Wichita State University
Community Engagement Institute

Kansas Local Health Department EHR Implementation Toolkit

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Preface

This toolkit was created through a joint collaboration between the Center for Public Health Initiatives at Wichita State University and the Kansas Immunizations Program at the Kansas Department of Health and Environment. Additional support and special thanks to the review and contributions of the Harvey County Health Department, Lawrence-Douglas Health Department, and the Franklin County Health Department. Many of the tools contained within this toolkit were created by various organizations and either vetted or modified specifically for use by local health departments in Kansas. The tools provided have been identified as essential for the effective selection and implementation of Electronic Health Records (EHRs) in Kansas Local Public Health Departments.

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The Office of the national Coordinator for Health Information Technology (HealthIT.gov)

Additional Support:

Additional support for the use and implementation of these tools can be provided from the Center for Public Health Initiatives at Wichita State University. Contact information can be found at: http://communityengagementinstitute.org/ or by emailing CPHI@wichita.edu

Introduction/Background

The Health Information Technology field is complex. Equally complex are the national guides and tools for reviewing, selecting, and implementing EHRs. Many of the tools in existence, while excellent resources, are unnecessarily complex for the needs of Kansas Local Health Departments. Because of this, it was determined that some of these tools could be simplified to help enhance the understanding of the fundamental issues surrounding EHR implementation.

This toolkit was ***not*** created to be the only source of information for LHDs. The purpose of this toolkit is to provide an overview of important elements of EHR selection and implementation to help LHDs assess, plan, and avoid known pitfalls. It is recommended that any LHD looking to implement an EHR proceed with an understanding that this toolkit does not cover all of the necessary details, but will provide a thoughtful step by step overview of the process. Further research should be conducted and consultation with experts is still needed. For example, legal assistance in the evaluation of Requests for Proposals and EHR contracts. Some additional resources are provided at the end of this document.

Where to Begin:

This toolkit is designed to outline the process from start to finish; prior to looking at EHRs and after implementation. If there are steps already taken by an LHD, identify where best to align with the timeline and tools provided. It might also be important to step backwards in the planning process to make sure no key elements identified in this toolkit are missing.

Interoperability and System Integration:

"Even if you rely primarily on one vendor for all of your health IT needs, your EHR will still need to be "interoperable" with other IT systems or applications to deliver the functionality you expect and may need in the future. Two systems are interoperable if they can exchange information and understand and use the information exchanged without special effort on the part of the user."

-EHR Contracts Untangled, Pg 29

It is important to evaluate all of the systems a department utilizes and to identify if, how, and when an EHR can become interoperable. Specifically in Kansas, questions should be raised about a systems ability to connect to the Kansas Immunizations Registry (WebIZ), the Kansas Health Information Network (KHIN), labs, and any clearinghouses used for billing. Interoperability does not just mean a "direct connection" between two systems. It also means identifying best methods for getting data from one system to another even if through import/export features or reporting. Note that some EHR vendors can charge fees for initial connection and/or monthly connection fees. Ensure any connection timelines and fees are identified up front in contracts.

Helpful Hint: Reach out to other EHR users and discuss what systems they have integrated with, along with any benefits and drawbacks to doing so.

Is an EHR really needed? If so, are you ready?

Be Realistic in Expectations

If you read nothing else, read this section

Some departments enter the EHR exploration process with the assumption that the EHR will come pre-made to fit their workflows and needs; that, and the EHR will solve all of the departments problems. This couldn't be further from the truth. Operationalizing an EHR often means changing current workflows, policies, and practices to fit the system.

If you are having trouble with your current system or EHR, consider that the problem may not be the software, but how a department is utilizing it. Starting over with a new software might land you in the same position you are in currently. EHRs are not meant to be a magic bullet. They take time and effort to develop and they create a new level of complexity to the work. A department must have staff willing to accept the challenge of changing how work is currently done.

Understanding the Details

There are many details to think through when considering the Implementation of an EHR. The more time spent in the first two phases, and more conversations had with other departments about their systems and experience, the smoother things will go.

Costs will vary based on vendor. there are implementation fees, monthly/annual maintenance fees, add-on packages and features, additional set-up and/or maintenance for direct connections to other software systems. Be prepared for additional charges and increases annually. Training costs are often additional costs added into a contract.

Contracts are how to keep processes moving along smoothly. Add or request additional requirements for the EHR vendor to meet deadlines for items like connecting to WebIZ.

System set-up is vital to success. All EHRs will need to be programmed and modified to meet the department needs. Be prepared for additional staff time and expenses when setting up a new system. This includes transferring every aspect done on paper or in other system, over to the new system. EHRs will likely have pre-programmed Encounter Forms, however these will need to be reviewed and edited to meet the needs and expectations of the program or department. If the EHR has a billing component, setting up behind-the-scenes codes and processes will take additional time.

Phases of EHR Implementation

The Five Phases of EHR Implementation

Each phase of the EHR implementation process is vital. Below are the five overarching steps of implementing an EHR effectively. This begins with determining if an EHR is needed and ends with moving forward with the system after implementation. It is important that departments think critically about each phase and do not move on to the next before they are ready. Utilizing the tools in this toolkit will assist in mapping out each phase and the tasks to be completed during each. Many tools can be used to communicate with staff and EHR vendors to make sure all are on the same page.

The timelines for these phases are subject to change based on the needs of the department and the abilities of staff and vendors. Extra time should be given to the first two phases to ensure the department is prepared for the process. Refer to the EHR Implementation Timeline Template to map out the expectations of each phase. Below is a summary of each phase, along with a list of tools to be utilized.

Tool Utilization

Some of the tools contained in this toolkit are guidance documents, others are templates that can be modified and utilized directly. All tools are developed with a broad view of department needs, meaning to make each useful, customization might be needed. While some tools might seem unnecessary or overburdening, keep in mind that communication with staff and stakeholders is important to success. These tools were identified and modified by local health departments who have implemented and utilize EHRs.

Phase One: Assessing LHD Readiness & Needs

The first step of this entire process is to gain an understanding of departmental needs and to lay out a plan for addressing those needs. This stage is one of the most important to make sure the department is ready and understands the in-depth needs. A department must ensure that an EHR is necessary and will enhance work, not hinder it or create a burden. To help with this analysis, the first four tools create a detailed level of self-assessment. Start the project with a detailed understanding of the tasks at hand. Use the information in this process to begin filling in the Timeline Template (#1 EHR Implementation Timeline Template).

Next, utilize the Decision Matrix, IT Evaluation, and created Workflow Diagrams for the department to identify the positive and negative 'touch points' an EHR will provide. A touch point is any step in operations that are affected by the EHR system. Once these processes are complete, a department should begin to have a solid foundation of how an EHR might impact operations. Workflow diagrams are Quality Improvement tools and can be seen as cumbersome. However, they are vital in terms of truly understanding the impact an EHR will have on operations. They will also become critical tools for orienting new staff to the operations of a department, and helping current staff members visualize changes to current practices. We have provided a number of examples and templates for departments to identify which version and software works best for them.

If the department still wishes to move forward with implementation, the fifth tool in this set outlines the roles and responsibilities for an implementation team. If a department has a limited number of staff, this only compounds the need to have each team member identify expectations and responsibilities in the process.

Tools include:

1. EHR Implementation Timeline Template
2. EHR Decision Matrix
3. IT Evaluation
4. Workflow Diagrams & Templates
5. Implementation Team: Roles & Responsibilities

Phase Two: Assessing EHR Options

There are a large number of EHRs out there. Be aware that software sales agents are not the ones who utilize the software daily and most have not been inside the departments they are selling to. Many EHRs offer similar features and functions but different workflows. This makes it important that the one selected meets the needs of the department. Some vendors lean towards supporting clinical interventions, others billing and coding, and some on administrative reports. This is why a diversified team is critical to review all aspects of a system. The tools to utilize in this phase will assist in differentiating vendors and ensure the right questions are being asked.

It is highly recommended that you *do not* purchase an EHR without seeing it in action at a department.

Vendor demos are expected for multiple systems. Most vendors will only highlight their key features, so it is important to take the time to request similar scenarios with all vendors. The Demo Script (#6) provided can and should be modified to meet the type of clients and processes a department handles regularly.

Reviewing multiple EHRs can be confusing when one does not know all of the details and features of what an EHR could include. To help with this, there is a Vendor Evaluation Guide (#7) with numerous features identified. Not all will apply, but if some do, they can be transposed to the Vendor Evaluation Tool (#8) and become part of the questioning and evaluation process. Most complex vendor evaluation tools can be found online and at HealthIT.gov. Included as part of this evaluation process is a Cost Comparison Tool. EHR vendors will help identify department needs and add-ons that can change the overall costs of a system. This tool will help map out differences between system costs.

Lastly, a Request for Proposal Example is provided (#10). This RFP is not all encompassing and should be used as an example. **If the document *is* to be utilized as a template for a department, make sure legal counsel is involved in the review**. Focus added attention on the key features that will enhance a department's capabilities as identified in the first phase of implementation. The RFP example gives an outline of how to frame such requested features. Also think through capabilities outside of clinical interventions that focus on population health.

Tools include:

6. Vendor Demo Scripts
7. Vendor Evaluation Guidance
8. Vendor Evaluation Tool
9. Vendor Cost Comparison Tool
10. EHR Request for Proposal Example

Phase Three: Training & Implementation Prep

Training can be handled in a number of different formats from the vendors. Most vendors will leave a window for departments to set up and practice with the system. The important thing for departments to realize is that practice ***must be a priority***. Staff need to both train and practice as much as possible in the system before going live. The system will inevitably have flaws, bugs and missing pieces. It is up to the department to set up and test the system and work through those prior to implementation. This will take additional staff time and/or overtime. When it comes to ensuring the system will operate properly, prevention is the best strategy.

Decisions must be made during this phase, including but not limited to: How will current patient demographic and medical information be migrated to the new system? How will report information be pulled from the system? What system integrations need to be addressed and set up prior to go-live? This is all part of setting up the system to operate the way the clinic expects. Departments are responsible for getting the system ready and staff prepared, not the EHR vendor. Do not expect the EHR vendor to set things up correctly, and do not expect staff to be able to adopt the system without extensive time practicing with the software.

Do not wait for the system to be up and running before mapping out new processes in terms of how clinical documentation will be handled (Tool #11 Chart Migration Checklist) and how to access needed information (Tool #12 Report Review Template). A template to help guide the discussion and schedule of practicing in the system is provided in tool #13. Practicing in the system is the most critical step to ensure the system and your processes have been properly adjusted to meet the needs of the department.

Lastly, having a plan to connect to the state Immunization registry must be mapped out with a meeting between the EHR Vendor and the state Immunizations Program. Start by reviewing the documents for Tool #14 WebIZ Connection Information & Guide. These documents are detailed and technical, but are essential to both the department and the EHR vendor to knowing and understanding the needed steps to implement the HL7 connection. HL7 is the common language that will allow the EHR to seamlessly send immunization information to WebIZ and eliminate the need for added data entry.

Tools include:

11. Chart Migration Checklist
12. Report Review Template
13. Department Practice Schedule
14. WebIZ Connection Information & Guide
    a. The Facts about switching form KSWebIZ Direct Entry to HL7 Interface
    b. KSWebIZ HL7 Information
    c. KSWebIZ HL7 v2.5.1 Implementation Guide v3.9 v16.4 Release

Phase Four: Implementation – Go-Live!

This is it. There are multiple ways to activate the system; either all at once, or in stages adding on programs as staff become more comfortable with the process and the software. Consider running the old system and the new system simultaneously for a period of time. If this is done, create achievements and milestones to help the department determine when it is time to deactivate old systems/practices. As staff and workflows change, this is the best time to document how work is completed through updated policies and practices. Tool #15 provides and outline of activities to address.

There are a number of lessons learned from other Health Departments. These are compiled to provide a guide of methods and processes to consider during the first days and weeks of going live in the new system. Expect delays, errors, and hang-ups. Warn staff and clients about the process and openly communicate. Schedule regular debrief session with staff to document questions and issues. Additional tips are noted in tool #16 Go-Live Tips.

Tools include:

15. Policy Considerations / Templates
16. Go-Live Tips

Phase Five: Moving Forward

Implementing an EHR is not the end of this journey. There will continue to be speedbumps and changes needed. Press the EHR vendor on needs and expectations, especially in the first 6 months of use. State-wide user groups will be a vital resource in learning new ways to approach the work and how to use the system. Contact other Local Health Departments and vendors to determine if current user groups exist. Finally, utilize the Post Implementation EHR Evaluation to help evaluate and articulate questions to staff, user groups, and the EHR vendor on success in utilizing the system. Use this tool as a road map to make sure issues are being addressed in a timely manner. This step could be easy to ignore if the system is up and running, but it is important to continue communication and progress on ensuring the system is working at full capacity.

Tools include:

17. Post Implementation EHR Evaluation

Conclusion/Next Steps/Offer of additional Support

Once a department has implemented an EHR, it is important to acknowledge the power of this new tool. It will be easier to pull data and analyze workflows and processes. EHRs have the potential to open new doors for data analysis and system connections. The possibilities are endless, but not without hurdles and speedbumps.

This toolkit was designed to help any health department navigate the processes of implementing an EHR. There are other similar tools available and also project coordinators who specialize in walking clinics and departments through the process. If Kansas Local Health Departments would like additional assistance in utilizing this toolkit, feel free to contact the Center for Public Health Initiatives at Wichita State University at CPHI@wichita.edu

Additional resources for becoming more familiar with this process:

There are many resources available for diving deeper into various areas of EHR implementation. Issues that involve additional considerations based on local programs and policies have specifically been left out of this toolkit to allow it to be useful to a wider array of departments. Utilize these additional resources when needed:

1. EHR Contracts Untangled: Selecting Wisely, Negotiating Terms, and Understanding the Fine Print https://www.healthit.gov/sites/default/files/EHR_Contracts_Untangled.pdf
2. Meaningful Use: http://searchhealthit.techtarget.com/definition/meaningful-use
3. Managing Risks and Liabilities (see above "EHR Contracts Untangled," pg. 37)
4. Building an Informatics-savvy Health Department: http://www.phii.org/infosavvy
5. Certified Health IT Product List: https://chpl.healthit.gov/#/search
6. Public Health Informatics Institute – Toolkit for Planning an EHR-Based Surveillance Program: http://www.phii.org/ehrtoolkit

Local Health Departments & EHRs as of June 2017

EHR	Departments
Aprima	Reno
Athena Health	Kingman Thomas Sheridan
BrightTree	Saline (Home Health only)
EMD	Cheyenne
Intelligent Medical Software (IMS)	Jefferson
Insight (by Netsmart)	Finney Geary Johnson Lawrence-Douglas Riley Wyandotte
Greenway	Lyon
Nightingale Notes (by Champ Software)	Butler Dickinson Jewell Ottawa Phillips Pratt Rooks Sumner
Patagonia	Clay Ellsworth Franklin Grant Harvey Marion Smith