The Utilization of Electronic Health Records in a Free Clinic Setting

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With the evolution of technology and the maturation of many Virginia free clinics, the use of technology to improve the provision of patient care in a free clinic setting has grown tremendously in recent years. The 2011 *Virginia Association of Free Clinics Membership Renewal and Annual Survey* indicated that all but two free clinics are now using some sort of electronic system to track patients. These systems run the gamut from home-grown databases and spreadsheets (*33%*) to patient management systems (*57%*) to full-fledged electronic health records (*EHRs*) (*7%*).

After several years of discussion, a growing number of free clinics are now actively considering the adoption of an electronic health record system. This paper has been developed to assist their planning efforts. It shares best practices and lessons learned from medical practices, and more importantly, from Virginia free clinics that have already made the transition. It is intended to help free clinic leaders define their information technology goals; identify and prioritize their needs; conduct any necessary research; prepare for installation and training; and implement and maintain a selected system.

This paper is not designed to assist with the actual selection of a particular EHR system. That decision requires considerable clinic and community specific information. However, a section with helpful information about considerations in selecting a system has been included in this paper to provide important insights, and help clinic leaders get started.

Frequently the terms EMR (*electronic medical record*) and EHR (*electronic health record*) are used interchangeably. There is a significant technical difference, however. EMRs contain the medical and treatment history of the patients in one practice. They are the digital version of a paper record, with a few advantages. They allow a clinic to track data over time, identify which patients are due for treatment, and monitor and improve the quality of care provided within the clinic. The information in an EMR stays in the clinic, and isn't transferrable to other providers of care. It is unlike an EHR system, which makes a patient's health information accessible to all providers of that patient's care (*such as specialists, hospitals, pharmacies, and laboratories*).

If free clinics seek to partner with other providers of care by exchanging patient information, their ultimate goal will likely need to be to transition to an EHR. For this reason, the term EHR is used throughout this paper. Most of the best practices and recommendations within this paper apply to *both* the utilization of an EMR and an EHR.

What to Expect from EHR Adoption

In determining whether to start utilizing an EHR system, a free clinic must weigh the benefits and challenges of such a transition. Some of these are the same as for any medical practice. Others are unique to free clinics and their use of so many volunteers, and delivery of multiple services (*i.e. medical and dental*). Fortunately, most of the challenges are temporary. The benefits, however, are longlasting.

<u>Benefits</u>

- Medication and treatment errors resulting from incorrect interpretation of handwriting should be largely eliminated. This benefit is expected to be even greater in a free clinic setting than in a private medical practice, given the difficulty of maintaining familiarity with the handwriting of so many volunteer providers.

- All patient information will be contained within the chart at all times. Necessary paperwork and lab results will no longer wait to be filed, or become misfiled.

- The time-consuming problem of locating missing charts should largely be eliminated.

- A chart can be utilized by multiple users within the clinic during the same patient visit.

- Continuity and quality of care for patients should improve, as records become more complete and the EHR serves as a tool for maintaining consistency across visits, doctors, treatment plans, and preventive treatment plans.

- With a web-based system, chart reviews and medication refills can be completed off-site (*i.e. by a volunteer at home*).

- Compiling data for funders should be simplified and less time-consuming once report templates are created.

- The clinic will be prepared to bill for services if this function is ever desired.

- Without thousands of paper charts, more physical office space will become available in the clinic.

<u>Challenges</u>

- Given the learning curve in system mastery, the number of patient visits is likely to fall for a period of time, as staff and volunteers undergo training, and become familiar with the EHR.

- It will take a long time for volunteer providers to learn the system, if they only come to the clinic infrequently. For example, if it takes a full-time practitioner three months to master a new EHR system in a typical medical practice, it may take years for a one-evening a month volunteer to master the same technology. (*Fortunately, there are ways to address this issue. See page 5.*)

- Employee morale may suffer in the short-term, if staff and volunteers feel overwhelmed with the transition requirements. An enthusiastic champion, whose time is dedicated to guiding and facilitating the transition, can mitigate many problems and keep everyone focused during this challenging period.

- Most EHRs are designed for medical practices or dental practices, but are not able to accommodate both, and few vendors have experience in developing or maintaining interfaces from dental patient information systems to medical systems.

Whether a free clinic determines to adopt an EHR system will depend considerably on its long-term vision for its services, its desire to achieve the operational benefits cited above, and on the value it places on the expected improvements to patient care.

Getting Started: Decision and Commitment

A very strong case can be made for adopting an EHR system, but the transition can be difficult without a solid commitment from clinic leadership, sufficient planning and buy-in, and the resources necessary (*both human and financial*) to facilitate adoption.

This is a significant change for a clinic, and will require all of the elements and deliberate attention associated with successful change management. In particular, it will be important to obtain buy-in of all key stakeholders; articulate the vision for the positive impact of the EHR once it is adopted and how that fits with the needs and larger strategic plan for the organization; and have a champion for the change. It is recommended that clinic leadership:

- Clearly articulate the rationale for and the expected value of the EHR, specifically addressing what it will ultimately improve for each group of key stakeholders (*staff, volunteer, providers, other volunteers, patients, partners, the Board*).

- Engage key stakeholders in the conversation and decision-making and obtain a group commitment to the transition. This includes a commitment from the Board of Directors, the staff, and the core volunteers.

- Identify a champion for the change who will serve as a major advocate for the EHR implementation.

- Identify a person to oversee the EHR implementation on a daily basis. This may, or may not, be the champion for the transition. If at all possible, make this the sole responsibility of a senior member of the staff. It should not be an "add-on" to an existing set of job responsibilities. Ideally, this person will have both IT and clinical experience.

Do Your Homework: Identify Needs, Conduct Research, and Prepare a Budget

Once the decision has been made to move forward with obtaining an EHR system, it is time to figure out what you want from a system, and establish a project timeline and budget. Recommended steps include:

- Conduct a detailed analysis of the clinic workflows and determine what information needs to be captured in the EHR. This includes all everyday processes that occur in the clinic, such as intake, scheduling a patient for an appointment, the visit sequence of services, handling of follow-ups and referrals, provision of prescription medicines and labs, and test result follow-up. The EHR will only be effective if it accurately mirrors the clinic's actual workflows.

- Identify and prioritize the functionalities you want from an EHR based on your clinic's workflow. Features common to most EHRs include:
  a) integration of the new EHR with an existing practice management system (*assuming one is in place*)
  b) preventive health monitoring;
  c) document management;
  d) the ability for internal providers to communicate about a patient;
  e) template-based charting;

f) orders and referral management and tracking;
g) outcomes reporting/quality measures reporting;
h) clinical decision support;
i) privacy and security features;
j) patient education materials;
k) electronic prescribing; and
l) coding assistance.

- Conduct an inventory of all data systems at use in the clinic and determine which ones would be beneficial to integrate with the EHR, and which could be replaced with the EHR system. Ultimately, you will have to determine how much of your desired integration is possible, as you review various EHR systems.

- Survey others in your peer network to identify EHR systems for consideration. Some suggested resources include:

    a) other free clinics in Virginia and throughout the country;
    b) community health centers;
    c) your clinic's volunteer physicians and hospital(s) (*a caveat: hospital EHRs are typically developed to meet hospital needs and may not have all the features necessary for a medical practice*);
    d) the Virginia Health Information Technology Regional Extension Center, which is funded by the U.S. Department of Health and Human Services to provide primary care medical practices with direct, local assistance needed to implement an electronic health record system, and integrate it into the patient care process. (*www.vhitrec.org*)

- Establish a realistic timetable for completing the homework and all necessary elements of the transition. This timeline may need to be revisited and updated as new information is obtained. Working through these different components typically not a speedy process. Don't underestimate the time necessary to successfully undertake this initiative, and don't take shortcuts, they will cost you in the end. The timeline should allocate the amount of time required for all steps that have been discussed in this paper, and indicate when each task will be undertaken and accomplished.

- Establish a realistic budget for the transition. There will be one-time start-up costs for EHR acquisition and implementation which will include expenses for software, hardware, necessary T1 lines and wireless internet, training and staffing. There will also be ongoing costs, which include software maintenance fees; staff for customization, maintenance and trouble-shooting of the software, and ongoing training of new staff and volunteers; and hardware replacement (*every few years*).

Selecting a System

With the preparatory homework complete, it is time to move forward and select the system which best meets your clinic's needs. There are many consultants that provide this service, but it can also be done internally. The secret to success lies in asking the right questions and making certain clear and specific answers are provided. A good starting point might be to visit:

http://mhcc.maryland.gov/electronichealth/cmsdemo/februarycmsehrdemonstrationarticle.pdf.

This site provides links to a number of resources that can be used to effectively evaluate electronic health records vendors. You will want to articulate, in writing, the criteria to be used in selecting an EHR vendor and establish an RFP and selection process. Make certain to inquire about system hosting and back-up options as part of the RFP. It is important to involve key staff and volunteers from all parts of the clinic who will utilize or be impacted by the EHR in the review of the system options, and get their input regarding system selection before making a final decision.

Preparing for Installation

Once you have selected an EHR system, you will need to undertake several tasks before the actual implementation begins. These include:

- Determine how the "file build" of the new system will be implemented, and who will be responsible for it. This is the process for incorporating data from existing patient records into the new system. Key considerations include which patients, if any, will be pre-entered and which data elements, if any, will be carried forward. There are a variety of approaches to this. You will need to select one that works best for your clinic and your patients.

- Recognize that to be effective, an EHR relies on customized templates for data collection and reporting. Identify which templates will be the most critical for your clinic and begin to prepare for their creation by determining the information you want in each.

- Determine a method of password protection that will meet the clinic's security needs, but can also be easily remembered and utilized by volunteers who may be using the system infrequently.

- Determine a schedule for system maintenance and back-up that reflects your clinic's hours of operation. Many clinics are open during evenings and early mornings (*when many traditional medical practices conduct these activities*).

Training

Training is one of the most important, but most underestimated parts of a transition to an EHR. Whether talking to EHR vendors, medical practices, or free clinics which have adopted EHRs, all cite "inadequate time allotted for training" as one of the most frequent and problematic aspects of implementation. If traditional medical practices with all paid staff, typically underestimate the amount of time required for this crucial component of implementation. Imagine the challenges this could bring to a free clinic that has many volunteers to train, as well as paid staff.

Don't make this mistake. Inadequate training significantly increases frustration with and resistance to a new EHR system. It can also undermine many of the intended benefits of the system, when staff and volunteers don't know where or how to enter key data regarding patient care or outcomes. Recommendations for a positive training experience include:

- Anticipate that your EHR training needs will greatly exceed that which is typically provided by the software vendor, and budget accordingly. Most vendors determine the amount of necessary training using a standard of provider FTEs. Since a free clinic may have dozens of individuals comprising one FTE, the training needs will be much greater.

- Determine how both staff and volunteer training will be provided. It is usually best to have separate training plans for each group.

  a) Staff should complete the training ahead of volunteers so that they can help test the system for glitches, and can be available to assist the volunteers when it is their turn to participate.

  b) Consider identifying a number of "super-users" who will know the system in greater depth, receive more training, and be available as a resource for everyone else. Consider scheduling "super-users" to be available in every clinic for the first year.

  c) Anticipate that many volunteers will require one-on-one training to accommodate their schedules.

  d) Plan for training to be a continuous process, as new volunteers are regularly joining the clinic team.

- Think through and develop a policy regarding who will be required to use the EHR, and how volunteer reluctance and refusal will be addressed. Only you know the dynamics of your clinic and how much "insistence" is possible.

  a) Some clinics have required all volunteer providers to use the system. In cases where a volunteer who provides a critical service refuses, they quietly assign a "scribe" to be present during each patient visit with that physician to record all key information in the EHR.

  b) Others have made participation completely voluntary and implemented a system where paper records are back-entered into the EHR by non-provider volunteers. Obviously, this can be very time intensive.

  c) Still others have engaged physician leaders as champions of the system to help persuade their colleagues, or found ways to navigate through resistance.

  d) No matter what policy is selected, a system will need to be established for non-users, should they exist.

- Recognize that one significant advantage of a web-based EHR is that training manuals and users guides are available on-line, and new users can practice utilizing the system at home after their training.

Important Considerations that Follow EHR Implementation

Once the EHR system is up and running, there is still important work to be done to make certain it provides the value anticipated. The transition to an EHR should not be seen as a short-term

proposition that will be complete in a matter of months. This is a long-term investment that requires steady re-investment in order to provide maximum benefit. For example:

- Time will need to be allotted on an ongoing basis to continue the customization of templates for each type of specialty clinic and service that the clinic offers. Both the Arlington Free Clinic and the Chesapeake Care Free Clinic reported that they spend considerable time on this task. The EHR will only deliver expected value, if the quality of the data entered is good and meets the users' specific needs. This requires customization, and customization takes time.

- Designated time will need to be allotted by an individual with clinical experience to <u>analyzing</u> patient data. Too often this very valuable feature of the EHR is underutilized by medical practices. Without it, the clinic will not be able to effectively capitalize on possible improvements to patient care.

- Recognize that any decision to integrate the clinic's EHR with providers outside of the clinic (*i.e. hospitals, pharmacies, and laboratories*) will necessitate that the clinic become HIPAA compliant. (*There is a separate paper in this series regarding HIPAA compliance.*)

Words of Wisdom from Virginia Free Clinics That Have Already Made the Transition:

Interviews with two Virginia free clinics (*Arlington Free Clinic and Chesapeake Care Free Clinic*) that have already made the transition to an electronic health record, identified several lessons learned that warrant extra emphasis.

- <u>Change is hard and requires a commitment to an articulated vision from all stakeholders</u>. There will be times during the transition when keeping staff and volunteer morale positive will become challenging. Not everyone will welcome the change and some will try to derail it. Some individuals may not like or appreciate the need for the new system and will resist. This is why a designated champion for the initiative; a strong commitment from the Board and other clinic leaders to implementing an EHR; and a constant focus on the value the EHR will bring to the clinic, staff and patients are critical. They will provide reinforcement when there are the inevitable bumps on the road to implementation.

- <u>It is important to set a timetable for the transition that reflects the reality of an organization that relies heavily on limited staff and many volunteers</u>. EHR implementation in a free clinic will take longer than it does in a private medical practice. EHR adoption will be much better received if time pressures are not extreme. Think carefully about the adoption schedule and make certain your EHR vendor is well informed about your special needs. Most vendors are not likely to have worked with many free clinics, and you will need to provide them with clear guidance about your training and timing needs.

- <u>Recognize that while free clinics already provide good patient care, an EHR used to its full potential can elevate the care provided significantly</u>. One of the main benefits of an EHR is that it can be used to review patient health outcomes, and discover any significant variations in patient care. For example, within months of EHR adoption, both the Arlington and Chesapeake free clinics discovered opportunities for improvement in the measurement of blood pressures and temperatures. They also found ways to improve the review of labs and

pharmacy orders. They are now continuously engaged in reviewing clinical workflows and making adjustments. With the hard work of the transition and training behind them, they are now learning and experiencing the many benefits of the data and enhanced information made possible by their EHRs. They are also finding it much less time-consuming to obtain data needed for reports to various donors, and for grant requests.

Considering a Free Clinic EHR Network

While many free clinics may elect to pursue a stand-alone EHR that meets their individual clinic needs, there may be benefit to considering the creation of an EHR network, in which multiple free clinics come together to order and utilize the same EHR system. This would not only provide economies of scale and shared bargaining power, it could also provide a host of other benefits:

- shared customization of templates and workflow designs for safety-net populations;
- shared ancillary services such as 24 hour help-desk support, claims management, accounting services, disaster preparedness, integration support, and report development;
- shared training development;
- shared QI expertise;
- shared vendor management; and
- a collaborative environment to facilitate peer learning.

For example, EHR software often requires customization beyond the vendor's offering to support items such as health management functions for particular populations, unique reporting requirements, and multiple language patient education tools for the safety net. These requirements demand additional time, technical expertise, safety-net experience, and a level of sophistication not often available or affordable to individual clinics. An EHR Network for free clinics could address this issue by developing these templates for all members, rather than the redundancy of each clinic developing its own.

A common EHR Network could also reduce contract costs for Medicaid providers and engage a vendor to handle their billing and provider credentialing.

Conclusion:

Whether a clinic decides to obtain an EHR system on its own, or to obtain one as part of a network, the time is approaching when every free clinic with a substantial number of patients (*600+*) should prepare itself for the adoption of an electronic health record system. With advances in technology and in EHR products, the benefits for the clinic and each group of stakeholders are worth the investment of the transition to an EHR system. This paper provides some basic information to help clinics get started, with special attention to the unique characteristics of free clinics.

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