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HEALTH CENTERS, INC.

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EHR/CLINICAL IT SYSTEMS IMPLEMENTATION:

Lessons Learned from a Community Health Center Model

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Central Valley Health Network

CVHN EMR Project

- **Collaborative Effort Between 3 Central Valley Health Centers**
- **Collaborative approach to the selection, purchase, customization and maintenance of an EMR product that would allow the CVHN members to capture data that would facilitate disease management.**

Reality

- Implementation Challenges
  - Delays and workarounds led to excess cost
- 11% Decrease in Office Efficiency and Revenue
- Loss of clinician morale; 2 physicians resigned
- Patient Safety Issues

Lessons Learned

- **Collaboration Brings**
  - **Savings:**
    - **Some hardware savings**
    - **Contractual issues**
      - **Possible economies of scale**
      - **Individual entities do not have to do an RFP and contract negotiations, = savings**
  - **Body of knowledge**
    - **Lessons learned can be utilized by all . Training and technical expertise can / should be shared**
    - **Planning and implementation expertise**
    - **Shared Help Desk**

Lessons Learned

Collaboration brings issues

- **Trust**
- **Collaboration may slow down change process**
  - **Tasks can potentially prevent one organization from moving forward at their desired pace**
- **Accountability between partners**
- **Clinical operations vary between entities: affects actual implementation of the product**
- **Individual entities/clinics/providers may have limited “flexibility”,**
- **Product selection should take into consideration all of the above!**

Lessons Learned

- **Focus on the problems you want to solve, don't focus on the technology**
- **Product selection**
  - **Better off with a" simpler" system: look at what is really needed**
  - **Cost: Realize that cost is more than the price of the product**
  - **Flexibility may NOT be an asset– look for standardized solution…..**
- **Must have internal champions in each organization**
  - **CMO, Application Design, ClO, CFO and CEO**
- **Move forward in steps**
  - **Identify the ones that give your staff immediate improvements**
- **Implementation of EMR is an on-going process.**
- **IT expertise must be involved throughout the process.**

Lessons Learned

- Demos and site visits are part of the “sales pitch”.
- It takes diligence separate the “sales pitch” from reality.
- Try to truly get an honest take on the product:
  - Spend as much time with non-clinical staff as clinical. If they are not paperless ask Why? If not accessing all data in computer ask Why?
  - Ask to have demoed what you are interested in. If they do not have it in place ask WHY?
  - Find out who is and is not using the system. Ask why not?
  - Walk up to “anyone” and ask how they use the system.
  - Do not let the sales folks hand pick who you talk to.
  - Observe and ask questions. Understand the flow within the site, and ask why?
  - Look for examples where they have had to modify their processes for the application and…… ask if it is better or not.
  - Ask to see the service request log. Look for numbers of service request and response times to service requests.

For Darin M. Camarena Health Centers, Has EMR Been Worth the Effort?

Let's look at some specific examples.

Why EMR?

"I know I signed those lab results, but they haven't made it back to the chart yet."

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Stages of EMR Development at DMCHC

Area of Functionality	Stage I: Paper Chart	Stage II: Paper Chart + MegaWest (1993-2002)	Stage III: EMR Product (2003-2005)	Stage IV: Next EMR (2005 - ??)
LAB	Paper results, manual process ▪**Issues**: chart pulls, results misplaced, not filed in charts, stacks on providers desks! ▪Charts pulled for any review of lab (WIC forms etc.) **Benefits: ??**	Interface with Unilab – **Issues**: "View Only" Paper copies placed in chart **Benefits :** ▪No chart pulls for Urgent Care visits = decreased over all chart pulls = decreased lost charts, decreased time spent hunting charts.	Interface with Unilab - Providers sign off electronically and message decision making to appropriate person for follow-up **Issues:** ▪Added Scanning to department duties to replace paper. **Benefits** ▪Provides comparative data views; complete chart available remotely. ▪No chart pulls, no lost time hunting charts! ▪No paper labs to providers.	CPOE of labs ordered directly from EMR **Benefits**: Eliminate errors caused by current manual entry of lab requisitions.

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Prescribing	NCR Paper pad, manual scribble with problems of legibility. Hand carried to pharmacy. NCR copy to chart. Manually updated Med List. **Issues**: ▪Illegible provider writing resulting in Medication errors, or delays **Benefits**:??	Med list automatically updated through the dictation. Transcriptionist "types" with symbols causing the meds to automatically be placed in med list. **Issues**: Lag time until dictation was received on a floppy disk. **Benefits**: Viewable without a chart.	Provider orders Rx into EMR, cross-interactions checked; Prints legible paper Rx, or fax directly from EMR to the pharmacy. Literature in Spanish & Eng. at 2 reading levels (low literacy and pharmacology level) **Issues**: **Benefits**: ▪Drug interaction issues decreased ▪eliminated all call-backs from pharmacy ▪med list is dynamic with current and past meds	Episodic vs. chronic meds.

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Rx-Refills	Telephone call from pharmacy, or patient requesting refill. Staff took message, chart pulled; to provider desk **Issues**: ▪Difficult for staff to correctly take messages, spell drugs (human error issues high) ▪Stacks of charts ▪Goal was 24 hour turnaround, hard to keep the promise. ▪**Benefits**: ???	Patients call pharmacy, Pharmacy calls or faxes request for refill; to medical records for chart pull; **Issues**: Required chart pull **Benefits**: Provider could look in MW at meds, speeded up the process somewhat.	Faxed directly to the pods. Ward clerk prints a copy of chart notes. Clinicians review paper notes and indicates on paper re-order request. Ward Clerk calls in order to pharmacy. Refill is document in EMR. **Issues**: Product does not have simple RX Refill process **Benefits**: **No chart pulls at all.**	Rx- Refill will be in the in-box to review by physician, and then orderd electronically. Patient to email pharmacy to trigger refill request. Email from pharmacy to DMCHC. (Kaiser does this)

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Tracking	Tickler files, index cards with color dots placed on **Issues:** ▪No report generating ▪All manual **Benefits:** ▪Full tracking capability	Using MegaTracks tracking driven by CPT/ICD9 and pre-set criteria. Generates reminder letters with addresses and messages. **Issues:** Med. Records personnel manually changes follow-up date in tracking system and sends recall.. **Benefits:** Can view ,without chart, appointment for follow up..	Mega Tracks continued Now clinician receives notification via in-box, responds via messaging. Now with an abnormal lab, message goes to ward clerk, who contacts patient and sends note. **Issues:** Having to utilize dual systems due to Products lack of Health Maintenance Module **Benefits:** Messaging regarding results	Preventive health and Abnormal follow-up based on criteria – pre determined and integrated in application. INTEGRATED APPROACH!!

The Electronic Health Record
Yes, it is worth the effort!

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