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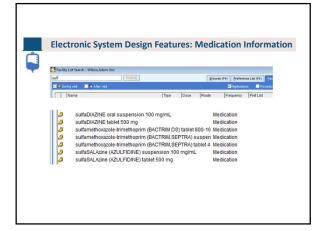
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Electronic S	ystem Design Featur	es: Medication Infor	mation	with Medication Safety

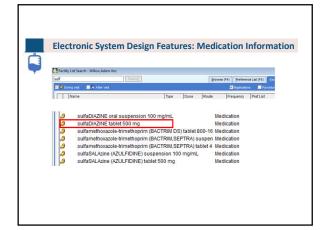
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Safe Present	Safe Presentation of Complete Medication Orders or Prescriptions								
Electronic Sy	Electronic System Design Features: Medication Information								
Electronic Sy	stem Design Feat	ures: Patient Inform	nation Associ	ated with Me	dication Safety				
Other Topics	Requiring Furthe	r Investigation and	Standards						
https://www.ismp.org/resource information	s/guidelines-safe-electron	ic-communication-medicati	ion-						

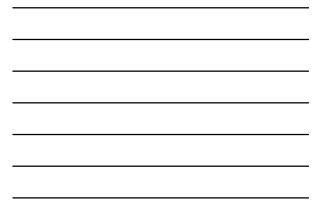


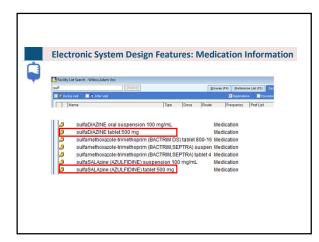
Electronic System Design Features: Medication Information

Provide a field to enter the purpose/indication for all medications prescribed electronically. Require entry of the purpose for the following types of medication orders: all PRN (as needed) medications; look-alike drug name products that are known to be problematic; and high alert medications that have different dosing based on the indication.

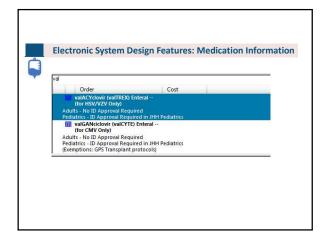


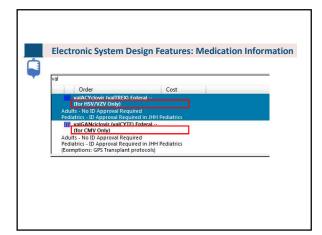












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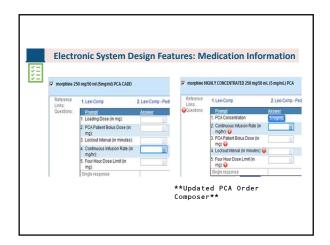
Electronic System Design Features: Medication Information
Provide a mechanism to facilitate safe order entry of complex medication regimens
(e.g., chemotherapy, electrolyte solutions, parenteral nutrition) or medications that require a tapering dosing schedule (e.g., steroids) so that the orders appear clearly, in a logical sequence, and include all required elements (which may be different than for routine medications).

morphine :	250 mg/50 ml (5mg/ml) PCA CADD			
Reference				
Links: Questions:	1. Lexi-Comp Promot	2. Lexi-Comp - Pedi Answer		
QUESSVIIS.	1. Loading Dose (in mg):	ARSWEL		
	2. PCA Patient Bolus Dose (in mg);			
	3. Lockout Interval (in minutes):			
	 Continuous Infusion Rate (in mp/hr); 			
	 Four Hour Dose Limit (in mg): 			
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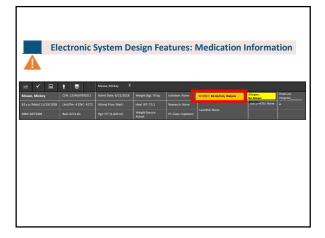
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፼ ✓ 旦	1 =	Mouse, Mickey X				
Mouse, Mickey		Admit Date: 6/21/2018	Weight (kg): 70 kg			Allergies: No Kozwn Hospital
82 y.o./Mile/11/18/1928		Attend Prov: Med I	Ideal WT:73.1	Research: None	Last BSA: None	ObjStrivSts: None
MRN: 8675309		Hgt: 72" (1.829 m)	Weight Source: Actual			



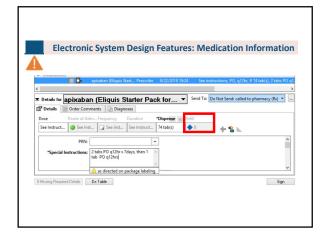






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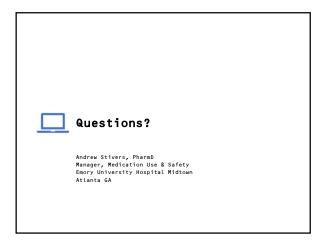






Closing Thoughts

- EHR safety is reliant not only on functionality but also usability
- ISMPs guidelines provide a framework for risk assessment
- Successes are reliant on strong relationships with informatics team members
- Continued advocacy efforts are needed to push EHR vendors to help embed safety principles in system design



Medication Error Reduction Plan (MERP): A Framework for Safety Planning

Katayoon Kathy Ghomeshi, PharmD, MBA, BCPS, CPPS Medication Safety Officer, UCSF Medical Center Assistant Clinical Professor, UCSF School of Pharmacy

Objectives

Describe the structure of the medication error reduction plan (MERP) program

Describe how a MERP approach can be useful to improve medication safety

A Day in the Life

Scenario 1

You have just started a position as a Medication Safety Officer/ Professional. You are responsible for developing a safety program that demonstrates improved safety for your practice site. You have multiple stakeholders that are looking to you to lead safety improvement work across many different patient populations, clinical specialties, phases of care, etc.

Scenario 2

You have been practicing as the Medication Safety Officer at your system/hospital. You would like to develop new ideas for comprehensive safety planning across the continuum of medicationuse and engage multiple disciplines in the process.

How do you accomplish this goal? Consider using the California MERP framework

What is MERP? A. A noise my stomach makes after lunch? Only sometimes ③ B. Medication Error Reporting and Prevention? NCC C. Medication Error Reporting Program? ISMP D. Medication Error Reduction Plan? CDPH	 A. A noise my stomach makes after lunch? Only sometimes [©] B. Medication Error Reporting and Prevention? NCC C. Medication Error Reporting Program? ISMP 	Pop Quiz!	
B. Medication Error Reporting and Prevention? NCC C. Medication Error Reporting Program? ISMP	 B. Medication Error Reporting and Prevention? NCC C. Medication Error Reporting Program? ISMP D. Medication Error Reduction Plan? CDPH 	What is MERP?	
D. Wedication Error Neddetion Flam:		B. Medication Error Reporting and Prevention?C. Medication Error Reporting Program?	NCC
YES! All of the above			CDPH



- Any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer.
- May be related to professional practice, health care products, procedures, and systems

 Errors may be in prescribing, order communication, product labeling, packaging, and nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use.

https://www.nccmerp.org/about-medication-erro

California Regulatory Requirement As a condition of licensure... every general acute care hospital... shall adopt a formal plan to eliminate or substantially reduce medication-related errors "medication-related error" means any preventable medicationrelated event that adversely affects a patient MEDICATION-USE SYSTEMS AND PROCEDURES Prescribing Order Communication Packaging & Nomenclature Product Labeling Compounding Dispensing Distribution Administration Monitoring Education Use wct-1339-63.html



 Procurement Storage Prescribing Order review Preparing/Compounding Administering Monitoring 		
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MERP Program Requirements

Include method to identify weaknesses in each system

Annual review of effectiveness

wooling to achieve reduction in errors

Describe technology to reduce errors

roactively identity errors

Incorporate external error alerts

Sources of error NAN Alert Incident Reports Medication safety • TJC Sentinel Event Alert dashboards AHRQ Web M&M Quality Improvement • ISMP Acute Care Alert! Initiatives ISMP Self-Assessments Medication-use ISMP Best Practices evaluations alert-archive https://psnet.ahrq.gov/Webmm https://www.ismp.org/

Potential Ti	melines	
Annual		
Review of MERP effectiveness	Quarterly Review of MERP initiatives Analysis of medication error themes	Monthly Review of medication errors by subject matter experts



Metrics

- What is the problem
- What is baseline (current state)What is goal (desired future state)

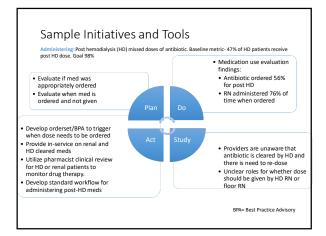




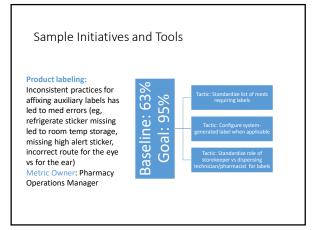
• Tools to consider: A3 problem solving, PDSA, DMAIC, SBAR, Spreadsheets, Word Documents

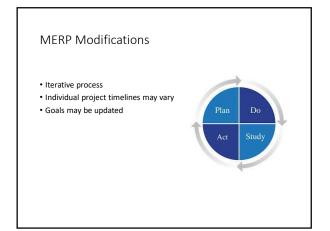
Process Weakness/ Baseline Met	ric Goal	S Current Metric	Project Owner	Follow up
Compounding Vicenopounding 37% compiles error due to poor compilance with workflow unifikawan with workflow unifikawan with the set of the set	nce 95%	62%	Bob	Obtain new equipment for IV room, develop and implement required training material for staff; share medication error that would have been prevented

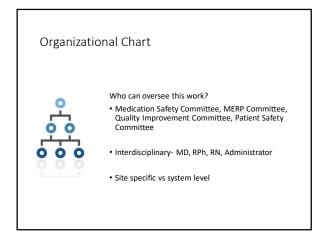












A Few MERP Pearls

- Supports a culture of safety
 Forces addressing many, and less obvious steps that might not get attention otherwise

- otherwise Increases visibility of system issues and gains support for improvement Not prescriptive in what you do or how you do it Demonstrates reduction in errors/improvement in safety Freaks up "status quo" mentality-your responsibility is to actively and continually seek weaknesses and deficiencies

Setting goals can be a guessing game and not all projects are metric-based Obtaining reliable data can be onerous Project management for multiple longitudinal initiatives requires resources and support Some categories overlap or are not well-defined Sometimes the weakness does not

Sometimes the weakness does not improve

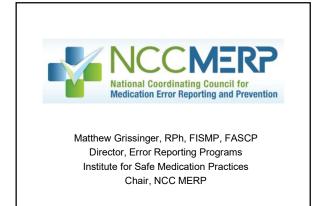
In Conclusion

- MERP is a California regulatory requirement that can serve as a good model for organizing comprehensive proactive safety improvement initiatives
- MERP model looks at all steps of medication use with a multidisciplinary lens
- MERP focuses on demonstrating reduction in medication errors with metric based initiatives













Vision

- No patient will be harmed by a medication error.

Mission

 To maximize the safe use of medications and to increase awareness of medication errors through open communication, increased reporting and promotion of medication error prevention strategies.

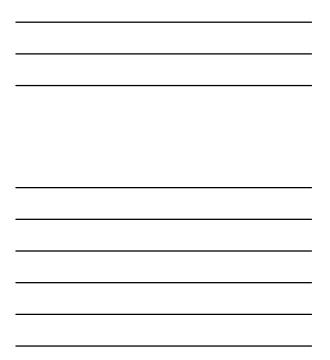


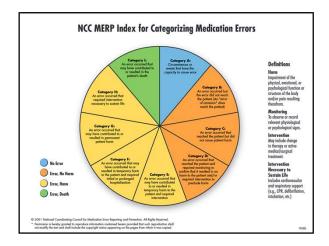
- Stimulate the development and use of reporting and evaluation systems by individual health care organizations
- Stimulate reporting to a national system for review, analysis, and development of recommendations to reduce and ultimately prevent medication errors
- · Examine and evaluate the causes of medication errors
- Increase awareness of medication errors and methods of prevention throughout the health care system
- Recommend strategies for system modifications, practice standards and guidelines, and changes in packaging and labeling.

Mer	nber Organ	izations
• AARP	• ASHP	• MSOS
 ACCP 	 BeMedWise 	 NASPA
• AGS	• DOD	 NABP
• AMA	• DVA	 NCSBN
• ANA	• FDA	PhRMA
APhA	• IHI	• SGM
 ASHRM 	ISMP	• USP
 ASCP 	• JC	

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National Coordinating Council for Medication Error Reporting and Prevention	CONTACT US SITE MAP	
SOUTMEDICATION EPROPSIBECOMMENDATIONS / STATEMENTSFOR CONSUMERSFEBRUARY 20	20190PHOIDS RESOURCESSEPTEMBER	
About Medication Errors	1 NAN ALERT	
What is a Medication Error?	The National Alert Network (NAN	
The Council defines a "medication error" as follows:	publishes the alerts from the National Medication Errors	
"A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care	Reporting Program. NAN encourages the sharing and reporting of medication errors, so	
professional, patient, or consumer. Such events may be related to professional patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing, order communication, product labeling, packaging, and nomenclature, compounding,	that lessons learned can be used increase the safety of the medication use system.	
dispensing, distribution, administration, education, monitoring, and use."	May 24, 2018	
The Council urges medication errors researchers, software developers, and institutions to use this standard definition to identify errors.	Safe handling of concentrated electrolyte products from outsourcing facilities during critical drug shortages	
	> Subscribe > Arc	
	POPULAR LINKS	









Questions About NCC MERP and Medication Errors Shawn C. Becker, M.S., B.S.N., Director Healtheam Quality Standards, Science and Standards Divis schelusp.org / (201) 616–8216 tal / (301) 616–8522 fax

Contemporary View of Medication-Related Harm. A New Paradigm

Introduction

Introduction The NGC MERP has trequently been asked to help heathcare professional distinguian among Adverse Drug Revers (ADES), Adverse Drug Revers (Dug Revers), The Gouncil notes severe diversions (ADPs) and Medication Errors. The Gouncil notes severe diversions for these terms in the intertum, research of the several diversions for these terms and the and ADR memory and the several diversion of the terms ADE and ADR and the diversion of the several terms and the several diversion of the several diversion of the several diversion man." An ADE has been defined as harm associated with any does a drug, whether the does is "mormally used in man" or not. An ADR, therefore, is a subsyste of an ADE to, all ADRs are ADEs, but harms, but not all ADEs are cused by an error. Significant confusion exists regarding these terms.

The Council proposes new terminology to clarify the terms and the relationships among them and encourages consistent ado across the medication safety community (see Figure 1 for a graphical depiction with no intended meaning to size of circles

Scenario/Case Studies

Medication error resulting in no harm Ceee 1. A 25 kg child with no prior history of penicili prescribed 250 mg orally of amovicilin suspension t (morring and evening) for 7 days. On the seventh a inadvertently received a morring dose of 500 mg ins The child did not suffer any negative consequences

A preventable ADE (medication-related harm due to error) Case 2. A 74 year old female with acute log pain present the emergency department. She has a history of sleep ap She has no previous history of opioid use. Preciriber orde hydromorphone 2 mg /V. Patiert found unresponsive in re distress with SP O2 at 70. Naloxone administered.

A Non-preventable ADE (medication-related harm not due to error)

Case 3. A 37 year old patient diagnosed with an infer



NCC MERP Recommendations

- · Recommendations to Weigh Patients and Document Metric Weights (2018)
- · Reducing Medication Errors Associated with Atrisk Behaviors by Healthcare Professionals (2013)
- · Recommendations for Avoiding Medication Errors With Drug Samples (2008)
- · Promoting the Safe Use of Suffixes in Prescription Drug Names (2007)



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- A copy of today's slides will be posted on our website
- Don't forget to mark you calendar:
 - Our next MSOS Briefings webinar will be held on Thursday, November 21, 2019.
 Register now:
 - https://attendee.gotowebinar.com/register/3361605469699521037

