Leveraging Telecommunication Capabilities: Integrating Telemedicine, Health Information Exchange and Electronic Health Records Systems

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Presentation Coverage

The following presentation addresses:

- Telemedicine versus Health Information Exchange (HIE)
- Similarities between Telemedicine and HIE
- The status of Telemedicine
- The status of HIE in Florida
- Incentives or reimbursement for both Telemedicine and HIE
- The need to take an integrated policy approach to Health Care Telecommunications in Florida
What is Telemedicine?

Florida Senate - SB 1646
• “Telemedicine” means the practice of medicine through the use of advanced communications technology by a telemedicine provider at a distant site…

Florida Board of Medicine - 64B8-9.0141
• “Telemedicine” means the practice of medicine by a licensed Florida physician or physician assistant where patient care, treatment, or services are provided through the use of medical information exchanged from one site to another via electronic communications.

American Telemedicine Association - What is Telemedicine?
• …telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status.
Diagram of a Telemedicine Project

Columbia University’s Informatics for Diabetes Education and Telemedicine (IDEATel) Project: Technical Implementation
Telemedicine as Interactive Video

Organizations Aim to Standardize Telehealth Practices
Florida Child Protection Team Map

- ★ Main Child Protection Team Office
- ★ Main Child Protection Team Office/Telemedicine Site
- ★ Child Protection Team Satellite Offices
- ★ Child Protection Team Satellite Office/Telemedicine Site

Telemedicine: Reducing Trauma in Evaluating Abuse
What is Health Information Exchange?

**National Alliance for Health Information Technology, Health Information Exchange (HIE)**

- The electronic movement of health-related information among organizations according to nationally recognized standards.

**Office of the National Coordinator for Health IT**

- Electronic health information exchange (HIE) allows doctors, nurses, pharmacists, other health care providers and patients to appropriately access and securely share a patient’s vital medical information electronically…

**HIMSS HIE Guide Work Group, 2009**

- An HIE automates the transfer of health-related information that is typically stored in multiple organizations, while maintaining the context and integrity of the information being exchanged.
HIE Emergency Department Use Case

Emergency Department physicians need to obtain accurate, timely information on a patient to make an accurate diagnosis and to deliver the most appropriate care and treatment.

Current medical problem
Current medications
Treatment from other physicians
Other disease states
Life style issues

Patient presents with past medical history that may not be available to the treating physician.

Emergency Medical Services
Hospital Electronic Health Record System
Hospital Laboratory
Community Hospital
Physician Offices
Radiology and Digital Imaging
Community Health Centers & Clinics
Hospital Pharmacy
Hospital Radiology and Other Digital Imaging
Hospital Emergency Department
Health Information Exchange
MPI/RLS
Community Health Information Exchange

Health Information Exchange

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HIE in Florida, 2014

- Patient Look-Up Onboarding Status - July 2014
Status of HIE in Florida, 2014

Health Care Facilities Connected to the Florida HIE, August 2014

- Hospital Connection Complete
- Hospital Connection In Progress
- Non-Hospital Connection Complete
- Non-Hospital Connection In Progress

Florida Health Information Exchange Organization Connection Status © Image Research 2014
Using the EHR as a Telemedicine Portal

Can EHRs and Telemedicine Integrate
“Cloud-based EHR provider Practice Fusion has acquired the telemedicine platform Ringadoc, which the company hopes will provide a “springboard” into a more comprehensive, integrated patient care ecosystem that promotes efficiency for providers and consumers alike.”

Telehealth and Allscripts
“The EHR Company Allscripts is partnering with American Well, a U.S. telehealth company. The companies will work to integrate American Well's Online Care platform into Allscripts electronic health records platform.”
Strategic Path to Integration

Telemedicine and HIE are considered to be two different technology systems. In reality, they are complementary systems.

- Telemedicine typically functions as a synchronous, two-way video or data connection between one provider and another provider with a patient.
  - The Telemedicine portal is often a TV or computer monitor running video connection software.

- HIE typically functions as a two-way, asynchronous data connection between one provider and another provider, either via the Patient Lookup Model or Direct Secure Messaging.
  - The HIE portal is typically a computer connecting to the HIE website or through the electronic health record system.

- From an architectural perspective, the Telemedicine and HIE digital networks have similar technical configurations.

- The EHR can be used as a portal for both Telemedicine and HIE.
Planning for Telemedicine

In planning for Telemedicine, HIE and EHRs should be included considered for additional communication efficiencies. Planning for Telemedicine should leverage work already done to take advantage of the health care telecommunications potential now available.

- The Florida HIE has invested $21.7 million in state-wide HIE connectivity based on the federal funding.
  - There is no further federal funding for building out HIE.
- Due to the EHR Incentive Program, 47% of physician practices in Florida have an EHR installed.
  - The EHR Incentive funding will end for Medicare in 2016 and for Medicaid in 2021.
- Telemedicine programs in Florida are limited to state programs at the Dept. of Health and private, unreimbursed initiatives.
  - Legislation requiring reimbursement for Telemedicine will function as an incentive to develop this network.
Some Recommendations

Recommendations for planning to develop Florida’s Health Care Telecommunications Network might include:

- Propose legislation in 2015 to require reimbursement for both Telemedicine and HIE.
  - The language of the 2014 Telemedicine Bills are broad enough to include HIE data exchange already.

- Leverage the knowledge level of health care facilities that have already implemented HIE connectivity.

- Leverage the knowledge of Florida’s Regional Extension Centers to work with physicians to install EHRs in their practices.

- Address the significant broadband connectivity issues facing the rural hospitals in Florida by:
  - Leveraging the FCC CONNECT program
  - Expanding the capabilities of the DMS MyFloridaNet.
Questions?

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