Ensuring Safety:

The Impact of ISMP Guidelines on Pharmacy Technician Practices

Megan Sinnen, PharmD, BCPS

PGY2 HSPAL Resident

June 2025

Disclosures

The planner(s) and speaker have indicated that there are no relevant financial relationships with any ineligible companies to disclose.

Learning Objectives

- Recognize the role Institute for Safe Medication Practices (ISMP) has in shaping policies and procedures within Advocate Health
- Identify relevant ISMP guidelines that impact pharmacy technician workflows
- Evaluate how incorporating these workflows positively impacts patient safety

ADVOCATE HEALTH

Abbreviations

ISMP – Institute for Safe Medication Practices

TJC – The Joint Commission

AH – Advocate Health

Outline

Patient Safety Overview

ISMP History

ISMP Guidelines Overview

Direct impact on Advocate Health Pharmacy Technician Workflow

Advocate Health Culture of Safety

ADVOCATE HEALTH

What is the significance of patient safety?

One in ten patients suffers harm while receiving care in the hospital

Each year, unsafe medical practices result in more than 3 million deaths

The indirect expenses linked to patient harm amount to trillions of dollars annually

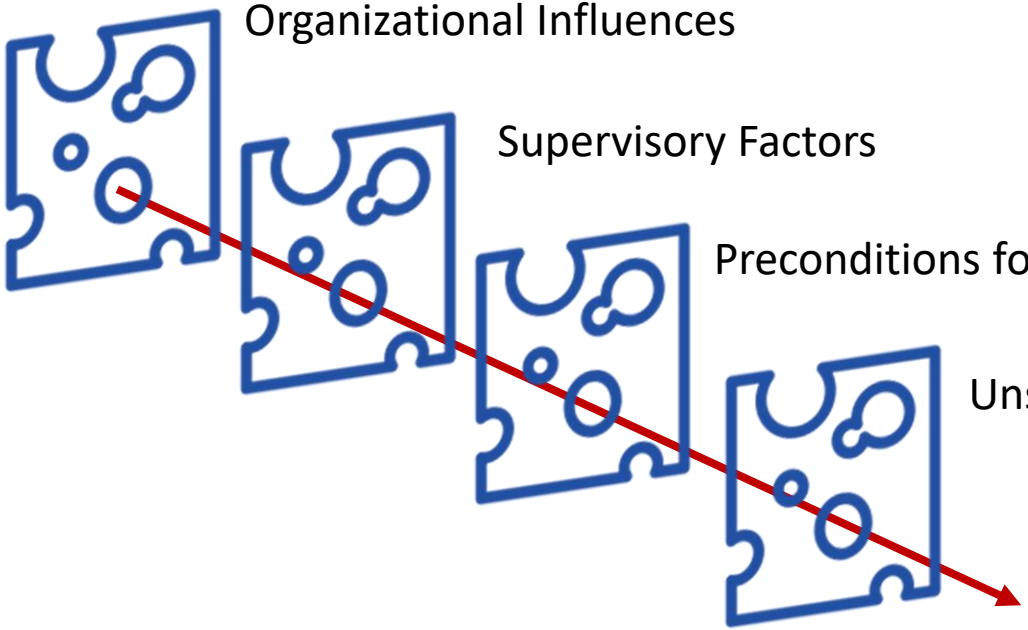
ADVOCATE HEALTH

Preventable Patient Harm

- When harm arises from an identifiable and modifiable cause
- Recurrence of the same event happening can be avoided by reasonable adaptation to a process or adherence to guidelines

ADVOCATE HEALTH

What Leads to Preventable Patient Harm?



ADVOCATE HEALTH

Examples of Preventable Patient Harm

- Common adverse events that may result in preventable patient harm include:
  - **Medication errors**
  - Unsafe surgical procedures
  - **Health care associated infections**
  - Diagnostic errors
  - Patient falls
  - Pressure ulcers
  - **Patient misidentification**
  - Unsafe blood transfusion
  - Venous thromboembolism

Let's Take a Moment to Brainstorm

Thinking about your role in the pharmacy, what are some things that you are doing that contribute to patient safety?

Hand Hygiene

Following policy & procedures when compounding a sterile and non-sterile product

Using two patient identifiers during a medication history

Recording accurate medication histories

ADVOCATEHEALTH

Let’s Take a Moment to Brainstorm

Thinking about your role in the pharmacy, what are some things that you are doing that contribute to patient safety?

ADVOCATEHEALTH

ISMP History

- Nonprofit organization devoted entirely to preventing medication errors
- Gold Standard for medication safety information initiatives

Mission

- "Advancing patient safety worldwide by empowering the healthcare community to prevent medication errors."

Vision

- "To be the premier independent, patient safety organization leading the effort to prevent medication errors and adverse drug events."

ADVOCATE HEALTH

ISMP Achievements

- **Development of Safety Guidelines**
  - ISMP has developed critical safety guidelines that have become standards in medication management within healthcare settings.
- **Influencing Healthcare Policies**
  - The organization's work has significantly influenced policies and practices across healthcare institutions, enhancing overall medication safety.
- **Measurable Improvements**
  - ISMP's initiatives have led to measurable improvements in medication safety, demonstrating their effectiveness in practice.

Evolution of ISMP Guidelines

- **Adapting to Evidence**
  - ISMP guidelines continuously adapt to new evidence and research findings to improve healthcare practices and patient safety.
- **Incorporating Technology**
  - The integration of emerging technologies into healthcare practices has influenced the evolution of ISMP guidelines significantly.
- **Ongoing Updates**
  - ISMP guidelines are regularly reviewed and updated to tackle current healthcare challenges and enhance patient safety protocols.

ISMP Guidelines

- Targeted Medication Safety Best Practices for Hospitals 2024-2025
- List of High-Alert Medications in Acute Care Settings
- List of Look-Alike Drug Names with Recommended Tall Man (Mixed Case) Letters
- List of Error-Prone Abbreviations, Symbols, and Dose Designations
- Guidelines for Sterile Compounding and the Safe Use of Sterile Compounding Technology

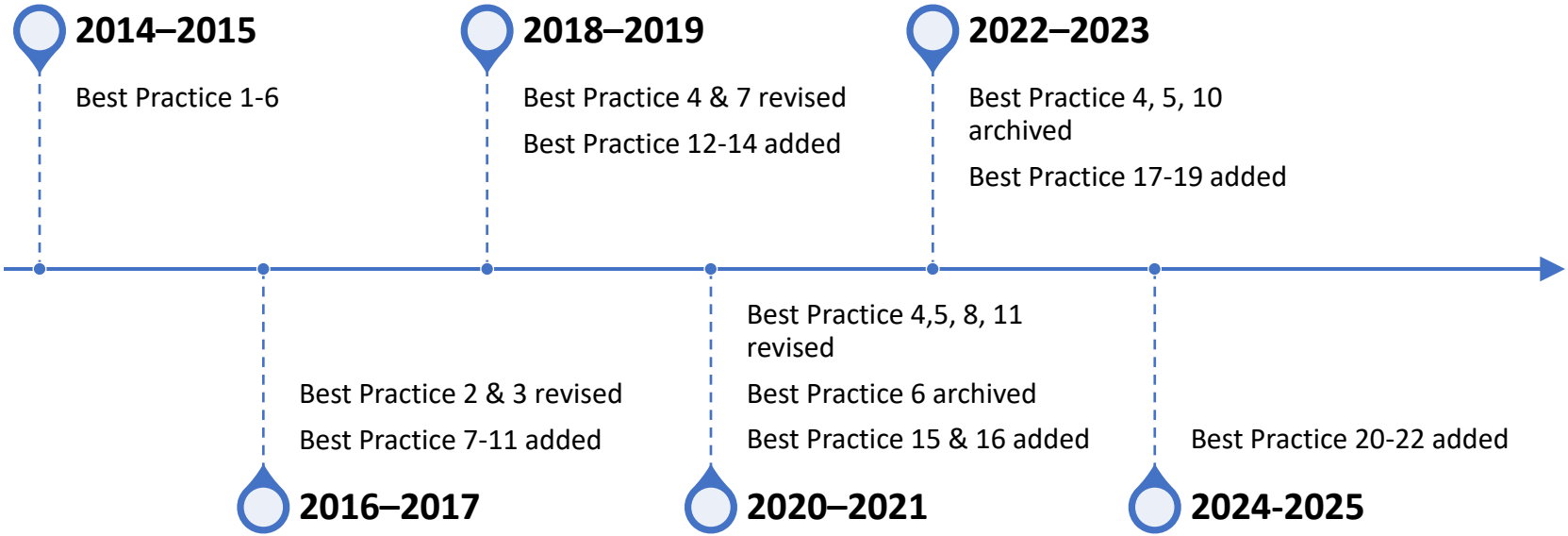
ISMP Targeted Medication Safety Best Practices for Hospitals 2024-2025

ADVOCATEHEALTH

Targeted Medication Safety Best Practices for Hospitals

- Recommendations designed to standardize pharmacy practices in hospitals by addressing frequently reported medication errors.
- Purpose: “to identify, inspire, and mobilize widespread adoption of consensus-based Best Practices for specific medication safety issues that continue to cause fatal and harmful errors in patients, despite repeated warnings in ISMP publications”

History of Best Practices



ADVOCATE HEALTH

Impactful to Inpatient Pharmacy Technician Workflow

#7	• Segregate, sequester, and differentiate all neuromuscular blocking agents (NMBs) from other medications, wherever they are stored in the organization
#11	• When compounding sterile preparations, utilize qorkflow management systems
#21	• Implement strategies to prevent medication errors at transitions in the continuum of care

ISMP List of High-Alert Medications in Acute Care Settings

ADVOCATEHEALTH

What is a High Alert Medication?

A. A medication that is commonly prescribed for minor illnesses

B. A medication that requires refrigeration before administration

C. A medication that poses a higher risk of causing significant harm if used incorrectly

D. A medication that is only available over the counter

ADVOCATEHEALTH

Classes/Categories of Medications

IV adrenergic agonists	Epinephrine, Phenylephrine, Norepinephrine
IV adrenergic antagonists	Propranolol, Metoprolol, Labetalol
Inhaled and IV anesthetic agents	Propofol, Ketamine
IV antiarrhythmics	Lidocaine, Amiodarone
Antithrombotic agents	Warfarin, Lovenox, Rivaroxaban, Dabigatran, Alteplase
Cardioplegic Solutions	
IV and Oral Chemotherapy	
Hypertonic Dextrose	Greater than 20% concentration
Dialysis Solutions	Peritoneal and Hemodialysis
Epidural and Intrathecal medications	

Classes/Categories of Medications

IV inotropic medications	Digoxin, Milrinone
IV and Subcutaneous Insulin	
Liposomal forms of medications and their conventional counterparts	Liposomal amphotericin B vs amphotericin B deoxycholate
IV moderate sedation agents	Dexmedetomidine, Midazolam, Lorazepam
Neuromuscular blocking agents	Succinylcholine, Rocuronium, Vecuronium
All routes of opioids	
Parenteral nutrition preparations	
Hypertonic sodium chloride	Greater than 0.9% concentration
Containers greater than 100mL of sterile water for injection, inhalation, and irrigation	
Oral sulfonylurea hypoglycemics	Glimepiride, Glipizide, Glyburide

Specific Medications

- IM and Subcutaneous Epinephrine
- IV Epoprostenol
- Insulin U-500
- IV Magnesium sulfate
- Oral Methotrexate
- IV Nitroprusside
- IV Oxytocin
- Concentrated IV Potassium chloride
- IV Potassium phosphates
- IV Promethazine
- IV Tranexamic acid
- IV and IO Vasopressin

ISMP List of Look-Alike Drug Names with Recommended Tall Man (Mixed Case) Letters
&
ISMP List of Confused Drug Names

ADVOCATEHEALTH

True or False?

Tall Man lettering is a strategy used to highlight the most commonly prescribed medications in bold font to make them easier to read.

FALSE

Tall Man lettering is a safety strategy that uses uppercase letters to help distinguish look-alike drug names and reduce medication errors (e.g., **predniSONE** vs. **prednisoLONE**).

ADVOCATEHEALTH

Name Differentiation Project

- Established in 2001 by the FDA
- Evaluation of postmarketing reports of name pair confusion
  - Degree of similarity
  - Safety risks with confusion between the name pair
  - Overlapping product characteristics
  - Reports of wrong drug errors and contributing factors
- FDA will request manufacturer voluntarily revise labels to include use of tall man lettering

Tall Man Lettering

Supported by ISMP, The Joint Commission, FDA, World Health Organization, and the International Medication Safety Network.

Since 2008, ISMP has kept a list of drug name pairs that include FDA-approved (table 2) and ISMP-recommended (table 3) look-alike and sound-alike medications.

Comparison of Guidelines

ISMP List of Look-Alike Drug Names with Recommended Tall Man (Mixed Case) Letters

- Generic-Generic drug name pairs that look alike
- Differentiates FDA approved vs ISMP recommended
- Safety focus is on use of tall man lettering to enhance safety during prescribing and dispensing

ISMP List of Confused Drug Names

- Mix of generic and brand name pairs (red names are generic)
- Comprehensive list of both FDA approved and ISMP recommended
- Safety focus comprehensive approach to identifying both look-alike and sound-alike pairs
- Provides additional guidance on strategies to reduce errors in addition to tall man lettering

ISMP List of Look-Alike Drug Names with Recommended Tall Man (Mixed Case) Letters

Table 1. FDA-Approved List of Generic Drug Names with Tall Man (Mixed Case) Letters

Drug Name With Tall Man Letters	Confused With
aceta**ZOLAMIDE**	aceto**HEXAMIDE***
aceto**HEXAMIDE***	aceta**ZOLAMIDE**
bu**PROP**ion	bus**PIR**one
bus**PIR**one	bu**PROP**ion
CARBOplatin	**CIS**platin
chlorpro**MAZINE**	chlorpro**PAMIDE**
chlorpro**PAMIDE**	chlorpro**MAZINE**
CISplatin	**CARBO**platin
clomi**PHENE**	clomi**PRAMINE**
clomi**PRAMINE**	clomi**PHENE**
cyclo**SERINE**	cyclo**SPORINE**
cyclo**SPORINE**	cyclo**SERINE**
DAUNOrubicin	**DOXO**rubicin
dimenhy**DRINATE**	diphenhydr**AMINE**
diphenhydr**AMINE**	dimenhy**DRINATE**
DOBUTamine	**DOP**amine
DOPamine	**DOBUT**amine
DOXOrubicin	**DAUNO**rubicin
glipi**ZIDE**	gly**BURIDE**
gly**BURIDE**	glipi**ZIDE**
hydr**ALAZINE**	**HYDRO**morphone — hydr**OXY**zine
HYDROmorphone	hydr**ALAZINE** — hydr**OXY**zine
hydr**OXY**zine	hydr**ALAZINE** — **HYDRO**morphone
medroxy**PROGESTER**one	methyl**PREDNIS**olone — methyl**TESTOSTER**one
methyl**PREDNIS**olone	medroxy**PROGESTER**one — methyl**TESTOSTER**one
methyl**TESTOSTER**one	methyl**PREDNIS**olone — medroxy**PROGESTER**one
mig**ALA**stat	mig**LU**stat

Table 2. ISMP List of Additional Drug Names with Tall Man (Mixed Case) Letters

Drug Name With Tall Man Letters	Confused With
ALfentanil	fenta**NYL** — **SUF**entanil
ALPRAZolam	clonaze**PAM** — **LOR**azepam
a**MIL**oride	am**LODIP**ine
am**LODIP**ine	a**MIL**oride
ARIPiprazole	**RABE**prazole
aza**CITID**ine	aza**THIO**prine
aza**THIO**prine	aza**CITID**ine
BUPivacaine	**ROP**ivacaine
car**BAM**azepine	**OX**carbazepine
CARBOplatin†	**CIS**platin†
ce**FAZ**olin	cefo**TE**tan — cef**OX**itin — cef**TAZ**idime — cef**TRIAX**one
cefo**TE**tan	ce**FAZ**olin — cef**OX**itin — cef**TAZ**idime — cef**TRIAX**one
cef**OX**itin	ce**FAZ**olin — cefo**TE**tan — cef**TAZ**idime — cef**TRIAX**one
cef**TAZ**idime	ce**FAZ**olin — cefo**TE**tan — cef**OX**itin — cef**TRIAX**one
cef**TRIAX**one	ce**FAZ**olin — cefo**TE**tan — cef**OX**itin — cef**TAZ**idime
Cele**BREX**‡	Cele**XA**‡
Cele**XA**‡	Cele**BREX**‡
chlordiaze**POXIDE**	chlorpro**MAZINE**†
chlorpro**MAZINE**†	chlordiaze**POXIDE**
CISplatin†	**CARBO**platin†
clo**BAZ**am	clonaze**PAM**
clonaze**PAM**	**ALPRAZ**olam — clo**BAZ**am — clo**NID**ine — clo**ZAP**ine — **LOR**azepam
clo**NID**ine	clonaze**PAM** — clo**ZAP**ine — Klono**PIN**‡
clo**ZAP**ine	clonaze**PAM** — clo**NID**ine
cyclo**PHOS**phamide	cyclo**SERINE**† — cyclo**SPORINE**†
cyclo**SERINE**†	cyclo**PHOS**phamide — cyclo**SPORINE**†
cyclo**SPORINE**†	cyclo**PHOS**phamide — cyclo**SERINE**†
DACTINomycin	**DAPTO**mycin
DAPTOmycin	**DACTIN**omycin
DEPO-Medrol‡	**SOLU**-Medrol‡

ADVOCATE HEALTH

ISMP List of Confused Drug Names

Drug Name	Confused Drug Name
Abelcet	amphotericin B
Accupril	Aciphex
acetaminophen	aceta**ZOLAMIDE**
aceta**ZOLAMIDE**	acetaminophen
aceta**ZOLAMIDE**	aceto**HEXAMIDE**
acetic acid for irrigation	glacial acetic acid
aceto**HEXAMIDE**	aceta**ZOLAMIDE**
Aciphex	Accupril
Aciphex	Aricept
Activase	Cathflo Activase
Activase	TNKase
Actonel	Actos
Actos	Actonel
Adacel (Tdap)	Daptacel (DTaP)
Adderall	Adderall XR

Drug Name	Confused Drug Name
ALfentanil	fenta**NYL**
ALfentanil	**SUF**entanil
Alkeran	Leukeran
Alkeran	Myleran
Allegra	Viagra
Allegra (fexofenadine)	Allegra Anti-Itch Cream (diphenhydr**AMINE**/allantoin)
Allegra Anti-Itch Cream (diphenhydr**AMINE**/allantoin)	Allegra (fexofenadine)
Alora	Aldara
ALPRAZolam	clonaze**PAM**
ALPRAZolam	**LOR**azepam
Altocor	Advicor
amantadine	amiodarone
Amaryl	Reminyl

ADVOCATE HEALTH

ISMP List of Error-Prone Abbreviations, Symbols, and Dose Designations

ADVOCATEHEALTH

ISMP List of Error-Prone Abbreviations, Symbols, and Dose Designations

- The ISMP National Medication Errors Reporting Program is used by ISMP to revise this guideline
- Abbreviations and shorthand can often lead to confusion and misinterpretation
- TJC “Do Not Use” list (Information Management standard IM.02.02.01)

Categories of Error Prone Abbreviations, Symbols, and Dose Designations

- Abbreviations for doses/measurement units
  - l or ml → lower case L confused with a 1 → use L or mL
  - U or u → mistaken for 0 or 4, causing overdose (4U seen as 40 or 4u seen as 44) → use “units”
- Abbreviations for route of administration
  - SC, SQ, or subq → SC seen as SL or sublinguial, SQ seen as “5 every”, q seen as “every” → use “SUBQ” or “subcutaneously”
  - IN → seen as IM or IV → use “intranasal”
- Abbreviations for doses/measurement units
  - l or ml → lower case L confused with a 1 → use L or mL
  - U or u → mistaken for 0 or 4, causing overdose (4U seen as 40 or 4u seen as 44) → use “units”

Categories of Error Prone Abbreviations, Symbols, and Dose Designations

- Miscellaneous abbreviations associated with medication use
  - D/C → could be perceived as discharge or discontinue which could cause premature discontinuation of medications if meant to indicate a discharge but interpreted as discontinue → use “discharge” or “discontinue”
- Drug name abbreviations
  - MgSO4 → mistaken as morphine sulfate → use “magnesium sulfate”
  - MS or MSO4 → mistaken as magnesium sulfate → use “morphine sulfate”

Guidelines for Sterile Compounding and the Safe Use of Sterile Compounding Technology

ADVOCATEHEALTH

Safety Summits

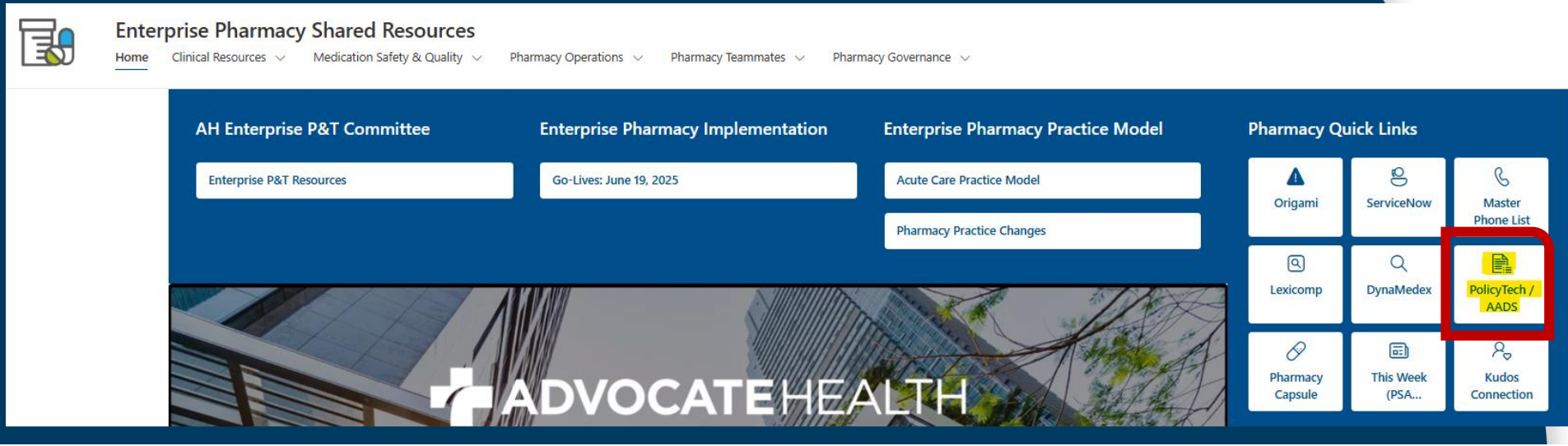
- 2011 first Sterile Product Compounding Safety Summit held
  - 2013 release of ISMP Guidelines for Safe Preparation of Compounded Sterile Preparation
- 2021 second Sterile Product Compounding Safety Summit held
  - 2022 release of Guidelines for Sterile Compounding and the Safe Use of Sterile Compounding Technology

Themes of the Guidelines

- Safe use of technology in sterile compounding
  - Automated compounding devices
  - IV workflow management systems
  - Robotic compounding automation
- Guidance when technology is not available
  - Standard Operating Procedures for garbing, hand hygiene, and aseptic technique
  - Double-check systems for ingredient verification
  - Environmental monitoring and documentation
  - Training and competency validation using tools like Compounding 360

AH Policies & Procedures

ADVOCATEHEALTH



Click HERE to view Searchability and Navigation instructions.

ISMP Impact on Midwest Region AH Policies and Procedures

- **High Alert and Look-Alike Medication Policy**
  - Attachment A. High Alert Medications List
  - Attachment B. Minimum High Alert Medication Safeguards
  - Attachment C. Guidelines for Storage Locations of Neuromuscular Blocking Agent Vials Outside of Pharmacy
  - Attachment D. Select High Alert and Look Alike Sound-Alike Safeguards Across the Medication Use Process
  - Attachment E. Look-Alike and/or Sound-Alike Medications List
  - Attachment F. Tall Man Lettering Conventions
  - Attachment G. Additional High Alert and Look-Alike Sound-Alike Medication Risk Reduction Strategies
  - Attachment H. Standard high alert and look-alike sound-alike medication auxiliary labels
- **Unacceptable Abbreviations Policy**
- Pharmacy Antidote Availability Policy

ADVOCATE HEALTH

High Alert Medication List

Attachment A. High Alert Medication List

I. **Adrenergic agents** (angiotensin II, dopamine, ephedrine, epinephrine, isoproterenol, norepinephrine, phenylephrine)

II. **Antithrombotics**
- A. Anticoagulants (e.g. heparin, low molecular weight heparins [e.g. enoxaparin, dalteparin], warfarin)
- B. Direct thrombin inhibitors (e.g. argatroban, bivalirudin, dabigatran)
- C. Factor Xa inhibitors (e.g. apixaban, edoxaban, betrixaban, fondaparinux, rivaroxaban)
- D. Thrombolytics, excluding use for catheter clearance and chest tube instillation (e.g. alteplase, reteplase, tenecteplase)

III. **Chemotherapy**

IV. **Concentrated electrolytes for injection, potassium and sodium salts as noted below:**
- A. Potassium acetate: 2 mEq/mL or greater
- B. Potassium chloride: 2 mEq/mL or greater
- C. Potassium phosphate: 3 mmol/mL or greater
- D. Sodium acetate: 2 mEq/mL or greater
- E. Sodium chloride: greater than 0.9% ("hypertonic saline")
- F. Sodium phosphate: 3 mmol or greater

V. **Insulin**

VI. **Magnesium sulfate, continuous infusion for obstetrics (e.g. 20 grams/500 mL)**

VII. **Neuromuscular blocking agents** (e.g. atracurium, cisatracurium, pancuronium, rocuronium, succinylcholine, vecuronium)

VIII. **Neuraxial infusions** (e.g. epidural, intrathecal)

IX. **Opioids**

X. **Oxytocin, intravenous**

XI. **Prostacyclins and analogs, infusions** (e.g. alprostadil, epoprostenol, treprostinil)

XII. **Sedatives** (benzodiazepines, dexmedetomidine, ketamine, propofol)

XIII. **Sterile water bags labeled for injection, inhalation or irrigation, over 100 mL**

XIV. **Vasopressin**

ADVOCATE HEALTH

Look-Alike Sound-Alike Medication List

Attachment E. Look-Alike and/or Sound-Alike Medication List

Table 1. Look-alike, sound-alike medications

Look-alike, sound alike medication or class	Potentially confused with
Biosimilars	Conventional formulation and other biosimilar formulations of the medication
Blood factors	Other blood factors
Concentrated electrolytes	Other concentrations, other concentrated electrolytes, and other medications/vials
Drugs available in conventional and alternate presentations (e.g. liposomal, protein-bound)	Alternative formulation of that medication
Drugs commercially available in pediatric and adult formulations	Alternate age formulation of the product
Epinephrine	Other epinephrine products and concentrations; ephedrine, norepinephrine, phenylephrine
Heparin	Other concentrations of heparin products
Hydromorphone	Other concentrations of hydromorphone products; morphine
Insulin	Other insulin types, other concentrations
Liposomal medications	Other liposomal medications/white liquids
Monoclonal antibodies	Other monoclonal antibodies
Morphine	Other concentrations of morphine products; hydromorphone
Thrombolytics	Multiple concentrations, and dispensing preparations
Tranexamic acid	Local anesthetics (bupivacaine, ropivacaine) due to same cap color and other similar appearing vials
Vaccines and diluents supplied with them	Other vaccines and vaccine diluents
Other drugs with tall man lettering conventions in Attachment F	Drug(s) with similar appearing or sounding name or physical appearance

ADVOCATE HEALTH

Unacceptable Abbreviations List

Unacceptable Abbreviation	Intent	Concern	Use Correct Term
µg	Micrograms	Mistaken for mg (10-fold overdose)	"mcg" or "micrograms"
AS, AD, AU, OS, OD, OU	Eye/ear route	Mistaken for one another	"left ear," "right ear," "both ears," "left eye," "right eye," "both eyes"
cc	Cubic centimeter	Mistaken as "u" (units)	"mL" or "milliliter"
IU	International unit	Mistaken as "IV" or "10"	"International units"
Missing leading zero (.x)	Ex. .x	Misplaced decimal point	Use leading zero (0.x)
MS, MSO_4, $MgSO_4$	Morphine sulfate or magnesium sulfate	Unclear distinction between magnesium sulfate or morphine sulfate	Use complete drug name
QD	Daily	Mistaken for "QOD" (every other day)	"daily"
QOD	Every other day	Mistaken for "Q.D." (daily	"every other day"
SC, SQ	Subcutaneous	SC mistaken as SL or sl (sublingual) SQ mistaken as "5 every"	"subcutaneous" or "SUBQ"
TIW	3 times weekly	Mistaken for 3 times a day or 2 times weekly	"3 times weekly"
Trailing zero (x.0)*	Ex. x.0	Misplaced decimal point	Do not use trailing zero (x)
U	Unit	Mistaken as "0," "4," or "cc"	"unit"

* A trailing zero is permissible only when required to demonstrate level of precision necessary for a value being reported. Examples of appropriate values include laboratory results, catheter sizes, and imaging studies that report lesion size. Trailing zeros are not permissible when expressing medication doses.

ADVOCATE HEALTH

ISMP Impact on Midwest Region AH Policies and Procedures

- **Medication Reconciliation Policy**
  - Medication Reconciliation Attachment A: Best Possible Medication History User Guide
  - Medication Reconciliation Attachment B: Best Possible Medication History User Guide - Home Health
  - Medication Reconciliation Attachment C: Best Possible Medication History User Guide-Ambulatory
  - Medication Reconciliation Attachment D: Reconcile Outside Information (ROI)
- **Sterile Compounding Policy**
  - Attachment A: Sterile Compounding Cleaning, Disinfecting, and Material Handling Standard Operating Procedure
  - Attachment B: Sterile Compounding Environmental Monitoring and Quality Control Standard Operating Procedure
  - Attachment C: Sterile Compounding Garbing and Hand Hygiene Standard Operating Procedure
  - Attachment D: Sterile Compounding Training and Competency Standard Operating Procedure
  - Attachment E: Immediate Use Compounding Standard Operating Procedure

Advocate Health's Culture of Safety

ADVOCATEHEALTH

Improving Patient Safety: Beyond ISMP

- Put safety at the top of your priorities in everything you do
- Enhance communication
- Be open and honest
- Report incidents, near misses, and safety concerns
- Don’t take shortcuts
- Ask for help
- Lead by example and reinforce safe work practices
- Get involved in quality improvement and patient safety projects

ADVOCATE HEALTH

Creating a Just Culture

“ A consistent, fair process that distinguishes between individual accountability, the role of the system, and the role of human behavior to establish a safe environment”

ADVOCATE HEALTH

7 High Reliability Tools

S.T.A.R.	• Internally focus your attention on the task at hand • STOP for 1-2 seconds, THINK, ACT, and REVIEW
Crosscheck	• The power of two; Take advantage of working together by verifying each other's work in high-risk tasks. Coach to provide reinforcement to colleagues for critical behaviors
Ask Clarifying Questions	• Avoid wrong assumptions from incomplete or ambiguous information by asking 1 or 2 questions to improve your understanding
Repeat Back	• Three-way communication involving a statement by the sender, read back by the receiver, and confirmed as correct by the sender

ADVOCATE HEALTH

7 High Reliability Tools

Letter & Number Clarification	• Improve oral communication for sound a like letters, abbreviations, words, and numbers
CUS+	• Speak up and make your voice heard when communicating with someone in authority. Use CONCERN, UNCOMFORTABLE, STOP + ENGAGE a peer, and/or escalate to a leader & enter safety event report
Question & Verify	• Unsure of how to proceed or have a gut feeling that something isn't right? Have a questioning attitude and check with a credible source to be sure you have it right before proceeding

ADVOCATE HEALTH

Medication Error Myths

ADVOCATE HEALTH

Medication Error Myths

ADVOCATE HEALTH

Medication Error Myths

Examples of Impactful Reports

- Astagraph XL 0.5 mg capsules were incorrectly repackaged as 1 mg capsules due to selection error during the repack process.
  - The error was missed during the pharmacist's double-check, leading to reinforced procedures and consultation with the automation team.
- Pre-surgical med history calls revealed a scheduling issue due to a misunderstanding about dulaglutide medication timing.
  - Technician confirmed last dose of dulaglutide and escalated to teammate who cancelled procedure to make them aware that last dose was correctly held before surgery
  - Patient's procedure was put back on original schedule which prevented the patient from having to be rescheduled

Examples of Impactful Reports

- Pharmacy technician found two open MDVs of Heparin 10,000 units/10 mL without BUD or patient labels in a patient-specific bin.
  - This safety event led to investigation regarding policies and procedures surrounding the use of MDV products outside of central pharmacy.
  - Re-education to nursing around best practices was the result of this safety event
- While filling pyxis batch, technician discovered an ISC medication with an expiration date 18 months out from the original repack date.
  - Escalation to all sites to check current inventory to ensure incorrectly dated product was identified and sent back to ISC for correction

ADVOCATE HEALTH

Questions?

Contact:
Megan.Sinnen@aah.org

ADVOCATE HEALTH

Ensuring Safety:

The Impact of ISMP Guidelines on Pharmacy Technician Practices

Megan Sinnen, PharmD, BCPS

PGY2 HSPAL Resident

June 2025