

Pharmacy Advisory Committee March 23rd, 2023





The RPhAC mission is to advance pharmacy informatics throughout healthcare organizations, and to enhance safety and efficiency of pharmacy practices. The RPhAC committee members serve as subject matter experts that participate as stakeholders for various development projects, as well as on sprint reviews. These sprint reviews provide opportunities for our Advisory members to offer feedback on design, functionality, and user-centered workflows for development consideration.

Agenda

- Welcome and follow up from the previous meeting
- Customer Success Stories
- Development Corner
- Drug Shortages
- IV Workflow Management System
 - Workflow discussion
- AIMs interface
 - Workflow discussion
- ISMP Article Discussion: Preventing errors when preparing and administering medications via enteral feeding tubes (December 2022, Volume 20-Issue 12)



Housekeeping/Follow Up Katelyn Maynard, Senior Specialist

Housekeeping/Follow Up

- Pharmacy Advisory Committee webpage updates
 - Mission Statement
 - Current meeting/Past Meeting page
 - New Member Page
- Welcome new members
- IDEA-4676 has been moved to CLIN-233611, which is in progress with development
- ORD-83506
 - This issue was brought up during a functionality discussion. We wanted to note the OM group has provided this solution



Success Stories Katelyn Maynard, Senior Specialist

Success Stories

- Group Success- 1 Month LIVE with MT Circle
- What new features has your hospital implemented that made a positive impact? All success stories big or small are welcome.
- For example, have you implemented a new interface, such as the robot?
- For example, have you changed a PHA customer-defined parameter to align with recommendations?



Development Corner

Robert Lombardi, Supervisor, Development

Recent Pharmacy Enhancements - Completed

- **ORD-38591**: LTC/Continuing Care Medication Management/eRx (Expanse 2.2.33)
 - Ordering through OM utilizing eRx solution, transmit to retail/contract pharmacy for dispensing and administration via MAR
 - Storing MEDID from API drug concept onto PHA Drug dictionary entry through FSV update process, sent to OM for internal use
 - Using MEDID to match ordered drug against received drug for medication administration
 - Several fields locked down on edit screen in Pharmacy to maintain integrity
 - Seeking Early Adopter
- CLIN-230134: Consume Order Diagnosis/Problem (Expanse 2.2.37)
- CLIN-230332: Google Health MEDID (Expanse 2.1.46)
 - Search and Summarization tool
 - Early Adopters currently testing

- CLIN-232148: Canadian Clinical Drug Data Medication Nomenclatures (CS 5.67.48)
 - Provides support for a Canadian Continuity of Care document through RXM
 - CCDD standard concepts loaded from First Databank file
 - Contact FDB to request CCDD files be added to monthly/quarterly streams
 - Solution for Expanse handled in Ordering/Ambulatory using Medication Management drug concepts
- Multiple other related Stories added changes to:
 - Re-label fields from RxCUI to CCDD
 - Link CCDD codes to DINs
 - Re-name MIS Toolbox parameter to control loading of files
 - Add CVC codes to MIS Vaccine Component dictionary (for Immunization CCD retrieval)
- **CLIN-227518**: Charge Reconciliation Add Grand Total to PHA Billing Log (Expanse

2.1.49, Expanse 2.2.37)

Recent Pharmacy Enhancements - Completed

CLIN-230134: Consume Problem/Diagnosis from OM

- Requires ORD-86642
- Includes Non-Continuing Care environments
- PHA Copy/Edit is not allowed on CCeRx environment orders

Problems & History List MURPHY, PAUL 52 M 10/29/1970 Allergy/Adv:	No Known Drug	Allergies			Ca	ncel Sa
Search for: New Problem	Filter			Sort By: Rank Order	Rank Problems	Mass Edit
~ Active Problems				✓ Medical History		
Description	НСС	Onset	Add to Order		No Medical Problems to Display.	
> Liver abscess			\checkmark	✓ Surgical History		
> High blood cholesterol			~		No Surgical Problems to Display.	
> Resolved/Inactive/Ruled-Out (R/I/R)					neor olion.≓contrae kontrapater wit kontrikatike	
> Deleted						

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ORDERS BY CATEGORY		PROVIDER		DATE	STATUS		•
 Medications 							
Pending							
Label Comments							
Dose Instruction						•	
Special Instructions							
Protocol						•	
Taper	Se	arch For Taper				• ×	
Problem	Hig	h blood cholesterol				×	
	Abs	cess of liver				×	
					-	•	
Diagnosis Code	E78	3.00 - Pure hypercholesterolemia, unspecified					
	K75	5.0 - Abscess of liver					

Murphy,Paul ① 52 M 10/29/19 ADM IN DM-I DM-:	70 6ft 1in 25	us Not Ordered No Hx Ava 50lb 2oz BSA:2.37m² v: No Known Drug Allergie		MG0000058639
	Detail History	Medicatio		r Links
Order	predniSONE 10 mg PO DAILY 0 of 30 Doses Given	Ordering User Ordering Device	MURPHY,DANIEL J LAPTOP (Browser)	
Total Doses Ordering Provider Order Location	30 MURPHY,DANIEL J DM-I	Category Order Number Internal Order Number	Medications 230217-105608086 MG1-B20230217105608086	
Source	02/17/2023 10:56 EST	Rx #	H00000507	
Start Stop Status	02/18/2023 09:00 EST 03/19/2023 09:01 EDT Active			
High blood cholest	Problem			
Abscess of liver	Diagnosis Code ercholesterolemia, unspecified		_	
K75.0 - Abscess of				
Audit 02/17/2023 10:56	ESTPHA - MURPHY,DANIEL JNo Signature is Necessary Order is Entered in PharmacyN			
Conflict Type Problem Interactio Dose Warning	DescriptionPharmacy Override CommenthypercholesterolemiaMd To ReviewMaintenance (1 Warning)Dose Changed			

• CLIN-230332: Google Health - Use FDB's MEDID for Medication search

- Search and Summarization tool within Expanse Chart
- Leverage MEDITECH legacy data
- Map outside data sources
- Achieves a true Longitudinal Health Record
- Retrofit MEDID from the LTC/CCMM/eRx project into 2.1
- Several related Stories to copy/delete/list MEDID

			IBUPROFEN	800 MG TAB	LET			
1	Dispensing	Ordering	Rules	Ingredients	Screenings	Site	Inventory	
	Purchasing	PCS	Customer-Defined Screen	OM	Strings / OM Site	Locations		
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FSV ID	008350		ibuprofen 800 mg ORAL tabl	let				
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CLIN-230332: Google Health - Use FDB's MEDID for Medication search

30015 - 1	BUPROFEN						Last Edit: 0	2/27/23 16:13		
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CLIN-232148: Canadian Clinical Drug Data - Medication Nomenclatures

	K. MEDITECH		-	0	×
Clinical Dictionaries (F-O) Facilities (Customer-Defined) Financial Classes Formulary Service Vendor Content Growth Charts Holidays Imaging Appropriate Use Institutions Institutions Instrances Interaction/Conflict Groups Languages Locations Marital Statuses MSA/CBSA Codes Messages National Provider Identifiers Newborn Adm Sources Notifications Order Periods Order Periods	Formulary Service Vendor Content Allergens Medication Nomenclature DINs Formulary Service Vendor Load	Medication Nomenclature List Medication Nomenclature View Medication Nomenclature Medication Nomenclature Inquiry	Back Home Recent Frequer	ř.	

CLIN-232148: Canadian Clinical Drug Data - Medication Nomenclatures

View MIS Medication	Nomenclature Dictionary (MTUNV56/D5.67LM/S567LM.CAN1) - Dr. MEDITECH	-	, C	×
02326809	Last Edit: 13/01/23 13:29			
	General CCDD CCDD Audit			
_				
Mnemonic	C02326809			
Active				
Type	CCDD			
Term Type	Manufactured Product			
Replaced by				
(Description			
AMLODIPINE	(amlodipine (amlodipine besylate) 5 mg oral tablet) PRO DOC LIMITEE			

- CLIN-227518: Charge Reconciliation Add Grand Total to PHA Billing Log
 - Trailer includes daily batch totals for each business unit
 - Multiple days/business units now have totals

DATE: 03/0 USER: PCAF		931					A - DEVN.US Billing Lo	
		Date	Batch			B/	AR Business	Unit
Account Number	Name			Billing Number	Qty	Amount	Cost	Order Type Doctor
		Date	в/2	AR Busine	ess Unit	:	Daily Bat	ch Total
		09/27/22	MTE	зU			1047	33.87
		09/28/22	MTE	BU			9	24.10
		09/29/22	MTE	BU			2190	54.48
						Total	3247	12.45
		09/27/22	MTE	3U2			69	53.60
		09/28/22	MTE	BU2				84.80
		09/29/22	MTE	3U2				63.60

Pharmacy Enhancements - In Progress

• IDEA-9474/CLIN-234621: Auto Verification Improvements (Expanse 2.1, 2.2)

Originated as request to have Unverified orders cross to Dispensing Machines and appear as profiled meds

- Reduces instances of Unverified orders
- Orders are available for vending from dispensing machines and MAR administration in more timely manner
- Drug Strings, Order Strings
- New "File Verified From" multiple
- Unedited/dictionary-defined string will file as verified provided order is complete
- Respect existing infrastructure for auto verification (e.g., rules, missing required field values)
- Existing Customer Defined Parameter will continue to be the default

Pharmacy Enhancements - In Progress

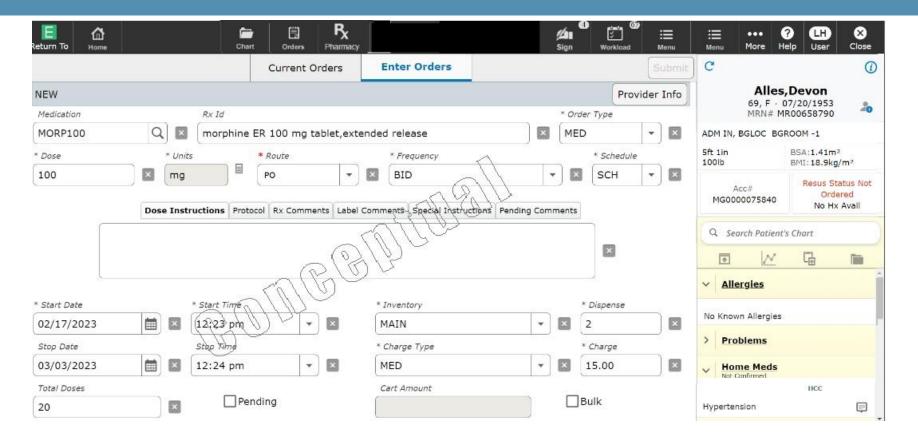
E Enter	r/Edit PHA Drug	Dictiona	ry (DEVN.CMS)									? Help	MJ User	× Close
		BU - IBUPF	ROFEN					1	Last Edit: 02/	16/23 10:17				
					Ibuprof	en 800 MG TAB	LET							
			Dispensing Orderin		Rules	Ingredients			Inventory					
			Purchasing PCS	Customer	-Defined Scre	en OM	Strings / OM Site	Locations						
		PHA	Site											
		.DFT	DEFAULT			A								
			Order Typ	es Compone	ent Strings IV	Fluid Strings	Order Strings Ord	er Strings 2						
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- CLIN-170465 (main Epic): Expanse Pharmacy (Expanse 2.3)
 - Dictionaries moved into web-based structures
 - Ordering screens modeled after Web Acute Ordering with emphasis on pharmacist-specific roles, workflows, and Advisory committee feedback
 - Several stakeholder meetings have contributed to design and usability (e.g., PHA New Activity)
 - Access to WEB tools, such as Widgets or Chart viewer, allows access to clinical information without leaving the patient's order
 - Leverage use of FDB API Med Knowledge Framework/drug concepts
 - Direct access to Interprovider messaging for better communication among providers
 - Streamlined maintenance of dictionaries, eliminating duplication of dictionaries (copies of dictionaries from NPR to M-AT)

• <u>Goals:</u>

- To enhance the Pharmacist's experience and provide the necessary tools to perform their job effectively and safely.
- Pharmacists are continuously in Web to perform job:
 - Review patient charts
 - Perform Home Med Reconciliation
 - Review transfer orders
- Eliminate returning to Pharmacy routines that are now outdated with sparse real estate left to enhance
 - Resolve long standing issues with Formulary Management

	Current Orders	Enter Orders			Submit	C		(i
Transfer Orders		Change Status	Link/Unlink	Copy/Edit	Renew	69, F	es,Devon - 07/20/1953 MR00658790	20
Orders With Activity Review Sort			~~~			ADM IN, BGLOC	BGROOM -1	
Morphine [MORPHINE SULFATE ER] 20 DAILY PRN 00000019	DO MG PO Alles,Laur	ren 11/04/20 PYXIS (22-0900 12/03	12.00	Unverified	5ft 1in 100lb	BSA:1.41m ² BMI:18.9kg	
Co	eview Activity Date - T Inflicts Found 10/14/2: eq/Sch Edit 10/14/2:	1 - 0915 2 вкадов	Source Provider		_	Acc# MG0000075840	Resus Sta Orde No Hx	ered
Current Orders Sort	0	(1)05				Q Search Patie	ent's Chart	
morphine [MORPHINE SULFATE ER NIGHTLY PRN 00000004	100 mg 80 \	tech DONO 10/24/20	22 - 1200 11/07 4 ER Tab	/2022 - 1159 18.00	Active		() 	Î
diazepam 10 mg IM BID SCH	JOBS,Med PHA	litech DONO 11/23/20 MAIN	1.011.000	15.00	Active Last Admin:	No Known Allergi	es	
warfarin [COUMADIN] 5 mg PO DAILY	PRN Alles,Laur PHA	en 10/21/20 PYXIS	22 - 1700 11/20 4 Tab)/2022 - 1700 6.00	Active Last Admin:	> Problems		
Iorazepam [LORAZEPAM] 1 tab buccal 00000017	TID SCH Alles,Laur PHA	en 10/26/20 MAIN	22 - 1700 2 Tab	11.00	Active Last Admin:	V Home Med	<u>s</u>	
		1.05418		11.00		Prescrip MEDICATIONS (1851	tion Monitoring F	rogra



Introducing

Matt Soehl, RPh, PharmD

• Product Manager, Strategy



Business and Clinical Analytics

- Web-based business intelligence tool
- BCA sits atop Data Repository
- Standard datasets and dashboards which can be customized for visual representation of clinical and financial data
 - Maximize financial performance
 - Drive operational efficiency
 - Improve patient outcomes

Question:

• What reports or data do you need that you are currently not able to create or retrieve through PHA Searches or RD/RW?

Responses may be sent to: <u>rlombardi@meditech.com</u>



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	ED - Throughput		ED Arrival Date			
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1	Overview					28
T	ED Throughput	ED LOS	Door to Doc	Doc to ADM Dec	ADM Dec to Depart	In Room to Depart
•	ED Provider	Average Minutes	Average Minutes	Average Minutes	Average Minutes	Average Minutes
₩	Total	144.6	115.5	3.6	47.4	67.6
ad	Konevich, Michael	155.9	124.6	14.3	50.8	72.9
	Pravda, Joel	153.3	123.3	13.6	46.4	71.2
	Cady, Thomas	153.1	123.0	13.3	48.6	71.1
	Brancato, Elaine	152.5	122.7	13.6	46.7	70.7
	Canavan, Stephanie	152.3	121.2	13.2	49.6	71.5
	Cottrill, John Eric	152.3	121.3	14.2	46.8	71.5
	Miller.Suellen	1.52.3	120.5	14.2	47.1	72.0
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Drug Shortages Caitlyn Mulligan, Specialist

Drug Shortages

- <u>KB:59592</u>:Drug Shortage Management
 - Drug shortages can have a significant impact on patient care and public health.
 - Within MEDITECH, queries are used to flag medications that are low in supply or out of stock due to a shortage. These queries are referenced within Pharmacy and Provider Order Management/Order Management rules to keep staff informed of shortages and provide clinical decision support for the most appropriate way to proceed.
- What other solutions or concerns do you have?



IV Workflow Management System Sara Caetano, Analyst

IV Workflow Management System

- Bidirectional HL7 interface available in Expanse (2.1 PP 41 and 2.2 PP 29)
- Outbound interface available in every platform.
- What is your current solution?
 - Interface or Label Intercept method?
 - What vendor is currently being used?
- If using the Label Intercept method, are there any plans to implement the IVWMS HL7 interface in the future?
 - If not, what are the reasons why?



Sue Liebherr, Senior Specialist

- Anesthesia Suite- The inbound Messages are an add-on to the Anesthesia Suite and only handles the INBOUND Medications.
 - The site must be LIVE with the HL7 Portion of the Anesthesia Suite
 - Site has to be at Priority Pack 27 or Higher in Expanse
 - We will work with your Anesthesia Vendor (SIS, IPro, Talis, etc)
- Interface connects via API and is **not** an HL7 Message
- Handled separately from the Anesthesia suite implementation
 - Takes 4-6 months of testing and working with your Vendor and MEDITECH to confirm workflow and functionality

- Allows Medications to appear in Pharmacy
 - Orders file as auto verified in Pharmacy and Discontinued

PHA.STD - Pharmacis	t Desktop (DEV21N.US)					•
🝈 57 M	15 1514-13	6ft 5in 195.58cm BSA: 2.01m 155lb 14.5oz 70.718kg BMI: 1 Allergy: strawberry Adv: Not F	8.5kg/	MR00002339		
+ Pat	ient View				Patient Lists	
0 of 20 s	elected				Select Patient	
* *	Current Orders	Instructions	Status	Source @	Next Patient	
	Orders with Activity	Review Instructions	Status	Source @	Patient Profile	
	ACETAMINOPHEN (ACETAMINO ACETAMINOPHEN 500 MG TABLET 00038883 ANE MED		1101 Mt,	ech M	Edit Pt Data Patient Audit Oncology	
	500 MG PO .ANE ACETAMINOPHEN(ACETAMIN ACETAMINOPHEN 500 MG T	NOPHEN) 500 MG ABLET	Amount		EMR Enter Orders Stock Orders	
	Review Activity Anesthesia Interface Order MAR Activity Prior to Edit	Date - Time User 03/17/22 - 1601 MT	Source		Edit Orders Rx Audit	
	MAR Activity Prior to Edit MAR Admin activity o filed after Rx activity				Interventions ADR Events	
0 of 3 5	lected				Progress Notes	
± 🗸	Home Meds	Last Taken	Category	Status GD	Fill Lists MARs	
					Billing	
					Sign Queue	
					Interfaces System Mgmt	
					Preferences	
	PDMP Verify Change Copy De Status Edit Cre		Enter Patient Comments Other Print Rec	compile Return to List	?∂6⊠∆	

• Orders appear as administered on the MAR and are view only

Return To	00002339 - PCS Open Chart (DEV21.US)			Close
Grantham, James 57 M ADM IN 15 1514-13	Code Status Not Ordered No Hx Avail 6ft Sin 155ib 14.504oz BSA:2.01m² B Allergy/Adv: strawberry	MG000006 MI:18.Skg/m²	8394 MR00002339 D34345343	Status Board
Include: 🔲 Active	STAT/ONE IVs PCAs PRNs Pending	Discontinued	•	Select Visits
Start ▼ Stop/Total Doses Status Ack Status Cancelled UnAcknowledged 03/07/2022 15:00 03/08/2022 14:59	© 50 mls/hr IV Q8H SCH	Time Wed Mar 16	Thu Mar 17	Summary Review Visit Patient Mags New Results Clinical Panels Vital Signs I & O Medications Laboratory Microbiology Blood Bank Chaclogy Reports Patient Care Notes Refresh EMR
Cancelled UnAcknowledged 03/17/2022 11:00 03/17/2022 11:01 Discontinued	Current Rate: 50 mls/hr Bag Volume: 100 mls Duration: 2 hr Trade: Cefazolin 2 G/100 ml-0.9% NaCl Rx#: 00038707 (H) LC[S][V]Inf]b C Acetaminophen 500 mg PO .ANE PRN Trade: Acetaminophen Rx#: 00038883			Orders Amb Orders Document Sign Clinical Data Snapshot 1 South Plan Of Care
Refresh	Discuss Dispense: 1 TABLET (500 mg Give: 1 TABLET (500 mg total) PNN Reason: Anesthesia Interface Change Document D	PRN Last Admin	S00 mg 11:00 MT Med Cmt	Worklist MAR Write Note TAR Discharge Discharge Plan Questionnaires

- How is your site handling Infusions for Surgery?
 - **Scenario**:Patient starts infusion and the Nurse Documents on the MAR. How is this handled when that patient goes down for Surgery?
 - Do you continue the Infusion?
 - Do you stop the Infusion?



ISMP Article Caitlyn Mulligan, *Specialist*

ISMP Article

- **Title**:Preventing errors when preparing and administering medications via enteral feeding tubes (December 2022, Volume 20-Issue 12)
- **Problem**:Enteral feeding tubes are complex in preparation and administration. There are continued occurrences of patient harm, due to reported instances of occluded tubes, reduced therapeutic effects, and toxicity
- Identified causes: Lack of readily accessible information, gaps in training/experience, unknown feeding tube status, incorrect or inappropriate route or tube size, improper/wrong preparation and administration.

• Safe Practice Recommendations:

- Interdisciplinary team that reviews concerns or events at your organization. This team should also review information from other sources:
 - <u>American Society for Parenteral and Enteral Nutrition</u> (ASPEN)
 - <u>Guidebook on Enteral Medication Administration</u>
 - Making the Enteral Route Safe and Effective for Tube-Fed Patients
 - Drug Monographs

- Establish drug and dosage form suitability.
 - Review any drugs added to your formulary for enteral feeding tube restrictions.
- Create a policy/procedure that is updated regularly. Also, ensure it is in a central location for practitioners to reference.
- Create education specific to safely prescribing, dispensing, preparing and administering medications via a feeding tube that is part of onboarding at your organization.
- Validate the route and tube size as part of the admission process and medication reconciliation.
- Flush before and after administration of each medication.

• Safe Practice Recommendations for an EHR:

- Select the route and access site while ordering
- Restrict prescribers' ability to order medications that are contraindicated for tube administration
- Include preparation instructions in the medication orders
- Setup enteral feeding tube orders to prompt a MAR entry of "tube", and trigger an alert if an inappropriate formulation is ordered

- Potential MEDITECH Solutions:
 - o <u>KB:68686</u>
 - Pharmacy Rule to Alert of Enteral Feeding Tube During Order Entry
 - Create a feeding tube query and add it to an assessment, such as admission or nutrition assessment. The assessment can trigger an order set (<u>reflex set</u>), or <u>query links</u> can be utilized.
 - KB:68693
 - Ordering Rule: Alert of Enteral Feeding Tube During Order Entry
 - <u>KB:58380</u>
 - reviews instructions and comments fields. Potentially useful fields are formulary comments, preparatory comments, protocol, and inpatient/outpatient comments.
 - Create an order type specific to tube feedings

Potential MEDITECH Solutions:

- What methods does your organization employ in MEDITECH currently as well as overall?
- Do you typically use diet orders?
- Do you order as an IV/build in the drug dictionary?
 - The intent being MAR display
- Are OM Reflex ordering and tube feeding assessments utilized?

Thank You

- Thank you for attending, and providing insight on the topics discussed. Your continued input and feedback is important to the success of these meetings.
- Including a link to <u>MEDITECH On Demand</u>, which contains many useful Pharmacy resources.
- Don't forget to check out our <u>Pharmacy Advisory Committee Webpage</u>!
 - Edits and updates to the site are ongoing