كليفلاند كلينك أبوظبي
Cleveland Clinic Abu Dhabi
A Mubadala Health Partner

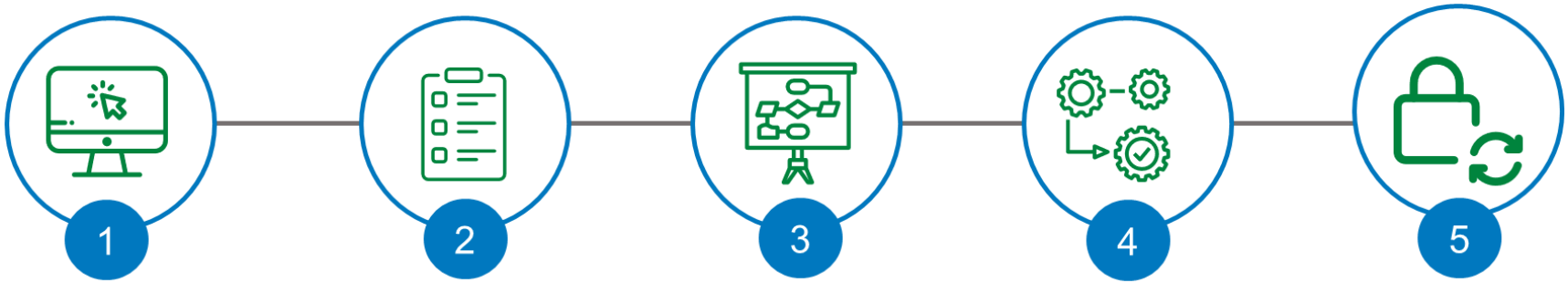
Life Cycle of a Medication Event

Rabih Dabliz, Pharm.D., FISMP, CPPS, CPHQ

November 4, 2023

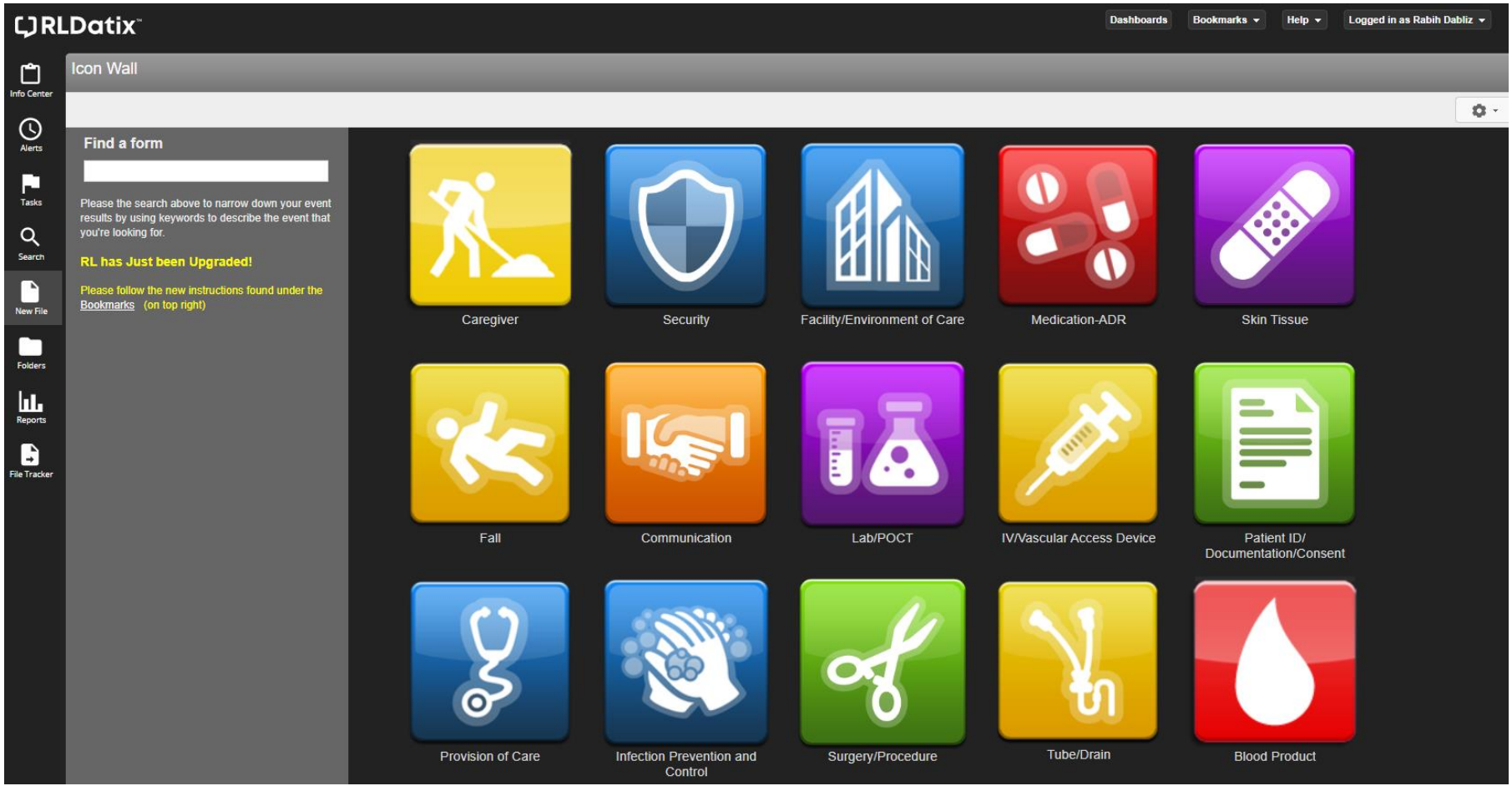

SAFETY CULTURE
COMPONENTS
INFORMED
LEARNING
JUST
FLEXIBLE
REPORTING

LIFE CYCLE OF A MEDICATION EVENT



STEP 1: EVENT REPORTED

- Simplify the process
- Encourage reporting within 24 hours
- Develop a policy event management
- Only require essential information
- Include at least the following:
  - Brief description (SBAR format)
  - Location(s), date and time
  - Medication(s) involved
  - Medication Record Number (MRN)
  - Recommendations for improvement
- Retain all evidence (i.e, containers, lines)


RLDatix
Dashboards
Bookmarks
Help
Logged in as Rabih Dabliz
Info Center
Alerts
Tasks
Search
New File
Folders
Reports
File Tracker
Icon Wall
Find a form
Please the search above to narrow down your event results by using keywords to describe the event that you're looking for.
RL has Just been Upgraded!
Please follow the new instructions found under the Bookmarks (on top right)
Caregiver
Security
Facility/Environment of Care
Medication-ADR
Skin Tissue
Fall
Communication
Lab/POCT
IV/Vascular Access Device
Patient ID/ Documentation/Consent
Provision of Care
Infection Prevention and Control
Surgery/Procedure
Tube/Drain
Blood Product

Medication Event - Reporting Form

Table of Contents

File Status

1 of 28 total fields completed.

1 of 14 mandatory fields completed.

Medication / Adverse Drug Reaction Event

General information about the medication / adverse drug reaction event

Specific Event Type *

IT Service Desk Ticket Number

Select the person affected *

Severity Level *

Equipment Involved/Malfunctioned?

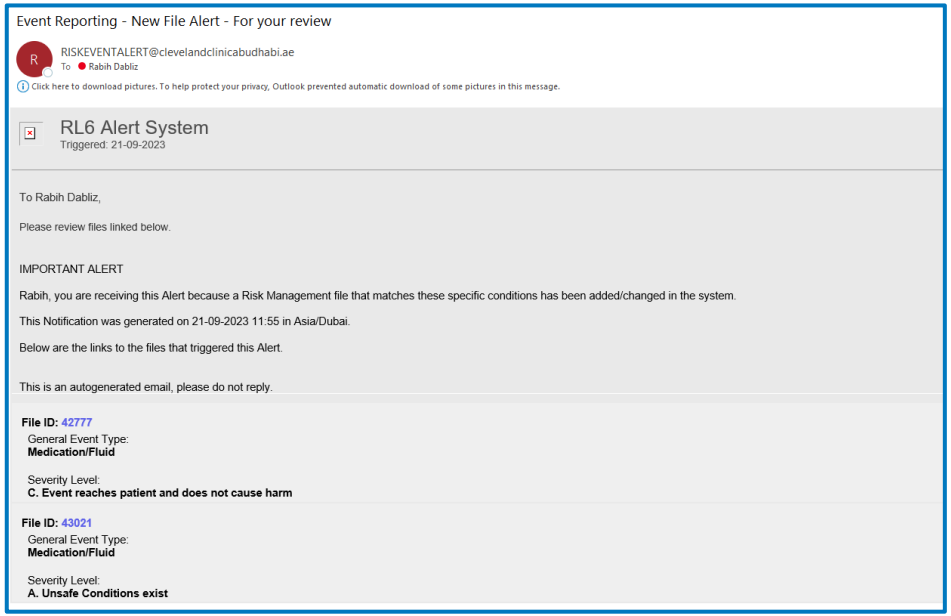
When filling 'What Happened?', Use SBAR (Situation, Background, Assessment, Recommendation)

What Happened? *

Recommendations for Improvement

EVENT NOTIFICATION

- Should be immediate
- Use a tiered system
- Develop daily and weekly reports


Event Reporting - New File Alert - For your review

RISKEVENTALERT@clevelandclinicabudhabi.ae
To Rabih Dabliz

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

RL6 Alert System
Triggered: 21-09-2023

To Rabih Dabliz,

Please review files linked below.

IMPORTANT ALERT

Rabih, you are receiving this Alert because a Risk Management file that matches these specific conditions has been added/changed in the system.

This Notification was generated on 21-09-2023 11:55 in Asia/Dubai.

Below are the links to the files that triggered this Alert.

This is an autogenerated email, please do not reply.

File ID: 42777
General Event Type:
Medication/Fluid

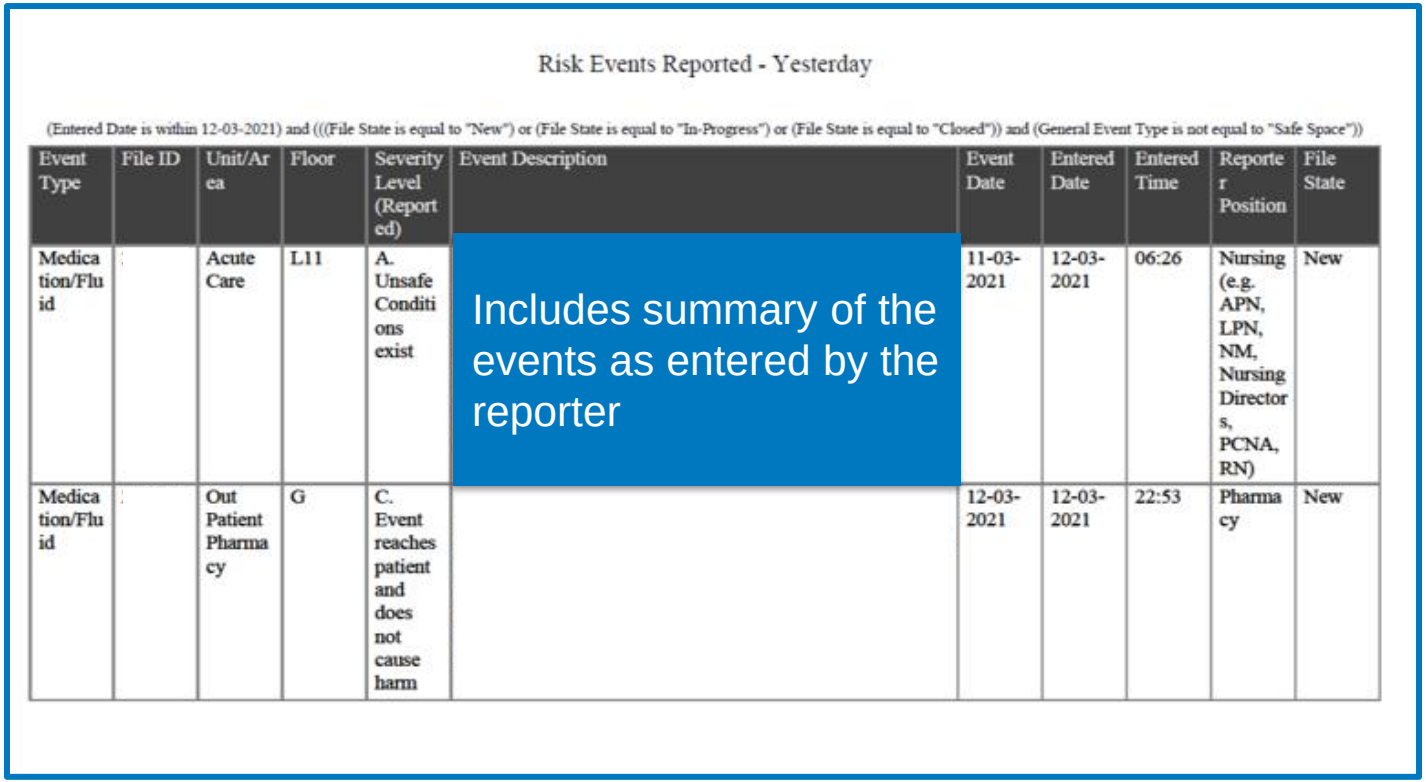
Severity Level:
C. Event reaches patient and does not cause harm

File ID: 43021
General Event Type:
Medication/Fluid

Severity Level:
A. Unsafe Conditions exist

EVENT REPORTS

Events in Last 24 hours



Risk Events Reported - Yesterday

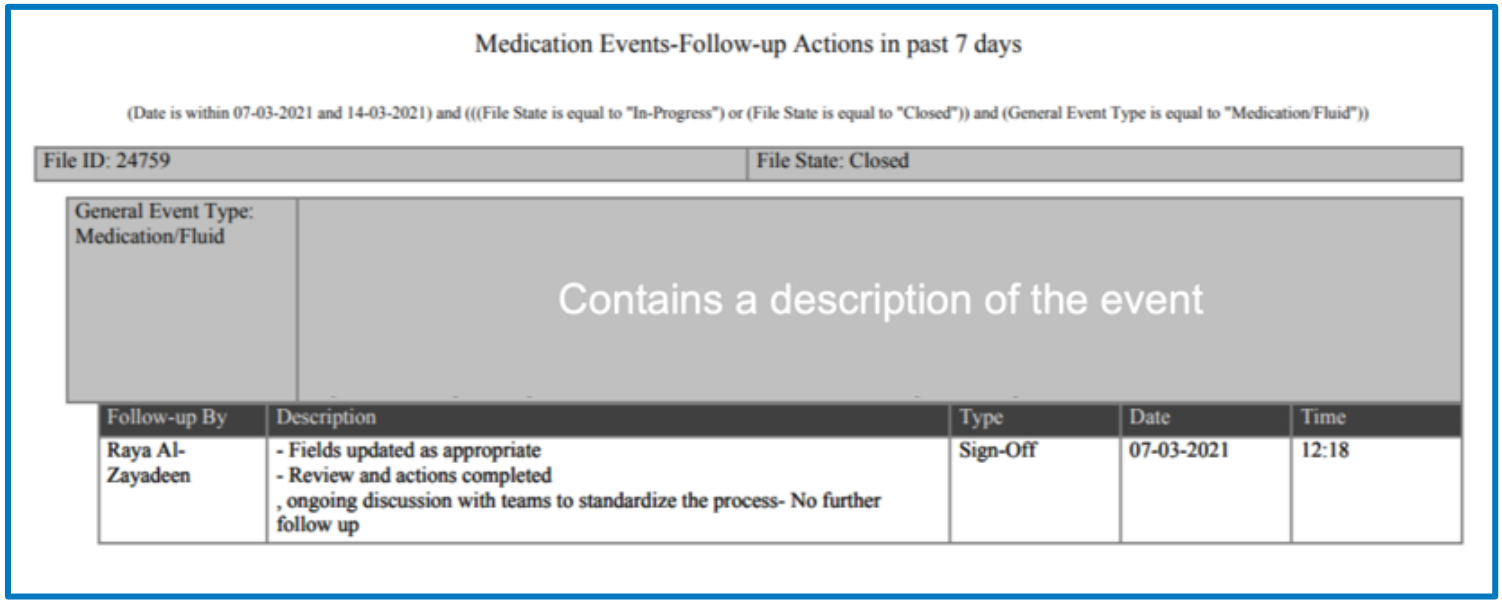
(Entered Date is within 12-03-2021) and (((File State is equal to "New") or (File State is equal to "In-Progress") or (File State is equal to "Closed")) and (General Event Type is not equal to "Safe Space"))

Event Type	File ID	Unit/Area	Floor	Severity Level (Reported)	Event Description	Event Date	Entered Date	Entered Time	Reporter Position	File State
Medication/Fluid		Acute Care	L11	A. Unsafe Conditions exist		11-03-2021	12-03-2021	06:26	Nursing (e.g. APN, LPN, NM, Nursing Directors, PCNA, RN)	New
Medication/Fluid		Out Patient Pharmacy	G	C. Event reaches patient and does not cause harm		12-03-2021	12-03-2021	22:53	Pharmacy	New

Includes summary of the events as entered by the reporter

EVENT REPORTS

Follow-up in Last 24 hours



Medication Events-Follow-up Actions in past 7 days

(Date is within 07-03-2021 and 14-03-2021) and (((File State is equal to "In-Progress") or (File State is equal to "Closed")) and (General Event Type is equal to "Medication/Fluid"))

File ID: 24759	File State: Closed

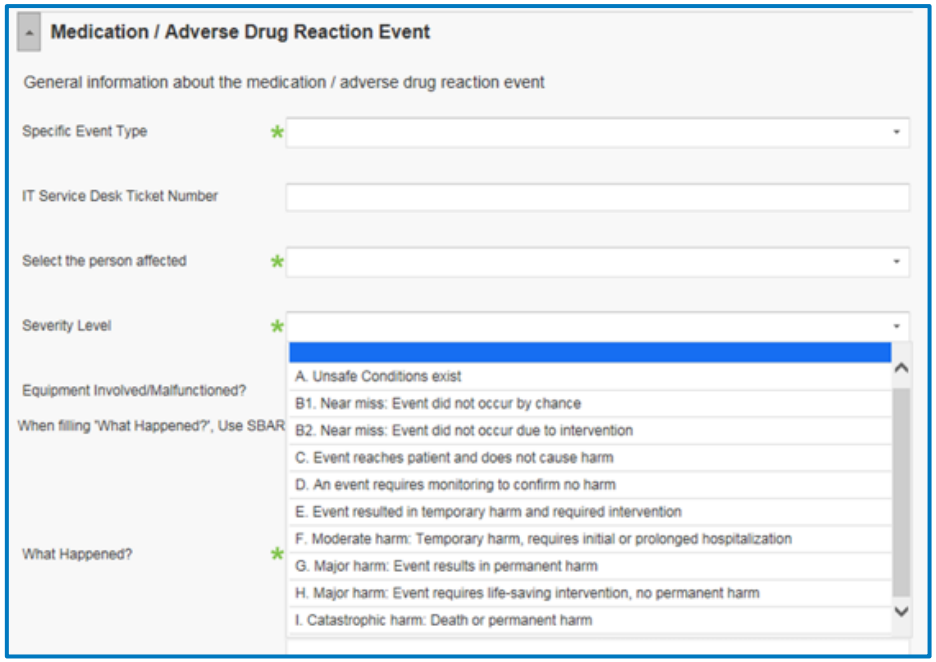
General Event Type: Medication/Fluid	Contains a description of the event

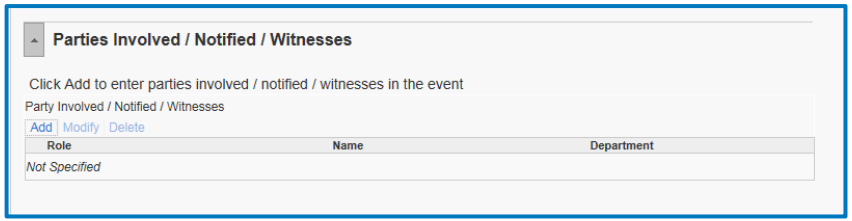
Follow-up By	Description	Type	Date	Time
Raya Al-Zayadeen	- Fields updated as appropriate - Review and actions completed , ongoing discussion with teams to standardize the process- No further follow up	Sign-Off	07-03-2021	12:18

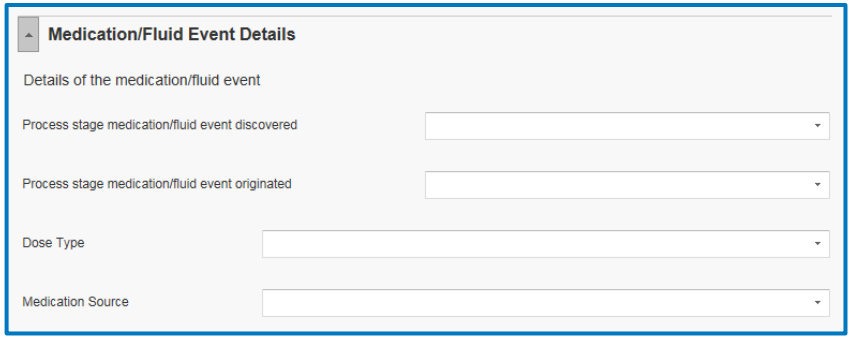
EVENT REPORTS

	Monday	Tuesday	Wednesday	Thursday	Friday
Daily Summary	◉	◉	◉	◉	◉
Daily Follow-up Summary	◉	◉	◉	◉	◉
Events Pending Closure	◉				
7 Day Summary					◉
7 Day Follow-up Summary					◉

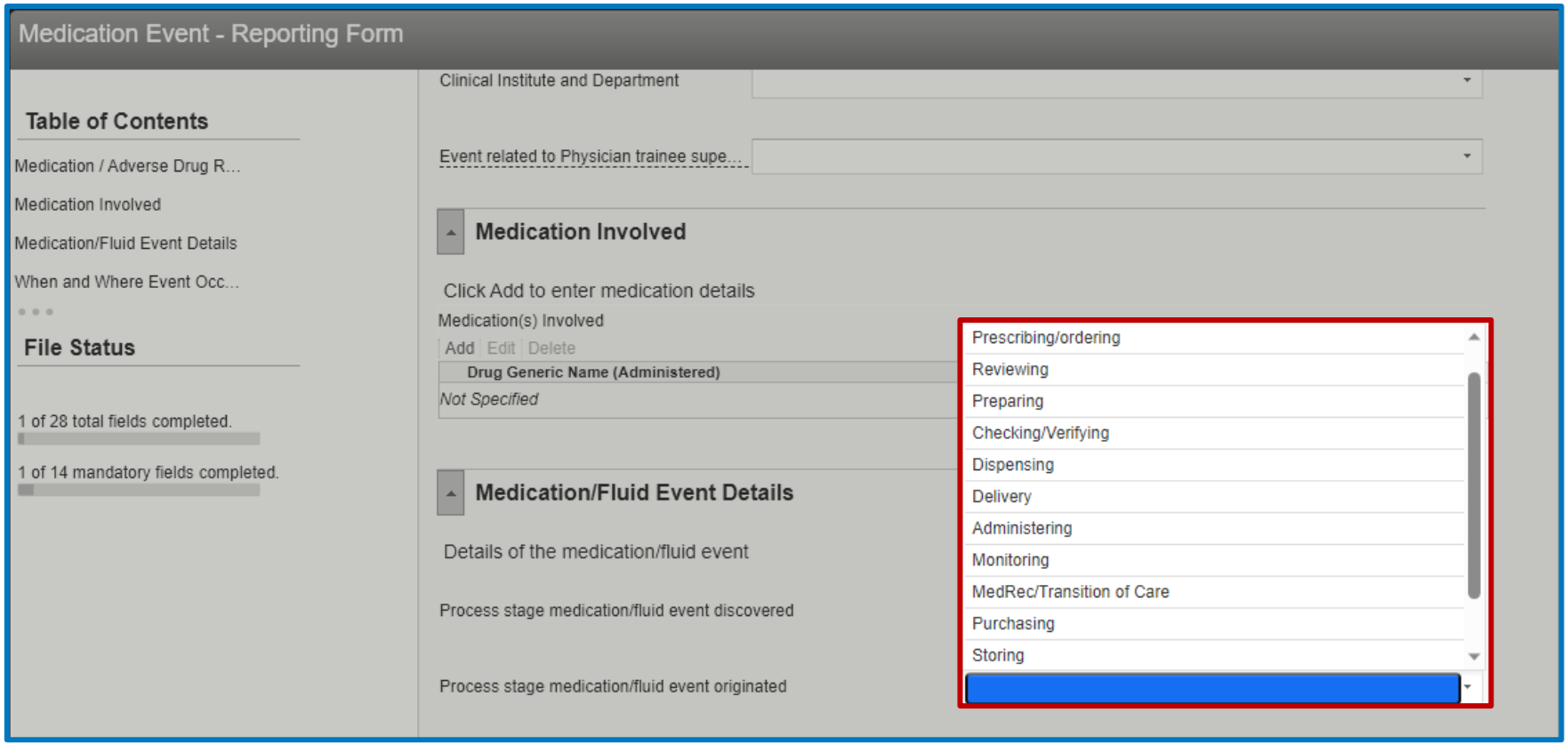
STEP 2: EVENT REVIEW & TASKING



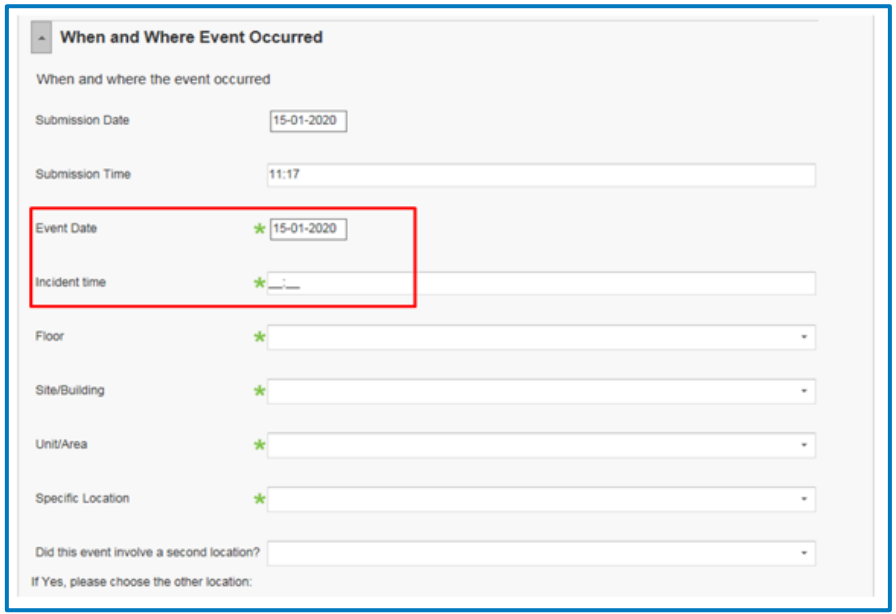


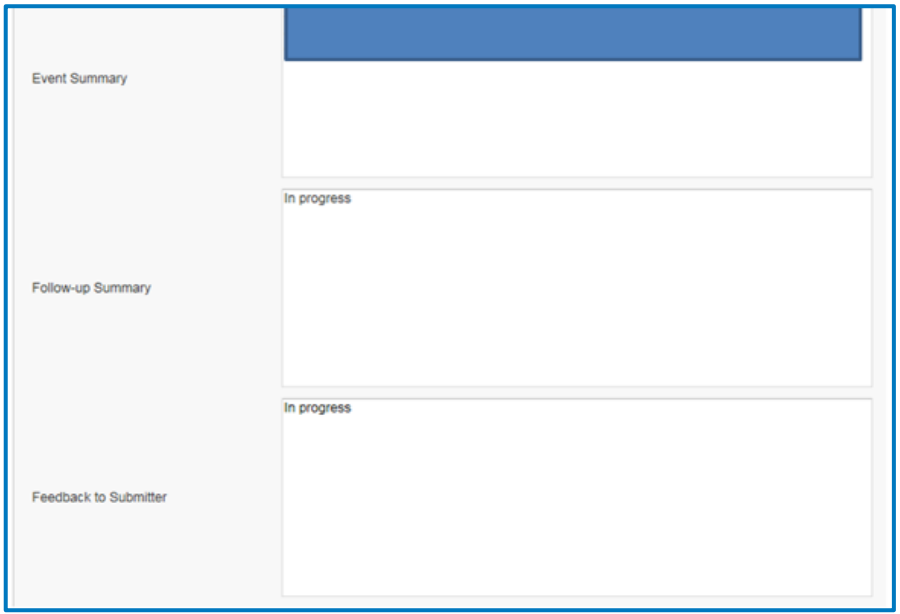


STEP 2: EVENT REVIEW & TASKING



STEP 2: EVENT REVIEW & TASKING





STEP 3: INVESTIGATION & FOLLOW-UP

What Happened?

Why did it Happen?

How did it Happen?

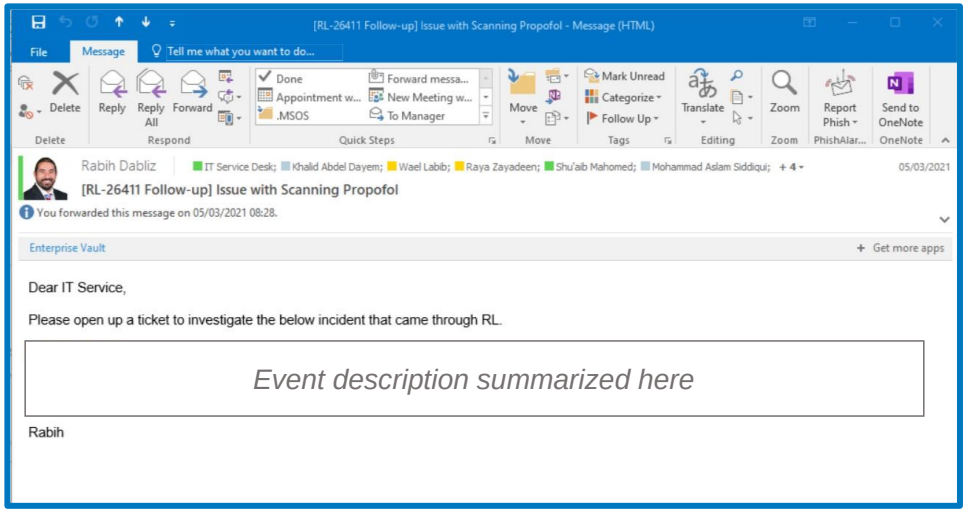
Action Plan

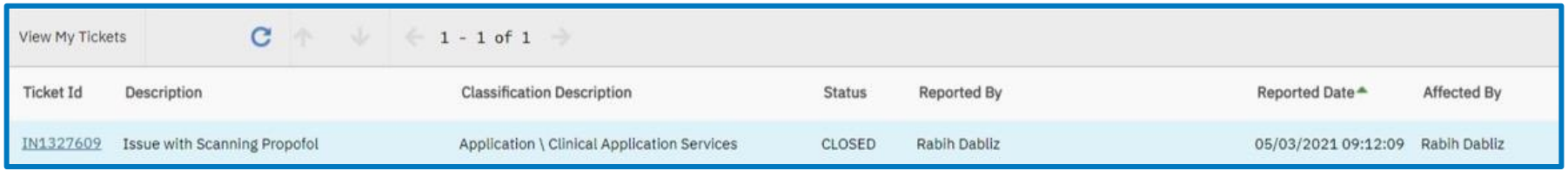
Assess Success

STEP 3: INVESTIGATION & FOLLOW-UP

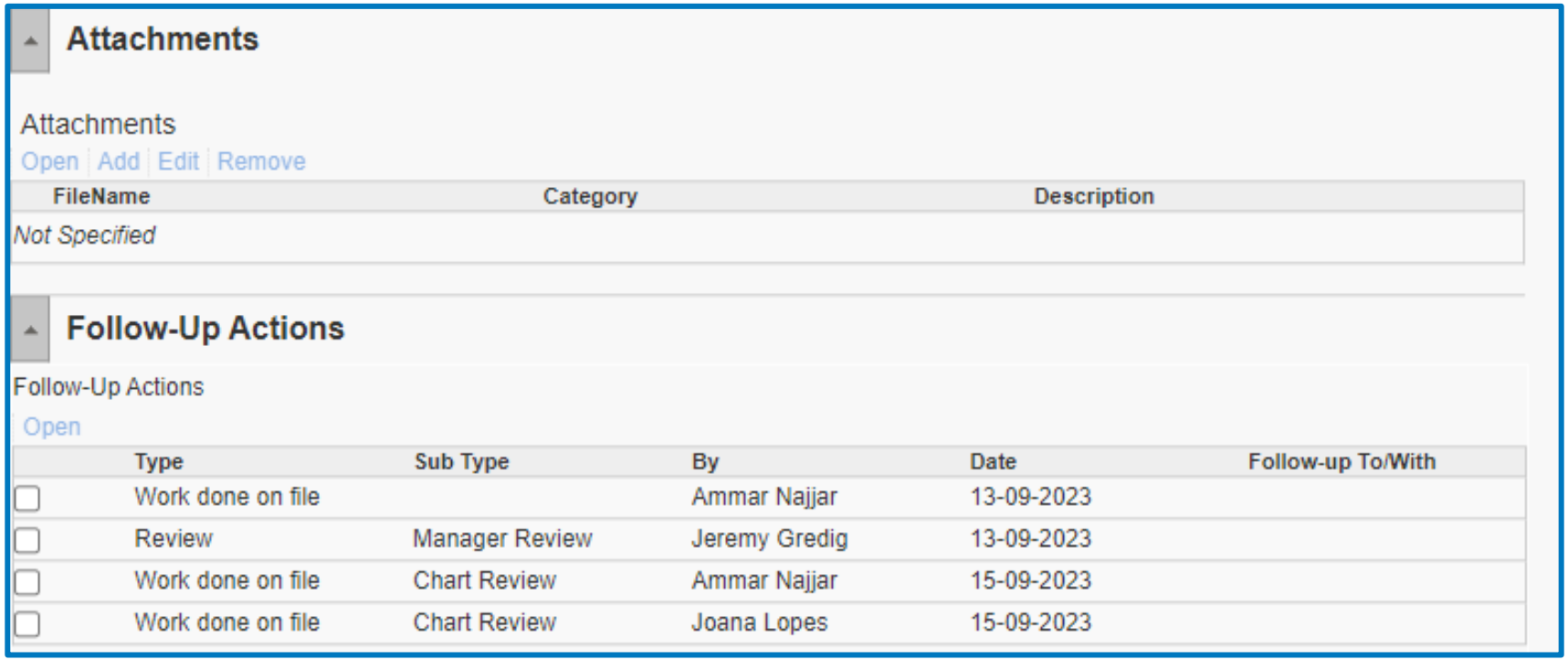
Why Did it Happen?	**Information System** • Patient correctly identified? • Documentation provides a clear picture? • Training issue? Communication issue? • Level of automation appropriate?	**Equipment** • Displays and controls understandable? • Equipment detects & displays problems? • Standardized or several different models? • Maintenance/upgrades up to date? • Warnings/labels understandable?
	Environment • Noise levels interfere with voices/alarms? • Lighting adequate for tasks?	**Architecture** • Area adequate for people & equipment? • Clutter or inadequate stowage? • People flow adequate, optimal? • Work areas, tools..etc located correctly?
	Policies & Processes • Do people work around policy? • Standardized process or order set? • Use of checklists or other tools? • Audit/quality control for process	**Safety Mechanisms** • Did anything stop or decrease harm? • Equipment safety mechanism functional? • System designed to be fault tolerant?
How to Prevent it?	**Standardize/Simplify** • Standardize equipment • Standardize protocol • Remove unneeded steps	**Improve or New Device** • Better controls/displays • Better integration • More fault tolerant
	Automation/Computerization • Automatic calculations • Provide reminders • Assist decision making	**Improve Architecture** • Improve flow of personnel • Better lighting, noise, clutter • More fault tolerant • Better stowage, signage, etc

STEP 3: INVESTIGATION & FOLLOW-UP





STEP 3: INVESTIGATION & FOLLOW-UP



Attachments

Attachments

Open | Add | Edit | Remove

FileName	Category	Description
Not Specified		

Follow-Up Actions

Follow-Up Actions

Open

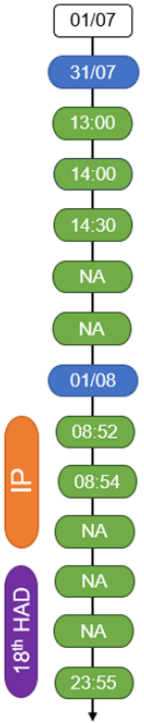
	Type	Sub Type	By	Date	Follow-up To/With
☐	Work done on file		Ammar Najjar	13-09-2023	
☐	Review	Manager Review	Jeremy Gredig	13-09-2023	
☐	Work done on file	Chart Review	Ammar Najjar	15-09-2023	
☐	Work done on file	Chart Review	Joana Lopes	15-09-2023	

STEP 3: INVESTIGATION & FOLLOW-UP

RL- 42387	Level 18	August 2	Severity C
Brief Description of Event	Pharmacy did not dispense TPN to the unit resulting in RN calling at night for replacement		
WHAT Happened?	• See timeline for details		
WHY did it Happen? (Contributing Factors)	• Awareness of operational process • No handoff communication between SPC Pharmacists • Reporter did not read endorsement email • No check in SPC for previous day's TPN	• No verbal communication to print label • Pharmacist misread the TPN labels • Home TPN bags sent to unit • No clear care plan in endorsement e-mail between PS and RPh	

STEP 3: INVESTIGATION & FOLLOW-UP

RL- 42387	Level 18	August 2	Severity C

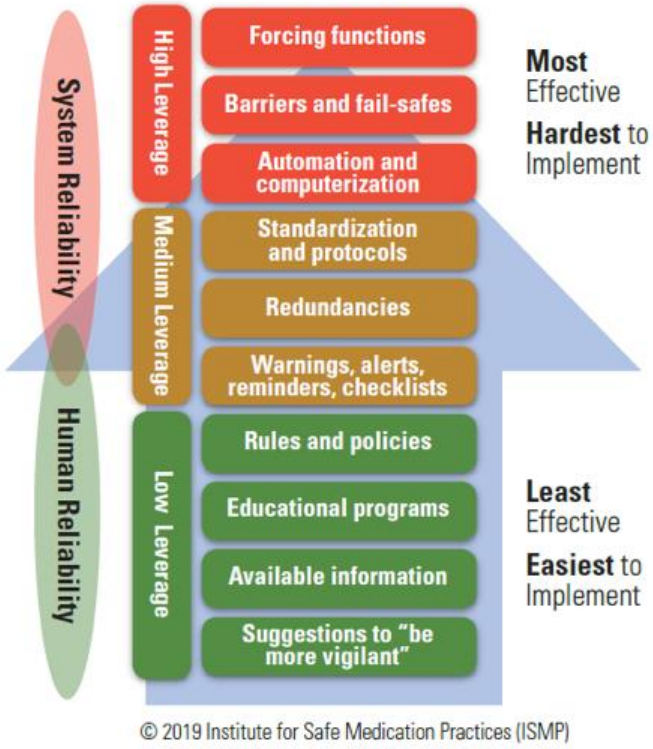


MD	Admits patient	
MD	Plans for patient discharge	
PS	Orders 3 bags of home TPN	
RPh	Notifies team that TPN are ready	
MD	Cancels patient discharge	
PS	Provides verbal communication to SPC RPh to relabel Home TPN bag for inpatient use	
PS	Sends E-mail communication to Inpatient team	
PS	Reorders TPN as DO NOT dispense	
RPh	Verifies no order	
Tech	Does not check labels from previous day	
RN	Calls requesting label to scan Home TPN	
RPh	Finds 3 bags of TPN on unit ➔ 1 Bag was expired and 2 home TPN bags	
RPh	Decides to prepare	

MD: Physician
PS: Pharmacotherapy Specialist
Tech: Pharmacy Technician
IP: Inpatient Pharmacy
RPH: Pharmacist
RN: Registered Nurse
TPN: Total Parenteral Nutrition

STEP 4: CORRECTIVE ACTION

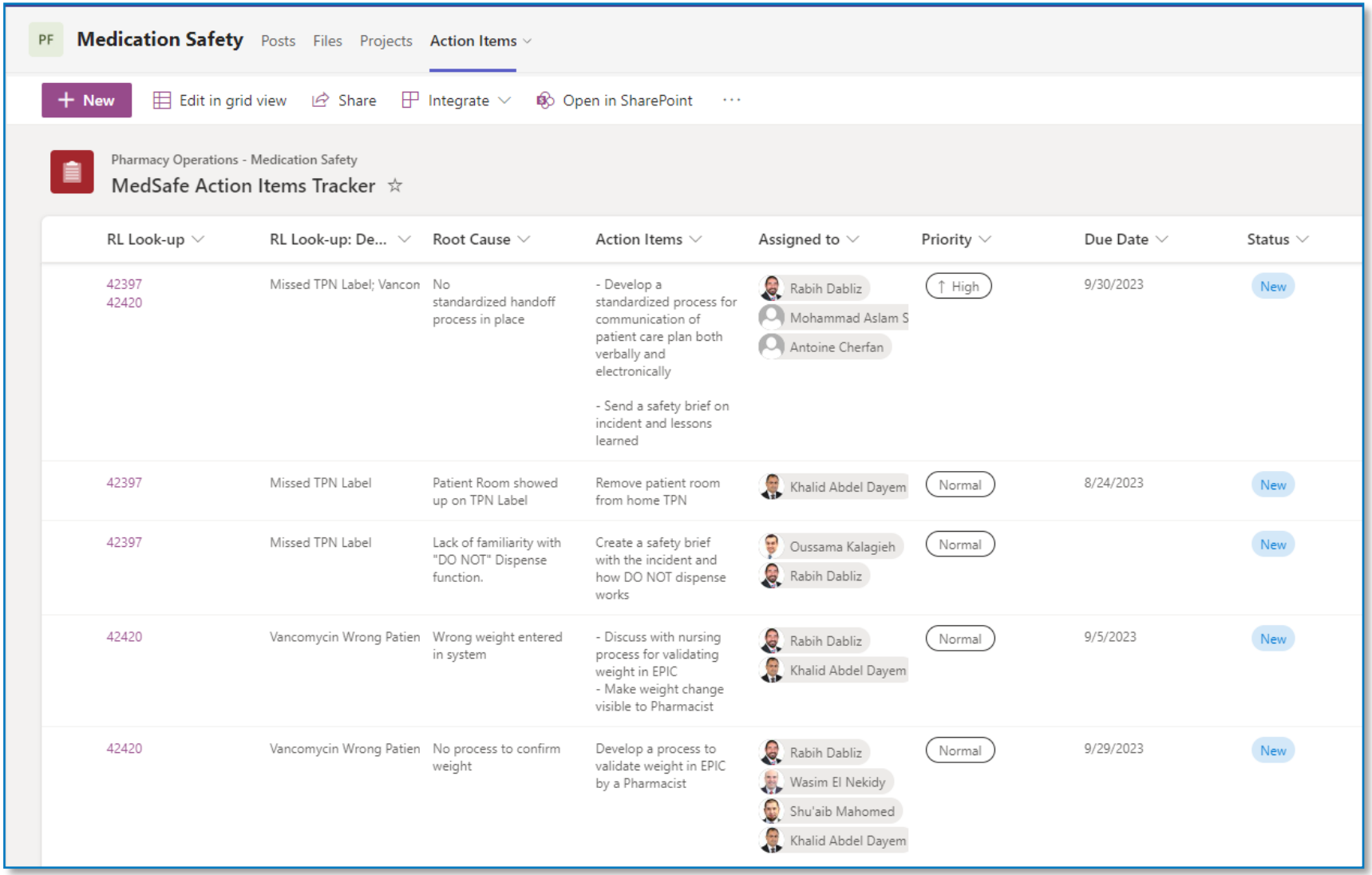
- System reconfiguration
  - Infusion pump
  - EPIC
  - Pyxis
- Removing the risk
  - Limiting access to the medication
  - Providing smaller size/strength



STEP 3: INVESTIGATION & FOLLOW-UP

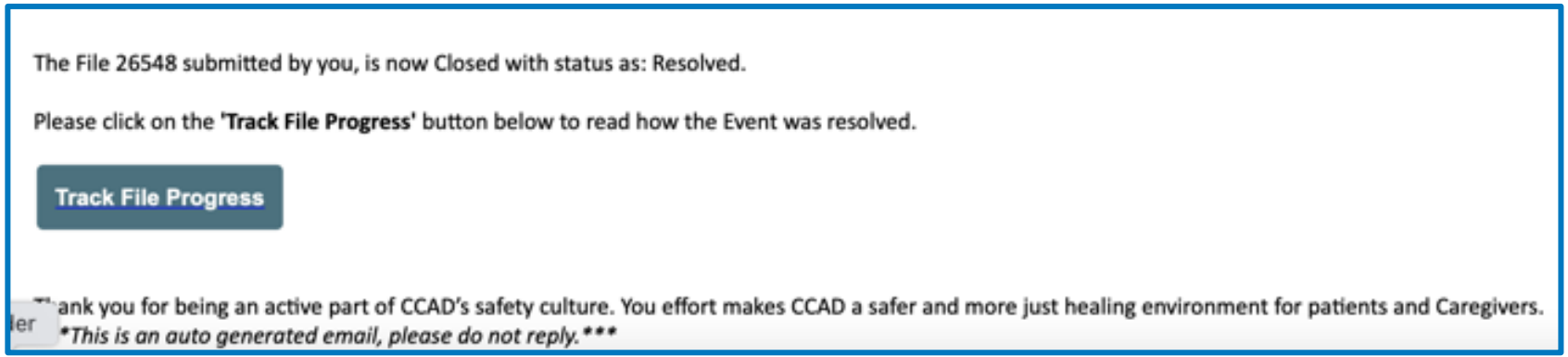
RL- 42387	Level 18	August 2	Severity C

HOW TO PREVENT IT?			
ROOT CAUSE	**ACTION ITEM**	**OWNERS**	**WHEN**
No standardized handoff process in place	• Develop a standardized process for communication of patient care plan both verbally and electronically • Send a safety brief on incident and lessons learned	F/U with Antoine/Mohammad	End of Sept
Patient Room showed up on TPN Label	• Remove patient room from home TPN	Khaled	10 days
Lack of familiarity with Do not dispense function	• Update the safety brief on how the functionality works	Rabih All	End of Week


PF
Medication Safety
Posts
Files
Projects
Action Items
New
Edit in grid view
Share
Integrate
Open in SharePoint
Pharmacy Operations - Medication Safety
MedSafe Action Items Tracker
RL Look-up
RL Look-up: De...
Root Cause
Action Items
Assigned to
Priority
Due Date
Status
42397
42420
Missed TPN Label; Vancon
No standardized handoff process in place
- Develop a standardized process for communication of patient care plan both verbally and electronically
- Send a safety brief on incident and lessons learned
Rabih Dabliz
Mohammad Aslam S
Antoine Cherfan
↑ High
9/30/2023
New
42397
Missed TPN Label
Patient Room showed up on TPN Label
Remove patient room from home TPN
Khalid Abdel Dayem
Normal
8/24/2023
New
42397
Missed TPN Label
Lack of familiarity with "DO NOT" Dispense function.
Create a safety brief with the incident and how DO NOT dispense works
Oussama Kalagieh
Rabih Dabliz
Normal
New
42420
Vancomycin Wrong Patien
Wrong weight entered in system
- Discuss with nursing process for validating weight in EPIC
- Make weight change visible to Pharmacist
Rabih Dabliz
Khalid Abdel Dayem
Normal
9/5/2023
New
42420
Vancomycin Wrong Patien
No process to confirm weight
Develop a process to validate weight in EPIC by a Pharmacist
Rabih Dabliz
Wasim El Nekidy
Shu'aib Mahomed
Khalid Abdel Dayem
Normal
9/29/2023
New

STEP 5: CLOSURE & FEEDBACK

- Event updated with details of the resolution then closed
- Caregiver receives notification that submitted event is closed


The File 26548 submitted by you, is now Closed with status as: Resolved.

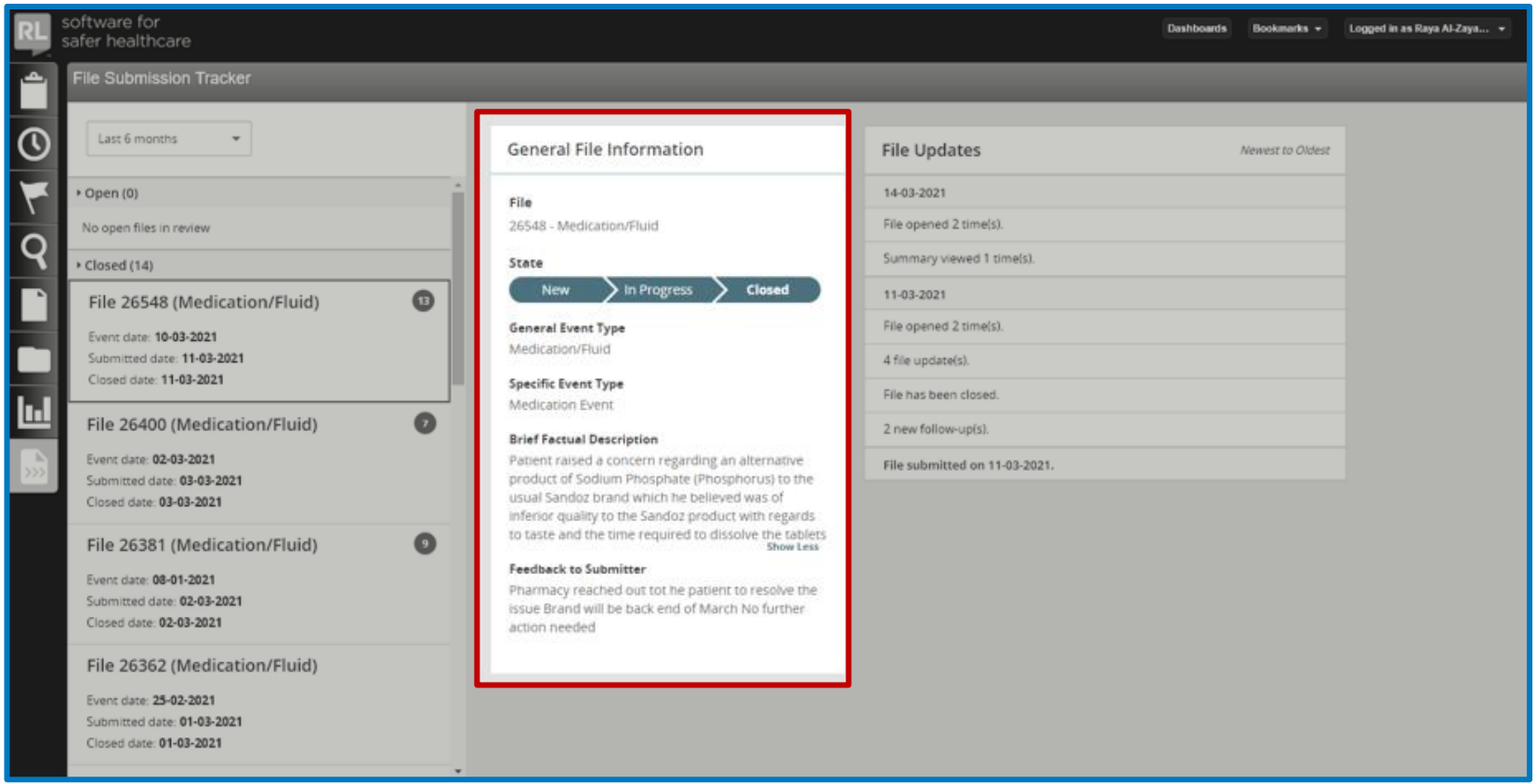
Please click on the **'Track File Progress'** button below to read how the Event was resolved.

Track File Progress

Thank you for being an active part of CCAD's safety culture. You effort makes CCAD a safer and more just healing environment for patients and Caregivers.

This is an auto generated email, please do not reply.

STEP 5: CLOSURE & FEEDBACK



WHAT WE DO WITH THE EVENTS

EXTERNAL

- Department of Health
  - *Adverse Drug Reactions*
  - *Serious Harm Events*
  - *Controlled & Narcotics*
  - *All events (quarterly)*
- Institute for Safe Medication Practices

Date Reported to DOH	21-02-2021
DOH Reference Number	AE/001142/0221

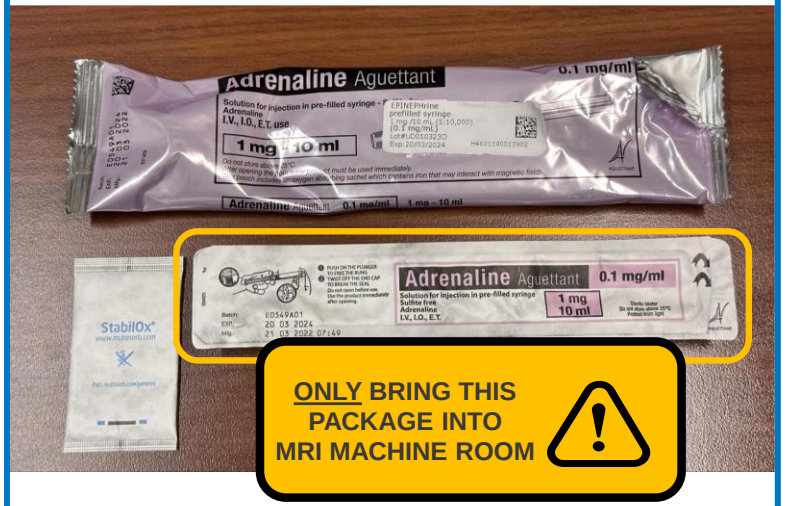
INTERNAL

- Quality & Safety Committees (QOC, QSC)
- Annual Review
- Safety Briefs
- Risk & Project Registry

SAFETY ALERT

Cleveland Clinic Abu Dhabi
A Mubadala Health Partner

ADRENALINE (EPINEPHrine)
SAFE USE IN MRI



- **Remove the syringe from the outer purple foil before bringing into the MRI room.**

- The outer purple foil package of Adrenaline (EPINEPHrine) pre-filled syringes by Aguettant, contains an oxygen-absorber called Stabilox®, used to prolong the shelf-life of the product.

- Stabilox® contains iron, which in a recent incident, resulted in the syringe being pulled into the MRI machine outer wall.

EVENT REPORT OUT

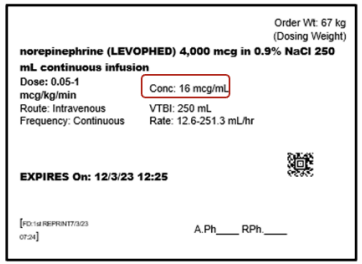
Cleveland Clinic Abu Dhabi
A Mubadala Health Partner

NOREpinephrine Incident

SUMMARY OF INCIDENT

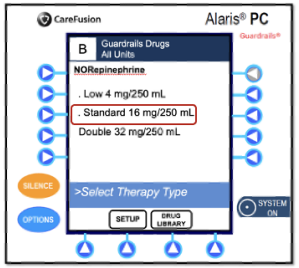
NORepinephrine bag of 4 mg/250 mL (16 mcg/mL) programmed in Alaris pump as 16 mg/250 mL (64 mcg/mL)

Bag Label



Physician intended 16 mcg/mL

Pump Screen



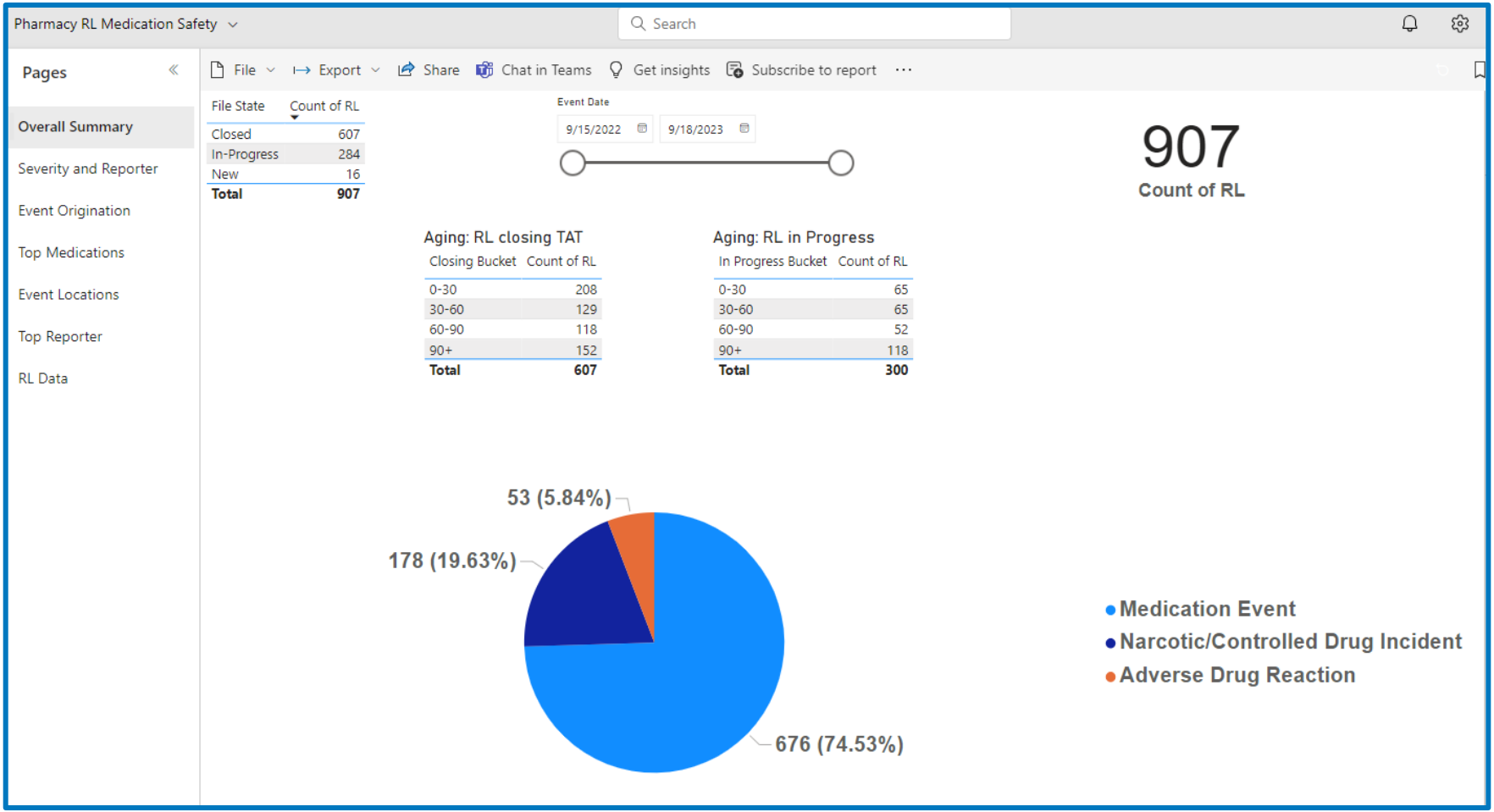
Nurse entered 16 mg/250 mL

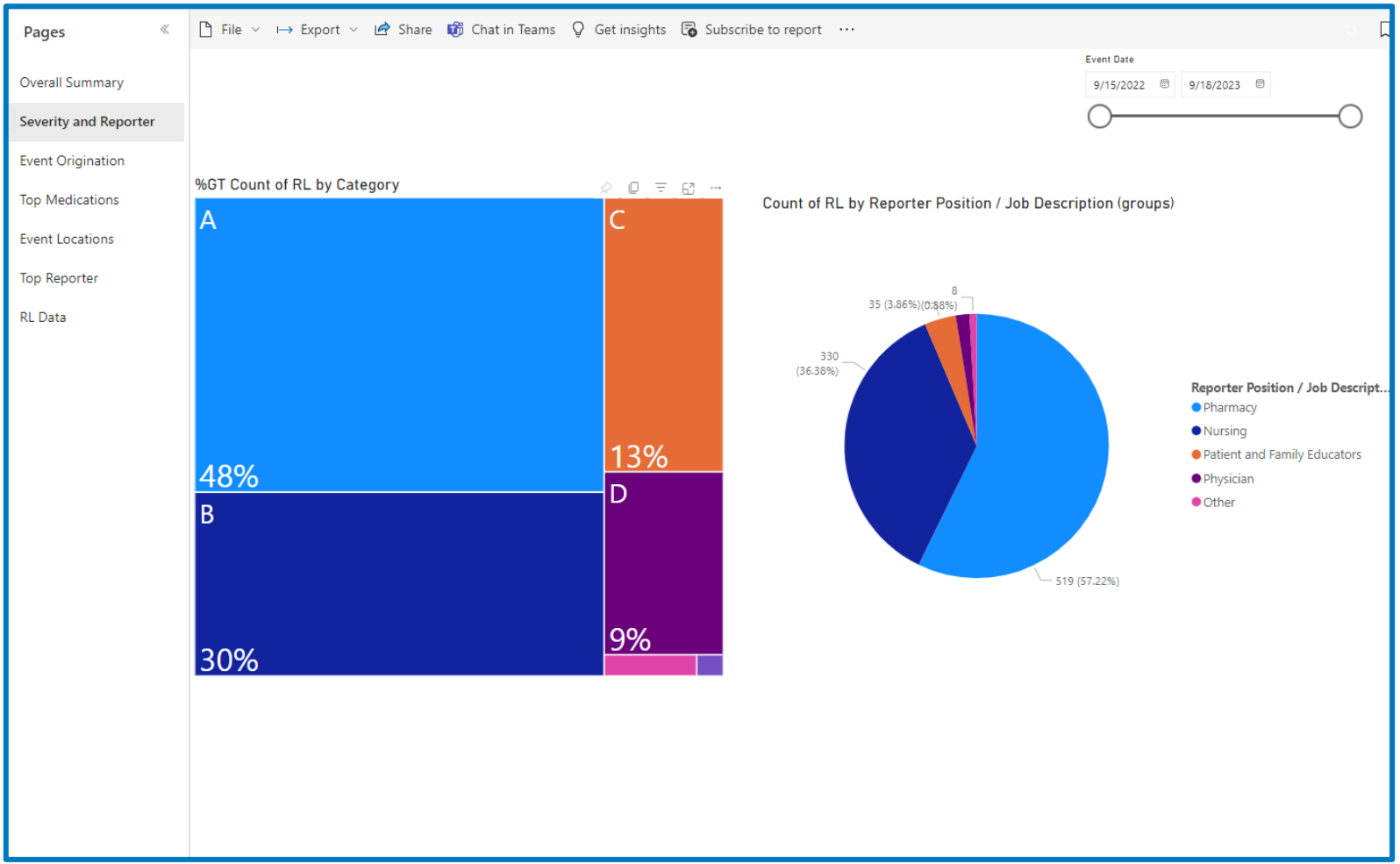
Medication	Vial Strength (Concentration)	Standardization	Strength (Concentration) EPIC	Strength (Concentration) ALARIS
NORepinephrine	4 mg/4mL (1 mg/1 mL)	Low	4,000 mcg/250 mL (16 mcg/mL)	4 mg/250 mL (16 mcg/mL)
		Standard	16,000 mcg/250 mL (64 mcg/mL)	16 mg/250 mL (64 mcg/mL)
		Double	32,000 mcg/250 mL (128 mcg/mL)	32 mg/250 mL (128 mcg/mL)
Epinephrine	1 mg/mL (1 mL)	Standard	4,000 mcg/250 mL (16 mcg/mL)	4 mg/250 mL (16 mcg/mL)
		Double	8,000 mcg/250 mL (32 mcg/mL)	8 mg/250 mL (32 mcg/mL)
		Quadruple	16,000 mcg/250 mL (64 mcg/mL)	16 mg/250 mL (64 mcg/mL)
		Anaphlaxis	1 mg/250 mL	1 mg/250 mL

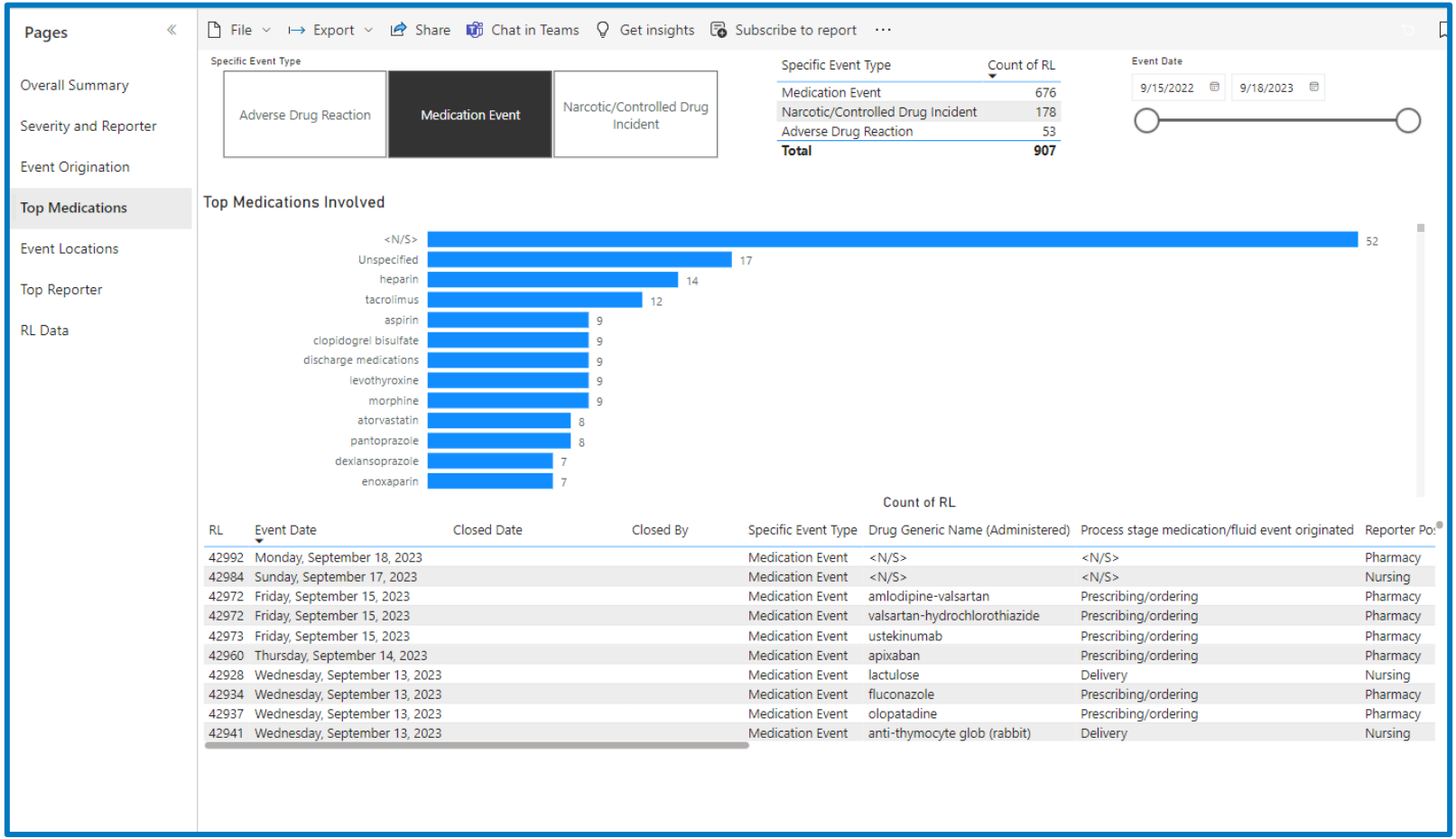
ACTION TAKEN

Change strength to:
- Standard 5 mg/250 mL (20 mcg/mL)
- Double 10 mg/250 mL (40 mcg/mL)
- Triple 15 mg/250 mL (60 mcg/mL)

Change low concentration to:
- 2 mg/250 mL (8 mcg/mL)
Or
- 3 mg/250 mL (12/mcg/mL)







RL	Event Date	Closed Date	Closed By	Specific Event Type	Drug Generic Name (Administered)	Process stage medication/fluid event originated	Reporter Po:
42992	Monday, September 18, 2023			Medication Event	<N/S>	<N/S>	Pharmacy
42984	Sunday, September 17, 2023			Medication Event	<N/S>	<N/S>	Nursing
42972	Friday, September 15, 2023			Medication Event	amlodipine-valsartan	Prescribing/ordering	Pharmacy
42972	Friday, September 15, 2023			Medication Event	valsartan-hydrochlorothiazide	Prescribing/ordering	Pharmacy
42973	Friday, September 15, 2023			Medication Event	ustekinumab	Prescribing/ordering	Pharmacy
42960	Thursday, September 14, 2023			Medication Event	apixaban	Prescribing/ordering	Pharmacy
42928	Wednesday, September 13, 2023			Medication Event	lactulose	Delivery	Nursing
42934	Wednesday, September 13, 2023			Medication Event	fluconazole	Prescribing/ordering	Pharmacy
42937	Wednesday, September 13, 2023			Medication Event	olopatadine	Prescribing/ordering	Pharmacy
42941	Wednesday, September 13, 2023			Medication Event	anti-thymocyte glob (rabbit)	Delivery	Nursing

NORepinephrine Example

NORepinephrine

- Two incidents whereby anesthesia prepared NORepinephrine 4 mg/250 mL **(16 mcg/mL)** but RN programed Alaris pump as 16 mg/250 mL **(64 mg/mL)**

Action Plan:

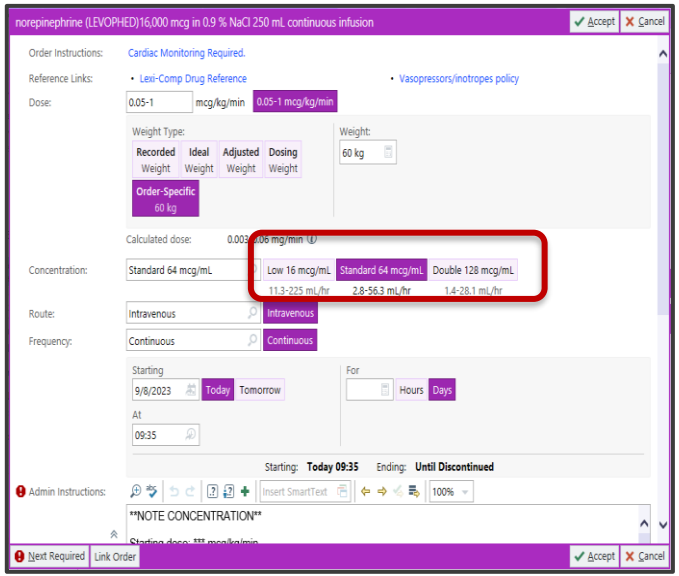
- Reviewed all vasopressors and inotropes records
- Changing the following concentrations in EPIC/Alaris

NORepinephrine	**4 mg**/250 mL (16 mcg/mL)	→	**3 mg**/250 mL (12 mcg/mL)
Epinephrine	**4 mg**/250 mL (16 mcg/mL)	→	**5 mg**/250 mL (20mcg/mL)
	8 mg/250 mL (32 mcg/mL)	→	**10 mg**/250 mL (40 mcg/mL)
	16 mg/250 mL (64 mcg/mL)	→	**15 mg**/250 mL (60 mcg/mL)

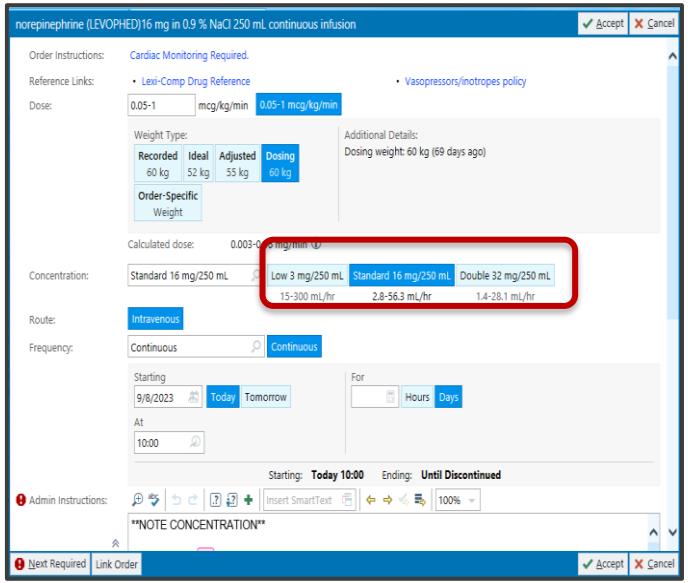
- Changing dosing buttons in EPIC from concentration (mcg/mL) to strength (xx mg/ xx mL)
- Standardizing concentration/strength display between Alaris and EPIC

NORepinephrine

Current



Revision



Alaris Pump

MEDICATION MANAGEMENT UPDATE

كليفلاند كلينك أبوظبي
Cleveland Clinic Abu Dhabi
A Mubadala Health Partner

Vasopressors and Inotropes

WHAT IS CHANGING?
A update will occur to the concentrations of epinephrine and NORepinephrine in both EPIC and Alaris

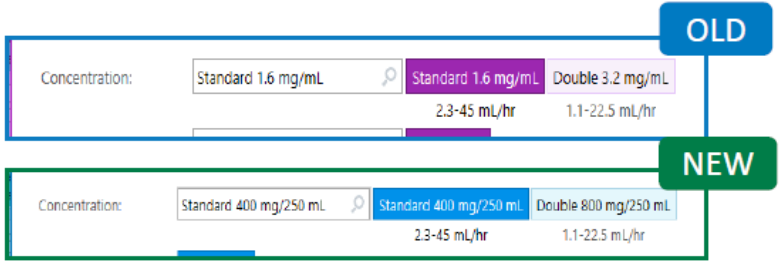
WHY IS IT CHANGING?
This is in response to various events where epinephrine 4 mg/250 mL (16 mcg/mL) was confused with epinephrine 16 mg/250 mL (64 mcg/mL) resulting in patient harm

WHEN IS IT CHANGING?
Thursday August 31, 2023

	OLD	NEW
Epinephrine	4 mg/250 mL (16 mcg/mL) 8 mg/250 mL (32 mcg/mL) 16 mg/250 mL (64 mcg/mL)	5 mg/250 mL (20 mcg/mL) 10 mg/250 mL (40 mg/mL) 15 mg/250 mL (60 mcg/mL)
NORepinephrine	4 mg/250 mL	3 mg/250 mL

WHAT DOES THIS MEAN TO YOU?

FOR PHYSICIANS
- The concentration buttons will be updated in EPIC and will now be displayed in strength instead of concentration



FOR NURSES
- An Alaris update will occur on Wednesday August 30. A separate communication will be sent accordingly
- Nurses will be able to access both the old and new concentration during a 5-day transitional period

Thank You

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