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Opportunity Knocks

Utilizing Safety Reporting data during EHR (Epic) implementation to drive improvements in Hospital Patient Safety

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Introduction

- Initial Opportunities: Patient Safety planning during Pre-Implementation phase of Electronic Health Record (Epic) conversion
- Second Wave Opportunities: Patient Safety during 'Go Live' Months: Using data to support changes and improve Safety
 Ongoing Opportunities: Continue the focus on Patient Safety





ABOUT BWFH



- 162 bed Community Teaching Hospital in Boston, Massachusetts
- Community Teaching Hospital of Brigham and Women's Healthcare
- Member of the Partners Healthcare, Inc. Network



BWHC 'BIG BANG GO-LIVE'

On May 30, 2015, Brigham and Women's Health Care family went live on the EPIC system

- All inpatient and ambulatory areas including an academic medical center, community hospital, specialty medical center (Dana Farber Cancer Institute), 2 ambulatory care centers and over 160 ambulatory practices
- 18 revenue cycle and clinical applications
- ▶ 13,500 users trained
- 13,000+ workstations
- 487 seats in command center
- 1,400+ biomed devices
- ▶ 1,500 super users



PLANNING GROUNDED IN LITERATURE REVIEW

Benefits of a Review

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• Many robust sources exist to provide themes of patient safety issues and frame risk points for your organization

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- Helps target staff education, support resources of the organization
- Provides clarity and focus for the patient safety team
- New EHR implementation may be a singular career event for Organization Leaders
- Senior Leadership/C-Suite Support for Patient Safety
- Essential Literature to frame known Risks and potential Problems
 - HealthIT.gov Office of the National Coordinator for Health Information Technology: Safer Guides
 - Jointcommission.org resources:
 - Sentinel Event Alert 54: Safe use of health information technology
 - Sentinel Event Alert, Issue 42: Safely implementing health information and converging technologies
 - IOM: Health IT and Patient Safety: Building Safer Systems for Better Care



MULTIPLE ACTIVITIES SUPPORT PATIENT SAFETY PREPARATION

A review of literature (IOM Health IT and Patient Safety) and Epic Identified issues framed

review of risk concerns at the Enterprise and local level

Centralized Act Partners Enterg	• Clinician Nouvelettore
Site Specific Ac	 Site Safety Leads Local Education campaigns Weekly Newsletter, Staff feedback Safety Analytics Presence in the Command Center Collaboration with Organizational Readiness Workflow mitigations

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EDUCATIONAL PLANNING FOR STAFF

Q: What are the essential questions that we need to answer to prepare staff to address Patient Safety issues during this time of organizational change?

- How do we engage staff to report patient safety issues at a time when they will be very busy and potentially distracted?
- How do we support and encourage reporting?
- What kind of information about risks would be helpful to line staff to prepare for implementation?





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SEE SOMETHING, SAY SOMETHING CAMPAIGN

SEE SOMETHING? SAY SOMETHING! MAKE PATIENT SAFETY YOUR PRIORITY.

Extra vigilance is required to ensure we provide the safest care for our patients as we become familiar with Partners eCare, our new Epic-based system and workflows.

COMMUNICATE POTENTIAL SAFETY ISSUES OR CONCERNS INVOLVING EPIC OR NEW WORKFLOWS IMMEDIATELY THROUGH THE COMMAND CENTER SERVICE DESK AT 857-307-4600.

During launch, all Service Desk tickets flagged as patient care-critical will be reviewed daily by your site safety lead. As always, any incident of actual patient harm or a near-miss event should be reported via RL Solutions.

Here are five ways you can help ensure patient safety during and after our go live:



SEE SOMETHING, SAY SOMETHING CAMPAIGN

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SAFELY MANAGE MULTIPLE CHARTS Close charts and verify that you are documenting in the right patient chart to avoid misplaced orders and information.

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UNDERSTAND PHASES OF CARE When writing procedural orders, indicate the proper phase of care: pre-procedure, procedure, PACU/recovery area, etc. so nursing can release the appropriate orders.

RECONCILE MEDICATIONS Review medications carefully with patients during initial post-live encounters to ensure each medication list is accurate.

REMEMBER, IF YOU SEE SOMETHING – EVEN IF YOU ARE JUST CONCERNED AND NOT CERTAIN – **SAY SOMETHING**.

For more information and tip sheets on any of the above topics, visit partnersecare.partners.org/addURLhere

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Partners eCare | CONE Patient CONE Team



HOSPITAL WIDE FEEDBACK PROJECT

Last Week in Patient Safety!

Newsletter

- Debut 4/6/15
- Weekly document sent by email to Department Leaders group, Chiefs, Senior Leadership
- Leaders send to staff
- Highlights "Good Catch" events and storytelling
- Provides area specific data on reporting
- Content allows for printing and posting for all staff
- Provides talking points

Last Week in Patient Safety! June 1, 2015 - June 7, 2015



- 12 of the Safety Events entered had a reported severity rating of temporary or minor harm or higher
- · Congratulations to Ellen McKenna for being the top safety reporter for last week! Thank you for your commitment to reporting safety events that happen at BWFH especially through our eCare implementation

Good Catch of the Week!

Elizabeth Palmisano, a RN on 6 North, noticed 2 units of PRBC was ordered for her patient in the Emergency Department, as well as one additional unit of PRBC was ordered by the Admitting Physician once being admitted to the unit. The Blood Bank then prepared all 3 of the requested units After realizing there was a double order, Palmisano spoke with the covering Physician, who clarified that the patient only needed 2 units of blood and should not receive the additional unit. Palmisano called the Blood Bank, and had the Physician change the orders to ensure they were accurate.

Thanks to Palmisano's vigilance, she caught the duplicate order and prevented any impact to her patient! Duplicate orders are a known system issue that arises in the early stage implementation of Epic. The Department of Patient Safety would like to ask all staff members to pay extra attention to orders through this transition time. If something does not look right, speak up. Thank you!

> If you would like to hear more about a safety event you have submitted, please contact your Director or Tayla Hough at ext 7679

Last Week in Patient Safety! May 18, 2015 - May 24, 2015

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 For the week of May 18th 2015 through May 24th 2015, 24 Safety Events were entered into BWFH's electronic safety reporting system, RL Solutions



- 67% of Safety Events entered were Near Miss Events.
- · 8 of the Safety Events entered had a reported severity rating of temporary or minor harm or higher.
- Congratulations to Christopher Richard and Lawrence Borbee for being the top safety reporters for last week! The Department of Patient Safety thanks you for your commitment to reporting safety events that happen at BWFH.

eCare Go Live

Once BWFH goes live with Partners eCare on May 30th, you will be able to access RL Solutions through Epic Click on Epic – open PHS Applications – open BWHC Applications – Open Safety Reporting BWHC



please contact your Director or Tayla Hough at ext 7679

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PATIENT SAFETY REPORTING: STRUCTURAL CHOICES AND CHANGES

Q: What do we need to do with our Patient Safety reporting system (rL Solutions) to support patient safety during EHR Implementation?

- How do we make it easy for staff to report?
- How will we report events related to implementation of EHR? What General Event Types should be used? Do they need to be consistent across a system?
- How can we pull data out of the system to track and trend patient safety issues and themes during implementation?





PATIENT SAFETY REVIEW PROCESS

Patient Safety team read all events reported in near real time – reviewed for data integrity, evaluated for connection to new EHR and recoded as needed

Service Desk ticket numbers imbedded or report submitted with deidentified info Triage to additional Leaders, EHR leads, Senior Leaders, Risk Management for review Report created to help track themes, recurring issues, target areas for intervention. Reports created actionable data for Leadership to drive changes as needed

Trended graphs over time help identify gaps or assure stabilization of the system

Improved safety For Patients!



LINE STAFF: REPORTING A SAFETY ISSUE

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	 NHMERCINE Collection Manager Resources Phone Directory Image: Collection Manager Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administration Since Ordering Directory Image: Search SWIF All Administratin State Searcontration Since Orderin State Search SwIF
Choice: Li	hin the new EHR allows for easy access to Safety Reporting System at issues for single sign on and build configurations exist



HEALTHCARE IT GENERAL EVENT TYPE



Healthcare IT			
General Information About the Healthcare I	r or l	Device Event	
Specific Event Type	*		*
		Access Issue	
Severity Level (Reported)		Barcoding Related	
Seventy Level (Reported)	*	Hardware - Keyboard	
		Hardware - Mouse	
Injury Incurred?		Hardware - Printer	
		Hardware - Other	
Equipment Involved?		Stolen / Missing Device	
		System - BICS	
		System - ECare / EPIC	
		System - EMAR	
		System - Lab / Sunquest	
		System - LMR	
Brief Factual Description	*	System - Meditech (Faulkner)	
		System - Omnicell	- 10
		System - OR Display and Scheduling	
		System - Pharmacy	
		System - Radiology, Centricity & PACS	
Suggestion(s) for Avoiding Similar Event in Future		System Slow or Unresponsive	
		Other (please specify)	\sim

Choice: Differentiate incidents that are primarily related to EHR from other events where EHR build or workflow plays a role (medication safety, handoff communication)

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ECARE RELATED QUESTION WITHIN RL SOLUTIONS

Resolution and Outcomes		
Resolutions and Outcomes of the Event		
Did Epic or new workflows factor into this event?	*	•
Severity Level (Actual)	Yes No/Unknown	

Choice: Creating a field in the Resolution section that is visible to Leaders who review/close. Drop down allows Patient Safety team ability to tag reports as related to Electronic Health Record and/or new workflow. Field then pulls to report for trending.







EPIC RELATED REPORT

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Brigham and Women's Faulkner Hospital Epic Related Safety Reports (Event Date is within Calendar 2016) and ((File State is not equal to "Incomplete") and (File State is not equal to "Deleted-Inc") and (Did Epic or new workflows factor into this sevent? is equal to "Yer") and (Facility is equal to "FH"))							
File ID	Event Date	Location Where Event Occurred	General Event Type	Specific Event Type	Severity Level (Reported)	Brief Factual Description	Resolution Comment
25696	01-01-2016	6 North	Healthcare IT	System - ECare / EPIC	1-No Harm – did reach patient	60 year old patient discharged home on 1/1/16. Patient has a discharge order. Unable to print AVS because discharge readmit order needed to be reconciled. Dr. McCann was notified and tried reconciling the order and help desk was called and notified. Patient ended up leaving without any papers but fortunately she knew about her medications and follow up appointments. Tried printing the discharge summary and gave it to patient. The problem was fixed somehow after the patient had already left.	1/5/16 Note: no other pattern of similar problems with printing known Likely build related reconciliation issue and user error contributing factors. C. Barney 01/07/2016: As noted, issue resolved after patient discharged. Will follow- up with patient by phone to extend apology(01/07/2016 SSE).

A daily report was created to assist Leadership in overview of all safety events that were related to EHR or new workflows



ALERT SCHEDULE

chedule					? ×
General	Recurrence	Message	Recipients	Content	
 Minute Hourly Daily 	Recur every 30	minute(s)			
Weekly Monthly		$\overline{\boldsymbol{\nabla}}$		_	
 Quarterly Yearly 			ear real		
Range of Recurren Start: 05/29/2015	ce: No end	l date			
Start. 03/23/2013	○ Find af ○ End af ○ End by	ter o	ccurences		
					ок

- Pre-Epic Implementation alerts were sent out to all Managers, Directors and Patient Safety Staff every 4 hours, if a file was submitted
- Prior to Go Live the alert schedule for Patient Safety Staff was changed to every 30 minutes
- This allowed Patient Safety Staff to be aware of new safety events that were taking place more rapidly
 - Pro/Con for instant alerts
 - Self selection for Leaders





WHAT HAPPENED?

- 25% increase in safety reporting starting at Go-live and sustained safety reporting engagement from front line staff
 - 75% of reports are "near miss"
 - Hospital leaders use safety reporting to work on identified issues using actual data from incidents rather than anecdote
 - Real time review of 100% of reports

Improved Process

Increased

Reporting

Increased

Collaboration

- Patient Safety Site Lead integration into Leadership Report outs allows for tracking and responding bi-directionally
- Rapid identification and correction of Patient Safety gaps







OVERALL SAFETY EVENT VOLUME 2015





OVERALL SAFETY EVENT VOLUME & EPIC RELATED VOLUME 2015





COUNT OF RL SAFETY EVENTS PER DAY: 2 WEEK POST GO LIVE



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COUNT OF RL SAFETY EVENTS BY WEEK



Week



OVERVIEW: PATIENT SAFETY WITH NEW EHR

All Safety Event Reports Go Live May 30 - September:

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- 579 safety events were entered into BWFH's electronic safety reporting system, RL Solutions.
- 78% of the safety events were near miss events.
- 130 safety events were assigned a severity rating of temporary or minor harm or higher

Epic/Workflow Related Safety Events Go Live May 30 - September:

- 209 safety events entered into RL Solutions were a result of the EHR implementation.
- 82% of all EHR related safety events were near miss events.
- 37 EHR related safety events were assigned a severity rating of temporary or minor harm or higher

36% of files were flagged as Epic/Workflow related



EXAMPLES: PATIENT SAFETY GO-LIVE ISSUES

- Medication Reconciliation conversion
- Uncoded allergies (free text conversion)
- Medication scanning issues
- Pended orders (training issue)
- Radiology Laterality orders
- Wristband design

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- Handoff communication
- Patient Movement- "Phases of Care"
 - This type of event eventually moved to GET Healthcare IT

[Med/IV Fluid] [Med/IV Fluid] [Med/IV Fluid] [Med/IV Fluid] [Imaging] [Coordination of Care] [Coordination of Care]



EHR/WORKFLOW RELATED SAFETY REPORTS BY LOCATION





GENERAL EVENT TYPES FOR EPIC RELATED EVENTS





MEDICATION/IV SAFETY VOLUME 2015









Ordering/Prescribing

WHERE IN THE PROCESS – MEDICATION IV/FLUID

Dispensing

18 16 14 12 Go 10 Live! 8 6 4 2 0 MAY JUN JUL AUG SEP OCT NOV DEC JAN 16' FEB MAR APR

Month

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Count

Administration

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HANDOFF RELATED SAFETY REPORTS





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OVERALL SAFETY EVENT VOLUME &





CURRENT STATE

- Feedback to reporter: started July 2015
- Department level Safety Culture debrief and education on reporting (non punitive response to error): September 2015
 - Presentations to Chiefs, Departments
 - Integration into Leadership Council
 - Support by Senior Leadership
- Continued trending of Epic/Workflow related events at Patient Safety Committee





FEEDBACK TO REPORTER

Would you like follow-up on this report?	*	
	Yes No	
Was follow-up given? (Patient Safety Use Only)	No	,
Follow-up Details (Patient Safety Use Only)	pending	





OPPORTUNITY SUMMARY

- Seize the moment of a big system change to harness the energy of staff regarding reporting
- Build reporting system to address issues that staff are reporting
- Implement systems that publicize, value and celebrate reporting including "good catch" events
- Establish trust and confidence that there is a closed loop process for safety event reporting
- Maintain increased reporting while building Just Culture constructs





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APPENDIX

How to insert a new field into a form

Step 1: Once in RL Solutions enter the "Admin Center"

Step 2: Click "Fields" under the Forms and Fields heading







Step 3: Make sure you are in module you would like to add the new field into and click "Add"

rlso	olutio	ons	
	Fields	5	
	Please ch	noose a module: Risk 🗸 Search: 🗌	Search in: OAll OName OCa
	Ad	d Open Delete Check	Usage Reset Active fields
		Name	Table
		AccessionNum	EventDetails
		ActingAsUserFullName	RMFileAuditLogs
		ActingAsUserId	RMFileAuditLogs
\mathbf{Q}		ActionDate	EventDetails
		ActionRequired	FollowUps

Tip: You can use one of the Pick List already provided by RL Solutions or create your own in the Pick List Manager under the Forms and Fields heading



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Step 4: Add in the criteria of the new field you are adding and don't forget to save!

Details			
Table		Table DB Name	
DB Name		Visiblity	True 🗸
Name	* Epic	Mandatory	True 🗸
Туре	* Dropdown 🗸	Readonly	False V
Caption	* Did Epic or new workflows	Availability	True 🗸
Form Caption	* Did Epic or new workflows	Default Value	No/Unknown
Description		PHI Level	None 🗸
		Sensitive	False V
		Inactive in Field Picker	
Properties			
Pick List	* YesNo/Unknown	1	
Allow Typing	7	-	
Allow Postback			





Step 5: Exit the "Fields" Section and click "Forms" under the Forms and Fields heading

Step 6: Select the form you are adding the new field to

* There are two options for every form - Manage or Submit.

Select the one based off of where you are adding the new field in the form

Step 7: Scroll down to the heading you would like the new field to fall under. Click the upwards facing arrow and select "Edit Section Template"

* Example: Our Epic related question was added under the Resolution and Outcome heading

$\left(\right)$	Resolution and Outco	omes –
	Insert 🕞	Outcomes of the Event-
	Move Up Move Down	nager/director, did you provide feedback to the reporter?]
4	Edit Section Template	ect those which describe the type of feedback provided]
	Delete	r new workflows factor into this event?]





Step 8: Determine where you would like to add the new field in the section and click the upwards facing arrow
above/below the field you would like it to be near. Then Select field

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Step 9: Search for your new field by clicking the downwards facing arrow

Properties					
General	Caption	Logic	Check List	Validation	JavaScript Extender
Element Editor Type Lookup: Lookup exp			•	•	

Step 10: Click Save add and your work is completed!

CONTACT INFO



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