Choosing and Implementing an Electronic Health Record

ECHO recommends clinics begin operations with an Electronic Health Record (EHR) in place. Electronic Health Records and Electronic Medical Records (EMR) are similar terms, and often used interchangeably.

Definitions:

- Electronic medical records (EMRs) are a digital version of the paper charts in the clinician's office. An EMR contains the medical and treatment history of all the patients in one practice.
- Electronic Health Records (EHR) include all of the above, but focus on the total health of the patient; they consider standard clinical data collected in the provider's office and include a broader view of a patient's care. They are built to share information with other healthcare providers, such as laboratories and specialists, and contain information from all the clinicians involved in the patient's care.

For the purpose of the curriculum, we will use the term EHR. It is more inclusive and provides care coordination and patient care linkages which enhance overall care.

There are many reasons for a clinic to use an EHR, including being able to easily access digital patient records and mitigate the confusions due to poor penmanship, which can lead to medication and treatment errors. In addition, the accurate tracking and reporting of clinical data is very important for today's nonprofit clinics. There are several benefits to starting with an EHR as opposed to converting to a system once the clinic is operational: the clinic workflow can be designed with the EHR in place, user training can be done without disrupting patient care, and all patient records will be in the system without the need for chart conversion.

Managing Your EHR

Your Data Champion will lead the process for choosing and implementing an EHR, keeping in mind the types of data you will be tracking, and their purpose in a clinical setting. This individual is empowered by the planning team to recruit a committee of future users of the EHR, and guide selection and implementation processes. The Data Champion should be well versed in both medical clinic operation and information technology. Ensure team members include representatives from the different departments that will use the system, including quality improvement, medical records, nursing, clerical, and IT. The team must have the support of clinic leadership to implement and use an electronic health record for the project to succeed.

Define What the Clinic Needs

The first step toward identifying vendor candidates is to create a list of criteria that define the system you need. Describe what you would like the clinic software to achieve. What is your budget you and will the clinic open? The team should determine what specific data clinic leadership will need each month to effectively judge EHR reporting capabilities.

Prioritize the functions you want from an EHR, based on identified needs.

Features to consider include:

- Preventive health monitoring
- Document management
- Ability to interface with other systems (laboratory, hospitals, other clinics)
- Ability for internal providers to communicate about and with a patient
- Available and customizable templates for charting
- Orders and referral management and tracking
- Outcomes reporting/quality measures reporting
- Ease of use
- Platform compatibility
- Clinical decision support
- Privacy and security features
- Patient education materials

- Electronic prescribing
- Coding and billing applications
- Grant reporting and other outside needs for specific data sets

Further considerations specific to budget

- Cloud based or onsite server hosting – Hosting on-site is generally more expensive.
- Hardware requirements – Will you have desktops, laptops, iPads, tablets? How many? One in each exam room, plus nurses' station, laboratory, reception, and administration offices?
- Wireless network or Ethernet wiring – If wireless, make sure to explore minimum requirements to enable multiple users.
- Data entry – Will providers enter their own data or will the clinic use scribes to assist providers? Who will be responsible for data accuracy and data/report compilation?

If the local medical community uses an EHR familiar to clinics and the local hospital, being connected to that system has many benefits and might be an obvious choice for your clinic.

Researching Vendors

System selection is the most intense component of the implementation process. Sorting through the many systems available can be mind-boggling.

Start by calling other clinics to inquire about the system they use and if it meets their needs. Ask about their experience with customer service and if they would use that vendor again. Please note the systems used by volunteering medical professionals may not always be appropriate or the best fit for use in the charitable clinic setting.

Once you have a list of potential vendors, contact them to schedule a demonstration of their software. Choose a time when most of your team can participate, so all areas of clinic operation can experience the system. During product demos, ask the salesperson to allow your team to actually use the product. If possible, create a structured, predefined scenario based upon a hypothetical patient visit to better determine how well a system fits your workflow.

Use product demonstrations to determine how well and how easily a system allows you to:

- Document a visit
- Write a prescription
- Check a patient in
- Order a test

Record any routine functions not listed that you expect your clinic to have.

Make sure the vendor does not use a scaled down or otherwise different version of the system during a demo. If it's not the most recent version, you do not want to see it. If there is a function you are interested in, ask the vendor to show it to you.

Ask to see sample reports and the flexibility of reporting features.

Specific features to investigate:

- Can the system retrieve health information related to a single visit or encounter?
- Can it report unique individuals served as well as patient visits?
- Does the system have weak reporting functions or weak printing features, where each entry prints on a single page?
- Does the vendor provide 24/7 support? Is there an extra charge?
- Does the vendor work with the charitable clinic sector?
- Are upgrades included in the maintenance fees?
- How frequent are the system updates?
- Is there a maximum number of users that can be on the system during clinic?
- Does the vendor have a training plan and a project plan you can review?
- How many installations does the vendor have in your area?
- Can the system be implemented modularly? This allows some budgeting flexibility.

Test as many functions as possible during the demo.

Keep a record of team feedback from each demonstration and rate the products reviewed. Narrow your search to two candidates; if possible, schedule a site visit to a clinic where the system has been implemented. Nothing compares to actually using a system in a clinical setting.

During the site visit, ask the staff or volunteers about the challenges they have faced using the system and how they overcame them:

- How is customer service with this vendor?
- How was the training offered by the vendor?

Ask them to print some reports on clinic activity so you can compare that data with your needs.

Based on your site visits, recommend an EHR to clinic leadership, and propose an implementation schedule, or the Planning Team can share their top two recommendations with pros/cons listed with the Board of Directors for selection and approval.

There are more than 2,000 systems available in the marketplace, a fair portion that meet the specific needs of safety net clinics. Ask your ECHO consultant for suggestions on currently used systems.

Getting the EHR system setup can be divided into two components:

- Hardware requirements
- Software setup and training

1) Hardware Requirement

It is important to decide early in the process what hardware will be needed and how it will communicate with the software. What devices will be used to enter information into the system:

- Laptop or desktop computer?
- Tablet PC or iPad?
- Will devices connect wirelessly, with an Ethernet cable to a high-speed internet connection, or to the clinic server that is hosting the software?

- Where are data entry locations in the clinic besides the exam room?

All these decisions will impact the capital budget and building design plans. The Data Champion must communicate well with the Planning Team/Board of Directors to ensure smooth EHR implementation.

2) Software Setup and Training

Setting up functions and customized templates for your system requires input from the medical team who will be using the system. Allow plenty of time for this process so the best, most functional settings are established.

Servers to consider

If you chose a cloud-based, remotely hosted system, hardware and software implementation can occur concurrently. If you will be hosting the software on-site, hardware will need to be configured first.

EHR Training

Effective EHR training is crucial to a successful launch with happy staff and volunteers. Initial training on the software should focus on "super users," the two to three individuals who will thoroughly know the system and be working during the first clinic sessions. These super users will be the trouble shooters for staff and volunteers who don't use the system every day. Before the clinic opens, hold enough training sessions on the system to introduce all medical and administrative staff and volunteers. Make sure the system is operational and all patient data is entered during the clinic dry run to test the processes, and give staff a feel for how the system will work during actual operations. Be prepared for continuous training on the system as new volunteers become active at the clinic.