

What's Up, Doc?

What is in the Data Sharing System and What Does It Really Do?

In the previous article entitled “What’s Wrong with Molly?” we described how our community provider agencies have been working for almost two years building the basics of a new system. This new data sharing system will improve the treatment of patient’s problems across agencies and providers. You may recall Molly’s situation in which her care was scattered and how it endangered her health. The goal of the new system is to improve the quality of health care, lower costs, speed up treatment, avoid adverse reactions, and get to the most accurate diagnosis possible. A recent study has demonstrated that an average patient may have as many as five providers.

Each of the partners in the exchange have different electronic systems. Many of the systems have a huge amount of data about each patient, sometimes going back years. So, what data is the most important for users to share to improve patient safety and care?

Clinical experts from each of our partner agencies met over a course of several months asking the question, “Given the information our systems have available, what is the basic set of information the providers need to truly help patients?”

They agreed that the following are the keys to improving patient safety:

- Demographics (name, birth date, etc)
- Allergies and Reactions
- Diagnosis
- Pharmacy
- Laboratory
- Immunizations
- History/visits
- Health Risk and Prevention Factors

They also agreed that they wanted the first screen of the new system to be a brief summary of all the information that is available. This will save time. As a second criteria, they wanted the ability to “drill down” and get additional details on the patient if needed.

And third, everyone has agreed that we will only use data that is already there in the system. In other words, no data is going to ever be hand typed into the system.

Once the clinical taskforce defined these key health fields, the next job was to find software that could connect and display the information. Four large software companies competed for our system by answering 116 tough questions and meeting 77 performance criteria. In the end the executive taskforce, composed of the administrators of all the participating agencies, agreed to the recommendation to select Cerner. Cerner currently operates a system very much like ours in Tennessee with over a million patients. They also operate the software for over 150 hospital systems around the country.

An example of the “summary screen” of the system is attached below. As you can see, the persons name, visits, diagnosis and medications are stated for the last three months. Other records available to the user go back over a year, including allergies and reactions, lab, pharmacy, immunizations, and provider information. You can see the tabs on the left which navigate through the system. Over 3,000 physicians use this system in Tennessee and it is working very well.

CHR – Patient Summary

The screenshot shows the 'Patient Summary' screen for Morgan, Erin, 9Y F. The patient's name, age, and gender are displayed at the top. Below this, there is a section for 'Patient Demographics' with fields for Address, Member#, Age, and Home Phone. The 'Claimed Visits' section shows a visit on 6/26/2005 at an Office, managed by Jones, Linda, M.D. The 'Current Medications' section lists three medications: fluticasone-salmeterol, amoxicillin-clavulanate, and loratadine-pseudoephedrine, each with its start date, supply remaining, and the managing physician.

DATE	TYPE	PROVIDER	CLAIM DETAIL
6/26/2005	Office	Jones, Linda, M.D.	View

DIAGNOSES	PROCEDURES
034.0 STREPTOCOCCAL SORE THROAT	87880 Infectious agent detection by immunoassay with direct optical observation; Streptococcus, group A

Current Medications	START DATE	SUPPLY REMAINING	MANAGED BY
fluticasone-salmeterol P III Advair Diskus 100mcg - 50mcg inhalation powder 1 puff, inhaled, 2 times a day, 1 refill	6/01/2005	31 days	John Carter, M.D.
amoxicillin-clavulanate P Amoxicillin-clavulanate 400 mg - 57 mg tablet, chewable 1 tab, chewed, every 12 hours, 10 days supply, no refills	6/26/2005	5 days	Linda Jones, M.D.
loratadine - pseudoephedrine PA Loratadine-pseudoephedrine, 5 - 120 mg tablet 1 tab, orally, every 12 hours, 2 refills	5/11/2005	22 days	David McCallie, M.D.

The system also includes electronic prescribing. This is a true lifesaver.

NEXT TIME: The Many Ways Electronic Prescribing Can Improve Your Safety