer, Availity

- **Joseph Touey**, Senior Vice President, North American Pharmaceuticals, Information Technology, GlaxoSmithKline

- **Micky Tripathi, PhD**, President and Chief Executive Officer, Massachusetts eHealth Collaborative

- **Susan Turney, MD**, Chief Executive Officer, Marshfield Clinic

- **Marcy Wilder**, Partner; Director, Privacy and Information Management Practice, Hogan Lovells

- **Marcus Wilson**, President, Healthcore

eHealth Initiative 2020 Roadmap

The primary objective of the 2020 Roadmap is to craft a multi-stakeholder solution to enable coordinated efforts by public and private sector organizations to transform care delivery through data exchange and health IT.

- Interoperability
- Business and Clinical Motivators
- Data Use and Access

Care Delivery Innovation Research

- eHealth Initiative, PwC Health Research Institute, survey of 1,000 Providers and Interviews of eHI executives

- Privacy and payment concerns remain top two barriers for provider adoption of mobile health

- Providers that staff more NPs/PAs appear more technologically savvy

- Providers participating in new care delivery models use tech and alternative care givers more effectively `

Perspectives on Innovation

- 50% - *e-visits could replace more than 10% of my patient encounters*

- 83% - *monitoring data generated by a personal device used by chronic disease patients at home is helpful when making treatment decisions*

- 26%- *Its very important that mobile health apps are FDA approved*

Consumers Value of Health IT

Survey released December 2015 by National Partnership for Women and Families

- Numbers of patients with online access to the information in their providers' EHRs have nearly doubled. Half (50 %) of patients now have online access to their health information, and
- Those with online access overwhelmingly make use of this capability: 86 % use it at least once per year, and more than half (55 %) use online access three or more times per year.
- The more frequently individuals access health information online, the more they report that it motivates them to do something to improve their health. 71% of those using online access 3 or more times per year report this, compared with 39% of those who used online access less often.
- Administrative or "convenience" features (such as online scheduling and medication refill requests) were rated highly by patients. EHRs were rated 31% higher than paper in scheduling or changing appointments.

Transparency Wave

- European Medicines Agency (EMA) publishing clinical trial data used to support the approval and authorization of new drugs in Europe in 2015
- HHS proposed new rules to require clinical trial sponsors to report summary results o all clinical trials (not just those FDA approved)
- AllTrials petition, calls for all trials registered all results reported
- Open FDA Initiative 2014 , public database for analyzing drug and medical device adverse events, recalls and labeling info.

Implications

- Less risk more data sharing capabilities
- Increased investment by executives in analytics to gain competitive edge

Impact of Recent Regulation and Legislation

- Meaningful Use

- Accountable Care

- Reimbursement

- ONC's Interoperability Roadmap

How Meaningful is Meaningful Use?

- Under the 2009 economic stimulus package, providers who demonstrate MU of certified electronic health records can qualify for Medicaid and Medicare incentive payments.

- Last week's CMS Data- About 81,500 eligible professionals attested to meaningful use requirements in February, up from 67,254 in January.

- Over 209,000 eligible professionals attested to meeting 2014 meaningful use requirements as of March 1. Less than half of 515,158 professionals who registered to participate

- Eligible professionals who do not meet the March 20 deadline will face a 1% cut in Medicare reimbursements.

- Perspectives from American Medical Association, American Hospital Association, Vendors

2014 eHI/ Premier Survey on Accountable Care

- ACOs adoption of health IT varies
  - 86% had an electronic health record system;
  - 74% had a disease registry;
  - 58% had a clinical-decision support system; and
  - 28% had the capability to build a master patient index
- ACOs largely have not been able to adopt more advanced health IT capabilities
  - Referral management tools;
  - Remote monitoring devices;
  - Secure messaging; or
  - Telehealth services
- Challenges
  - 100% accessing external data 95% cited costs;
  - 95% cited a lack of interoperability;
  - 90% cited a lack of funding or return on investment; and
  - 88% said integration of disparate data from other EHR systems and other sources was a barrier

CMS Response: The Next Generation ACO Model

- March 10, Centers for Medicare & Medicaid Services (CMS) Innovation Center Launched
- Fee-for-service and capitation combination
- 4 payment systems, 2 risk tracks, including one with almost full risk
- Coverage of telehealth and post-discharge home services, coverage of skilled nursing care without prior hospitalization, and reward payments to beneficiaries for receiving care from ACOs.
- Expect 15-20 ACOs to participate
- Only a few of the largest ACOs have created IT systems to compile data from several sources across their patient populations.

2015 Research on Telemedicine

- Survey sampled 50 academic medical centers, hospitals, health systems, with follow up interviews

- Measured four primary types of telemedicine:
  - video conferencing (92%, e.g. consults, remote visits)
  - store and forward (74%, e.g. diagnostic imaging, asynchronous consults)
  - remote monitoring (66%, e.g. home-based blood pressure or blood glucose monitoring)
  - robotic services (32%, e.g. robotic surgeries)

*65% use two or more types of telemedicine

Telemedicine Services

- Many organizations offer the following telemedicine services:
  - synchronous consults (67%)
  - asynchronous consults (64%)
  - provider education (60%)
  - remote visits, e.g. exams (58%)
  - provider-supported patient monitoring (56%)
  - patient education (56%)
- Top Telemedicine Use Cases
  - Psychiatry/behavioral health
  - Neurology
  - Radiology
  - Cardiology
  - Maternal/fetal health
  - Critical care

Telemedicine Investments

- About a quarter investing over $20 million
- About a quarter investing $5-10 million<
- About a quarter < $1 million

Reimbursement for Services

- Independent contractual arrangement (71%)

- Medicaid (60%)

- Commercial payers (60%)
  - 44% of respondents receive equivalent payment from commercial plans as they would for in-person visits

- Medicare (50%)

Takeaways

- Telemedicine is primarily viewed as a provider tool. Results emphasized consulting, triage, and monitoring as primary uses

- Regulatory environment may hinder telemedicine development
  - Implications for licensing and reimbursement
  - Organizations view licensing as a solvable problem, but solutions appear to focus on obtaining cross-state licenses for small groups of providers → will it scale?

- Organizations take what they can get regarding reimbursement, impacts adoption

Last 3 Weeks

- **Mayo Clinic** has partnered with **Gentag**, a provider of biosensors, to develop wearable skin patches for diabetes and obesity management

- **Cleveland Clinic** has partnered with **Cox Communications**, a cable and broadband provider, to develop an in-home telehealth services program

- **Athenahealth** has partnered with the **Beth Israel Deaconess Medical Center** in Massachusetts to develop an Internet-based medical record management system

- **American Medical Association** has partnered with **MATTER**, a health care technology incubator in Chicago, to provide a technology-enabled space for health care professionals to develop new care delivery models

- **Apple** announced ResearchKit, which will allow researchers to gather data from iPhone users to help further medical research. ResearchKit is an open-source software platform with disease-specific applications that patients can use to track their symptoms.

Exploring Internet of Things and Data from the Internet

- eHealth Initiative seeking partners for *Collaborative for Transparency in Social Listening*

- Considerable risks abound related to the public's understanding of what data is being captured, studied and utilized by companies. Transparency is key to mitigating public concerns about data use.

- Without transparency, concerns about spying on patients and "big brother" will continue to evolve.

- The purpose of the *Collaborative* is two-fold: to create a public forum for the pharmaceutical industry to share information and context about current research efforts; and to gather perspectives and respond to public concerns.

- The *Collaborative* will increase transparency about social listening efforts by convening patient advocacy groups, providers, researchers and pharmaceutical companies to communicate and share vital information.