

# **REGIONAL HEALTH INFORMATION ORGANIZATIONS: CHALLENGES AND ISSUES**

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## **ABSTRACT**

Health data exchange remains sparse and inconsistent. To eliminate medical errors, and incorrect drug interactions throughout the healthcare continuum Regional Health Information Organizations (RHIOs) have become the vehicle to produce portable medical records, and the access to those medical records for all that need them to perform medical services across states, health care patterns of utilization, health care financing and health outcomes data for all populations.

## **INTRODUCTION**

The purpose of this paper is to identify the problems that are currently in the way of full development of RHIOs and the reason for these problems. A Regional Health Information Organization (RHIO) is a multi-stakeholder organization that provides the exchange and usage of health information, in a secure manner, for the purpose of promoting the improved development of health quality, safety and efficiency. There are basically three approaches for developing RHIOs: Federated Centralized, and Hybrid.

Federated (decentralized) is an approach to the coordinated sharing and interchanges of electronic information emphasizing partial, controlled sharing among autonomous databases within a RHIO. In a federated architecture, independent databases (decentralized) are connected to share and exchange information. Components in a federated form represent the various users, applications, workstations, main frames and other stakeholder components in a RHIO.

Centralized is an approach to RHIO data sharing and inter-change of electronic information emphasizing full control over data sharing through a centralized repository. Components in a centralized architecture refer to the Central Data Repository (CDR) and the requestor. The CDR authenticates the requestor through technological means, authorizes the transaction and records it for audit and reporting purposes.

Hybrid is a combination of the Federated and Centralized, where various data transactions occur based on a decentralized or centralized method. For instance, a RHIO may have pharmacy transactions occurring within a federated model while lab data is shared through a centralized database. The providers in hybrid forms may decide to share patient data through a CDR or peer to peer.

## **CHALLENGES AND ISSUES**

Followings are main challenges that should be addressed in regard to establishing RHIOs:

### **Legal**

The legal discussion has centered on the major changes to the existing laws and regulations that govern

antitrust, and privacy that may need to be modified to facilitate the development of RHIOs. These obstacles make it hard for stakeholders to commit funding to the RHIO at this time, because of the barriers that exist within the legal community. Many times the lack of financial commitment by physicians will stall the creation of a RHIO, they often times do not have any financial reason to employ these systems. However hospitals and other healthcare facilities can more directly recoup their investment in new technologies. These dilemma raises the question that if these physicians invest thousands of dollars into the infrastructure, computer software, and training for the RHIO should they be there be some type of subsidization for these cost? If they are subsidized the question then becomes are they in violation of the law?

Stark law that prohibits entities, absent an exception, from billing Medicare and Medicaid for certain designated health services that are provided based on a referral from a physician with whom the entity has a financial relationship. The anti-kickback statute bars any person from knowingly and willfully soliciting, receiving, offering or paying any remuneration in return for the referral of patients for items or services covered by federal health care program. Thus anytime a physician receives something of value from an entity to which he or she refers patients, compliance with the fraud and abuse laws must be analyzed.

Obviously there are some concerns for local communities when planning for the development of a RHIO, but these legal concerns can be overcome with time and dedication on the part of the stakeholders. The main focus needs to be on the resolution of the many complex governance and financing issues that will be faced by the communities while developing the RHIOs.

### **Integration**

For a long time hospitals have used technology to obtain and control the flow of procedure and patient information throughout the hospital departments, such as; ED, labs, and Radiology. The gain from this is the wealth of documented and more accurate service delivery, and the reduction in medical errors, and administrative workloads. RHIOs will change most of this with the integration of all departments within a system and the region.

Once the establishment of a regional system is in place, the completion of the national information exchange can begin. The question still remains will this all happen within the 10 year time frame the current Bush administration is wanting. Many of the current leaders in healthcare IT do not believe so because of the financial reasons that prohibit smaller systems the ability to afford new IT systems that have not been prove to decrease cost, only increase quality. It is not that healthcare systems do not want to increase quality, but they are thinking at what price we should have to pay for that increase in quality. Some would rather wait and see what other come up with before exploring this new area of IT.

### **Competition**

With many different stakeholders participating in the start up of these systems there is not much room for competition. The idea of a single repository has been investigated but there is not feasible way for one entity to administer a full fledged RHIO, there is too much cost involved, and the amount of man hours is not cost effective for a single site repository.

Many approaches seem to have been built on the idea that an enterprise can procure a

## **Investment**

The financial risk is very high involving the development of a RHIO network because there is not a true return on that investment. There is no hard evidence that there ever will be a ROI except for the quality increases that are realized once the network is truly running. That is why there must be a strong commitment on the part of each and every entity to do their part when it comes to the financial funding of the RHIO.

## **CONCLUSION**

Many areas in the country have established groups of stakeholders, steering committees, hospitals, labs, and physician's practices. However only about 10 RHIOs are up and running, and sharing data, some are still in the process of collecting data. Fewer than 10 RHIOs have launched pilot tests of systems for exchanging data. Others have been struggling with the details of governance models, addressing security and privacy concerns, and trying to determine a way to pick vendors that all stakeholders will agree to use.

However as more organizations use the RHIO technology, there will be more groups that finally develop them. On going research is needed for ROI of RHIO, and they should be compared with standard benchmarks. Once this is achieved then the primary stakeholders that use the system will be more willing to take on the financial burden of operating a RHIO in their organization. As these issues begin to work themselves out with the commitment of major stakeholders we will see the development of systems that will further the quality of healthcare for years to come.

With the establishment of RHIOs the quality of a visit to the doctor's office will become more efficient and faster. The physicians will no longer have to remember all the things that are next in the patient's recovery plan, because they will have that information within the palm of their hands. No one person should be expected to know all of the changes to medicine that come out each day or week. We have the technology to help physician's and other healthcare provider to make the job easier and better than it is now all we have to do is demand the usage so the quality will follow.

**References Available Upon Request**