Let's Talk Informatics

The Pivotal Role of Standardization within Electronic Health Records

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Acknowledgement

We acknowledge we are gathered today

in Mi'kma'ki (*Mig-*maw*-gee), the traditional ancestral

unceded territory of the Mi'kmaq (*Mig-**maw**) people.

Informatics

Informatics utilizes health information and health care technology to enable patients to receive best treatment and best outcome possible.

Let's Talk Informatics Objectives

This series is designed to enable participants to:

- Identify knowledge and skills healthcare providers need in order to use information now, and in the future.
- Prepare health care providers through an introduction to concepts and experiences in Informatics.
- Acquire knowledge to remain current by becoming familiar with new trends, terminology, studies, data and news.
- Collaborate with a network of colleagues to establishing connections with leaders who can provide advice on business issues, best-practice and knowledge sharing.

Conflict of Interest Declaration

I do not have an affiliation (financial or otherwise) with a pharmaceutical , medical device, health care informatics organization, or other for-profit funder of this program.

Session Specific Objectives

- At the conclusion of this activity, you will be able to:
  - Understand the benefits of standardization within EHRs.
  - Know how to leverage Oracle Cerner's Model Experience in developing your EHR.
  - Recognize the importance of remaining current with your Oracle Cerner code levels to leverage the "latest and greatest" content.
  - Identify the benefits and risks of silos.
 - Optimize your training plans and methodologies.

Let's Talk Informatics Certifications

- **Digital Health Canada** - participants can claim 1CE hour for each presentation attended.

- **College of Family Physicians of Canada and Nova Scotia Chapter** - participants can earn one Mainpro+ credit by providing proof of content aimed at improving computer skills applied to learning and access to information.

- **Canadian College of Health Information Management** - approves 1 CPE credit per hour for this series for professional members of Canada's Health Information Management Association (CHIMA).

Cornwall Community Hospital

156 funded beds

- 53,000 ED visits
- 44,000 Outpatient Clinic visits
- 96,000 DI Exams
- 64,000 Patient days
- 527 Newborn deliveries
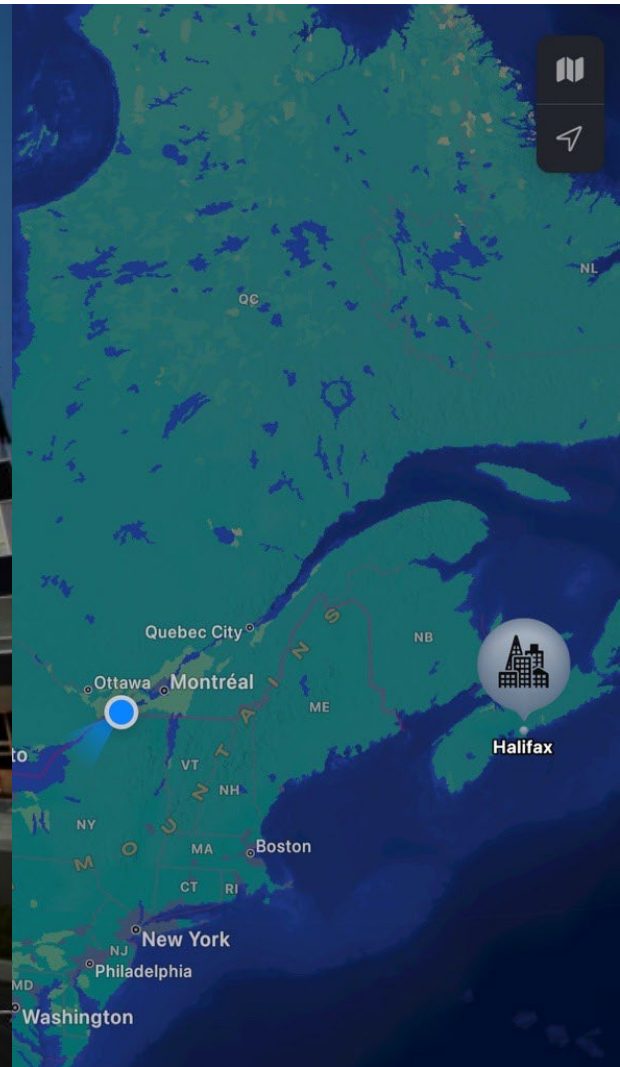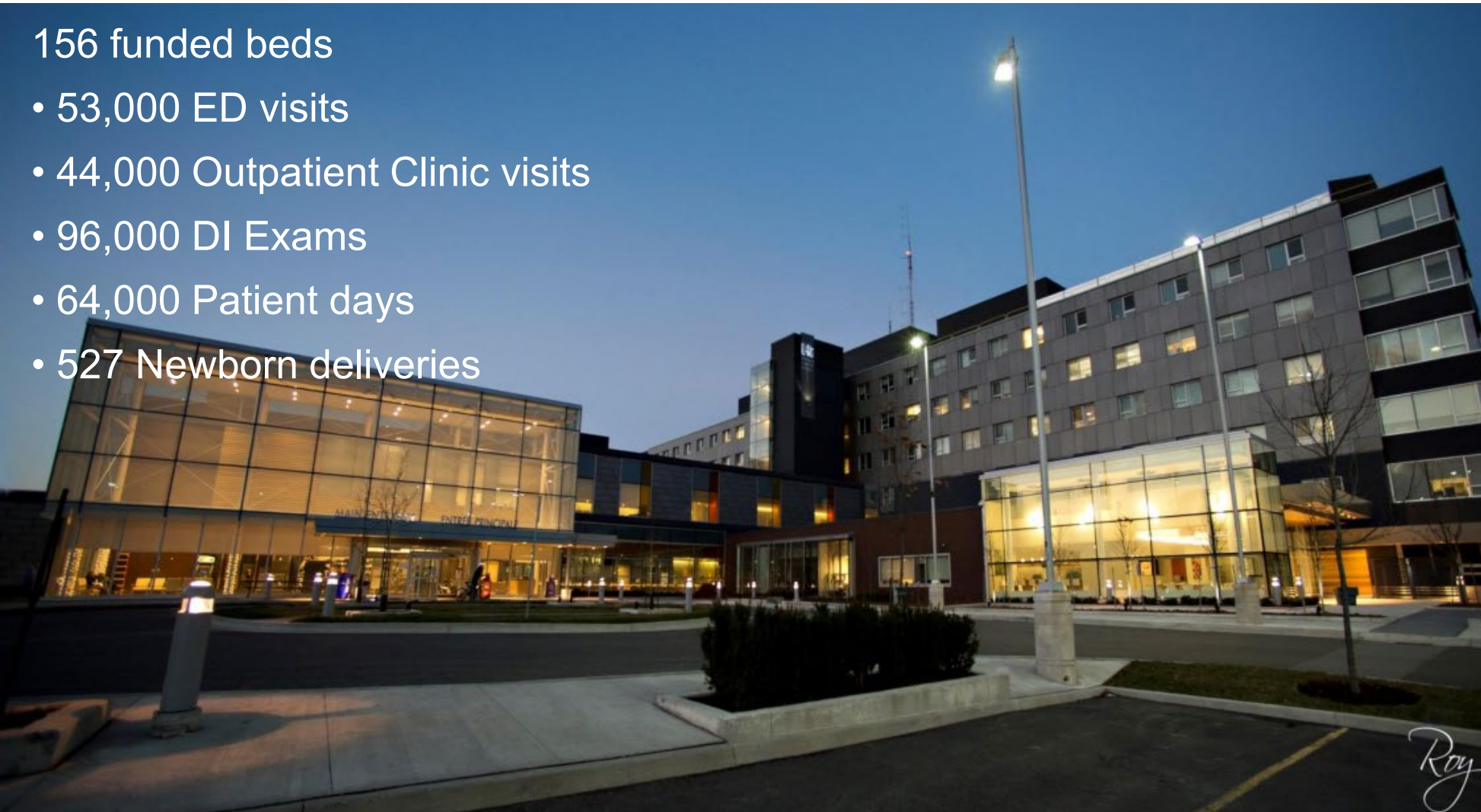
Model Experience

- What is Model Experience?
  - A collection of strategies, recommendations, and tools to assist clients with configuring their EHRs.
  - The "Oracle Cerner Standard".
- Benefiting from Model Experience
  - A reliable starting point.
- Reasons to Align
  - Interoperability
  - Future-Proofing

https://modelexperience.cerner.com/

Model Experience

Model Experience - Workflows

Emergency Medicine

Workflows

Workflows provide our clients with Cerner-recommended processes deemed essential for the optimal user experience.

To view a list of Cerner-recommended workflows related to Emergency Medicine, select a topic you want to explore. This page only contains workflows specific to the US. To view workflows for other markets, please search by workflow name here and filter by the appropriate market.

Related Workflows

Acute Care - Blood Product Administration

Acute Care - Specimen Collection - Nurse Collect

Charge Services/Emergency Medicine/Patient Accounting - Trauma Charging

Charge Services/Patient Accounting - Charge Reconciliation: Emergency Medicine

Clinical Supply Chain Point of Use Non-Patient Dispense

Clinical Supply Chain Point of Use Patient Dispense

Clinical Supply Chain Point of Use Patient Return

Clinical Supply Chain Point of Use Patient Waste

Emergency Medicine - Clinic Charging & Coding (Charge Specialist)
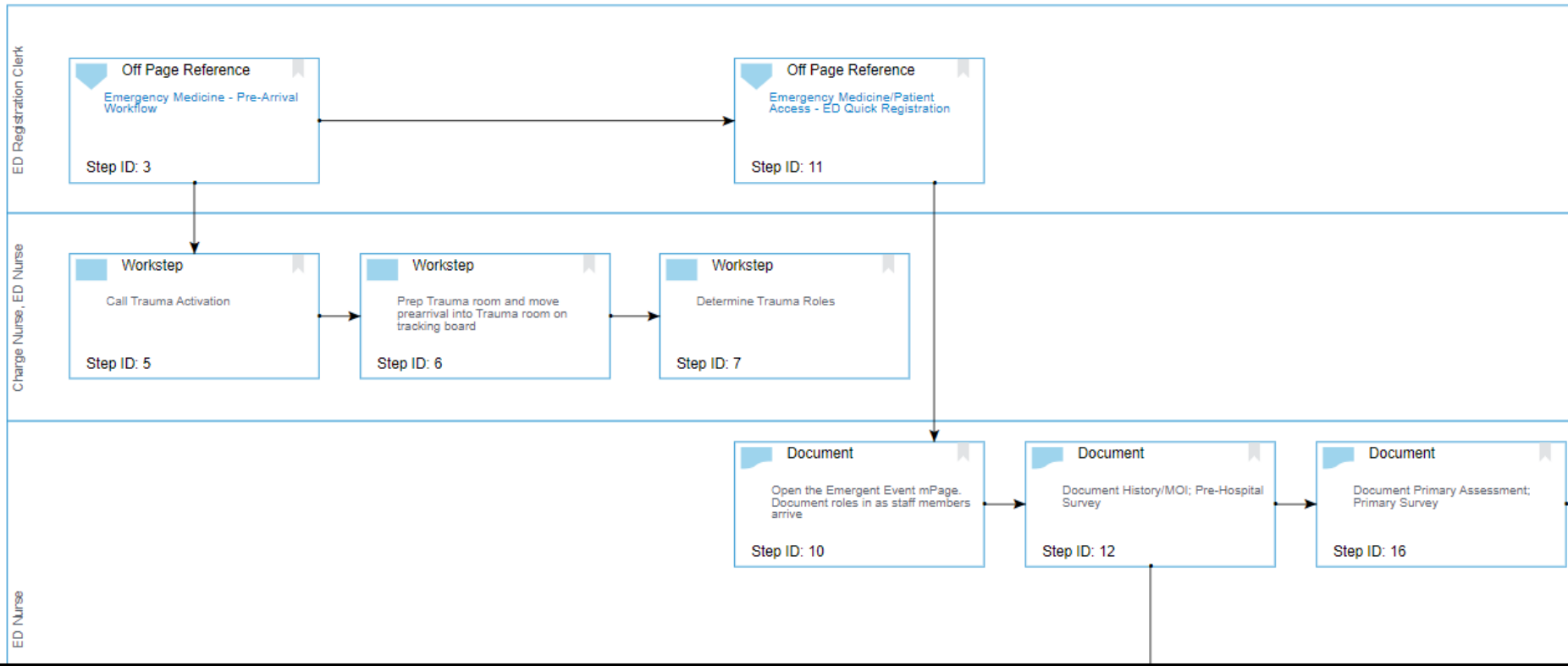
Emergency Medicine - Clinic Charging (Nurse)

Rows per page: 10 ▾   1-10 of 56   ‹ ›

Model Experience - Workflows

Model Experience - Reference Build

Explore / Clinical Solutions / Emergency Medicine

Emergency Medicine

Reference Build

Reference build is a detailed list of solutions, content, or both that needs to be built for optimal operation of the workflow.

⬇ Emergency Medicine Reference Build

Model Experience - Reference Build

	Emergency Medicine Reference Build Content	Applicable Yes - Standard Content Available No - Not Applicable
1	ORACLE Health	Emergency Medicine Reference Build Table of Contents
3	Activity Views	Yes
4	Acuity Level	Yes
5	Ad Hoc Folders	Yes
6	Allergy Folders	Reference Acute Care Reference Build
7	Application Groups	Yes
8	Arrival Mode	Yes
9	Auto Text	Yes
10	Bed Status	Yes
11	Care Team Preferences	No
12	Check-in LOS Indicators	Yes
13	Chief Complaint List	Yes
14	Custom Menu	Yes
15	Custom Toolbar	Yes
16	Dashboard Properties	Yes
17	Default Relationships	Yes
18	Document Event Association	Yes
19	DTA Conditionality	Yes
20	DTAs	Yes

Model Experience - Reference Build

	DTA Mnemonic	DTA Description	Activity Type	Result Type
	ORACLE Health	**DTAs**		
23168	Wound Closure Activity	Wound Closure Activity	Patient Care	Alpha
23173	Wound Closure Appearance	Wound Closure Appearance	Patient Care	Multi
23179	Wound closure assisted by	Wound closure assisted by	Patient Care	Provider
23181	Wound Closure Comments	Wound Closure Comments	Patient Care	Freetext
23183	Wound Closure Location	Wound Closure Location	Patient Care	Alpha
23322	Wound Closure Location Laterality	Wound Closure Location Laterality	Patient Care	Alpha
23326	Wound Closure Patient Tolerance	Wound Closure Patient Tolerance	Patient Care	Alpha
23331	Wound Closure Performed By	Wound Closure Performed By	Patient Care	Provider
23333	Wound Closure Removal	Wound Closure Removal	Patient Care	Alpha
23336	Wound Closure Removed By	Wound Closure Removed By	Patient Care	Provider
23338	Wound Closure Type	Wound Closure Type	Patient Care	Multi
23343	Wound Drainage Device:	Wound Drainage Device:	Patient Care	Multi
23348	Wound Edge:	Wound Edge:	Patient Care	Multi-alpha and Freetext
23363	Wound Exudate Amount:	Wound Exudate Amount:	Patient Care	Alpha
23369	Wound Exudate Color:	Wound Exudate Color:	Patient Care	Alpha
23384	Wound Exudate Odor Description:	Wound Exudate Odor Description:	Patient Care	Alpha
23395	Wound Exudate Odor:	Wound Exudate Odor:	Patient Care	Alpha
23400	Wound Exudate Type:	Wound Exudate Type:	Patient Care	Alpha
23407	Wound Percent Epithelialized:	Wound Percent Epithelialized:	Patient Care	Numeric
23409	Wound Percent Granulated:	Wound Percent Granulated:	Patient Care	Numeric
23411	Wound Percent Necrotic Tissue Eschar:	Wound Percent Necrotic Tissue Eschar:	Patient Care	Numeric
23413	Wound Percent Necrotic Tissue Slough:	Wound Percent Necrotic Tissue Slough:	Patient Care	Numeric

Model Experience - Learning Materials

Status and Length of Stay

- Bed Assignment
- Discharge
- Bed Ready
- Discharge With Medications
- Bed Request
- Orders Complete

Medication Orders

- Medication ordered
- Medication order completed

ECG Orders and Results

- **ECG In Process**: The ECG order has been placed, and the procedure is either waiting to be completed or is in process.
- **ECG Completed**: The ECG is completed and reviewed.
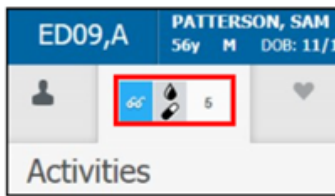
Radiology Orders and Results

- Ordered
- Report available
- Complete

Laboratory Orders and Results

- Ready for
- Reviewed with

Document Activities

Click an order icon with an activities indicator to open the Activities tab. Once open, an icon is displayed with the total number of pending activities.

ED09,A   PATTERSON, SAM   56y   M   DOB: 11/1

Activities

- **Nurse Review:** Click this icon to complete the nurse review, if applicable, for the order associated with this activity.
- **Document:** Click this icon next to the appropriate activity to complete the associated documentation.
- **Not Done:** Click this icon next to the appropriate activity to indicate that the activity was not completed. You are prompted to enter a reason.
- **Overdue:** This icon indicates that the activity is overdue.
- **Medication Administration Record:** Click this icon to review and document medications from Medication Administration Record in the chart.
- **Medication Admin Wizard:** Click

Icons and Layout in
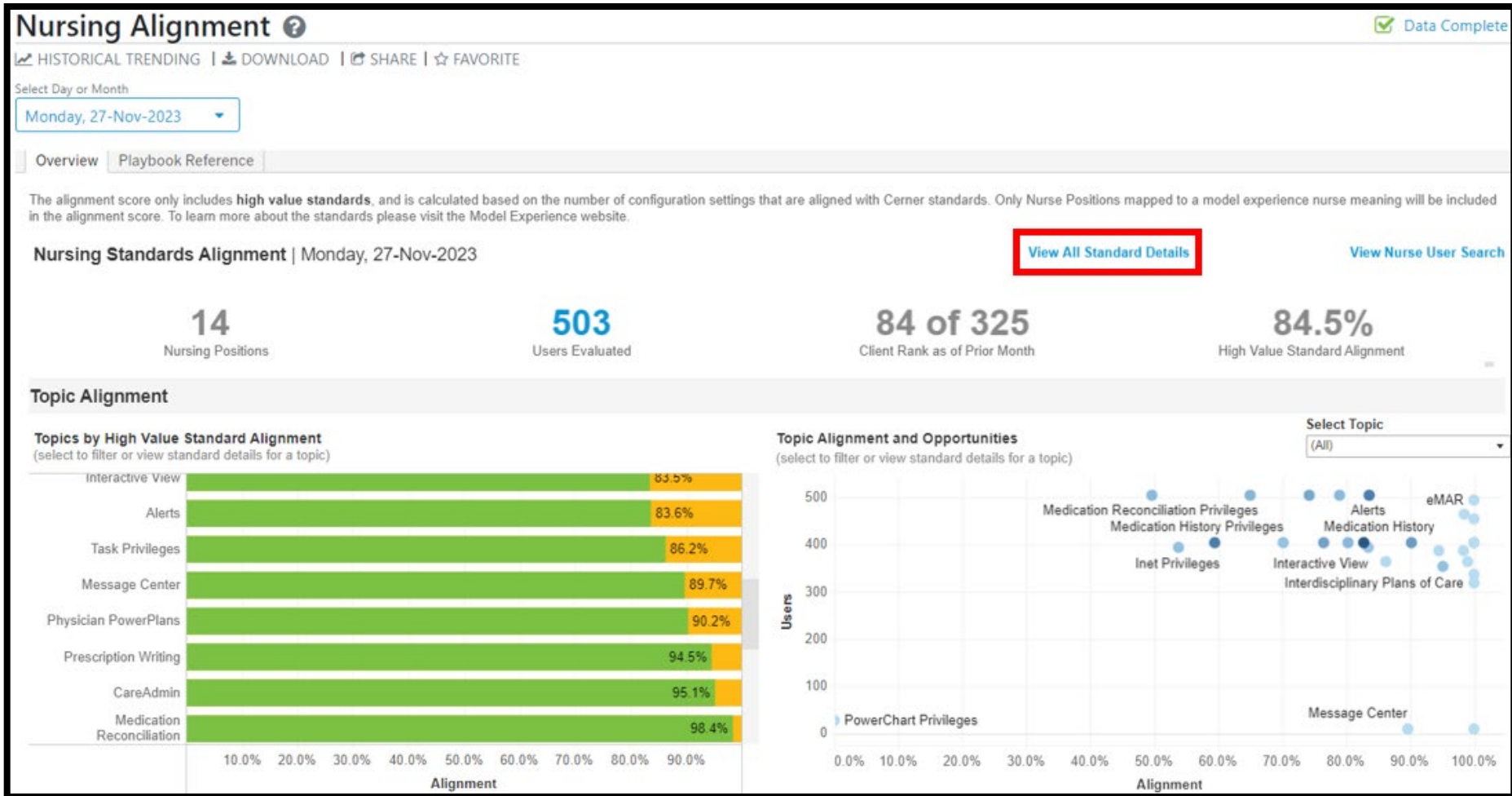*ED LaunchPoint*
Nurses and Technicians

Lights On

Lights On Details

- Enterprise-level data analytics solution.

Lights On

Lights On

Nursing All Standard Details ⊘ ✅ Data Complete

📈 HISTORICAL TRENDING | ⬇ DOWNLOAD | ↗ SHARE | ☆ FAVORITE

Select Day or Month

Monday, 27-Nov-2023 ▾

The Standard Details dashboard will display alignment for specific standards by position as well as the current values for those standards and their setting locations.

Standard Alignment	Select Topic	Select CDF Meaning (Specialty)	Select Position	Select Standard
Standards Fully and Partially Not Aligned ▾	(All) ▾	(All) ▾	(All) ▾	(All) ▾

Select Standard Type	Priority	IT Work Effort	Nursing Training	Workflow Impact
(All) ▾	(All) ▾	(All) ▾	(All) ▾	(All) ▾

Standard Summary | Monday, 27-Nov-2023
Note: select to view specific settings and current values

Type	Topic	Priority	Standard Name	Positional Alignment	Standard Value	Nurse	Nursing Student	Psychiatric Care Nurse	Rehab Nurse	Resource Nurse	Respiratory Therapist	SurgiNet: OR Management
			med_dash_pm	57.1%	1	Fail		Fail	Fail		Fail	Fail
	Clinical Notes	Low	CLINICAL_ATTACHMENTS	53.8%	1	Pass		Fail	Fail	Pass	Fail	Pass
			PRINT_DOCUMENTS	0.0%	0;0;0;0;0;0	Fail		Fail	Fail		Fail	Fail
					1;6;0;0;0;0					Fail		
			SHOW_ASSOCIATED_PROVIDERS	53.8%	1	Pass		Fail	Fail	Pass	Fail	Pass
			VIEWEVENTHIST	53.8%	1	Pass		Fail	Fail	Pass	Fail	Pass
		Medium	FORWARD_ONSIGN	53.8%	1	Pass		Fail	Fail	Pass	Fail	Pass
	Documentation and Review	High	ADD_NEW_DYNDOC	85.7%	1	Pass	Pass	Pass	Pass	Pass	Pass	Pass
			ENCNTR_FILTER	8.3%	FOCUS	Fail		Fail	Fail	Fail	Fail	Fail
		Low	MED_VERIFY	58.3%	0					Fail		
					1	Pass		Pass	Pass		Pass	Fail

Keeping Current with Code: Unlocking the Full Potential of Oracle Cerner

- **The Importance and benefits of keeping Code Current**

Responsive Worklists

Mobile Applications

Workflow Components

Responsive Worklists – Hospitalist Worklist

Location	Med History	Problems	Diagnoses	Labs	Isolation	COVID Vaccine Status	Resus	Fall Risk ∧	Illness Severity	Suspended Me... ∧
1813-3 Level 1 Med	✔ Medication History (Complete) ✔ Admission Reconciliation (Complete) ⓘ Discharge Reconciliation (Not start...	Dementia MRSA Parkinson disease **1**	1 - Dementia 2 - Aggression	COVID-19: Not Detected 24hr Urine Sodium: -- Creatinine: 97 umol/L	😷 Isolation	ⓘ Three doses (1st bo... 7 wks ago	1	↘ 55	🟠 Watch	metFORMIN
1605-3 Level 1 Med	✔ Medication History (Complete) ✔ Admission Reconciliation (Complete) ⓘ Discharge Reconciliation (Not start...	Atrial fibrillation Compression fracture Hypertension **4**	1 - Fall 2 - Rhabdomyolysis 3 - Closed fracture of bone...	COVID-19: Detected 24hr Urine Sodium: -- Creatinine: 67 umol/L	😷 Isolation	ⓘ Fully vaccinated 5 mos ago	1	↗ 60	🔴 Unstable	warfarin
1707-4 Level 1 Med	ⓘ Medication History (Incomplete) ✔ Admission Reconciliation (Complete) ✔ Discharge Reconciliation (Complete)	Bronchitis Cirrhosis Diabetes **9**	1 - Ascites	COVID-19: Not Detected 24hr Urine Sodium: -- Creatinine: 82 umol/L		ⓘ Fully vaccinated 3 mos ago	1	↘ 65	🟠 Watch	
1605-1 Level 1 Med	✔ Medication History (Complete) ✔ Admission Reconciliation (Complete) ⓘ Discharge Reconciliation (Not start...	Arthritis DDD (degenerative disc diseas... High blood pressure **4**	1 - Fall	COVID-19: Detected 24hr Urine Sodium: -- Creatinine: ⊕ 59 umol/L		ⓘ Fully vaccinated 3 mos ago	1	↘ 75	⚪ Stable	
1501-4 Level 1 Med	✔ Medication History (Complete) ✔ Admission Reconciliation (Complete) ⓘ Discharge Reconciliation (Not start...	Dyslipidemia Osteoporosis	1 - Confusion 2 - Failure to thrive	COVID-19: Not Detected 24hr Urine Sodium: -- Creatinine: ⊕ 42 umol/L		ⓘ Fully vaccinated 3 mos ago	1	↗ 50	🔴 Unstable	
1710-2 Level 1 Med	✔ Medication History (Complete) ✔ Admission Reconciliation (Complete) ⓘ Discharge Reconciliation (Not start...	COPD Epilepsy Lupus **3**	1 - Inability to care for him...	COVID-19: Not Detected 24hr Urine Sodium: -- Creatinine: ⊕ 30 umol/L	😷 Isolation	ⓘ Fully vaccinated 8 wks ago	1	35	🟢 Discharging	
1811-1 Level 1 Med	✔ Medication History (Complete) 🛡 Admission Reconciliation (Partial) ⓘ Discharge Reconciliation (Not start...	Chronic inflammatory small bo...	1 - Vomiting 2 - Diarrhea	COVID-19: Not Detected 24hr Urine Sodium: -- Creatinine: ⊕ 33 umol/L	😷 Isolation	⬆ Unvaccinated 8 wks ago	1	→ 20	🔴 Unstable	
1811-4 Level 1 Med	✔ Medication History (Complete) ✔ Admission Reconciliation (Complete) ⓘ Discharge Reconciliation (Not start...	Acute viral bronchitis ALS - Amyotrophic lateral scler... Coarse tremor **11**	1 - Ulcer 2 - UTI - Urinary tract infe...	COVID-19: Not Detected 24hr Urine Sodium: -- Creatinine: ⊕ 35 umol/L	😷 Isolation	ⓘ Three doses (1st bo... 5 wks ago	1	↘ 35	🟢 Discharging	
1813-2 Level 1 Med	✔ Medication History (Complete) ✔ Admission Reconciliation (Complete) ⓘ Discharge Reconciliation (Not start...	Current smoker Liver cirrhosis Renal cell carcinoma	Accidental hypothermia	COVID-19: Not Detected 24hr Urine Sodium: -- Creatinine: 80 umol/L		ⓘ Fully vaccinated 7 wks ago	1	↗ 80	⚪ Stable	
1811-3 Level 1 Med	✔ Medication History (Complete) 🛡 Admission Reconciliation (Partial)		1 - Pleural effusion 2 - UTI - Urinary tract infe...	COVID-19: Detected 24hr Urine Sodium: --		ⓘ Three doses (1st bo... 6 wks ago	2	↗ 60		

Responsive Worklists – Hospitalist Worklist

Patient Information Column:
- Name alert
- Allergies
- Resuscitation Status
- Length of Stay
- Illness Severity
- Summary
- Actions
- Labs
- Medication Orders
- Situational Awareness & Planning

Responsive Worklists – Pharmacy Care Organizer

Pharmacy De...	Unv...	Allergies	Isolat...	Diagnoses	Labs ^	Medication Hist...	Pharmacy...	COVID-19 POS...	Medic...
... OUT OF RA... m C.. OUT OF R... m... Height/Lengt... 1. c. IBW: 73.18 kg	▲ 8	🔴 contrast media (iodine-b...	☣ Isolati...	1 - Pneumonia	COVID-19: -- Magnesium: 1.04 mmol/L Phosphate: ⬆ 1.90 mmol/L Potassium: ◆ 6.26 mmol/L	✔ Medication Hist... 🔄 Admission Rec... ⓘ Discharge Reco...	Consult to Pharma		🔗Medica...
BSA: 2.22 m2 CrCl: 11.3 mL/min Height/Lengt... 1. c. IBW: 73.18 kg		🔴 levoFLOXacin	☣ Isolati...	1 - Pneumonia	COVID-19: Not Detected Magnesium: 0.70 mmol/L Phosphate: ⬆ 1.72 mmol/L Potassium: ◆ 3.42 mmol/L	✔ Medication Hist... ✔ Admission Rec... ⓘ Discharge Reco...		Negative 9 days ago	🔗Medica...
BSA: 2 m2 C.. OUT OF R... m... Height/Lengt... 1. c. IBW: 74.99 kg		⚪ No Known Allergies			COVID-19: Not Detected Magnesium: 0.70 mmol/L Phosphate: ◆ 0.64 mmol/L Potassium: ◆ 3.09 mmol/L	✔ Medication Hist... 🔄 Admission Rec... ⓘ Discharge Reco...		Negative 3 days ago	🔗Medica...
BSA: 1.4 m2 CrCl: 38.38 mL/min Height/Lengt... 1. c. IBW: 43.33 kg		🔴 d... p... p... s... c.. e... F V...	☣ Isolati...	Partial obstruction of small...	COVID-19: Not Detected Magnesium: ◆ 0.58 mmol/L Phosphate: 0.86 mmol/L Potassium: 4.07 mmol/L	✔ Medication Hist... 🔄 Admission Rec... ⓘ Discharge Reco...	Consult to Pharma	Negative 25 hrs ago	🔗Medica...
BSA: 1.57 m2 CrCl: 72.27 mL/min Height/Lengt... 1. c. IBW: 49.67 kg		⚪ No Known Allergies			COVID-19: Not Detected Magnesium: 0.74 mmol/L Phosphate: ◆ 0.77 mmol/L Potassium: 3.60 mmol/L	✔ Medication Hist... ✔ Admission Rec... ⓘ Discharge Reco...		Negative 19 hrs ago	🔗Medica...
BSA: 1.81 m2 CrCl: 68.77 mL/min Height/Lengt... 1. c. IBW: 68.65 kg		🔴 ciprofloxacin, levofloxacin		1 - Pneumonia	COVID-19: Not Detected Magnesium: -- Phosphate: -- Potassium: 4.56 mmol/L	✔ Medication Hist... 🔄 Admission Rec... ⓘ Discharge Reco...	Consult to Pharma	Negative 20 hrs ago	🔗Medica...

Responsive Worklists – Clinical Leader Dashboard

COVID-19	C...	I...	R...	Mobility	Orientation	CAM	Allied Disc...	Fall	Diagnoses	P...	A...	COVID Va...	Last Fall
COV... Not D...		1	1	Two person tr... 3 days ago	Identifies self 42 mins ago	Negative 41 hrs ago	BSO program... 3 wks ago	↘ 55	1 - Dementia 2 - Aggression	Dem... MRSA P... 1	1	Three doses (... 8 wks ago	NOV 07, 2021... 6 mos ago
COVI... Dete...		1	1	Two person tr... 4 days ago	Oriented x 4 6 hrs ago	Negative 6 hrs ago	Pt refused at... 4 wks ago	↗ 60	1 - Fall 2 - Rhabdomyolysis 3 - Closed fracture of b...	Atria... Com... H... 4	1	Fully vaccinated 5 mos ago	
COV... Not D...			1	Two person tr... 7 hrs ago	Oriented x 4 7 hrs ago	Negative 3 days ago	LTC 3 wks ago	↘ 65	1 - Ascites	Bron... Cirrh... D... 9	1	Fully vaccinated 3 mos ago	
COVI... Dete...			1	Two person tr... 7 hrs ago	Oriented x 4 7 hrs ago	Negative 7 hrs ago	Home with se... 6 days ago	↘ 75	1 - Fall	Arth... DDD... H... 4	1	Fully vaccinated 3 mos ago	
COV... Not D...			1	Two person tr... 3 days ago	Disoriented x 4 17 hrs ago	Positive 17 hrs ago	Current substi... 3 days ago	↗ 50	1 - Confusion 2 - Failure to thrive	Dysli... Oste...	1	Fully vaccinated 3 mos ago	
COVI... Dete...	1	1	1	Two person tr... 6 hrs ago	Identifies self,... 6 hrs ago	Negative 6 hrs ago	LTC bed Wed... 6 days ago	↘ 40	1 - Dehydration	Hyp...	1	Fully vaccinated 3 mos ago	
COV... Not D...		1	1	Two person tr... ...	Oriented x 4 ...	Negative ...	Pt wants to g... ...	35	1 - Inability to care for...	Bow... COPD	1	Fully vaccinated ...	

Workflow Components – eKardex

Workflow Components – eKardex

Cloud Enabled Mobile Solutions
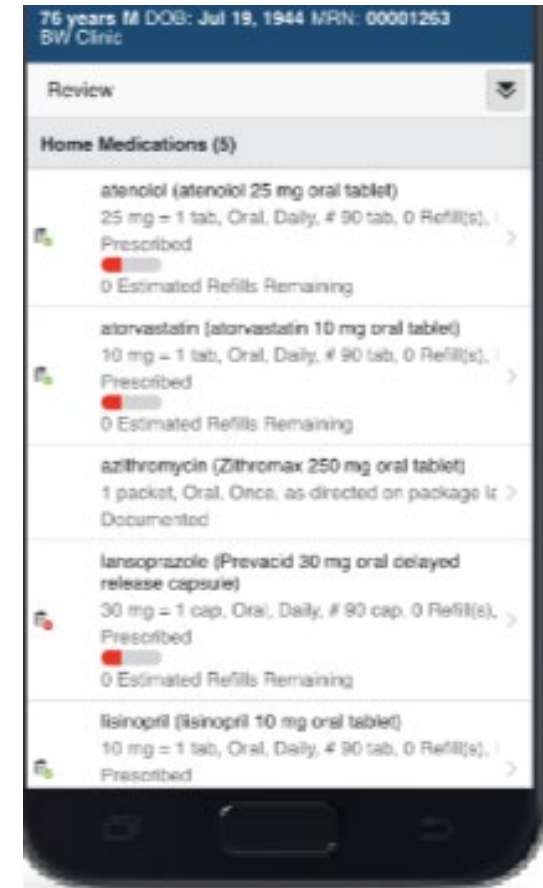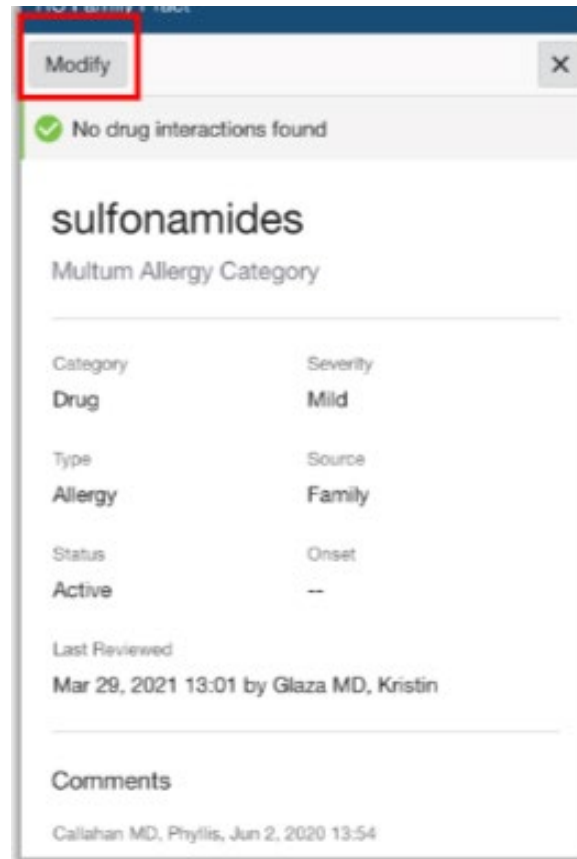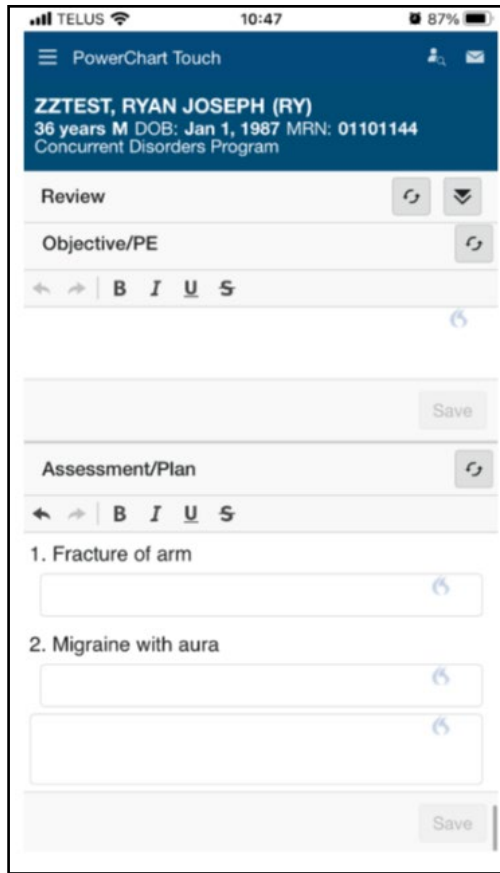
Collaboration vs Silos

- ## What are Silos:
  - Silos refer to the hoarding or sealing of information, working in a tunneled fashion without collaboration across the facility.

- ## How are Silos Created
  - Silos are created when information is not shared, and overspecializations are created giving missed opportunities for streamlining workflows or autonomous departments forming their own goals with too much focus on what they do.

Collaboration vs Silos

- ## What is Collaboration
  - ### It is the process of working together, creating teams from different areas/backgrounds across the organization working together towards a common goals.

- ## How is Collaboration created
  - ### Collaboration is created when objectives are clearly defined and communicated across the organization.
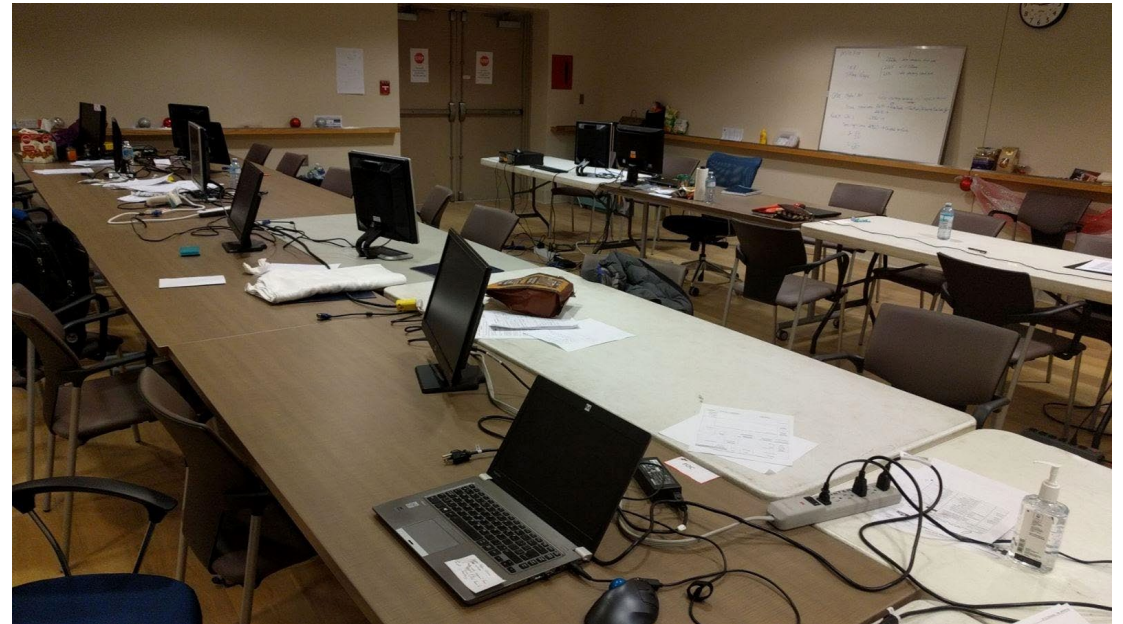
Collaboration vs Silos

- The Good and the Bad
  - Are all Silos bad?
    - Silos are not all bad, Hierarchies and Specialized departments are unavoidable, and it is impossible to have a perfect organizational structure. They can highlight opportunities for improvement.

  - Is Collaboration always good?
    - Collaboration is not always good, when the costs of collaboration exceed the benefits. Tasks that are simple or brief can get bogged down in meetings and decisions that have little effect on the outcome of the task.

Collaboration vs Silos

- How to break down Silos
  - Unified leadership
    - Collaboration starts with organizational leadership who communicate with each other and define the strategic plan/big picture of the project.
  - Create Cross functional Teams
    - Creating teams with members from different areas/departments. This can create a more open and resilient team to face challenges and find solutions.
  - Use of effective collaboration tools
    - There are many digital tools available; but sticking to one or two and ensuring everyone knows how to use them is key.
  - Instituting good Communication Strategies
    - Communicating clearly and regularly avoids disconnect between departments and delays on the project. Setting up a communication tool, easy access to documents and surveys are some ways to keep communication open and flowing.

Training – Pre Go-Live

- ## Pre Go-Live Standardization:
  - Structured training programs for all staff
  - Consistent training materials and resources
  - Simulated scenarios to familiarize users with the system
  - Customized training based on roles and responsibilities

Training - Standardization

- Advantages of a Standardized Training Model:
  - Reduced learning curve for users
  - Increased confidence among staff
  - Minimized errors and potential patient safety risks
  - Smooth transition during the go-live phase

Training - Support

- Elements of Support:
  - Continuous training opportunities
  - Accessibility of CI staff and support channels
  - Regular updates on system enhancements and changes
 - Feedback mechanisms for users to report issues

Training – Challenges & Solutions

- Challenges:
  - Staff turnover affecting proficiency
  - Resistance to change
  - Technological updates and advancements

- Solutions:
  - Comprehensive onboarding programs
  - Change management strategies
  - Periodic refresher courses and updates

Training – Ongoing Support

- ## Importance of On-Going Support:
  - Addresses evolving user needs and challenges
  - Ensures staff remain proficient with system updates
  - Sustains high-quality patient care
  - Fosters a culture of continuous improvement
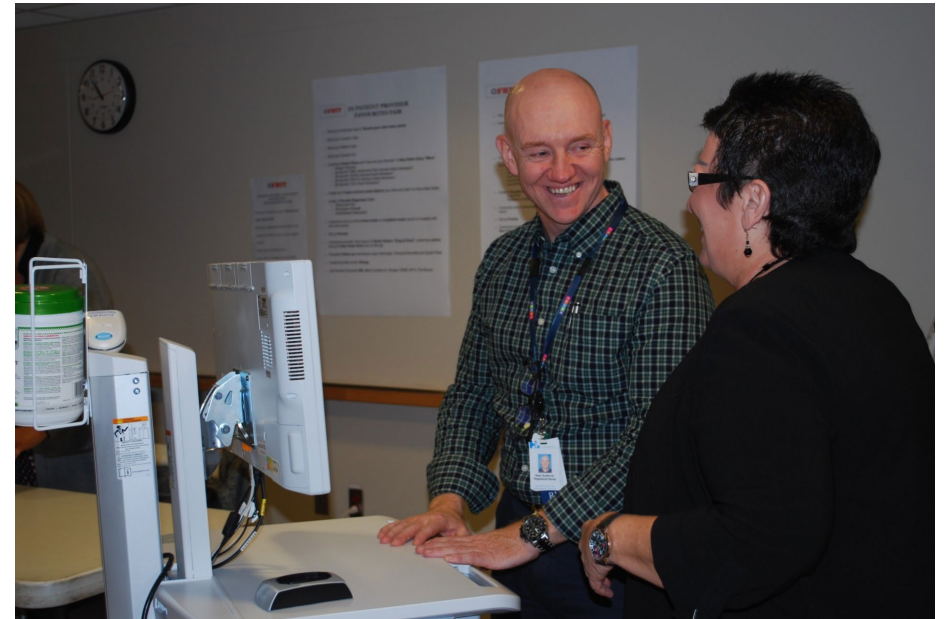
Benefits of Standardization

- **Benefits:**
  - Ease of Maintenance
  - Compatibility between solutions
  - Less complications and risks with upgrades
  - Interoperability
  - Data Quality

Benefits of Standardization

- Ease of implementing/onboarding new solutions
- Reduced operational costs with maintaining custom build (i.e., Custom Code requiring extensive testing)
- Improved user experience (i.e., consistent formatting of pop-ups and alerts for staff decreases cognitive load)
- Cross-pollination of staff between departments; easier cross training

Thank you

Need More Info?

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