Virtual health: the next frontier for care

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Abstracts: Français, Español, 中文
Physician Collaboration – Now needed more than ever

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ABSTRACT: Driven by the changing reimbursement climate from volume to value-based, hospital systems must initiate technology and training to ensure that communications between all HCPs involved with a given patient are coordinated and all test results and care plans are immediately available at every point of care in the system.

Since the enactment of the Patient Protection and Affordable Care Act (PPACA), there has been intense pressure on hospitals and health systems to reduce costs. Many hospitals are responding by merging and buying doctors’ practices, while some are beginning to offer their own health plans for the first time and setting up accountable care organizations that would provide coordinated high quality health care for large groups of patients.

With new hospital mergers being announced weekly and more practices being added to hospital systems daily, the need to collaborate through virtual health initiatives is gaining strength. The addition of inexpensive secure telemedicine to the availability of an intelligent patient record form based on best practice guidelines will enable greater collaboration across the hospital system. This type of technology will increase revenues, cut costs, improve outcomes and increase patient and provider satisfaction.

Introduction
We are living in an amazing time for hospitals, their physicians and patients. Over the past few decades, innovations and advancements such as the use of robotics and precision equipment in the operating room, the development of interventional radiology, non-invasive cardiovascular procedures and the ability to perform MRI and CT are empowering doctors. Furthermore, with more effective new drugs and personalized medicine, patients are living longer and many previously terminal illnesses are managed as chronic illness.

Today, how healthcare is delivered in the U.S. is fundamentally changing. Since the enactment of the Patient Protection and Affordable Care Act (PPACA), there has been intense pressure on hospitals and health systems to reduce costs. Many hospitals are responding by merging and buying doctors’ practices, while some are beginning to offer their own health plans for the first time and setting up accountable care organizations that would provide coordinated high quality health care for large groups of patients.

Moving from Volume to Value
The pressure for promoting change is the movement in the PPACA from a Volume to a Value reimbursement dynamic. Volume has been the traditional and incumbent payment mechanism whereby a healthcare provider and hospital is paid for each encounter. Value is the emerging payment mechanism, where a healthcare provider is paid on value provided. It should be noted that Value is a term used not only for the outcome, but also for the cost effectiveness of care. As a result of this payment scheme shift, from Volume to Value, there is the need for enhanced collaboration between healthcare providers.

The onset of pay-for-performance varies among markets, and several payers in a region are necessary to make the transition efficient and worthwhile for providers. Health systems can align with employers, other providers and payers to build a critical mass. Providers also need to adjust their thinking about value-based reimbursement from the short- to long-term.

In its 2014 national study of payers and providers, McKesson1 found 90 percent of payers already transitioned to some form of value-based reimbursement. Generally, providers are more reluctant to value-based care initiatives, such as accountable care organizations. Sixty percent of payers said they believe value-based reimbursement will have a positive finance effect on their organizations, while only 35 percent of healthcare providers believed the same.

Despite their feelings about new reimbursement models, both payers and providers agree they will soon eclipse traditional fee-for-service. Providers using mixed models expect fee-for-service to decrease from about 56 percent today to 34 percent by 2020.

In today’s still majority Volume reimbursement environment, effective and efficient coordination of care is limited due to the lack of reimbursement. Said another way, there historically has not been substantial negative reimbursement consequences for poor coordination among healthcare providers. But as PPACA mandates continue to be implemented, the need for more coordination will be at a premium.

Technology to the Rescue
The integration of telehealth or telemedicine initiatives in mainstream care delivery to provide complementary or substitute care received a big boost from innovations.

1 The State of Value-Based Reimbursement and the Transition from Volume to Value in 2014. McKesson Health Solutions 2014.
in communication technology that has created more convenient, fast and affordable virtual interaction. Deloitte on Virtual Health 2014

Technology can be very useful with physician collaboration in care management. If handled properly, it can lead to an increase in new revenue opportunities, cut costs by improving physician productivity, improve the quality of care and outcomes and improve patient satisfaction. New revenue opportunities can come from attracting more referrals both from within and outside the hospital network. Following best in class treatment protocols and connecting the hospital network across all of its geography through telemedicine can cut costs and raise provider productivity. Improving diagnosis accuracy and speed to proper diagnosis especially for complex cases will lead to better patient outcomes at lower cost with lower re-admissions. All of these will combine for faster processing and happier patients.

An intelligent collaboration solution which can automate the process of “clinical information commerce” and provide Intelligent Operation and Management of Referrals’ authorizations and clinical information sharing/exchange across borders and cross organizations is needed. Hospital systems that can enable care coordination with access to the appropriate interdisciplinary specialists flawlessly the first time, with no delay in care, will become the leaders of the future.

The Need for Care Management

Nearly one-half (49.5%) of total personal health care dollars are being spent on the top 5% of patients in the US today. These are the very complex cases, with patients who have multiple diseases and providers, where care management could enable great cost savings. According to Thomas Bodenheimer, as published in The New England Journal of Medicine March 2008, “Patients with several chronic conditions may visit up to sixteen (16) physicians in a year. In these complex expensive cases, care among multiple providers must be coordinated to avoid wasteful duplication of diagnostic testing, perilous polypharmacy and confusion about conflicting care plans, not only for reducing unnecessary costs, but also for improving outcomes.” Value-based compensation as proposed by the Affordable Care Act, will require measuring costs and outcomes as determinants of how a healthcare provider (i.e., hospital, physician) will be compensated. Reimbursement will drive behavior.

Other relevant recent changes in the U.S. healthcare environment include:
1. A recognition of the impact of medical errors on patient outcomes and care cost;
2. The growth of patient self-directed care enabled by the Internet and hundreds of Advocacy groups;
3. Innovations in telehealth communication technology that has created more convenient, fast and affordable virtual interaction;
4. The rise of large self-insured employer groups; and
5. The realization of those self-insured employers and other commercial payors of the economic benefits of population health management services, providing employees/insured with various self-directed services such as telemedicine and diet and fitness services.

A common thread in all of these changes is the need to provide an intelligent patient record from disparate sources during the provision of care, allowing multiple levels of collaboration.

Critical and complex care situations as well as simple cases require patient medical records and images to be shared and accessed by multiple specialists. Due to the traditional fee for volume payment scheme, hospital systems and physician clinics are not well integrated within the same network or across non-affiliated networks. Lack of collaborative tools in the clinical setting is now seen as a large capabilities gap. And as healthcare continues to evolve to where care is provided across hospital networks, State lines and in different Countries, the need for collaboration will be critical.

Virtual Health is Coming

Innovator Hospitals that set up a secure infrastructure for clinicians to deliver care remotely will enable clinicians to be more efficient and make more informed clinical decisions in a timely manner, which increases quality of care and patient safety.

Deloitte on Virtual Health 2014

Virtual health provided through secure HIPAA compliant systems can be a convenient, fast and affordable way to interact with hospital-based specialists. Virtual health offers the potential to raise revenues, lower costs and increase efficiency while providing effective care management across the entire hospital system.

Specific best practice Virtual health capabilities should include:
- Delivers a turn-key virtual consultation and intelligent referral management capability that enables cross-enterprise referral management and authorization solutions
- Helps find the best doctor for diagnostic and treatment referrals, creating opportunities to give or get expert consultations
- Allows searches across a hospital system to be initiated by physicians, clinicians, administrators, payors and patients
- Provides a tool for creating a robust directory of preferred consulting physicians
- Allows organizations to manage multiple physician and specialty communities through a single resource
- Delivers robust search performance using semantic matching to target conditions, procedures, providers and service lines
- Enables physician-to-physician or patient-initiated requests for a medical second opinion regarding a diagnosis or treatment protocol
- Allows multiple specialists to be invited to consult on the same case
- Enables a customized consultation workflow with text

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alerts for pre-determined critical parameters

- Facilitates collaboration and continuity via a secure communications engine

**Intelligent File Sharing Needs**

To enable virtual consultation for complex cases, hospital systems must provide both medical connectivity and relevant clinical information sharing.

Specific best practice file sharing capabilities should include:

- Delivers the most relevant and current patient data, according to standard or customized best practice protocols
- Permits clinical data and diagnostic image sharing via a structured-data template according to medical condition parameters
- Provides structured data capture and a secure exchange of clinical patient information
- Enables the exchange and sharing of diagnostic-quality images (DICOM) from remote and disparate systems into home clinical information systems from any location globally
- Allows access to images via a secure cloud-based network from any location with internet access
- Manages patient information via an integrated personal health record
- Allows integration of data from various formats, including electronic medical records, scanned documents or manual entry

**Conclusion**

With new hospital mergers being announced weekly and more practices being added to hospital systems daily, the need to collaborate through virtual health initiatives is gaining strength. Driven by the changing reimbursement climate from volume to value-based, hospital systems must initiate technology and training to ensure that communications between all HCPs involved with a given patient are coordinated and all test results and care plans are immediately available at every point of care in the system. The addition of inexpensive secure telemedicine to the availability of an intelligent patient record form based on best practice guidelines will enable greater collaboration across the hospital system. This type of technology will increase revenues, cut costs, improve outcomes and increase patient and provider satisfaction.

**BIOGRAPHY**

Simon Schurr is a leading digital and connected health expert and has over 25 years of business management and entrepreneurial experience with a core focus in emerging global healthcare solutions. Schurr founded CMTC which specializes in developing diagnostic and treatment collaboration solutions using innovative cloud-based applications that provide telehealth/telemedicine capabilities. CMTC’s Physician Collaboration Platform, developed at Columbia University Medical Center, enables hospitals and physicians to create, brand, and manage secure collaborative communities of clinicians/providers. Prior to founding CMTC, Schurr had several C-level roles at public and private companies. He holds a Master’s of Science degree in Educational Technology from Lehigh University in Pennsylvania, and a B.A. in International Relationships and Business from the Hebrew University in Jerusalem.