

HIMSS
Central & Southern Ohio Chapter

transforming healthcare through IT™

Meaningful Use: A Practical Approach



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CSO HIMSS Spring Conference 2013

Agenda



- ✓ About UC Health
- ✓ History with EMR & Technology
- ✓ UC Health EMR Implementation – 2011-2012
- ✓ Project Governance
- ✓ Project Organization
 - ✓ Roles and Responsibilities
 - ✓ Implementation Timeline
 - ✓ Challenges
 - ✓ Outcomes
 - ✓ Accomplishments
 - ✓ EMR Wave Program
- ✓ What's next?

http://www.washingtonpost.com/local/plebes-no-more-at-the-naval-academy/2011/05/24/AFUdQEAH_video.html

- ✓ Tripartite Mission: Patient Care, Research, and Education
- ✓ Governance: President's Policy Council
 - ✓ CEO UC Health
 - ✓ CEO UC Physicians (MD)
 - ✓ Dean UC College of Medicine (MD)
 - ✓ CEO West Chester Hospital (MD)
 - ✓ CEO University Cincinnati Medical Center (MD)
 - ✓ CFO UC Health
 - ✓ VP Education UC Health - Senior Associate Dean for Academic Affairs UC College of Medicine (MD)
 - ✓ VP Research UC Health - Senior Associate Dean for Academic Affairs UC College of Medicine (MD)

About UC Health

Research ...

- ✓ Number of Grants Awarded ... 677
- ✓ Total Dollars Awarded ... \$169.5 Million



Education ...

- ✓ College of Medicine: 1,000 Residents and Fellows



About UC Health

- ✓ Number of Employees: 10,000
- ✓ Number of Physicians: 900
- ✓ Hospital Locations:
 - ✓ University of Cincinnati Medical Center (612 to 650)
 - ✓ West Chester Hospital - 160
 - ✓ The Drake Center (166 LTAC, 103 Skilled Nursing, 102 A.L.)
 - ✓ University Pointe
- ✓ Ambulatory Locations:
 - ✓ 100 + physical locations
 - ✓ 180 Clinics





✓ Drake Center

- ✓ Beds (166 LTAC, 103 Skilled Nursing)
- ✓ Assisted Living (102 beds)
- ✓ Full-service Conference Center for 15-300 people
- ✓ Outpatient Services – OT, PT and Speech Therapies



✓ Drake Center ... Tenants

- ✓ HealthSouth Rehabilitation Hospital
Inpatient rehab for patients
- ✓ VITAS Inpatient Unit
Innovative hospice care
- ✓ Cincinnati Children's Hospital Medical Center
Outpatient rehabilitation therapies for children
- ✓ Mercy Health Physicians—Family Medicine
- ✓ Dialysis Center, Inc. (DCI)



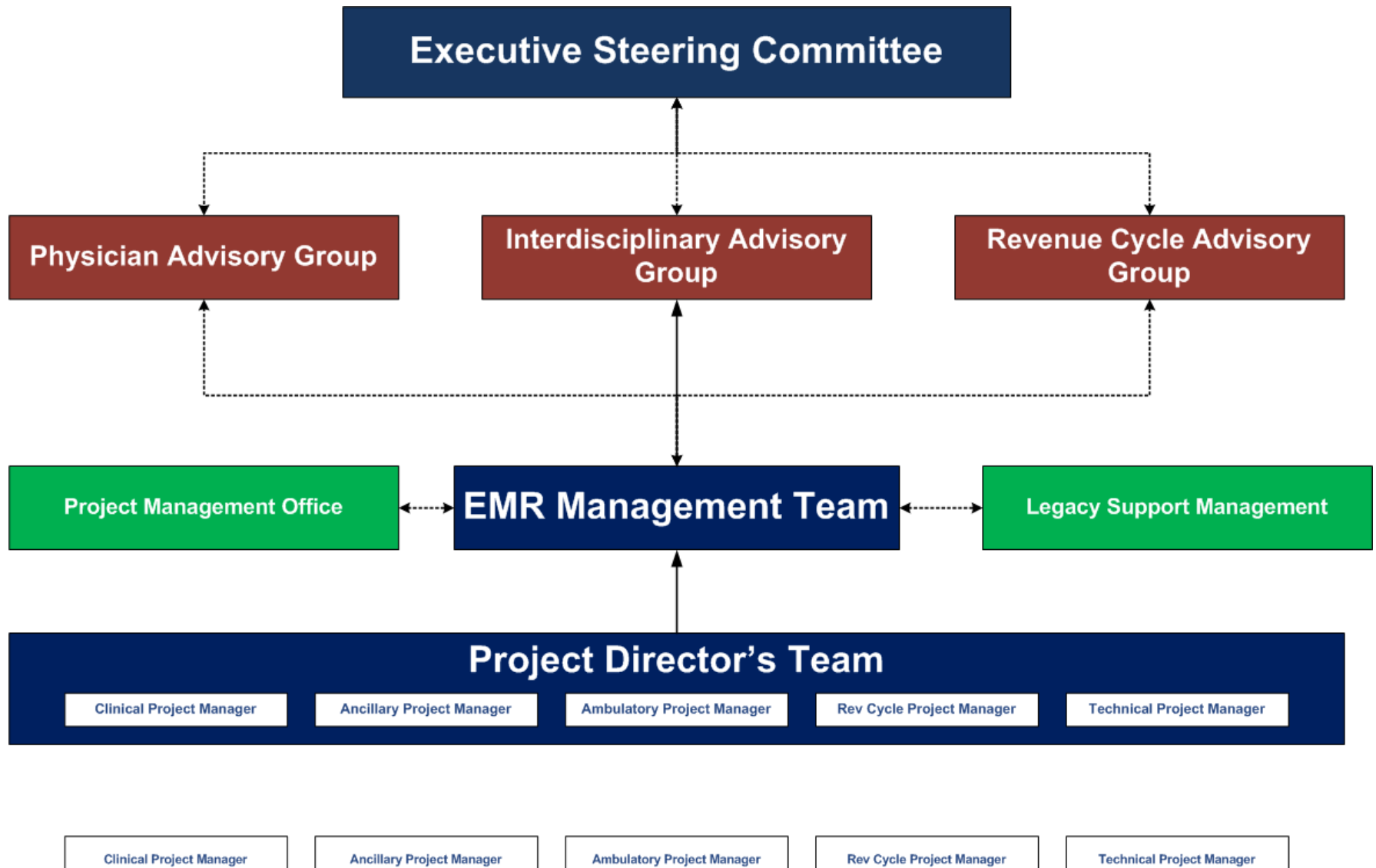


- ✓ Well established enterprise 'best of breed applications' 1997 to 2012.
- ✓ Centralized Clinical (e.g. PACS, RAD, LAB, OR, Pharmacy)
- ✓ CPOE at UH (Bio-Authentication for Ohio Board of Pharmacy certification)
- ✓ Bar Code Medication Administration at West Chester Hospital
- ✓ Ambulatory EMR (7 years ... with over 20 places on paper)
- ✓ Solid IT foundation for clinical processes
- ✓ Best Practices
 - ✓ PMO for IS&T led initiatives
 - ✓ Clinical/Bio-Medical Engineering team as part of IS&T

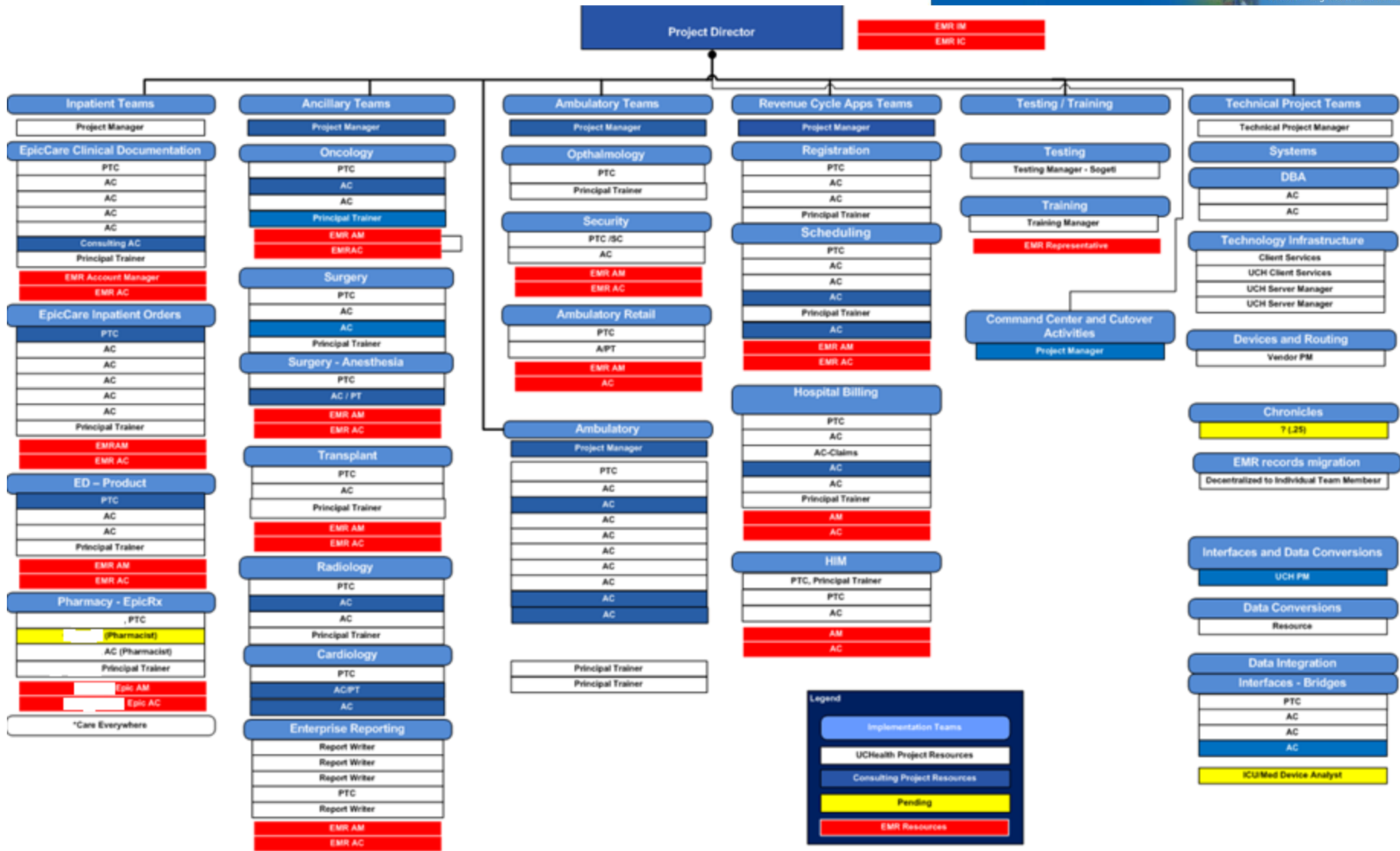
- ✓ Why Big Bang?
 - ✓ Time to market
 - ✓ Physician Stage 1 incentives in 2012
 - ✓ Manage Costs
 - ✓ More accurately predict, minimize and control
 - ✓ Legacy Platform unsupported
 - ✓ Experience with past phased implementation approach

- ✓ Why Single Solution vs. Best of Breed
 - ✓ Clinical Integration between Ambulatory and Inpatient
 - ✓ Minimize Training Costs for organization
 - ✓ Improved communications between care providers and patients

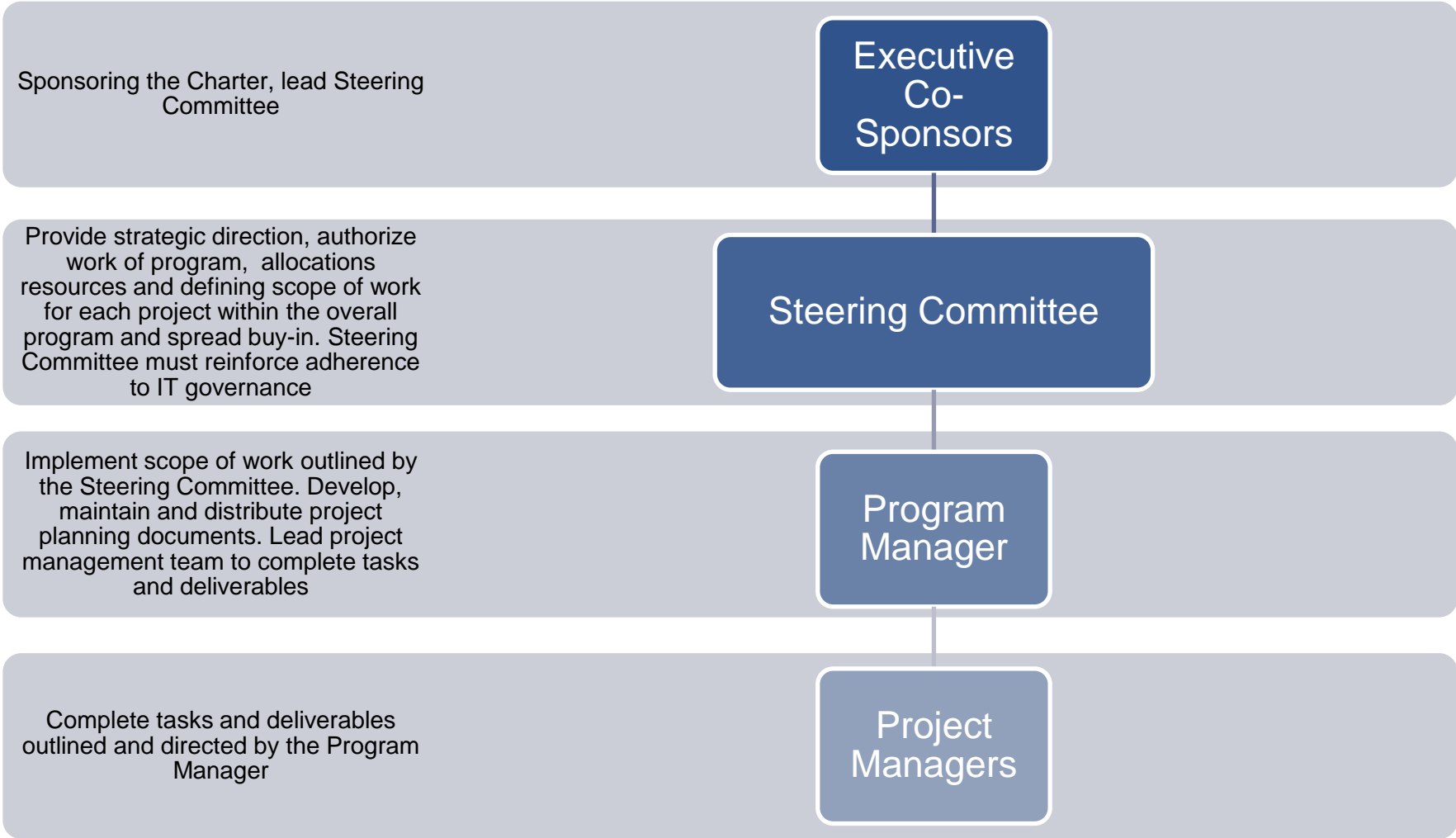
Project Governance



Project Organization



Roles & Responsibilities



EMR Project Timeline



- Board Approval
- Contract Signed
- Hire Internal Resources
- Start 1st EMR Certification
- Acquire Legacy Support
- System Design
- Registration & Scheduling System Build
- Ambulatory System Build/Unit Test
- Ambulatory Integrated Testing
- Inpatient System Build
- *Reg/Sched Go Live
- *Ambulatory Go Live
- Inpatient Integrated Testing
- *Inpatient Go Live
- EMR Optimization



*Each Go live was accompanied with Command Center operations that included "at the elbow" support for two weeks and increased Helpdesk staffing

Challenges

- ✓ Don't know what you don't know.
- ✓ Key Resources hard to find
 - ✓ Tool specific
- ✓ Adoption of new technologies
 - ✓ New Interface Engine
 - ✓ Medical Device Interfaces
 - ✓ Tap Badge
- ✓ “At the Elbow” Go Live support
- ✓ Overwhelming scale of project ... Epic “WAVE”

- ✓ Device setup
 - ✓ Printers (can't adequately test before go live)
 - ✓ Bar Code Scanners – 1447
 - ✓ Tap Badge Readers - 4536
 - ✓ Replacing Bio-Authentication with Tap Badge process
 - ✓ Medical Equipment Integration:
 - ✓ 54 Anesthesia machines integrated to EMR
 - ✓ 146 Ventilators integrated to EMR
 - ✓ 12 Dialysis machines integrated to EMR
 - ✓ 400 Bedside patient monitors ... ECGs, Blood Pressures, Vitals

- ✓ **Access to a common record by multiple users from anywhere**
- ✓ **Improved communications:** Between care providers. Between providers and patients.
- ✓ **Clinical integration** of: Inpatient with Outpatient. Physicians with Hospitals. UC Hospitals with each other.
- ✓ **Competitiveness** with others in the marketplace.

- Accomplished: Project was on-time, on budget & achieved Stage 1 MU in 2012
- Conversion of legacy patient information
 - Total Records converted – 57,781,560 million
 - Error rate – 0.00321%
- Aligned IS&T support structure with appropriate clinical and business departments (e.g. Revenue Cycle - Medical Records)
- CMIO was integrated into the organization.

Meaningful Use:

2012 - 334 providers attested

2013 - Expecting 2 hospitals and 496 providers to attest

Ambulatory Operational Scope:

180+ locations / 1,000+ providers

21,088 Patients using “myUCHealth”

Inpatient locations:

University Hospital (now UCMC) Holmes & Deaconess

West Chester Hospital (University Pointe)

The Drake Center



Rick Haucke & Ajay Sharma

**The EMR Wave
A Practical Approach**

Why call it the EMR Wave Program?



What was the EMR Wave Program



The Wave Program kept track of progress of non-EMR projects, but related to the EMR initiative of 2011/2012.

The Project Manager (PM) of each one of the projects in the EMR Wave Program followed certain protocols and procedures as part of the Project Management Office at UC Health that set the stage for:

1. Weekly Project Status Report
2. The Program Team Dashboard
3. Weekly Check Points

that were required to manage and oversee their specific projects.

- Project Lifecycle
 - Introduction
 - ▶ Defining the Project Purpose, Business Need, Brief Work Description, Funding Source, Areas of Concerns & Sponsorship.
 - PDR (Project Deliverable Review)
 - ▶ Review of items listed above plus in-scope and out of scope, Assumptions, Risks and Issues, Detailed WBS, BAA, DR Plan, Master Test Plan, Audit Log use.
 - PLA (Project Launch Assessment)
 - ▶ Present items above in PDR to IT Leadership and Business Sponsorship.
 - IPR (In Process Reviews) – Anytime between 30 and 90 days of PLA. Checkpoint and Health Status
 - Project Closing (Conclusion Review)
 - ▶ Official Closing of Project, Finalize Financials, Lessons Learned, Closed issues and risks. Sponsor sign off.

Development & Timeline of the Program



- Started with 5 projects – September 2011
 - DataCaptor - Medical Device Integration of Vital Signs Capture
 - Imprivata - Single Sign On Solution
 - PC Deployment
 - UC Physicians - Integration
 - Disaster Recovery & Business Continuity for new EMR System

- February/March 2012 - Program Manager came on board. Consolidated projects into the EMR Wave Program

- By Ambulatory Go Live, Wave Scope had grown to 12 projects

- By Inpatient Wave Scope had grown to 18 projects

Infrastructure Projects in the Wave



- ✓ Disaster Recovery and Business Continuity
- ✓ DataCaptor
- ✓ PC Deploy - Bedside
- ✓ PC Deploy – ED, NICU, SICU, OR
- ✓ Streamline - Added at TDC
- ✓ Imprivata
- ✓ Imprivata Tap Badge Enrollment
- ✓ Epic Production Support
- ✓ The Drake Center and West Chester Hospital Bar Code Scanner Replacement
- ✓ Inpatient Standardization
- ✓ UC Health Surgical Hospital Standardization
- ✓ UC Physicians Integration
- ✓ UC Physicians Standardization
- ✓ Outpatient Pharmacy Upgrade
- ✓ Inpatient Downtime BCA
- ✓ Dragon Microphones
- ✓ Printer and Workstation Build
- ✓ UCMC Bar Code Scanner Replacement

Wave Program Project Repository



Wave Program - Windows Internet Explorer provided by The Health Alliance

http://sharepoint.healthall.com/shared/epic/Wave%20Program/Forms/AllItems.aspx?RootFolder=%2fshared%2fepic%2fWave%20Program%2fEpic%20Install&Fol

File Edit View Favorites Tools Help

Wave Program

Epic Resource Site Intranet IS&T Site Help Site Actions

Epic Resource Site > Wave Program > Epic Install

Wave Program

View All Site Content

Access Request

Global Documents

- Communications
- Cross Team Integration
- Document Templates
- Project Plans and Timeline
- Project Org and Staffing
- Progress and Status Reports
- Project Meetings
- Project Policy and Procedures
- Risk Management
- Testing
- Training Documentation
- ReEngineering and Validation Sessions

Epic Wave Program

- Epic Install
- ICD10
- ICD10 (Standalone Site for Testing Only)

Project Team Sites

- Ancillary Team

Type	Name	Modified	Modified By	Checked Out To
Folder	Bar Code Scanner Replacement-Westchester Drake	2/12/2013 2:08 PM	Haucke, Rick	
Folder	Consolidated Program Documents	2/18/2013 3:51 PM	Gateley, Joe	
Folder	DataCaptor	2/18/2013 3:51 PM	Gateley, Joe	
Folder	Docutrack	2/18/2013 3:51 PM	Gateley, Joe	
Folder	Dragon Dictation Infrastructure	2/18/2013 3:52 PM	Gateley, Joe	
Folder	ED PC Deployment	2/18/2013 3:52 PM	Gateley, Joe	
Folder	Epic DR	2/18/2013 3:52 PM	Gateley, Joe	
Folder	Epic In-Patient Standardization	2/18/2013 3:52 PM	Gateley, Joe	
Folder	Epic Production Support	2/18/2013 3:52 PM	Gateley, Joe	
Folder	Imprivata	2/18/2013 3:51 PM	Gateley, Joe	
Folder	Imprivata Tap Badge Enrollment	2/18/2013 3:51 PM	Gateley, Joe	
Folder	In-Patient Downtime BCA	2/18/2013 3:51 PM	Gateley, Joe	
Folder	Outpatient Pharmacy Upgrade	2/18/2013 3:51 PM	Gateley, Joe	
Folder	PC Deployment	2/18/2013 3:51 PM	Gateley, Joe	
Folder	Print Routing	2/18/2013 3:51 PM	Gateley, Joe	
Folder	Streamline	2/18/2013 3:51 PM	Gateley, Joe	
Folder	UCP Integration	2/18/2013 3:51 PM	Gateley, Joe	
Folder	UCPSH Standardization	2/18/2013 3:51 PM	Gateley, Joe	

Local intranet 100%

Wave Program Reporting



Epic Wave Program Weekly Project Status Report RBLEH 2012-6-29.doc [Read-Only] [Compatibility Mode] - Microsoft Word

Check Out Required To modify this server document, you must check it out. [Check Out](#)

UC Health

Weekly Status Report - (UCP Integration)
 Epic Wave Program (EWP)
 Report Date: (Friday, 6/29/12) Period From: 6/25/2012 - 6/29/2012

Key Accomplishment this Week:

Activity
1. UCP Integration - Updated master spreadsheet with workstations that need signature pads and tap badge readers for 100% of the sites
2. UCP Integration - Created checklists for peripheral device deployment for 100% of the sites
3. UCP Integration - Identified Imprivata installation mode (Individual vs. kiosk) for 100% of the sites
4. UCP Integration - Created process for working with the managers to get their employees enrolled and have their UC Health network accounts validated
5. UCP Integration - Created process and checklists for activating all Imprivata tap badge readers

Status Overview:

(One line Describing the Current Temperature or Pulse of the project)

- UCP Integration - Peripheral device deployment is 93% complete and a daily email is being sent to keep the team apprised of the progress. 23% of the Imprivata workstations have been activated. The process for standardization of the UCP workstations has been moved up to coincide with the Imprivata installation for any workstation that needs to be in "kiosk" mode.

Deliverables or Tasks

Project Name & Task	Status	Baseline Due Date	Estimated End Date	% Comp	Owner	Comments
(examples below)	● ● ●	3/9/12	3/12/12	50%	Matt	This will be delayed due to...
UCP Integration-Deployment schedule for remaining R&R PCs	● ● ●	5/18/12	5/23/12	95%	Becki Bleh	Working with Jerry Poppe and Ken Wigle to complete.
UCP Integration - Schedule for testing and deployment of peripheral	● ● ●	5/23/2012	5/23/2012	95%	Becki Bleh	Working with Application Owners to complete task.

Page: 1 of 2 Words: 537 80%

- EMR Wave accomplished the following Objectives
 - Report out the Progress and Issues
 - Used a Single Dashboard view to report to EMT
 - Mimicked EMR project reporting standards
 - Collaboration & Communication between projects was facilitated.
 - Plan for Project Risks better as there were interdependencies between the various projects.
 - Leadership was able to leveraged a Single Project Repository to view Project Status Reports
 - ▶ Used for Weekly Report to EMT for decision making purposes.

Wave Program Summary



In summary, The EMR Wave Program with the organizational strategy to establish a balanced, executable plan that will help achieve goals. We were able to support that strategy by:

- Maintaining program alignment with the EMR implementation
- Budgeting and Allocating financial resources appropriately
- Allocating human resources where required
- Measuring component *project* contributions
- Managing strategic risk

What's Next?

- EMR Upgrades
- MU Stages to end of decade
- Continuous Physician Practice Integration
- ICD-10 – Once in a generation project
- Clinical Informatics
- Support of BYOD

