Meaningful Use: A Practical Approach

Jay Brown – Sr. VP & CIO, UC Health
Rick Haucke – Manager, IS&T, PMO, UC Health
Ajay Sharma – FHIMSS, Sr. Manager, Sogeti USA, LLC

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?

About UC Health

✔ 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

DISTINGUISHED RESEARCH:
George Deepe Wins 2013 Rieveschl Award for Distinguished Scientific Research
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
About UC Health

✔ 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
About UC Health

✓ 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)
History with EMR & Technology

- 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
UC Health EMR Implementation 2011-2012

- 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

Executive Steering Committee

- Physician Advisory Group
- Interdisciplinary Advisory Group
- Revenue Cycle Advisory Group

- Project Management Office
- EMR Management Team
- Legacy Support Management

Project Director’s Team
- Clinical Project Manager
- Ancillary Project Manager
- Ambulatory Project Manager
- Rev Cycle Project Manager
- Technical Project Manager
Project Organization

- **Inpatient Teams**
  - Project Manager
  - EpicCare Clinical Documentation
    - PTC
    - AC
    - AC
    - AC
    - Consulting AC
    - Principal Trainer
      - EMR AM
      - EMRA
      - EMR AC
    - EMR Account Manager
    - EMR AC
  - EpicCare Inpatient Orders
    - PTC
    - AC
    - AC
    - AC
    - AC
    - EMRAM
    - EMR AC
  - ED – Product
    - PTC
    - AC
    - AC
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    - EMR AM
    - EMR AC
  - Pharmacy - EpicRx
    - PTC
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  - Cardiology
    - PTC
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    - AC
    - Principal Trainer
    - AC
    - AC
    - Enterprise Reporting
      - Report Writer
      - Report Writer
      - Report Writer
      - PTC
      - EMR AM
      - EMR AC
  - Ambulatory Teams
    - Project Manager
    - Oncology
      - PTC
      - AC
      - AC
    - Security
      - PTC/AC
      - AC
      - EMR AM
      - EMR AC
    - Surgery
      - PTC
      - AC
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      - EMR AC
    - Surgery - Anesthesia
      - PTC
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      - EMR AC
    - Transplant
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      - EMR AC
    - Ambulatory Retail
      - PTC
      - APT
      - EMR AM
      - EMR AC
  - Ambulatory Billing
    - PTC
    - AC
    - AC
    - AC
    - AC
    - AC
    - Hospital Billing
      - PTC
      - AC
      - AC
      - AC
      - AC
  - HIM
    - PTC
    - Principal Trainer
    - AC
  - Revenue Cycle Apps Teams
    - Project Manager
    - Registration
      - PTC
      - AC
      - AC
      - EMR AM
      - EMR AC
    - Scheduling
      - PTC
      - AC
      - AC
      - AC
      - Principal Trainer
      - EMR AM
      - EMR AC
    - Testing / Training
      - EMR Representative
      - Training Manager
      - Vendor PM
      - Project Manager
Roles & Responsibilities

Executive Co-Sponsors

Steering Committee

Program Manager

Project Managers

Sponsoring the Charter, lead Steering Committee

Provide strategic direction, authorize work of program, allocations resources and defining scope of work for each project within the overall program and spread buy-in. Steering Committee must reinforce adherence to IT governance

Implement scope of work outlined by the Steering Committee. Develop, maintain and distribute project planning documents. Lead project management team to complete tasks and deliverables

Complete tasks and deliverables outlined and directed by the Program Manager
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

18 months
January, 2011
February, 2011
March, 2011
March - May, 2011
July - November, 2011
December, 2011 – April, 2012
December 2011 to June end 2012
12 months
April 2012 to June 2012
December, 2011 – October, 2012
April 12, 2012
July 10, 2012
August 2012 to October 2012
October 27, 2012
October 27, 2012 till date

*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”
Challenges

✓ 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
Outcomes

✓ 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.
Accomplishments

- **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.
Accomplishments

**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
The EMR Wave
A Practical Approach

Rick Haucke & Ajay Sharma
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.
UC Health Project Lifecycle

- **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

## Epic Resource Site

### Wave Program

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Wave Program Reporting

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:

- UCP Integration - Updated master spreadsheet with additions that need signature tabs and signing delegate for 103 of the URV.
- UCP Integration - Added shortcuts to permit business components for 103 of the URV.
- UCP Integration - Identified maximum a maximum enrollment cap (103/191) for 101 of the URV.
- UCP Integration - Created process for merging the managers' letterhead envelopes and letterhead for 103 of the URV.
- UCP Integration - Created process for activating an enrollment tab for 103 of the URV.

Status Overview:

- One line describing the current status or role of the projects

Deliverables or Tasks

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Wave Program Accomplishments

- 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.
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