



Module 10: Health Information Technology

Part 3: Health Information Exchanges

For the third module of HIT and Healthy People 2020 we're going to talk about how HIT can be used to improve care coordination through health information exchanges.

The goals of this module, we're going to, as usual, review the meaning and purpose of HIT, learn about the purpose and functionality of different health information exchange models, and learn how HIEs can coordinate care.

Again, the purpose of HIT is to improve efficiency and quality of care. Anything that enhances services and improves data collection through technology could be considered HIT.

Who needs access to health information? Many different groups and people need access. Clinicians whose patients have been seen in emergency department need to review the notes and test results from their patient's E.R. visit. Health systems represent large groups of patients and play a large role in ensuring access to services and coordinated care.

Payers and insurers need to monitor trends and identify areas where costs can be improved. Government needs to be engaged so that security and privacy are upheld at all levels of exchange activity and helps public health officials meet their commitment to the community. All of this is hoped to be accomplished by using what's known as a health information exchange.

An HIE, a health information exchange, is the electronic movement of health related information among organizations according to nationally recognized standards. The goal of health information exchange is to facilitate access to and retrieval of clinical data to provide safer, timelier, more efficient, more effective, equitable patient-centered care. HIEs can be run by regional health information organizations that provide a service to enrolled members to house and/or secure health information and are funded through a mix of government, foundation, industry, and membership funds and fees.

What do HIEs provide? Health information exchanges are the medium that provide a connecting point for an organized standardized process of data exchange across statewide, regional, and local initiatives. They also provide the means to reduce duplication of services, which can help result in lower health care costs.

Health information exchanges can provide the means to reduce operational costs by automating many administrative tasks. They provide governance and management of the data exchange process. HIEs also provide a way for AHRs to talk to each other so that coded health information can be exported and imported from one platform in one practice setting to the next.



What are the different kinds of models of health information exchanges? Each model has pros and cons. There is a centralized model that can facilitate a high degree of interoperability. It's where data is actually compiled and centrally located in a repository. This can be very expensive and cumbersome to maintain, especially for security and privacy reasons, and requires very, very strong oversight.

There's a federated model which is a fast and easy way to exchange clinical information. It reduces concern over data ownership since it acts like a record locator service. All of the data is still housed at the practice, and then the exchange just allows the functionality to locate the information needed when it's needed. Management of access to the third party system is really administratively burdensome and complicated to maintain.

Then, there's a hybrid model. There's some centralization of data and then there's some record locator services.

Now, we can talk about how health information exchanges can improve care. The main purpose of health information exchanges is making patients' information available when and where it's needed. When a doctor's patient has been seen in the emergency room over the weekend and had some labs or X-rays done, the doctor doesn't have to wait to place a call to the emergency room, and have them fax over the information, and find the chart, and attach it to the chart. They can simply request the information electronically and have it incorporated right into the chart for review.

Exchanges also provide connecting points for organizations with interests in health information like research and health payers. They allow for governance and management of our data exchange to be regulated for privacy and security, which is a really big component of health information. They help reduce duplication of services, meaning if I had a diagnostic test done a few years ago and go to a new doctor, my new doctor can receive that information electronically instead having to re-order or re-perform the procedure.

The current state of health information exchange is that there are over 50 states, territories, and entities that have received awards throughout the country to begin or sustain existing health information exchanges. In 2010, Pennsylvania received a large sum of money to begin to implement this, and they are working on it.

Let's review what we learned in this module about health information exchange. The purpose of HIT is to improve efficiency and quality of care. There are several different models of health information exchange that serve to facilitate the exchange of health information between groups. HIEs can help coordinate care by making information available, providing a connecting point, helping to keep information secure, and reducing duplication of services.