BEWARE... the ICE AGE is coming

ELECTRONIC MEDICAL RECORDS MUST INTERFACE TO BE USEFUL

By Mark Anderson

President Obama's healthcare technology stimulus plan, aka HITECH, calls for sharing of codified data between multiple practicing physicians. To help resolve this issue, AC Group has coined a new term — Integrated Community EHRs (ICE). ICE products are designed for community systems, including hospitals, MSOs, and IPAs where there is a desire to create one common community integrated patient record no matter where the patient is treated. A community based ICE solution includes three main components. First, a community Hub where data is exchanged via the national Health Information Exchange (HIE) protocol; second, multiple products for capture of patient specific clinical data, including EHRs, eRX, lab reporting, imaging centers, and hospital systems; and third, one common Patient Health Record (PHR) application which consolidates patient specific demographics and clinical information into a common patient portal for viewing and updating. Advanced functionality includes reporting and tracking of orders, results, e-Rx, allergies, and problem lists, among others. The ICE solution must provide a community master patient index, based on numerous

inputs, including hospitals, health plans, and numerous physician practice management systems. The real value of "ICE" is the ability to share common patient data (following that national HITSP c32 Version 2.5 CCD standard) between multi care providers and between multi EHR vendors.

With changes in the Stark Laws, hospitals and other community initiatives are interested in implementing locally hosted ICE solutions (HIEs and multi EHR products). Based on our research of 114 community based ICE projects, we were able to identify five (5) different operational models:

- All physicians are employed by one organization using one product
- Employed physicians and community physicians who have all purchased different products and share data via the government's new CCD interoperability standard via a Federated Model (Passive Mode with no data repository)
- Employed physicians and community physicians sharing one PM and EHR Database (Security and access is controlled within the software)
- Employed physicians and community physicians who agree to share one open clinical data base but have separate PM databases
- Employed physicians and community physicians who have separate databases — non-Federated Model (Active Mode with a central data repository)

With $2 billion allocated from the HITECH stimulus package for the development of community based HIEs, communities and State organizations are actively searching for the right vendor with the right functionality. Based on our extensive research, a community HIE with the ability to connect into multi care provider systems must provide the following capabilities:

- **Community Master Patient Index (MPI)** for retrieving of patient and insurance demographics
- **Physician Management.** The ability to properly identify

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providers and their relationships with patients or the patient's outcome significantly enhances the ability to measure the value of care given by that provider. Provider credentialing is critical to the safety of patients. Private healthcare enterprises rely on referrals to increase market share and remain competitive.

- **Clinical Information Sharing.** Systems today rely on different patient identifiers and terminology creating silos of fragmented data. Healthcare enterprises need to present the right information at the point of decision making to improve decisions, reduce costs and improve the patient experience.
- **Patient Access.** As healthcare enterprises expand their reach, it becomes necessary to break boundaries, whether departmental, regional or national, to improve the patient experience and ensure that the latest information is available at the point of service.
- **Chronic Disease Management.** Global healthcare spending continues to grow at an unsustainable rate. To reduce costs or slow the rate of healthcare spending increases, healthcare enterprises must understand the health of populations and identify trends in data.
- **One Interface** between all 3rd party companies (Lab Corp, Quest, PACS, Hospitals) while allowing the sharing of interface costs between all practices
- **Patient Family, Social and Medical History** that can be updated by one provider or patient with auto update to all practices
- **Community Patient Portal, Community Physician Portal, and Community Registry Reporting** allows practice to leave the community and remove its database without adversely affecting the community
  EHR repository

Benefits of an ICE Age Strategy

The overall benefits of a community HIE, designed to connect and share data with multi care provider systems, could help reduce overall healthcare costs by 14%. A few of the quantified benefits are:

- HITECH requires data sharing between all providers of care
- HITECH requires the establishment of one centralized patient record that can be accessed by the patient or family
- Since HITECH requires the reporting of 85 "meaningful use" indicators starting in 2011, an ICE solution provides the means and the tracking of the indicators for all providers treating the same patient. Clinical data captured by one provider can be used to meet the "meaningful use" requirements for other providers
- Patient data is entered once and can populate multiple databases
- Patient has complete control over disseminating of clinical data following HIPAA rules
- Since 73% of the data captured during a specialist office visit has been recorded by the primary care practice, specialist data entry time is reduced by over 65%
- 92% reduction in duplicate data entry
- 74% reduction in overall data entry time
- 19% reduction in clinical testing
- 32% reduction in referral tracking activities
- Reduces uncompensated ER cost by as much as $500,000 for every 20,000 emergency room visits. Study conducted by AC Group on 3,120 ER visits determined that if clinical data was available to the ER physician at the time of treatment, the ED physician could properly treat the patient faster and with fewer tests
  - Patient time in the ED was decreased by 26%
  - Test costs were reduced by 31%
  - Cost reduced $500,000 for every 20,000 emergency room visits

Summary

With President Obama's new plan to financially reward healthcare organizations that elect to deploy and use advanced technologies, we may finally be on the verge of a healthcare revolution. We have all heard the complaints about rising healthcare costs, the inability to improve healthcare outcomes, and the lack of data sharing capability between physicians. Now we have a solution. But is the healthcare industry really ready for the ICE AGE? Well it better be since the ICE AGE is already here. ■

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