# MSOS Member Briefing May 2025

Moderated by: E. Robert Feroli, PharmD, FASHP





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#### **Key Abbreviations**

• ADE: Adverse Drug Event

• CDS: Clinical Decision Support

• EHR: Electronic Health Record

• eRAF: Electronic Risk Assessment Form

• MAR: Medication Administration Record

• MSO: Medication Safety Officer

OPA: Our Practice AdvisoryPAL: Peripheral Arterial Line

• SIP: Smart Infusion Pump



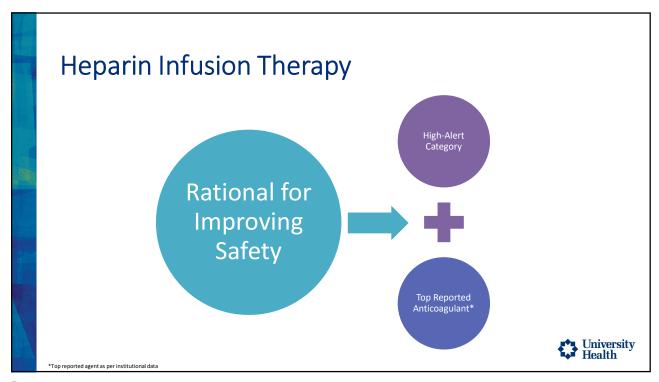
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#### **About Us**

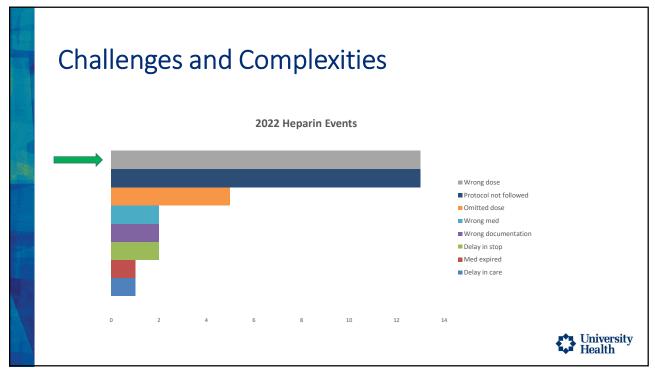
- > 1,000-bed public teaching hospital located in the San Antonio Texas Medical Center
  - Level I Trauma Center
  - · Women's & Children's Hospital
    - Level IV NICU
    - Level IV Maternal Center

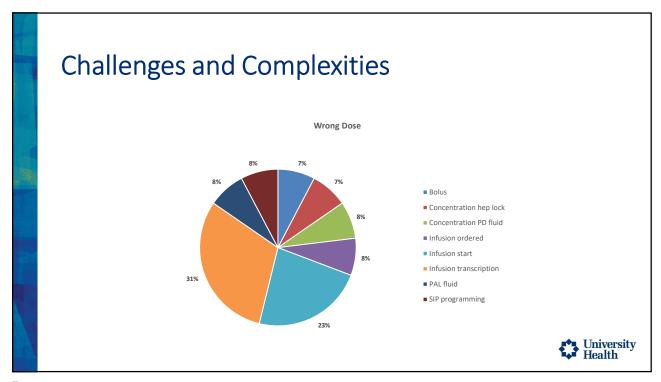
Hospitals & Outpatient Clinics in San Antonio | University Health



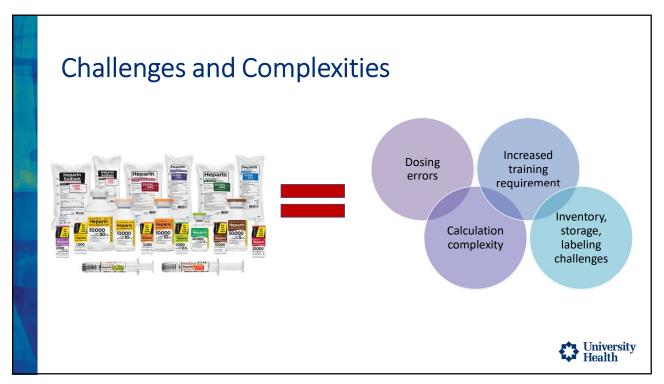


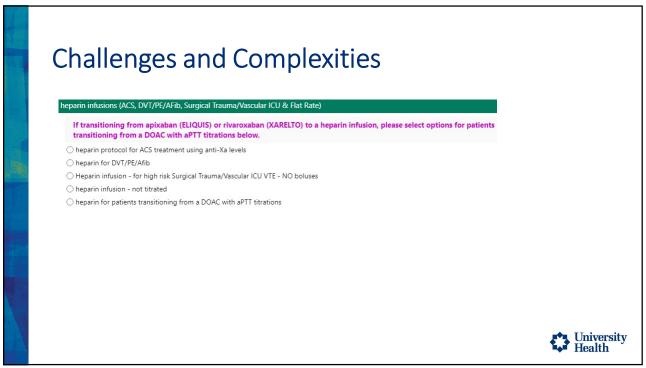
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Challenges and Complexities

• Difference in unit of measure

EHR

Heparin bolus from pump 10,000 Units

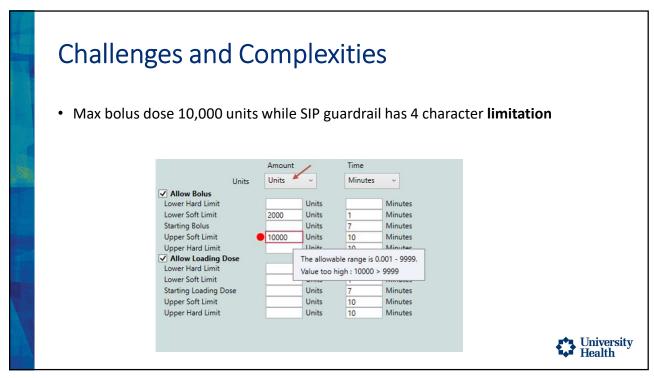
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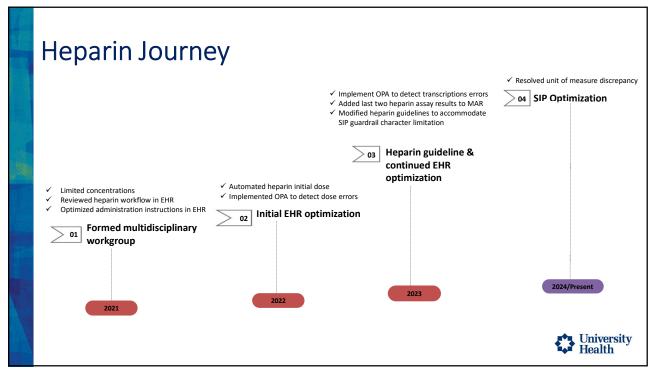
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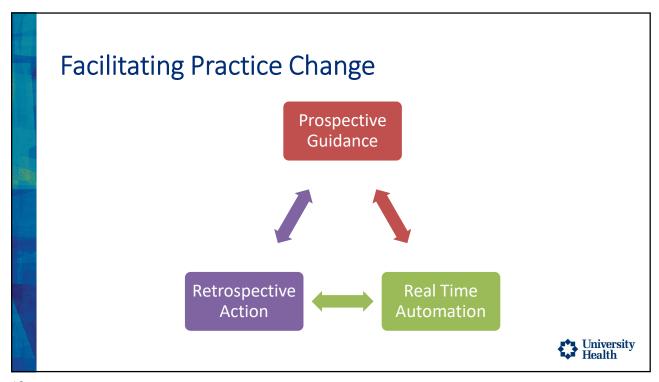
Patient Safety Risks

University
Health

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## **Prospective Guidance**

- Evidence-based clinical guidelines
- New-hire education

#### **Heparin Guidelines**

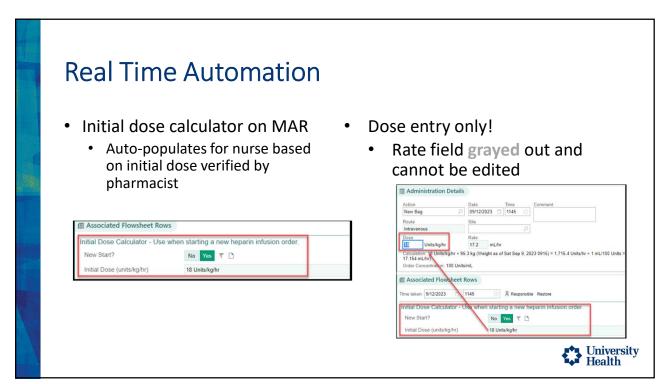
- <u>ECMO Heparin Management Guideline</u> for Adults (rev. 06/2024)
- ECMO Heparin Management Guideline for Pediatrics (rev. 09/2021)
- Infusion Protocol for Adults in Surgical/Vascular ICU with High Bleed Risk (rev. 4/2022)
- Infusion Guideline for Adults <u>VTE/Afib/ACS</u> (rev. 12/2023)
- <u>Infusion Protocol for Pediatrics</u> (rev.10/2021)
- <u>Subcutaneous Heparin for VTE</u> <u>Treatment</u> (rev. 12/2023)

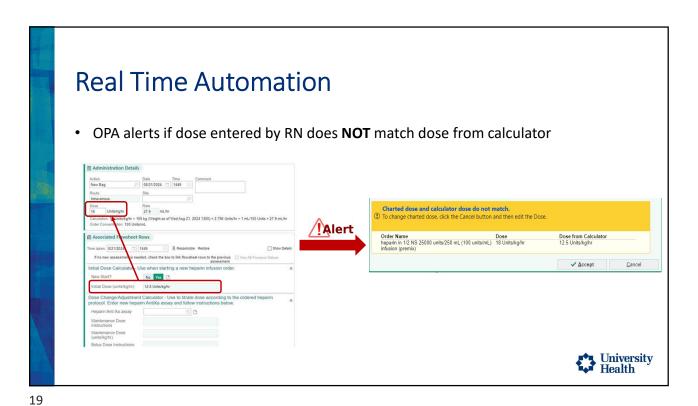


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# Real Time Automation Insperin in 1/2 NS 25000 units/250 mL (100 units/mL) infusion (premix) Order Information Automatical Chair Suppose and year Suppose Shows where the students in some of a product of the control of the control

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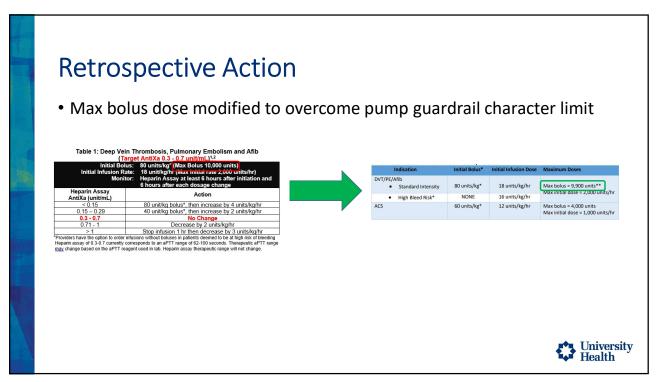




Real Time Automatically pull in most recent heparin assay results

heparin in 1/2 NS 25000 units/250 mL (100 units/mL) influsion (premix)
Order Information

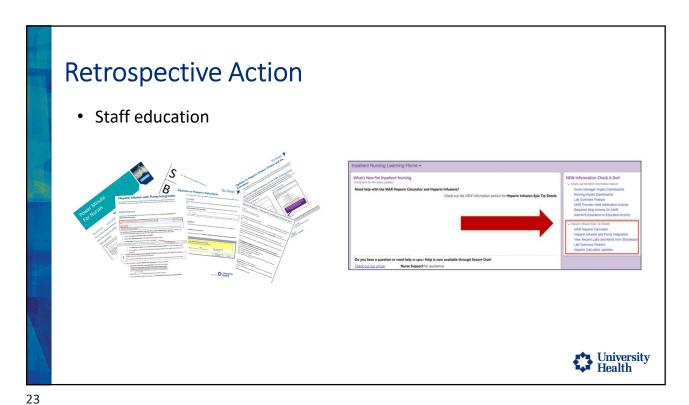
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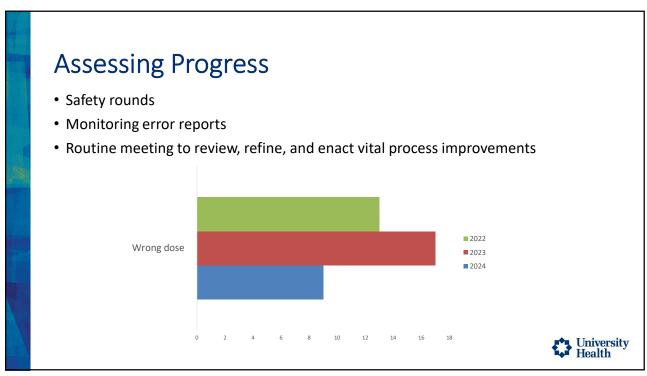


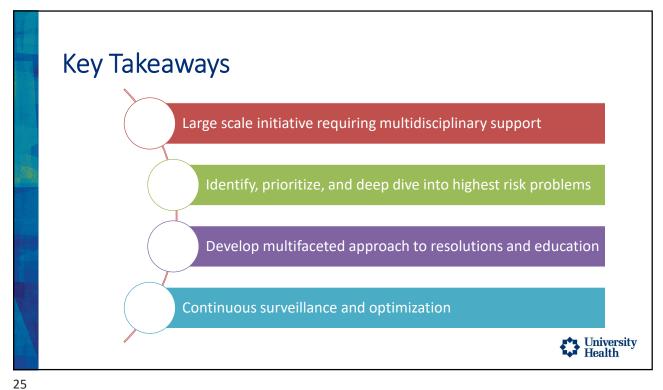
Retrospective Action

• Align unit of measure for bolus dosing in SIP and EHR

| ACU | Heparin | Peparin |







#### References

- ISMP Medication Safety Self Assessment \* for High-Alert Medications General High-Alert Medications Neuromuscular Blocking Agents Concentrated Electrolytes Injection Magnesium Sulfate Injection Moderate Sedation in Adults and Children, Minimal Sedation in Children Insulin, Subcutaneous and Intravenous Lipid-Based Medications and Conventional Counterparts Methotrexate for Non-Oncologic Use Chemotherapy, Oral and Parenteral Anticoagulants Neuraxial Opioids And/or Local Anesthetics Opioids. Accessed June 01, 2024. https://online.ecri.org/hubfs/ISMP/Resources/ISMP\_HighAlert\_Self\_Assessment.pdf
- ISMP List of High-Alert Medications in Acute Care Settings. Accessed June 01, 2024. https://www.ismp.org/system/files/resources/2024- $01/ISMP\_HighAlert\_AcuteCare\_List\_010924\_MS5760.pdf$



# Respiratory Therapists: A Vital Link in Your Medication Safety Efforts

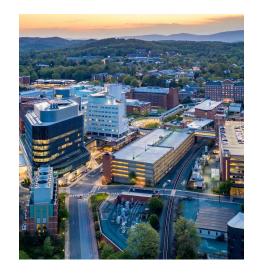


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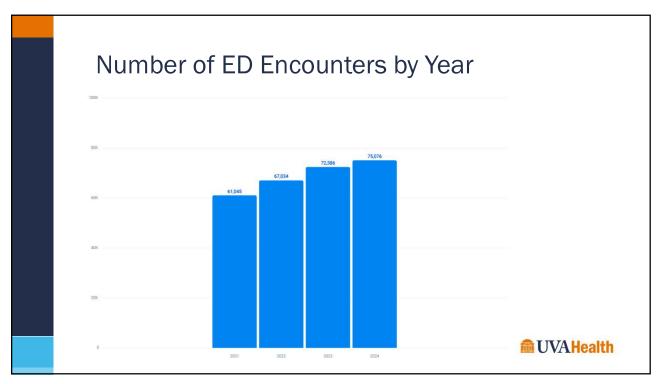
## UVA Health Medical Center

- 659 bed academic medical center
- 70 bed, Level 1 Trauma emergency department
- 75,000 ED visits/year (and rising)
- 50,000 ED medication orders/month
- Epic/Pyxis facility



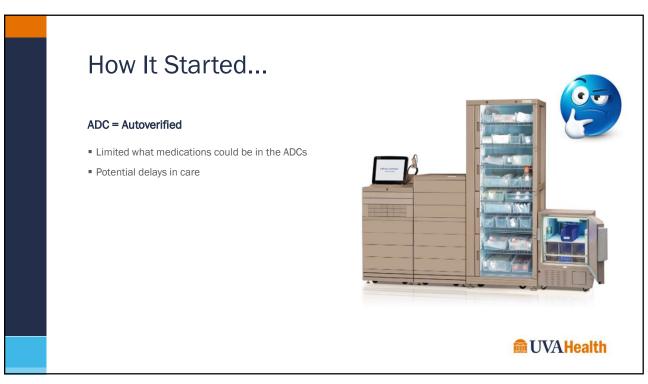


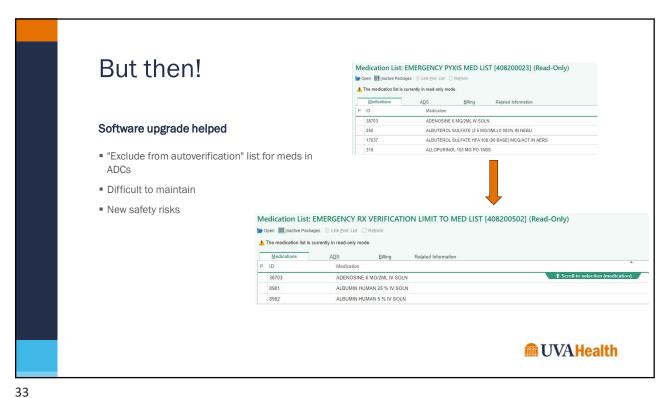
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#### **ED Nights UVA Health ED** 00:00 01:00 02:00 Pharmacist Coverage 03:00 04:00 05:00 ■ 5-6 dayshift pharmacists --> 4 x 10 hour shifts/week 06:00 07:00 800 2 nightshift pharmacists --> 7 on/7 off 10 hour shifts 08:00 09:00 830 10:00 11:00 12:00 1230 13:00 14:00 15:00 16:00 17:00 18:00 1900 19:00 20:00 21:00 2200 22:00 23:00 **WAHealth**

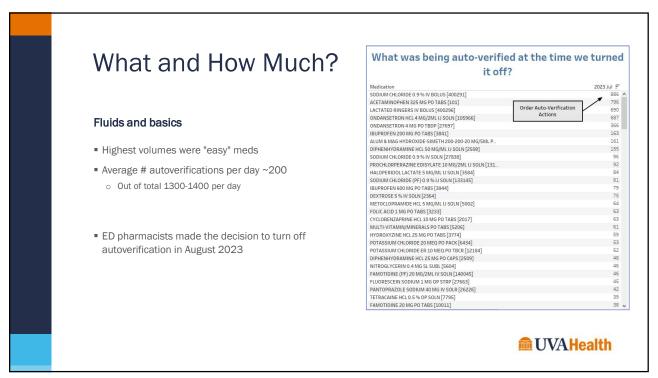
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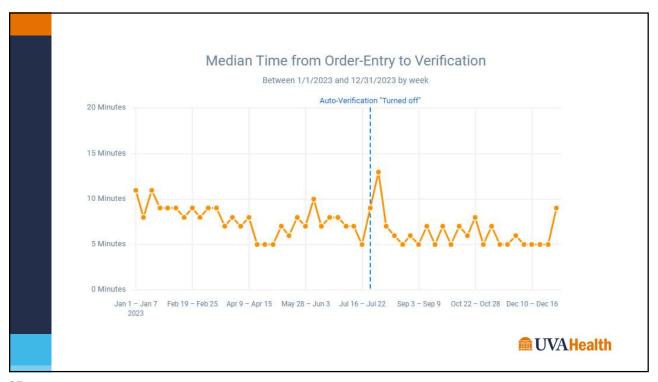




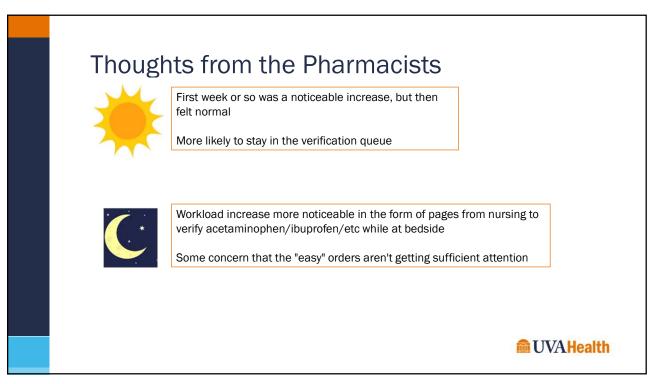
What would it look like to have nothing autoverify?

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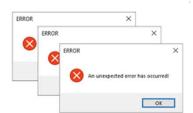
### Error prevention?

#### Reported autoverification errors pre-2023

- Sulfamethoxazole/trimethoprim ordered on patient in severe AKI
- Duplicate vancomycin ordered for patient in AKI
- Adult dose midazolam ordered for pediatric patient
- Unintendedly high heparin dose ordered

#### What we're catching now

- Ketorolac and pregnancy
- Inappropriate formulations
- Home medication timing





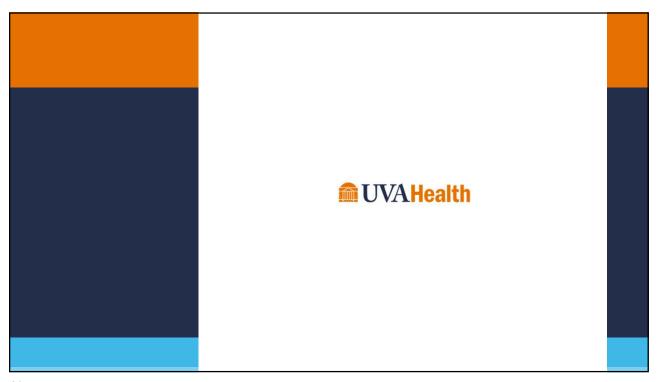
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#### Conclusions

- Removal of autoverification in the ED at UVA Health has improved pharmacist coverage of our patients
- Time to verification has not been impacted
- Previously undetected errors are being caught
- Maintenance-free

THANK YOU to Nate Hedrick, Derek Burden, and Chris Shelton for their contributions to this presentation





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#### **Patient Safety Alert**

- Anesthesia Patient Safety Foundation (APSF) and ECRI/Institute for Safe Medication Practices (ISMP) issued an urgent alert regarding medication vial coring and fragmentation risks after receiving numerous recent reports of medication vial coring incidents.
- See Interim Practice Recommendations to Minimize the Risk of Coring When Using Needles to Access Medication Vials via this link: <a href="https://www.apsf.org/news-updates/patient-safety-alert-urgent-alert-regarding-medication-vial-coring-and-fragmentation-risks/">https://www.apsf.org/news-updates/patient-safety-alert-urgent-alert-regarding-medication-vial-coring-and-fragmentation-risks/</a>

Report any instances of coring directly to ISMP: <a href="https://home.ecri.org/pages/ecri-ismp-error-reporting-system">https://home.ecri.org/pages/ecri-ismp-error-reporting-system</a>

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#### **Survey Reminder**

- Survey on implementation status of ISMP Targeted Medication Safety Practices for Hospitals 2024-2025.
- Deadline: June 5, 2025.
- ISMP plans to present the results of this survey during the American Society of Health-System Pharmacists (ASHP) Midyear Clinical Meeting and Exhibition in December 2025.



LINK TO SURVEY: <a href="https://ecri.iad1.qualtrics.com/jfe/form/SV\_dcBW5zm8ygXIKou">https://ecri.iad1.qualtrics.com/jfe/form/SV\_dcBW5zm8ygXIKou</a>
LINK TO TMSBPS: <a href="https://home.ecri.org/blogs/ismp-resources/targeted-medication-safety-best-practices-for-hospitals">https://home.ecri.org/blogs/ismp-resources/targeted-medication-safety-best-practices-for-hospitals</a>

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#### **Upcoming Educational Programs**

#### **ISMP Live Webinar**

- Applying Best Practices for Injection Safety: A "How To" Roadmap
- Wednesday, June 11, 2025
- Time: 1:00 pm 2:00 pm ET
- TO REGISTER:

https://home.ecri.org/blogs/ismpupcoming-events/june-2025-applyingbest-practices-for-injection-safety

#### **ISMP On-Demand Education**

(Pharmacy CE available)

- Ensuring Medication Safety in Parenteral Nutrition: The Role of Multi-Chamber Bags and Alternative Lipids
- ACCESS WEBINAR:

https://home.ecri.org/blogs/ismp-ondemand-events/tagged/webinars



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#### **Upcoming Educational Programs**

https://home.ecri.org/products/medication-safety-intensive-workshop

- Medication Safety Intensive Workshops (Virtual)
  - August 14 & 15
  - October 16 & 17\*
  - December 4 & 5
- Medication Safety Intensive Workshops for Community & Specialty Pharmacies
  - Sep 26 & Oct 3



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#### Ochsner Children's & ISMP Safe Medication Management Fellowship

#### **DEADLINE EXTENDED TO MAY 30**

- One-year program beginning in summer of 2025
- Unparalleled opportunity to learn from and work with nation's top experts in medication safety, while supporting medication safety initiatives and error prevention strategies in pediatrics
- Requires working on site at Ochsner Health in New Orleans, LA, with additional remote work with ISMP



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https://home.ecri.org/pages/safe-medication-management-fellowships

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#### **Med Safety Board Director Job Posting**

- Med Safety Board (MSB) is an ISMP company powered by ECRI that provides consulting services to life science organizations to improve the safe use of pharmaceuticals and medical devices
- Position: Full-time, fully remote leadership position
- Responsibilities:
  - Provide leadership and oversight for MSB projects and consultations
  - · Participate in collaboratives, summits, and educational programs
  - Help develop new tools and resources
  - Develop strong partnerships with key stakeholders
- Application:

https://www.paycomonline.net/v4/ats/web.php/jobs/ViewJobDetails?job=135080&clientkey=C58BBB9614530727D8D9D756DDF51F1F



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## Questions?



- A copy of today's slides will be posted on our website.
  - Next MSOS Briefing date July 24<sup>th</sup>, 2025.

