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Health IT: Making Positive Changes in Healthcare in Oregon

By Shalene Keiner, Headhunters NW, and Linda Barney, Barney and Associates

Health IT in Oregon

There is a major push in the United States to better implement technology into the healthcare system using health information technology (health IT). The US Department of **Health and Human Services (HHS)** defines these goals, "Health information technology (health IT) allows comprehensive management of medical information and its secure exchange between healthcare consumers and providers." HHS believes "that the broad use of health IT will improve healthcare quality, help prevent medical errors, reduce healthcare costs, increase administrative efficiencies, decrease paperwork and expand access to affordable care." This article describes some of the ways Oregon is using health IT to implement systems that will meet the HHS goals of improving access to medical records and improving the quality of healthcare.

Electronic health records

One of the major thrusts in health IT is the adoption of electronic health record (EHR) systems. President George W. Bush has called for widespread use of health information technology (health IT) and for electronic health records (EHRs) to be in use for most Americans by 2014. According to Jody Pettit MD (Health Information Technology Coordinator, State of Oregon), another important area of focus is in the area of Personal Health Records (PHRs). Personal health records are a compilation of information that should be accessed and controlled by the patient in contrast to the clinician-focused EHRs. It is critical that any health information technology address the privacy concerns of individuals. Technology should be guided by great privacy policies.

Pettit stated, "Ideally, when a baby is born a new record should be started, and information should be added to the record throughout their lives including well-child visits, immunizations, high school physicals, and so forth. All the history should be available from one access point, which is what the personal health record should be." Clinician-facing EHRs can provide copies of patient information to the PHRs. However, electronic health records have not been implemented nationwide, which results in missing information and increased costs. "Every day in the clinic, we find we don't have the information that we need. We have to re-run tests, ask the patient to repeat information because we don't have it at our fingertips. Time is taken up – sometimes weeks – waiting for records to be mailed to our clinic and the patient has to come back. If we had [had] immediate access to the information, we could have helped them on the same visit," said Pettit.

Adoption of electronic health records in Oregon

Estimates of the rate of EHR adoption by clinicians nationwide are low. The **Office for Oregon Health Policy and Research** hypothesizes that the rate of adoption in Oregon is higher than the national average. A 13-question survey was sent to 2,403 clinics/practices and 68.6% of the clinics responded. The survey indicates that 59% of ambulatory physicians in Oregon have (or are currently implementing) an EHR. The survey also found that there is a positive correlation between practice size and EHR adoption in Oregon, and that EHR adoption was lower in smaller clinics. Of those respondents without

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an EHR, approximately 1/3 plan to invest within 2 years. Expense and satisfaction with the status quo were the two main reasons for not investing in an EHR, according to the studies done through Oregon Healthcare Quality Corporation.

What needs to be considered when adopting an EMR system?

Dick Gibson MD (Senior VP and CIO at Legacy Health System), provided insight on what technical and clinical staff need to be aware of when considering and implementing Electronic Medical Record (EMR) systems. Legacy has six hospitals, including the Legacy Emanuel Children's Hospital as a separate hospital from the Legacy Emanuel Hospital. Gibson indicated that EMR systems have been in place at Legacy Hospitals and in offices of physicians employed by Legacy for six or seven years. Legacy is currently moving to a different EMR system; the updated EMR system has been installed at one hospital while the existing system is installed at the other five hospitals. Once the incoming EMR vendor system is installed, the nurses, physical therapists, and doctors will be filling out charts online and doctors will also fill orders online. Gibson stated, "We need also to work on helping private physicians who practice at Legacy but are not employed by Legacy to adopt and acquire office EMRs."

It is important that hospitals and clinics are aware that there are various EMR modules that can be installed across a hospital and that each module needs to fit the workflow of the particular area. Gibson stated, "Extensive planning needs to go into understanding the workflow of various areas in the hospital, what is needed for the EMR in each unique area and standards that will be used with the EMR. For example, the workflow is different for an Emergency Department, Operating Room, or Labor and Delivery and the EMR modules must meet what is needed in each area." It is also essential that a multidisciplinary team be involved in the evaluation and implementation of an EMR system. The team evaluating a hospital EMR should include EMR software vendor technical staff, technical/IT team members, clinical members (such as nurses, respiratory therapists, physical therapists, physicians, nutritionists, and care managers). In later stages, customer support staff and trainers must be involved and these people must have a deep understanding of the EMR system. An implementation team for a medical office EMR should include the medical assistants, physicians and office/front desk staff.

When evaluating an EMR system, it is crucial for the evaluation team to determine how well the software meets the structural workflow of each clinical area and what needs to change. Teams should determine if the screens make input easy, cause extra effort, or disrupt the workflow of how staff interact with patients; they should also evaluate if the EMR software provides an information-rich environment that makes it easy to see all the data that has previously been collected and is easy to input new information. Medical institutions and clinics also need to be aware that physicians will be resistant to using an Electronic Medical Record system if it is difficult to use, so careful evaluation and testing is critical to successful adoption of the EMR tool.

Gibson indicated that hospitals and clinics should expect a long process in adapting EMR software to the workflow of a particular area and to get the staff accustomed to integrating the EMR into their workflow because both the software and workflow need to be changed. Gibson stated, "Legacy Health System is still in pursuit of providing clearly superior healthcare as a result of EMRs. We believe that EMRs are a part of improving healthcare but we still have significant challenges in implementing EMRs and then using them to make care safer and more reliable."

Organizations helping increase EHR/EMR adoption in Oregon

Oregon is actively working toward development of electronic health records. A variety of groups in government, hospitals, physician clinics, businesses, and health associations are working toward this goal. A report presented to the 73rd Oregon Legislature on "Electronic Health Records & Data Connectivity" in March 2005 reported^[1], "The efficiencies in the healthcare system gained by adoption of electronic health records and health information exchange would improve the competitiveness of Oregon's economy."

Pettit stated, "So many organizations are contributing to the effort to

get to EHRs widely implemented in Oregon. They are [Acumentra Health](#), Office for Oregon Health Policy and Research, the [Oregon Health Policy Commission](#), [Oregon Health Care Quality Corporation](#), [Oregon HIMSS](#), [Oregon Business Council](#), and [Oregon Medical Association](#) and many other groups as well as hospitals, clinics and various health plans. The biggest challenges to making this work are mostly political and financial." When asked what would help the rate of EHR adoption over the next year or two, Pettit answered: financial incentives and technical assistance. Other organizations, such as the OCHIN and many Independent Physicians Associations (IPAs), are making it easier for smaller clinics to be able to afford an EHR/EMR system by sharing infrastructure costs.

OCHIN

OCHIN is a community health collaborative sponsored and governed by various community health institutions. OCHIN is unique because it makes EHR, billing, scheduling and document management systems available to groups who could not typically afford them, such as community health centers and schools. "At OCHIN, we use economy of scale to help make the EHR/EMR more affordable for those institution sponsor members who disproportionately serve uninsured or Medicaid-covered patients," stated Mike Leahy (MBA, OCHIN Chief Executive Officer). About 30 of the 50 OCHIN staff are certified experts at electronic health and medical information and can help members plan and implement an EHR system. Leahy stated, "Health IT is a critical tool, a means, and not an end. It is already transforming clinic and school healthcare in OCHIN – the future is here today."

InterHospital Physician's Association (IPA)

The [InterHospital Physician's Association \(IPA\)](#) has been in existence for nearly 25 years. The original focus of the association was to help physicians put together risk-management packages. "With the push toward adopting Electronic Health Records systems nationally, it became clear our physician membership needed help in implementing EHR systems so the IPA began to develop a model that would be attractive," stated Maryclair Jorgensen, executive director of IPA.

The IPA selected a specific EHR vendor and was able to obtain discounts because of the volume of EHR licenses. IPA works with clinics to understand their workflow and project management, helps with the EHR implementation and training as well as ongoing support and maintenance. "The IPA provides needed financial support, clinics buy the computer hardware but pay for the EHR software over a 5-year period. For \$325 a month, practitioners can have their own EMR system," stated Jorgensen. Clinics who have implemented an EHR report that it did not take long to be back up to full production using the EHR. Jorgensen says she hears comments such as, "We would never go back to paper charts. This is the best thing for patient care." Since physicians with EHR have better access to patient history, they can track trends in diseases such as diabetes or congestive heart failure and are working on patient education programs and disease prevention.

Other health information technologies

Health IT is creating health-related software, database tracking, secure messaging and online training tools in a variety of health-related areas – all designed to help improve patient care as well as provide healthcare organizations with management, scheduling and cost information. Next, we describe some of the health IT-related software or training projects in Oregon.

Krytiq – enabling collaboration between physician groups, health systems, and patients

Today, even with electronic health records (EHRs) that dramatically improve clinical data-keeping and office efficiency, providers and staff struggle with paper, phone, and fax communications that are slow, costly, and unreliable. Calls go to voicemail, people are kept on hold, paper is misplaced, and information is not available where it is needed. This lack of data mobility is at the heart of the cost and quality issues facing healthcare today. Connectivity solutions, which allow organizations to replace these manual workflows with secure electronic workflows, represent the single biggest opportunity to quickly and cost-effectively modernize our healthcare systems. These technologies are neither complex nor expensive and fundamentally improve the availability and security of clinical data. [Krytiq's](#)

healthcare connectivity solutions have proven successful across Oregon, in organizations ranging from single physician practices to large integrated delivery networks.

For example, the Oregon Clinic and Providence Medical Group implemented Kryptiq's secure messaging to enable electronic referrals between the two organizations. As well as improving patient and provider satisfaction, and enabling better coordinated care between different institutions, these organizations were able to document a savings of more than \$10 per referral by moving from paper to electronic workflows. Samaritan Health Services purchased secure messaging, patient portal and electronic prescribing solutions to enable physicians spread across 5 hospitals and 35 clinics to work more closely using secure electronic communications, as well as empower patients with online access to care services and select components of their medical records. Kryptiq's solutions can be fully integrated into an EHR or other enterprise application to further extend the power of these applications beyond the walls of the organization. Other healthcare organizations in Oregon utilizing these connectivity solutions include GreenField Health System, Legacy Health System, and Pediatric Associates of the Northwest.

Online training

Peter Cizik (CEO of BridgeFront) indicated that healthcare organizations sometimes require a catalyst in order to embrace new technologies, and that he sees them lagging behind corporate IT in many areas. This is especially true in small medical practices that are run by doctors who typically don't have the funds or time to adopt new technology. Cizik stated, "The Federal Governments' mandate to implement HIPAA staff training in all healthcare organizations was a catalyst to move many practices and hospitals toward online training as a way to meet the requirements. After their first experience with online training, providers saw huge benefits in cost savings and productivity gains by letting staff members take training at a time convenient to them. Since starting the company in 2002, the adoption of online training in the healthcare industry has drastically increased. We now serve over 10,000 healthcare organizations."

BridgeFront, a company providing digital learning solutions that assist healthcare organizations in streamlining their education through the use of new and economical online learning solutions, offers over 350 courses covering important healthcare topics such as HIPAA, OSHA, JCAHO, Revenue Cycle Management and Nursing Continuing Education. Online training provides on-demand subject matter expertise, without the cost of travel or lost productivity trying to gather all staff members in one location for stand-up lectures. Online education is just now expanding into areas that can have a direct impact on a healthcare organization's ability to manage their business, thus having a positive return on investment. For example, 47% of those responding to a recent HFMA revenue cycle survey indicated improved staff training is having a high, measurable impact on their revenue cycle performance and the ability to reduce write-offs, bad debt and delayed payment for services. BridgeFront's Revenue Cycle Management education is targeted at frontline staff that rarely has any structured training on these concepts, yet can have a huge impact on an organization's financial performance. RxSafe program.

An exciting Health IT project called RxSafe is being implemented in Lincoln City on the Oregon Coast. The goal of RxSafe is to develop an electronic tracking system that shows all medications that a patient may be taking. This project is funded through a partnership between the Agency for Healthcare Research and Quality and contributions of local healthcare organizations, supporting a collaborative effort among the Oregon Practice Based Research Network, Oregon Health Sciences University (OHSU), Portland State University, and the Oregon State University School of Pharmacy, in partnership with the Lincoln City providers including Samaritan North Lincoln Hospital, local physician practices, pharmacies (both retail and long-term care), and nursing homes.

According to Dr. Paul Gorman (Associate Professor at OHSU who is involved in developing the RxSafe system), "Although Lincoln City is a rural area, they are ahead of the curve in Health IT. Samaritan North Lincoln Hospital, local Lincoln City physician clinics and pharmacies already have Electronic Health Records systems in

place.” The group developing RxSafe faced a number of barriers including the lack of technical interoperability because the EHR systems could not exchange information, the systems were not based on the same standards and various members such as pharmacies were concerned about the security of the information. The RxSafe system is now in a pilot phase that includes live connections between a physician clinic, a retail and long-term care pharmacy, the hospital and a nursing home. In the pilot phase, medical staff can log onto the RxSafe system to search for a patient, and see a medication list for the patient from various sources such as the hospital, clinic, and pharmacies. Using RxSafe can reduce overmedication, prescription errors and time spent by medical staff reconciling medication lists. RxSafe is a good example of how Health IT can improve and change healthcare. Dr Gorman states, “Even in smaller clinics and rural areas, when physicians find a technology that makes their jobs easier and helps provide better patient care, they are ready to implement the technology.”

Other articles in this series:

[The Need For A National Integrated Electronic Health Record System](#)

About the authors

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[1] “Report to the 73rd Oregon Legislative Assembly: Electronic Health Records & Data Connectivity”, March 2005, prepared by the Electronic Health Records & Data Connectivity Subcommittee and reviewed by the Oregon Health Policy Commission.

