



Going From Zero to Warp Speed in 5 Years

Lessons learned
Next steps

2001: An IT odyssey

- 2001:
 - Emerging from breakup of Stanford-UCSF merger.
 - Inherited IDX Last Word
- 2003:
 - Operational Leadership Group formed
 - Work groups formed.
 - Clin doc, orders, PIMS, pharmacy
 - 8 hr weekly commitment for staff and admin
- 2004: build begins
 - IDX clin doc product now CareCast
 - Gemini orders.
 - FloCast
- 2005: activation begins in May
 - Hire first RN informaticist. 4 onboard by end of year
 - Activation of clin doc on adult med surg units
- 2006:
 - Roll out of clin doc in pediatric acute care
 - Enterprise Orders
 - Development partner on pharm and orders
 - Starting work on critical care product and multiple other products/reports





UCare – Project Scope

Phase I

- Acute care EMR
 - Results retrieval
 - Documentation
 - Providers
 - Nursing
 - Ancillary

Phase II

- cPOE
- Pharmacy
- Basic Clinical Decision
 - Support and reporting
- Critical Care



Operational Leadership Group

- Executive Director, Clinical Support Services
- Medical Director of IT
- IT Director
- Director, Adult Services
- Director, Home Care
- Director, Children's Hospital
- Director, Clin Labs
- UCare Project Director



Clin Doc work group

- Led by Vendor rep and internal IT personnel with nursing background
- Referee'd by 2 Nursing Directors
 - adult nursing
 - Children's Hospital
- Multiple units represented
 - Adult MS
 - Medicine, Surgery, Onc, BMT, Transplant, cardiology, etc
 - Adult critical care
 - Cardiac, neuro, general
 - Pedi MS
 - Med Surg, Onc/BMT, Rehab, PCRC
 - Pedi critical care
 - Neonatal, pediatric, cardiac
 - Perinatal



Clin Doc workgroup

- Multiple stakeholders with population specific requirements
- Had to review every detail of care and documentation
- Had to agree on most details
- Hours, days, weeks devoted to
 - Allergies
 - Tubes and drains
 - I's & O's



Roll out from Nursing's perspective

- Documentation was completely pen and paper
- Some had experience with viewing online labs
- Everyone was wedded to their flowsheets
- Aging work force + new grads
 - Aging work force
 - used to Pong
 - Questionable computer skills
 - New Grads
 - used to Nintendo, Play Station, X Box
 - High expectations of functionality



Not so secret key to successful activation: ***Change Management***

- Communication
- Education
- End user support

Communication:

It was all UCare all the time

- Clear, frequent, continual communication with all stakeholders
 - Executive level, administration, management
 - Faculty, residents, staff
 - all end users
- Lessons learned:
 - Identify champions in each group/service
 - Identify nay-sayers but don't spend 80% of your time trying to convince them.
 - Spend efforts on champions and early adopters
 - Validate decisions with end users not involved in project early and often
 - Never underestimate the power of chocolate – use liberally during roll out





Education

- What kind?
- How much?
- How close to go-live?
- How much training for faculty and staff not using – just viewing?
- Who develops the curriculum?
- Who teaches it?
- How to assess competency?

Support

- Strong, visible, accessible IT support
 - Command center
 - 24/7 on site resources
 - Sufficient #s to address multiple, concurrent, unexpected issues
- Super Users
 - Specially trained end users out of staffing count at ratio of 1:4
 - End users of the same discipline seem to be the most effective support at point of care.
- Executive/administrative/faculty support and expectations for compliance



Confounding factors

- Big bang vs. small increments of change
- Some units are up, some aren't but patients flow through both.
- Parts of documentation up but some aren't
- Some disciplines are up and some aren't
- What happens when RNs from non-activated units float to live units?
- No matter what, it's going to take more time than paper
- It doesn't have Nintendo functionality





Disaster planning

- Downtime policies and procedures
- Downtime codes (Code IT)



The 80 – 20 Rule

- Can't build for every contingency

BUT...

- Some populations are so different that this rule has to be broken for patient safety.
 - Pediatrics
 - Obstetrics

Pediatrics in an Adult setting

- Not little adults
- Don't fit in adult assessments, parameters or measures
- Don't like broccoli
- Don't go to SNFs
- Don't sign consents
- Don't metabolize meds like adults
- Require weight based dosing
- Meds, IVs, fluids present big potential for harm



UCSF's response to Pediatric conundrum

- Customized flowsheet to accommodate Pediatric needs
- Delayed implementation of Orders
- Became development partner for next version of pharmacy which will accommodate wt based dosing
- Involved pediatric clin pharmacists, MDs and RNs in development
- Involved multiple pediatric end users in validation sessions





Future developments

- Care Plans
- Development of critical care product
- Tablets vs COWs
- Improving work flow
- Reevaluating critical role of informaticists in ever changing environment
- Improve functionality and user ease in all products

Desired Future State

- Integrated Medical Record
- Inpatient | Ambulatory EMR

