

Patient Care Device Integration (PCDI)
**A Hospital Case Study: Implementing a BIG Device
Integration Project in a Short Span of Time**
Objectives & Lessons Learned

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PCDI: An Essential Part of a Maturing EHR Strategy



- Implementing and maturing the EHR at CUH is ingrained into our culture
- EHR is a corporate level project led by IT but not an “IT project”
- The level of visibility extends to the Board with regular updates to BOT committees
- Device connectivity is a key part of maturing the EHR

PCDI: An Expensive Part of a Maturing EHR Strategy

- PCDI is only one component to overall EHR maturity, yet is one of the more expensive investments
- IT, Patient Care Services, BioMedical Engineering, EHR vendor and selected PCDI vendor must work in concert for a smooth installation
- **Limited competition in the PCDI space**
 - ◇ Early adopters can reap benefits
 - ◇ Early adopters must be diligent and ensure the technology is capable of delivering on its promise
 - ◇ High Risk – High Reward (everyone with “skin in the game”)

PCDI: An Evolving Part of a Maturing EHR Strategy

- **Develop a good relationship with your vendor so that both parties are “at risk” for the success of the project**
- **Identify early on any areas where you need to work to overcome obstacles to building an integrated customer/vendor team**
- **Hold true to maintaining and fostering the strong business relationship and continue to seek new opportunities for taking calculated risk**
- **After completion of implementation, be sure to celebrate success with your internal team and your external business partners**

About Cooper University Hospital



- **Cooper University Hospital, Camden, New Jersey**
- **The Level 1 trauma center for the southern New Jersey region**
- **550 bed hospital with 75 physicians practices throughout our service area**
- **Recently announced that the *Cooper Medical School of Rowan University* will be housed here**

Device Connectivity Project Goals



- Identify all CUH BioMed devices in the institution
- Identify and select a Device Integration vendor and its technical solution
- Evaluate vendor stability, experience, and product
- Define scope of initial phase

Identifying Devices

- **Dependent upon other sources for device data**
- **Initial inventory of over 12,000 individual devices and components.**
- **Decision was made that the first phase would be monitors on the GE Unity Network (115 monitors)**
- **Once connected to the GE Unity network, vendor needed to “discover” all connected devices**
- **Ensuring that monitors are in the correct mode for data to be accepted by vendor software**

Vendor Selection

- **This is a relatively new discipline, so vendor choice was limited**
- **Major incumbent device vendor did not have a solution**
- **Epic was reluctant to use any vendor except the one with which they have experience**
- **Financial stability of some vendors was in question**
- **Only one had implemented an Epic solution**

Vendor Evaluation



- All vendors completed the IT Tech Eval
- Vendors presented their corporate profile and solution set to BioMed and Cooper IT
- All data gathered was then applied to the IT Vendor Scorecard
- Selection decision was based upon company health, location vs. patient centric, existing device library, cost, flexibility

Implementation Challenges

- **Buy-in from other Cooper departments**
- **Connecting to existing vendor network**
- **“Selling” the solution to nursing**
- **Epic device build**
- **Native device connectivity (Wi-Fi, Ethernet and RS-232)**
- **Vendors would submit new products/solutions at subsequent meetings**

Implementation Challenges II

- **Delays in contract negotiations and review**
- **Time compression - Implementation timeframe squeezed down to 3 weeks!**
- **EHR “flowsheet and device build”**

What Went Well

- **Cooper Clinical Analysts being “in the trenches” for user training and acceptance of new workflow**
- **Our device integration vendor pre-loading device configurations**
- **Epic staff performing build tasks for devices and flow sheets, plus interface creation and elevation**
- **Cooper IT staff building the server, VPN, etc. while contract details were being hammered out**
- **Go-live went so smoothly that Cooper was able to add additional devices**

We Did It!

- **Cooper Team – Emma Brandon, Paul Shenenberger, Rich Valentino, Bill Rowley, Tom Fortino, Laini Sykes, Jon MacMurray, James West, Jeff Forrest, Terri Maerten, Eric McGrier, Ben Benesby and his Cooper BioMed team, CIS Epic team.**
- **iSirona Team – Mary Karr, Patrick Leonpacher, Tommy Wheeler, Bruce Sherr**
- **Epic Team – Kailyn Gee, Deron Austin, Nathan Wilson**

Q & A

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