MSOS Member Briefing November 2020

Moderated by: E. Robert Feroli, PharmD, FASHP





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Medication Safety Strategic Planning: Saudi Medication Safety Center (SMSC)

Ghadeer Banasser, PharmD, CPHQ, FISMP

Medication Safety Specialist Saudi Medication Safety Center (SMSC) Ministry of National Guard - Health Affairs (MNG-HA)



Outline

- Organizational Structure: An Overview
- O Strategic Plan Development Process
- O Medication Safety Strategic Plan Review

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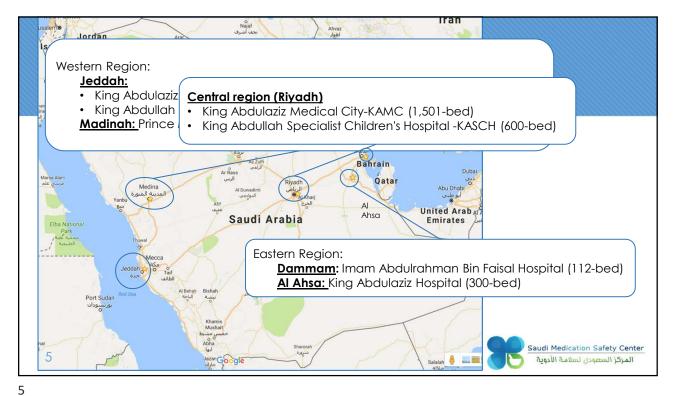


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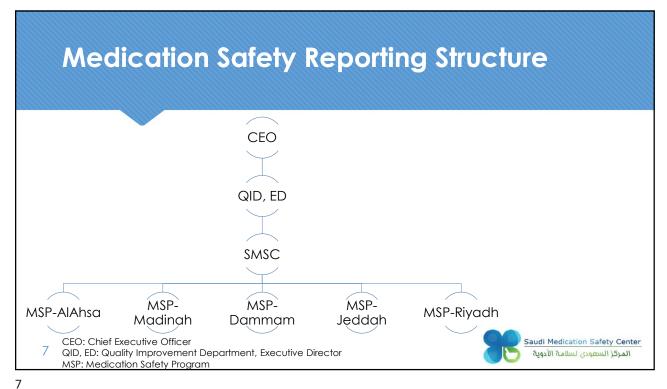


Ministry of National Guard- Health Affairs (MNG-HA)





MNG-HA Facilities Medical Cities Oncology Centers Cardiac Centers O Children Hospitals O Primary Health Care (PHC) Centers O King Saud University for Health Sciences O King Abdullah International Medical Research Center (KAIMRC) Saudi Medication Safety Center 6 المركز السعودي لسلامة الأدوية



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MSP Membership

- O Chairman: Director, Quality Improvement Department
- Co-Chairman: Director, Pharmaceutical Care Services (or equivalent)
- Members:
- Medication Safety Officer/Specialist (or equivalent), Quality Improvement Department
- Physician Representative(s)
- Pharmaceutical Care Services Representative(s)
- Nursing Services Representative(s)
- Clinical Information Management System, ISID Representative
- Pharmaceutical Planning, Logistics and Contracts Management Representative
- Chair, Medication Use Process Error Subcommittee (MUPES)
- O Chair, Adverse Drug Reaction (ADR) Team
- O Chair, Regional Medication Pump Team
- Chair, Regional Automated Dispensing Cabinet (ADC)Team
 Saudi Medication Safety Center

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Strategic Plan Development

- O Involve Key People
- Assess your Current Position
- Review the Model Plan
- O Map a Strategy for the Future
- Select Change Projects
- Implement the Strategic Plan
- O Monitor Performance

ISMP. Pathways for Medication Safety - Leading a Strategic Planning Effort. 2002. available at: https://www.ismp.org/resources/strategic-planning Medication Errors. 2nd ed. Washington, DC: APhA; 2007



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Strengths

- Positive Reputation
- Qualified Expertise
- National Representative at the IMSN

Opportunities

- National Expansion in Med
 Safety activities
- Collaboration with the ISMP

Weaknesses

- Manpower Shortage
- Hiring Turnaround
- Lack of Qualified Candidates

Threats

- Leadership Support
- Local Accreditation Standards
- Low Med Safety Literacy

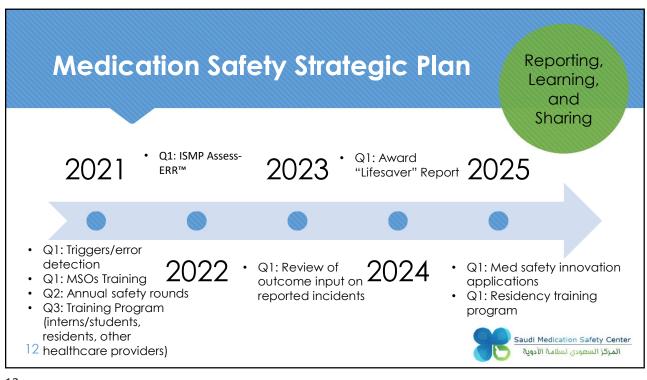
Saudi Medication Safety Center المركز السعودي لسلامة الأدوية

WOT analysis

10 IMSN: International Medication Safety Network

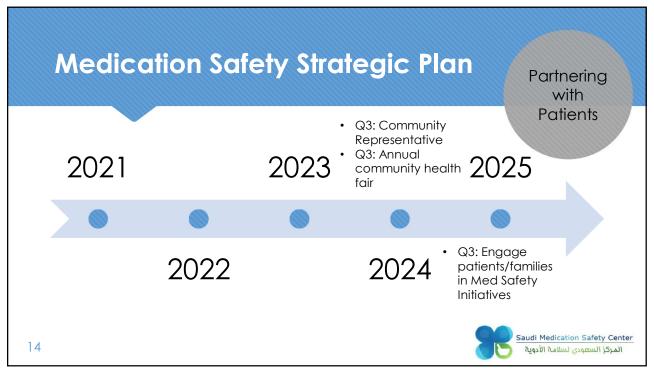


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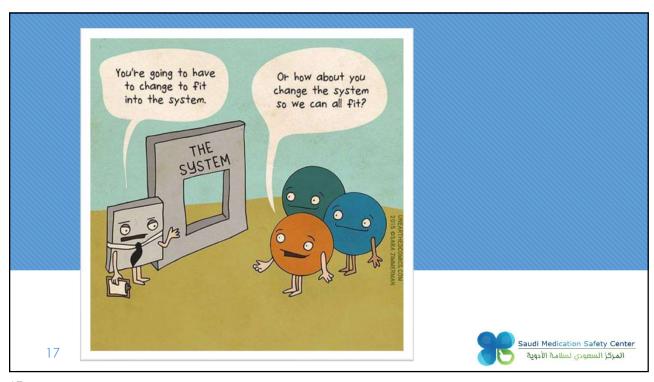
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Hidden Medication Losses: A discovery on patient care rounds

Dan Sheridan, MS, RPh, CPPS

Medication Safety Pharmacist OhioHealth Marion General Hospital & Hardin Memorial Hospital Marion, OH





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OhioHealth Marion General Hospital

250-bed, not-for-profit, community hospital



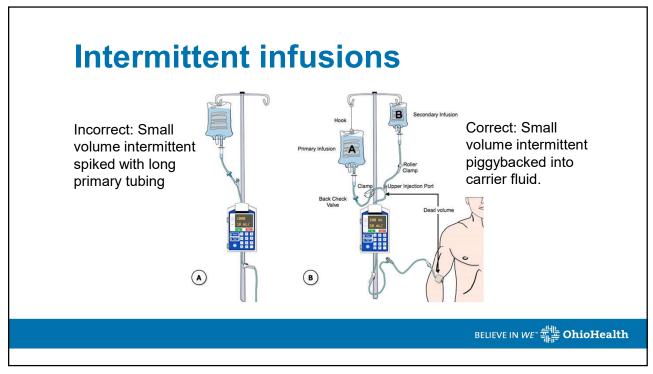


Patient Care Rounds

Safety issue spotted:

- Empty 50 mL bag of piperacillin/Tazobactam on IV pole
- 27 mL primary tubing was still full
- Patient received about 46% of dose
- 4 hour extended infusion only lasted 2 hours
- Secondary tubing should have been used





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Key point

A large primary tubing in a small bag may lead to substantial hidden drug loss.

Assuming a 25 mL primary set

Can lose:

- 50% of a 50mL bag
- 25% of a 100 mL bag
- 10% of a 250 mL bag
- 5% of a 500 mL bag

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Quality Metric Selected as a Marker

From IV pump data:

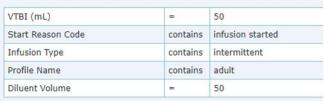
50 mL intermittent infusions given via secondary

50 mL intermittent infusions given via secondary and primary

Chemotherapy excluded - special short primary tubing used

Measuring the extent of the problem

1) Download pump data, limited to:



2) Use Excel filters to quickly see how many run as secondary, out of how many?

2607 of 4118 records found

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Blossoming scope of the problem

- Two patients on one unit
- Hospital-wide: 28.5% given correctly Jan 2019
- System-wide: 35.7% given correctly Jan 2019
- 30,000+ monthly opportunities for improvement just with 50 mL intermittent infusions

Why does it happen?

- Unclear policies
- Shortage of large volume parenterals
- Intermittent IV medications ordered without carrier fluid orders
- Orders to stop IV fluids, but still on intermittent IV medications
- Nurses can't hang carrier fluids without an order

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Corrective Strategies

Problem: Nurses can't hang "carrier fluid" without an order.

Our approach:

- 1) Embed orders for carrier fluid into "insert IV" orders
- 2) Embed orders for carrier fluid into admission order sets
- 3) P&T authority for pharmacists to enter carrier fluids

Corrective Strategies

Problem: Lack of awareness of issue

Our approach:

- 1) "Tip of the week" educational document
- 2) Engaged nurse educators
- 3) Slogan: "If the IV bag is the small kind, put it on a secondary line!"

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"Just in time" education

- 1) Pop-up warnings on dispensing cabinets "This drug must be given with a SECONDARY set"
- 2) "Infuse via secondary set" labels for a few months

Appeal to Emotions

Find real people within the data, and tell their story.

"A 54 year old patient was admitted to the ICU with Pneumonia. The patient was started on Zosyn every 8 hours. The patient's first 6 doses were given via primary tubing, so the patient likely only received half the doses. If the IV bag is the small kind, put it on a secondary line!"

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Lessons Learned

- Go to Gemba, see the problem
- Use data to measure the problem
- Build carrier fluids into order sets
- Seek partners across professions
- Tell stories to humanize the problem
- Create accountability at site and unit level

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Celebrate Success!



Questions?

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Standard Auxiliary Labels



Joanie Cook, PharmD, BCPS, CPPS Clinical Coordinator Saint Francis Medical Center Colorado Springs CO JoanCook@Centura.org

Nov 19, 2020

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Medication Safety Events

Bupivacaine continuous nerve block almost administered IV



Bupivacaine epidural administered via IV pump



Vecuronium vial left unused at bedside

WARNING: Paralyzing Agent

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Observations

- >80 labels
- Duplicates/overlaps
- Inconsistent use
- No written guidance









CYTOTOXIC MATERIAL HANDLE PROPERLY



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Project Goals

- ✓ Decrease number of labels by 50%
- ✓ Improve consistency
- ✓ Develop label management process



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Planning

- Research publications & resources
 ISMP 2/2019 "Your attention please... designing effective warnings"
 - MSOS forum
- Collect & organize
- Review
 - Pharmacy leadership group
 - Front-line/end-user
 - **Medication Management Committee**
- **Approval**
 - Med Management Committee
 - Nursing Practice and Quality Council

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Review

> Is the label necessary?

- Likelihood & severity of event
- · Clinical significance
- Reported errors
- Published recommendations
- Redundancy
- End user feedback
- Frequency of use







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Review

- Design
 - · Easy to understand
 - Affirmative wording
 - Color standards
 - Behavior based









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Label Placement

- Patient-specific doses dispensed from pharmacy *
- 2. Pharmacy bins excludes carousel, ADCs, CII Safe
- On every medication in all areaspharmacy, kits/trays, procedural areas, etc. *
- * Directly on the product and over closures when possible

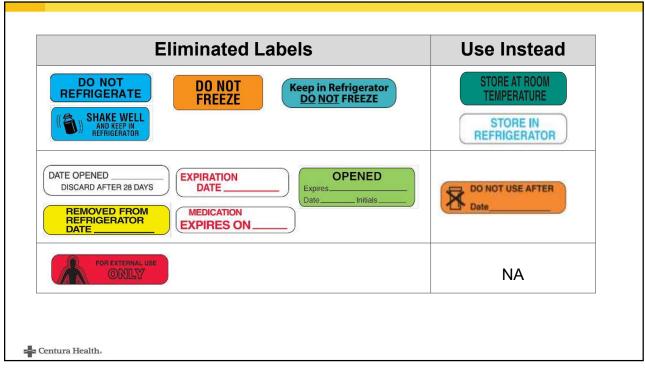




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Label	Situation	Placement
FOR EPIDURAL ADMINISTRATION ONLY	Pharmacy- compounded epidurals	Pharmacy bins Directly on each bag
NOTE DOSAGE STRENGTH	When RN must administer a partial tablet, vial, etc.	Patient-specific doses
	Double/quadruple or non-standard IV infusions	Pharmacy bins Directly on each bag
ACTIVATE BEFORE INFUSING	Premixed parenteral nutrition IV bags if contents require activating/mixing	Patient-specific doses
FOR ORAL USE	NICU oral solutions	Patient-specific doses



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Procedure: Label Management

- ✓ Review labels annually
- ✓ Approve changes through Med Management and Nursing Practice Committees
- ✓ Align with design standards when possible
- ✓ Only Pharmacy Buyer will purchase
- √ Use commercially-available labels when possible
- √ Responsibilities for label placement
- ✓ Annual audit

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Final Steps

- Purchase labels
- Purchase dispensers
- Remove old labels hide and seek
- Place dispensers in convenient locations
- Communicate & educate
 - Emails,
 - Newsletters,
 - Meetings/huddles
 - Posters

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Looking Back & Forward

- 80 → 30 in 8 months
- Effectiveness?
- Maintenance
- Round 2?
 - Design
 - Label of the month
 - 2nd look
 - Requests IM Only, Central line only







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Questions? Comments?





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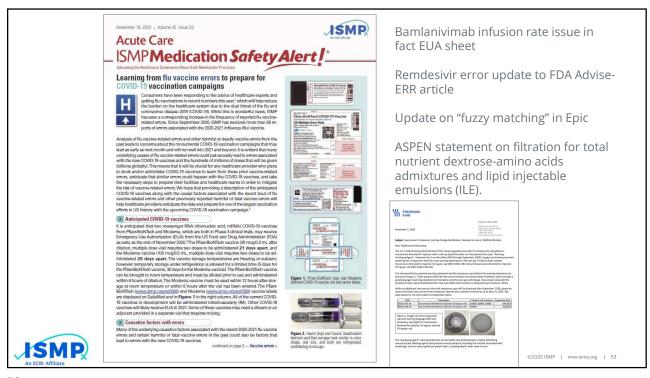
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ISMP Update MSOS Briefing November 2020

Michael R. Cohen, RPh, MS, ScD (hon.), DPS (hon.), FASHP President, Institute for Safe Medication Practices

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Questions?



- A copy of today's slides will be posted on our website
- Next MSOS Briefing date January 28, 2021.
 Register: https://ecri.zoom.us/webinar/register/WN YTUR1 JWS-CKALq3Zm8Dvw

