

UCSF Medical Center



UCSF Children's Hospital

UCSF Medical Center

“A Day in the Life of a Nurse Informaticist”

Using the Nursing Informatics Toolkit for UCSF Medical Center projects and lessons learned while promoting best practices.

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Department of Nursing

March 6, 2009

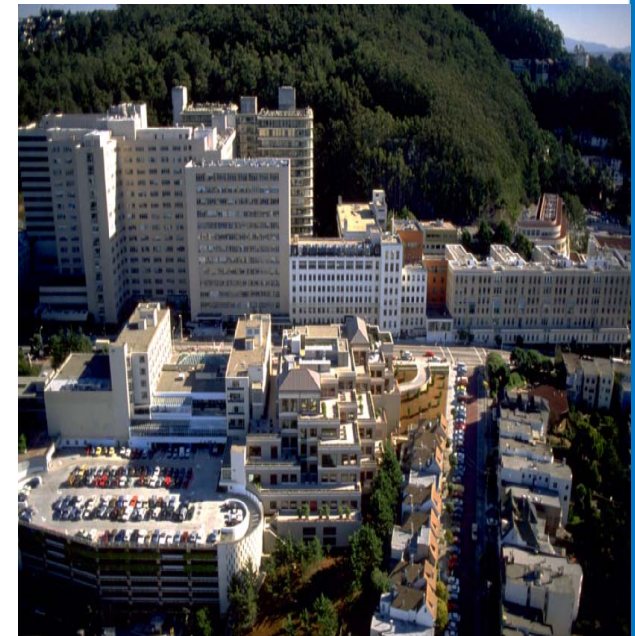
Objectives

- **Describe the Role and structure of Clinical Informatics at UCSF Medical Center**
- **Discuss pertinent informatics projects both past and current**
- **Discuss Challenges and lessons learned**
- **Describe the future direction of Nursing Informatics**



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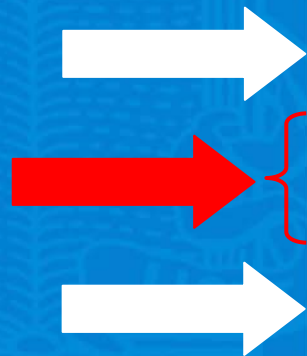
- **Two site, 620 bed academic medical center**
 - Children's Hospital-within-a-Hospital
 - *102 clinics with 700,000 ambulatory visits annually*
 - *~178k patient days*
 - *~28k discharges*
- **About 18,600 faculty and staff (full & part time)**
 - *2,200 RNs*
 - *900 Physicians and surgeons*



UCSF current status – GE Centricity Enterprise / UCare

EMR Adoption Model

Stage	Cumulative Capabilities	2007 Final	2008 Final
Stage 7	Medical record fully electronic; HCO able to contribute CCD as byproduct of MER; Data warehousing in use	0.0%	0.4%
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	0.8%	1.4%
Stage 5	Closed loop medication administration	1.4%	1.5%
Stage 4	CPOE, CDSS (clinical protocols)	2.2%	2.5%
Stage 3	Clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology	25.1%	35.7%
Stage 2	Clinical Data Repository, Controlled Medical Vocabulary, Clinical Decision Support, may have Document Imaging	37.2%	31.4%
Stage 1	Ancillaries – Lab, Rad, Pharmacy – all installed	14.0%	11.5%
Stage 0	All Three Ancillaries Not Installed	19.3%	15.6%



Visit <http://www.himssanalytics.org> to see the country's current EMR Adoption Model Status

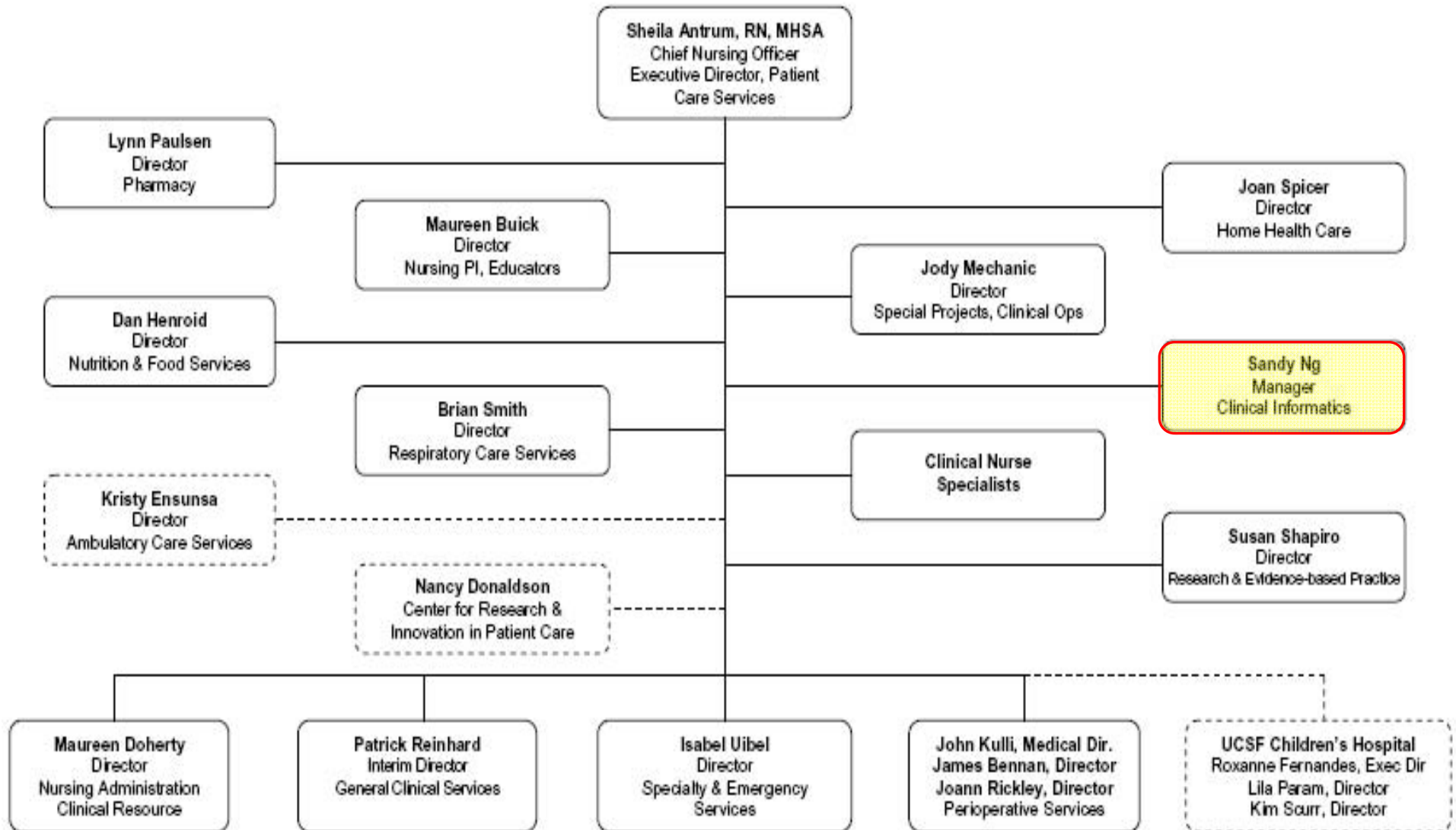


Clinical Informatics at UCSF

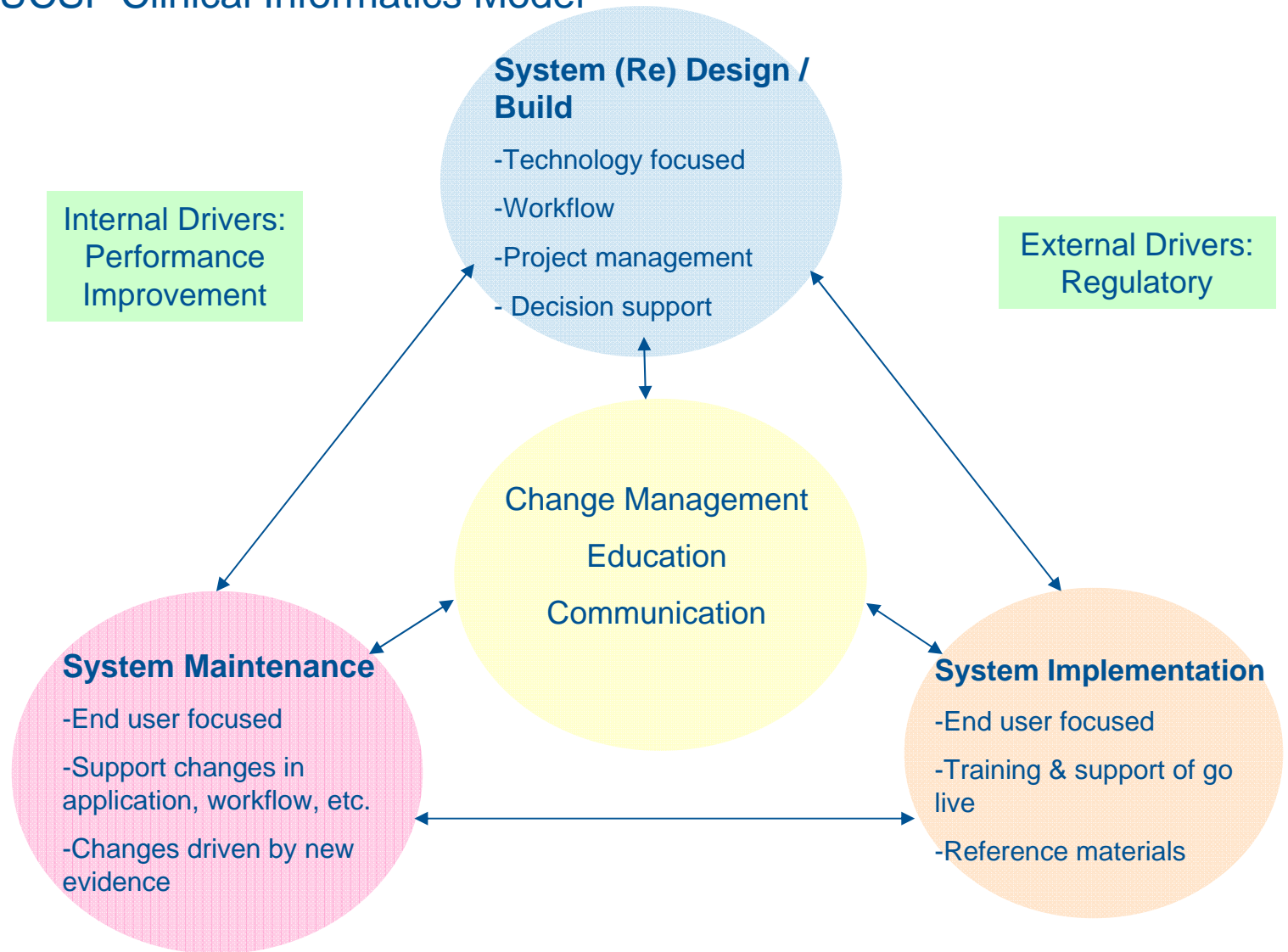
- **Team of 6 FTEs**
 - 4 Informaticists – Master's prepared RNs
 - 1 Informatics Associate – Associate's prepared RN
 - 1 Analyst
- **Support Groups**
 - Documentation: All Nursing (RN, PCA, etc.), Ancillaries (RT, Rehab, Care Coordination, etc.)
 - Reporting: All Nursing, Ancillaries & Regulatory / Quality



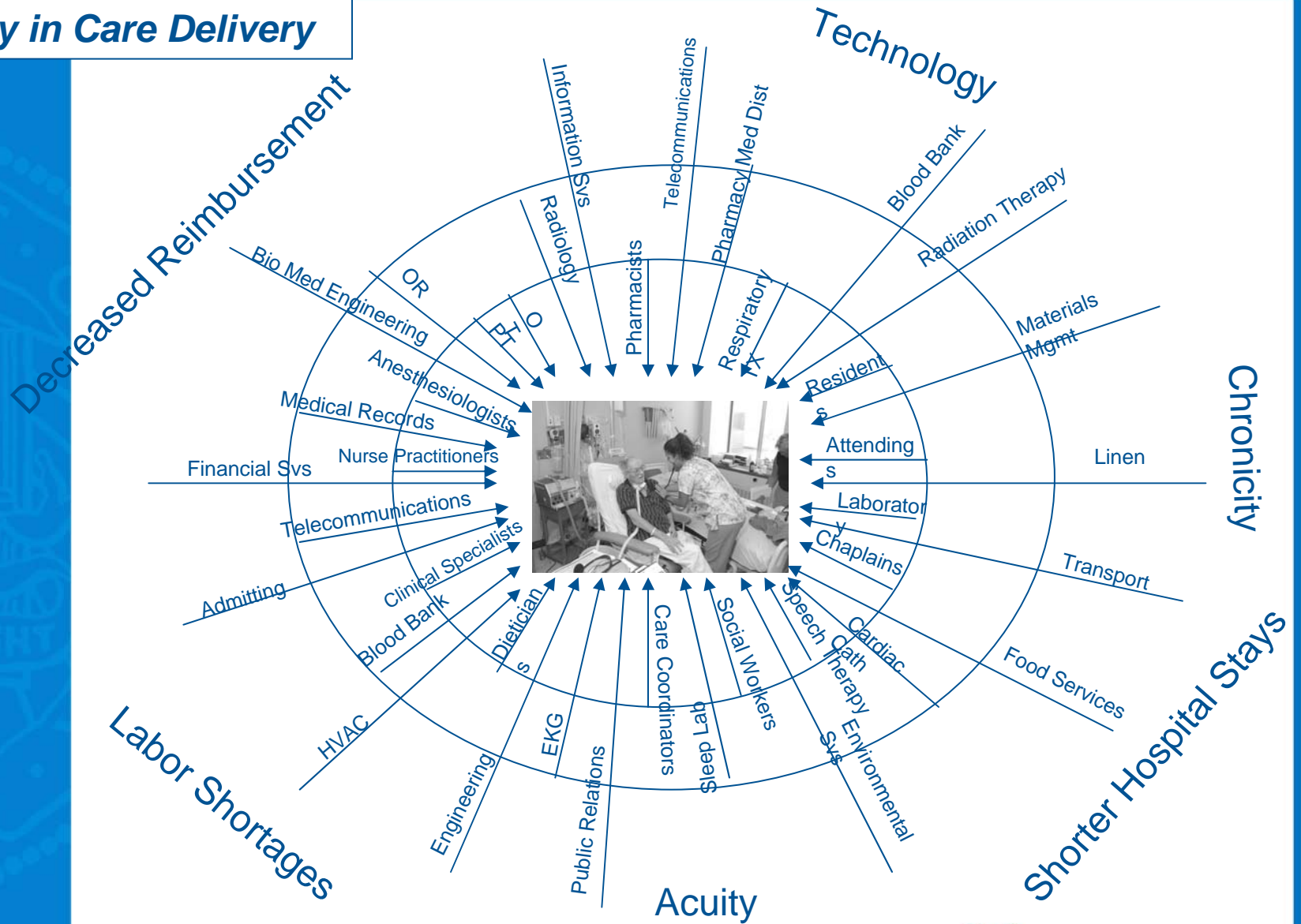
Nursing & Patient Care Services



UCSF Clinical Informatics Model



Complexity in Care Delivery



© Marjorie S. Wiggins, RN, MBA, Vice President of Nursing/Chief Nursing Officer, Maine Medical Center and UMDNJ School of Nursing

Global Imperatives Driving Clinical Informatics

- **Financial Imperative**
 - *Patient Flow: admission, discharge & transfer*
 - *Billing and charge recovery*
- **Regulatory Imperatives**
 - *Staffing*
 - *Ongoing monitoring*
 - *Maintaining compliance*
- **Clinical Imperatives**
 - *Improve patient safety and quality*
 - *Utilize and contribute to evidence based practice*
 - *Increase practice efficiencies*



Clinical Projects at UCSF as a result of Medical Center Imperatives

UCSF Medical Center



UCSF Children's Hospital

System Maintenance Projects

Clinical & Regulatory drivers

- *New Hire orientation and ongoing staff education*
- ***Clinical documentation – Flowsheets, notes, etc.***
- *System enhancements*
- ***Reports***

Financial drivers

- ***Hardware maintenance***



UCare Clinical documentation

TEST, BUFFY MRN: 85000241 Gender: F
 DOB: 02/14/1963 Age: 45 Years
 Visit:

FlowSheet Charting AMMISSION Add Flowsheet Data

Previous Assessments List

Learning Assessment

Summary Note

- LANGUAGE & LEARNING:
 - Pt Language Spoken
 - Pt Language Read
 - Caregivr Lang Spoken
 - Caregiver Lang Read
 - Interpreter Needed
 - Way of Learning
- LEARN & COMMUNICATE
 - No Problms Id by Pt
 - Memory Problems
 - Difficulty Reading
 - Poor Eyesight
 - Glasses to Read
 - Poor Hearing
 - Hearing Aid
 - Other Problems
- BARRIERS TO LEARNING
 - No Barriers
 - Non-English Speaking
 - Unable to Read
 - Unable to Speak
 - Impaired Cognition
 - Hearing Deficit
 - Visual Deficit
 - Attention Deficit
 - Pain
 - Anxiety

Language & Learning Needs

Templated From: 9-Oct08 9:16am

	Result:	Comment:
Patient Language Spoken:	Spanish	
Patient Language Read:	Spanish	
Caregiver Language Spoken:	Spanish	
Caregiver Language Read:	Spanish	
Interpreter Needed:	Yes	
Easiest Way to Learn:	Written	

If interpreter used for patient care, go to "Add a Note" tab and enter an "Interpreter Note"

Add Skip Back

New Column Update Change Column Time Audit One Column Older One Column Newer Back

FLWSHEETS ADD A NOTE ACUT

WEIGHT/MEASUREMENTS

- Nursing ADULT Flowsheets
 - Admission Assessment
 - Limited Stay Assessment
 - V5 / Pain Assessment
 - Acute Care Acuity
 - Critical Care Acuity
 - Systems Assessment Flowsheet
 - Adult Safety/Precautions/ADL
 - Diet Nutrition Assessment
 - Intake and Output Flowsheet
 - IV Flowsheet
 - PCA/Epidural/PNI Flowsheet
 - Pressure Ulcer/Incision/Wound Assessment
 - Drain Flowsheet
 - Point of Care Testing Flowsheet
 - Insulin Adult Flowsheet
 - Special Infusions Flowsheet
 - Peritoneal Dialysis Flowsheet
 - CBI Flowsheet
 - EEG Seizure/Telemetry Flowsheet
 - Detailed Neuro Assessment
 - Detailed GU Assessment
 - Detailed Cardiovascular Assessment
 - Swallow Assessment
 - Med-Surg Restraint Assessment
 - Behavioral Restraint Assessment
- Pt Care Assistant ADULT Flowsheets
- Nursing PEDIATRIC Flowsheets
- Pt Care Assistant PEDIATRIC Flowsheets
- Nursing OB Flowsheets
- Nursing NB Flowsheets
- RT Flowsheets
- PICC Flowsheet
- Infection Control Flowsheet
- Pharmacy Vaccination Flowsheets

Lessons Learned

- **Suggestion Box**

- Staff sends direct communication about UCare application enhancements
- Monitored by CIS and Informatics

The screenshot displays a web-based suggestion box interface. At the top right, a small box labeled "Suggestion Box" contains a "Suggestions" button. The main form area is titled "For Communication of UCare Suggestions" and includes a "Select UCare Group Below" section with radio buttons for "Providers" and "All Other Users". Below this is a text instruction: "Please enter a phone # and email address in the text for follow-up communication. Failure to enter accurate contact information may prevent followup." The "Message Text" section features a large text area and an "Enter Editor" button.



Reports

Pain Assessment / reassessment

Room / Bed	Patient name	MRN	Intervention Clinician	Pain Intervention	Intervention Date	Intervention Time	Assessment Type	Reassessment Interval	Pain / Discomfort	Pain Intensity	Acceptable Level
L103 1103-L1	Test, tiger15	85004689	Rogers, Vern	PRN IV PRN IV	12-22-09	12:10	Assessment	8 Minutes 20 Minutes	Yes	9	3
						12:18	Reassessment		Yes	7	3
						12:38	Reassessment		Denies	0	3
L103 1103-L1	Test, tiger15	85004689	Rogers, Vern	PRN PO	12-22-09	13:30	Assessment	60 Minutes	Yes	9	3
						14:30	Reassessment		Denies Pain	0	3
L103 1103-L1	Test, tiger15	85004689	Rogers, Vern	PRN IM	12-22-09	12:10	Assessment	8 Minutes	Yes	9	3
						12:18	Reassessment		Denies Pain	0	3
L103 1103-L1	Test, tiger15	85004689	Rogers, Vern	PRN PR	12-22-09	12:10	Assessment	8 Minutes	Yes	9	3
						12:18	Reassessment		Denies Pain	0	3

Total Interventions: 5



System Implementation Projects

Clinical & Regulatory drivers

- ***Automated Medication Administration Record – aMAR***
 - Triggered by a regulatory driver, but primarily for increased patient safety
 - Began mid Nov 2007 – present

Financial & Clinical drivers

- ***C5 Tablet roll out***



Example

UCSF MEDICAL CENTER/UCSF CHILDREN'S HOSPITAL MEDICATION ADMINISTRATION RECORD

ADMINISTRATION PERIOD: 07:01 NOVEMBER 02, 2007 - 07:00 NOVEMBER 03, 2007

START STOP		MEDICATION	DOSE/ROUTE/FREQ	0701-1500	1501-2300	2301-0700
10/24 15:00		DOCUSATE 250 MG CAP (eq. to COLACE) HOLD FOR LOOSE STOOLS. DISCONTINUE ORDER IF PATIENT UNABLE TO TAKE PO MEDICATIONS	250MG = 1 CAP ORAL TWICE DAILY	0900	1800	
		ord: 158				
11/02 18:00		FAMOTIDINE 20 MG TAB (eq. to PEPCID)	20MG = 1 TAB ORAL TWICE DAILY		1800	
		ord: 454				
11/02 21:00		METOPROLOL 50 MG TAB (eq. to LOPRESSOR)	50MG = 1 TAB ORAL EVERY 12 HOURS		2100	
		ord: 456				
11/02 21:00		HOLD AND CALL HO IF SBP < 90 OR HR < 55 CONTINUE FOR 7 DAYS POST-OP TO _____				
10/24 22:00		SENNOSIDES 8.6 MG TAB (eq. to SENOKOT)	2TABS ORAL ONCE DAILY AT BEDTIME		2200	
		ord: 202				
11/02 22:00		HEPARIN 5,000 UNITS INJ SYRINGE	5000 UNIT = 0.5 ML SC EVERY 8 HOURS		2200	0600
		ord: 455				
11/02 22:00		CEFTIZOXIME 1 GM IV ADV VIAL (eq. to CEFIZOX)	1GM = 1 VIAL IV EVERY 8 HOURS		2200	0600
		ord: 453				
11/02 22:00		IF DRUG—DO NOT DISPENSE WITHOUT CLARIFICATION				
				---CONTINUED ON NEXT PAGE---		
INITIALS/SIGNATURE				X MAR MEDS		
				X _____		
				SIGNATURE		
ALLERGIES: NO KNOWN DRUG ALLERGIES:				TEST, VALIDATE MRN: 4156813640		TEST TEST VISIT: 4156813640
				DOB: 05/22/1970		3Y YR MALE
				ADMIT: 10/18/07		190 cm 82 kg
				PHYSICIAN:		

PRINTED: 11/02/07 14:21

FOR PERIOD: 07:01 November 02, 2007 - 07:00 NOVEMBER 03, 2007

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UCSF Medical Center



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aMAR Lessons learned

- **Standardize, standardize, standardize**
- **Nursing practice & perception versus pharmacy oversight regulation – metrics, metrics, metrics**
- **Rumor control / Quick definitive decision making**
 - *Needed right players – ex: Lack of MDs with ICU*



UCSF Hardware

- Hardware
 - Desktop PCs
 - COWs
 - WOWs
 - C5 Tablets – no biometrics
 - Dinamap Carts

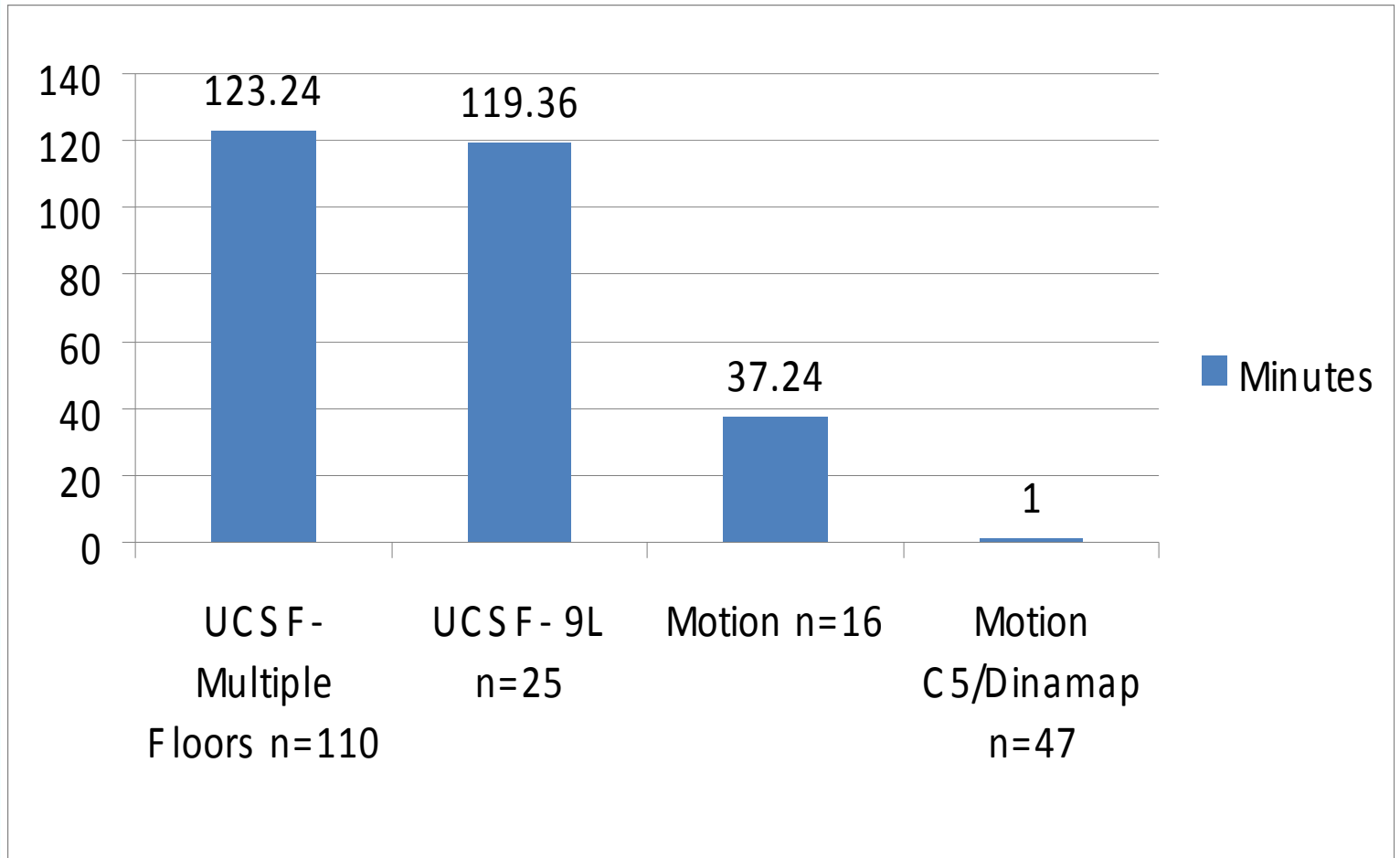


C5 Motion Tablet

- Reduced log in times
- Increased efficiency & accuracy
- Increased real time charting



Time from Vital Sign Acquisition to Recording in UCare



Manual Data Transcription

Take Vital Signs-Pulse,
Systolic/ Diastolic BP,
Respiration
Temperature, O2 Sat



Handwrite to paper
notes



Record into UCare

6 discrete
data
elements
manually
transcribed



6 discrete
data
elements
manually
transcribed



12

Chances
for error



Motion C5 / Dinamap Data Transcription

Take Vital Signs-Pulse, Systolic/
Diastolic BP, O2 Sat, Respiration,
Temperature,



4 data elements flow into UCare
Manually enter 2 data elements
into UCare

2 discrete
data
elements
manually
transcribed

= 2

83%



Chances for error



Point-of-Care Documentation

- During the pre-implementation observation period, there was no POC documentation done
- Following implementation, nurses self-reported that within 1-2 days of using the MCA they had increased their point of care documentation by 20-25%
 - *Intake and output*
 - *Pain assessment*
 - *Blood glucose readings*
 - *Physical assessment data*



C5 Motion Tablet & UCare eMAR

Successes	Challenges
<ul style="list-style-type: none"> • Mobile and light weight option provided • Larger visual display is available • Accommodates broad demographics of users • Secured storage option available • Small footprint in med area and patient room • Ability to retain current Vitals Capture hardware • Flexibility in use and workflow • Login time is streamlined 	<ul style="list-style-type: none"> • Suite of hardware does not address centralized supplies and meds and potential time-savings • Increased maintenance and support due to greater amount of hardware and usage • Users who want larger visual displays must push C5+WOW through hallway and in rooms
Assumptions	Conditions / Constraints
<ul style="list-style-type: none"> • Hardware is intended for users to primarily perform the eMAR workflow with additional documentation capability if desired • Minimal to no documentation necessary in med areas • Change management activities will be carried out as part of UCare Pharmacy deployment during eMAR training • eMAR must be available during med preparation and at the patient bedside • Current nursing policies are followed, with ability to be revised per future workflows • Ratio of existing equipment, including laptop WOWs (COWs), will be adjusted per unit to optimize flow 	<ul style="list-style-type: none"> • Power management issues are resolved • Performance speed issues are resolved • Hardware reliability issues are resolved • CEUI display issues are resolved • Screen size issues are resolved • Hardware maintenance, support, research and development is structured • Users must comply with Infection Control standards regarding equipment disinfection • C5+WOW+Dinamap configuration needs to be assembled for further evaluation



Hardware issues & solutions

- **Power management challenges**
- **Peripheral hardware break down**
 - Informatics: Twice weekly round on units
 - Field Service (FS) “Proactive approach” providing preventive support
- **Identification and status of hardware being serviced**
 - Standardized “Down COW” sign on them with ticket information
 - COW website
- **Ownership**
 - Challenge: Hot potato phenomenon
- **Cleaning and Maintenance**
 - Contract with various departments for clarity on maintenance schedule
 - FS: Computer maintenance schedule / unit (twice a year)
 - Biomed engineering: Dinamap part of carts
 - Hospitality / Environmental engineering: Fan filter changes
 - Nursing units: COWs, WOWs, etc.



Hardware lessons learned

- One size does not fit all
- Favors are hard habits to break
- Ownership and accountability still rules
- Need clear role definition in all departments for ongoing support
 - *Proactive approach*



Proactive Approach

- Performance Improvement
- Reduction of Hardware Failures and Hi Priority Calls
- Monitor Hardware and perform preventive maintenance
- Increase IT visibility and customer service
- Establish partnerships

GOAL: More Up Time & Happier Customers

**Not intended to replace the standard reporting process of problems. It is still the responsibility of the Users to report known issues.*

System Design / Build Projects

Financial & Clinical Drivers


- *Carefusion*
- *Perinatal*
- *Patient portal*
- *Premise*
- ***GE Pharmacy system***
- ***CPOE (Computerized Provider Order Entry) activation***
- ***CCFS – Critical Care Flowsheet***
- ***CaseView***

Clinical & Regulatory Driver


- *Nursing Hand-off – Clinical & Regulatory*



UCare eMAR

 **MAR**

Selection Parameters						Worklist Options & Allergies					
Start:	6-Feb2009	00:01	<input type="checkbox"/> Include PRN medications			<input type="button" value="Non-Med Worklist"/>	<input type="button" value="MAR"/>	<input checked="" type="checkbox"/> Allergies			
End:	7-Feb2009	23:59	<input type="checkbox"/> Include Completed medications			<input type="button" value="Lab Worklist"/>	<input type="button" value="Infusion MAR"/>	<input type="checkbox"/> 24 Hr Acetaminophen			
<input type="button" value="Refresh"/>						<input type="button" value="Calculator"/>	<input type="button" value="PRN MAR"/>	<input type="checkbox"/> Charted Meds			

Noted?	Status	Date	Time	Prn	Order Description	Dose	Unit	Priority	Result	Cht Detail	Order Comment	Note
No		6-Feb2009	09:00		 Multivitamin Tab 1 PO DAILY	1				<input type="checkbox"/>		
		6-Feb2009	18:00		Ferrous Sulfate Tab 325 MG PO TID Meals	325	MG			<input type="checkbox"/>	Start on POD #2	
		6-Feb2009	18:00		Ferrous Sulfate Tab EC 325 MG PO With Meals	325	MG			<input type="checkbox"/>		
		6-Feb2009	21:00		Aspirin Chew Tab 81 mg PO TID	81	MG			<input type="checkbox"/>		
		6-Feb2009	21:00		oxyCODONE Tab SR 12HR 10 MG PO BID (eq to OxyCONTIN)	10	MG			<input type="checkbox"/>		
		7-Feb2009	08:00		Ferrous Sulfate Tab EC 325 MG PO With Meals	325	MG			<input type="checkbox"/>		
		7-Feb2009	08:00		Ferrous Sulfate Tab 325 MG PO TID Meals	325	MG			<input type="checkbox"/>	Start on POD #2	
		7-Feb2009	09:00		Aspirin Chew Tab 81 mg PO TID	81	MG			<input type="checkbox"/>		
		7-Feb2009	09:00		Multivitamin Tab 1 Tablet PO DAILY	1	TAB			<input type="checkbox"/>		
		7-Feb2009	09:00		oxyCODONE Tab SR 12HR 10 MG PO BID (eq to OxyCONTIN)	10	MG			<input type="checkbox"/>		
No		7-Feb2009	09:00		Multivitamin Tab 1 PO DAILY	1				<input type="checkbox"/>		
		7-Feb2009	12:00		Ferrous Sulfate Tab EC 325 MG PO With Meals	325	MG			<input type="checkbox"/>		
		7-Feb2009	12:00		Ferrous Sulfate Tab 325 MG PO TID Meals	325	MG			<input type="checkbox"/>	Start on POD #2	
		7-Feb2009	15:00		Aspirin Chew Tab 81 mg PO TID	81	MG			<input type="checkbox"/>		
		7-Feb2009	18:00		Ferrous Sulfate Tab EC 325 MG PO With Meals	325	MG			<input type="checkbox"/>		
		7-Feb2009	18:00		Ferrous Sulfate Tab 325 MG PO TID Meals	325	MG			<input type="checkbox"/>	Start on POD #2	
		7-Feb2009	21:00		Aspirin Chew Tab 81 mg PO TID	81	MG			<input type="checkbox"/>		
		7-Feb2009	21:00		oxyCODONE Tab SR 12HR 10 MG PO BID (eq to OxyCONTIN)	10	MG			<input type="checkbox"/>		

Critical Care Flowsheet - CCFS

Start Here ▾

DEMO, ONLY MRN: 01007145 Sex: F Facility: UCSF
 Name: DEMO, ONLY Age: 34 Years Admit Date: 4-Nov08-6
 Select Patient ▾ Date Of Birth: 11/04/1974 PatientPointer109: 0000001264 Room Bed: DIL-1

Flowsheet Template Name: Critical Care Flowsheet

Navigate Flowsheet Go to Time View Frequency: 60 Minutes Claim Frequency: 15 Minutes Validate Parameter Search

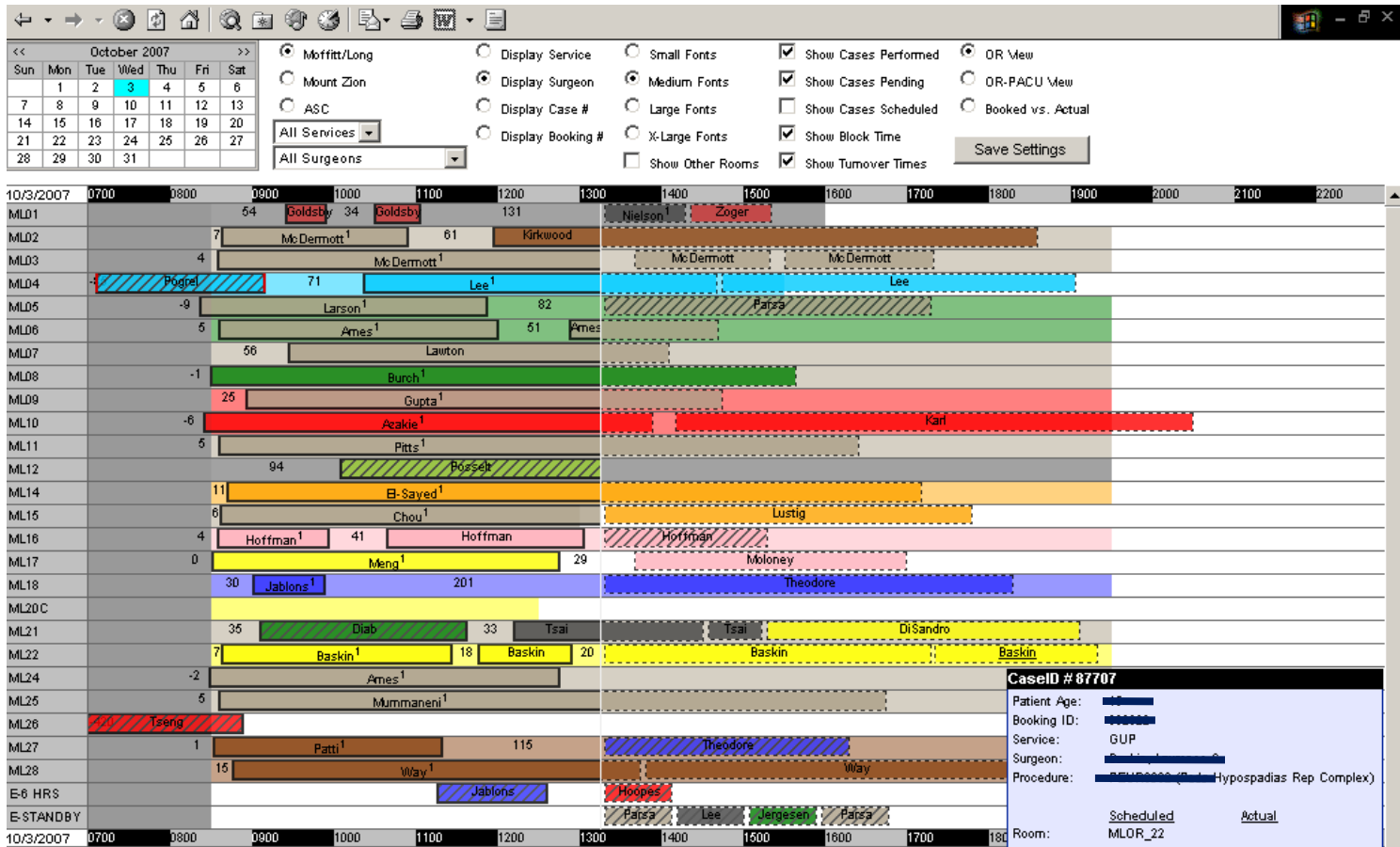
Patient Data Intake/Output Pt Info/Shift Checks Neuro Cardiac Respiratory Care

	2008/11/08 12:00	13:00	14:00	16:00	17:00	18:00	19:00
NOTE							
Hemodynamic Status							
Temperature (Axilla) cel							
Heart Rate bpm	69	69	69	69	69	69	69
Heart Rhythm							
Respirations breaths/min	20	20	20	20	20	20	20
SPO2 %	82	82	82	82	82	82	82
Art SBP mmHg	136	136	136	136	136	136	136
Art DBP mmHg	73	73	73	73	73	73	73
Art MAP mmHg	94	94	94	94	94	94	94
Patient Care							
Oral Care (Swab)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oral Care (Toothbrush)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HOB = 30 Degrees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
HOB degrees		90					
Position						Left	
SCDs							
Sat Probe Location				Left Hand 4th digit			

Annotations:

- Place a checkmark in the time column of the data you wish to validate and select Validate. The validated data is regular font. The non validated data is bold and italicized font.
- A checkbox indicates Yes or No.
- Some variable cells require a numeric entry.
- This variable cell requires free text.
- Some variable cells have picklists where you choose one answer from the dropdown menu.

CaseView



Main OR Statistics:

Number of cases pending:	22	Number of first cases performed:	19
Number of scheduled cases performed:	27	Number of first cases on time 5 minutes:	11
Number of unscheduled cases performed:	5	Percent of first cases on time 5 minutes:	58%
Number of cases midnight to 7:00 am:	0	Total block time available (min):	13920
Total number of cases performed:	32	Total block time elapsed (min):	6495
Total case minutes scheduled:	10270		
Total case minutes performed:	5893		

Lessons learned from others: Nursing workflow & Med administration

- **Efficiency recommendations (3.87% on information retrieval): Direct access to**
 - *Drug information*
 - *Hospital policies and procedures*
 - *Access to patient clinical results*
- **Benefits:**
 - *Eliminates time for transcription*
 - *Error during transcription*
 - *Eliminates error & time needed in deciphering illegible handwriting or referencing original order*

Keohane CA, et al. Quantifying nursing workflow in medication administration. *The Journal of nursing administration* 2008. 38 (1): 19-26



Medication order reference links

SMITH, Betty

MRN: 01007699 Sex: F
DOB: 12/02/1939 Age: 69 Years
SSN:

Select Patient ▼ Patient ⓘ

Medication Order Review

Order Pharmacy Nurse

Specify Med Details

Heparin, Porcine (PF) Syrg IJ

Dose	Units	Route
5000 to	UNIT	SubQ

Frequency: Q8H

Priority:

PRN PRN Reason:

Duration: Days Hours

Patient's Own Med

or Total # of Doses:

Self Administered Meds

Medication Information

Defaults

Labs

Advisory Description

Reference Information

- UCSF Formulary Search
- Lexi-Drugs Online: Heparin
- Heparin Infusion Guidelines

Allergies

- MED CODEINE, Other - Itching - Vicodin OK

Review Ref



IV med order linked with charting

Order Description

HYDRomorphine in NS 1 mg/mL 0.9 MG IV PCA +

Medication Components

	Medication Component	Dose		Volume	
1	HYDRomorphine in NS	55	MG	55	ML
2	Sodium Chloride 0.9% (NS)	55	ML	55	ML

Order Details

HYDRomorphine in NS PCA IV 1 mg/mL , Dose: 0.9 MG , Delay: 6 Minutes , Basal Rate: 0 , One Hour Limit: 2 , Bolus Dose: 0.2 to 0.9 , Bolus Freq: Q1H PRN

Flowsheet Charting

Buttons to Flowsheets

Adult PCA Flowsheet

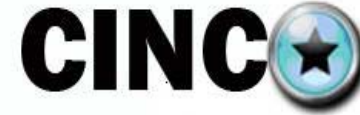
Pedi PCA Flowsheet

OB PCA Flowsheet

I & O Flowsheet



Lessons learned at UCSF



Collaborating with IT and Nursing to Create Optimal Outcomes

- Design process improvements
 - *Inefficient validation process – veto power*
 - Solution: Rapid design sessions
 - *Pure clinician led design – everything & the kitchen sink*
 - Solution: Greater CIS / Informatics lead with drafts
- Operations vs. IT Project & creation of CINCO
 - **CINCO**
 - Consists of representatives from Informatics, Education, Nursing Management, Clinical nurse specialist and performance improvement
 - ***Making it stick:*** *We needed to have an approving body earlier than when CINCO was created*



The Best IT Project is Not an IT Project

Knowledge-Based Nursing Initiative (KBNI) Project

“The best practice clinical project implementation is one owned by practicing clinicians. Only they can sponsor, champion, and create the practice transformation required to make complex clinical applications truly successful.”

Murphy J (Winter 2009). The best IT project is not an IT project. JHIM, vol. 32(1) 6-9.



Communication and Education Themes

- **Methods**

- *Emails*
- *Flyers*
- *Job aids*
- *Newsletter*
- *Web sites*



- **Discussions**

- *Podcasts*
- *Video - UCtube*



Hardware Communication

UCSF MEDICAL CENTER INTRANET

UCSF Medical Center

UCare Help For...

Providers

Nurses

Ancillaries

Pharmacy

Administration

Students

Providers

Nurses

Ancillaries

Pharmacy

Administration

Students

Learn about...

Training

Documentation

Access

Communication

Policies

Clinical Applications



Total cows: 5

Down cows: 0 (0 %)

COWS

Please report down COWS to the IT Customer Support Center at 514-4100, option 1, so that IT can open a Remedy Helpdesk Ticket and begin to work on the problem

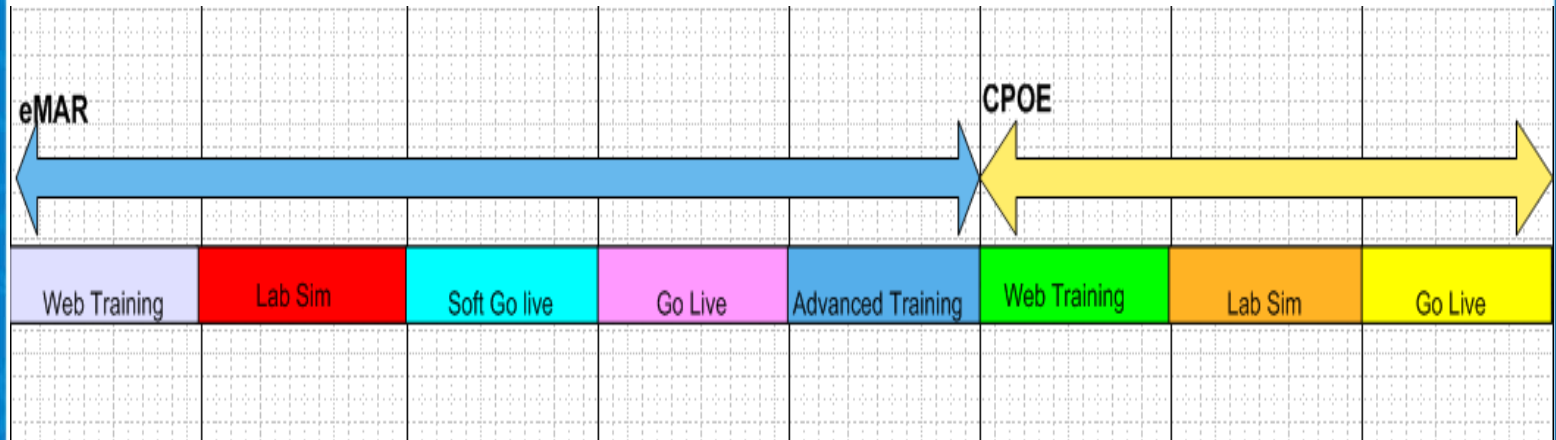
Click on a header to sort on that column. Click on a cow name to edit that cow. [Click here to add a cow.](#)

Show me only those cows in this unit: Remember my selection.

COW name	Computer name	Function	Site	Unit	Room	Status	Note	Filter	Change Date	Last maintenance
COW-100-12M	CLW2K81	UCare	Moffitt/Long	12M GCRC	12M	UP	Performed cow maintenace - Sid	1/20/2009	01/08/09	
COW-101-12M	6SW2K81	UCare	Moffitt/Long	12M GCRC	12M	UP	Performed cow maintenace - Sid	1/20/2009	01/08/09	
COW-110-12M	4XW2K81	UCare	Moffitt/Long	12M GCRC	12M	UP	Performed cow maintenace - Sid	1/20/2009	01/09/09	
COW-97-12M	3NW2K81	UCare	Moffitt/Long	12M GCRC	12M	UP	Performed cow maintenace - Sid	1/20/2009	01/09/09	
COW-98-12M	FFW2K81	UCare	Moffitt/Long	12M GCRC	12M	UP	Performed cow maintenace - Sid	1/20/2009	01/09/09	

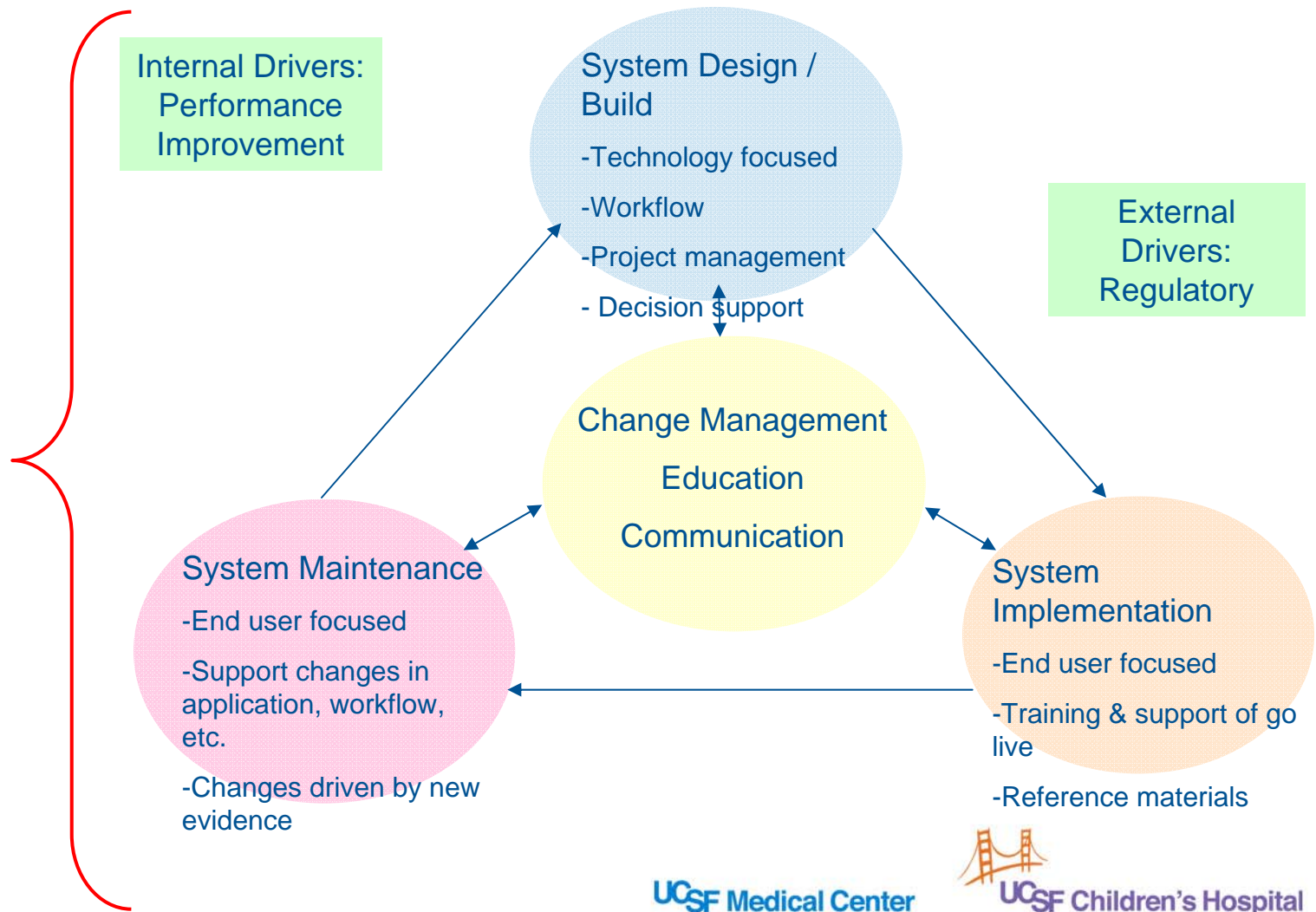
Training / Education

- Outline of CPOE activation and ongoing training



Advancing Clinical Informatics

UCSF Clinical Informatics Model



Spreading the “Informatics” word

- **Internal**

- *Nursing Grand Rounds*
- *Medical center presentations*
- *Unit / Departmental partnerships*

- **External**

- *Participation in professional organizations*
 - *Sigma Theta Tau, ANIA, Caring, TIGER, HIMSS, etc*
- *Partnering with Schools of Nursing – UCSF SON*
- *Collaborating with other institutions – Site visits, etc*
- *Presentations at HIMSS, GE conferences, etc*
 - *Conferences / Webinars*
- *Interdisciplinary presentations – Help Desk Institute, AMDIS, AMIA conference presentations*
- *Abstracts and Research paper publications*



UCSF Informatics future direction

- **Creating a fully electronic medical record**
- **Creating & adhering to documentation standards**
- **Continued integration of research & best practices into documentation re-design**
- **Participate and / or disseminate Informatics research projects**
- **Support non-clinical and ancillary Informatics**
- **Workflow and knowledge driven environment**
- **Continue standardization**
- **Participate in design of Women and Children's facility**



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UCSF Children's Hospital