



# When Mistakes Matter Strategies for Enhancing Medication Safety and Managing Risk

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# Learning Objectives

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Identify and  
analyze

Identify and analyze common causes of medication errors.

Explore

Explore potential suggestions and solutions to reduce medication errors.

Awareness

Become aware of trends in claims and occurrences.

# What Is A Medication Error?

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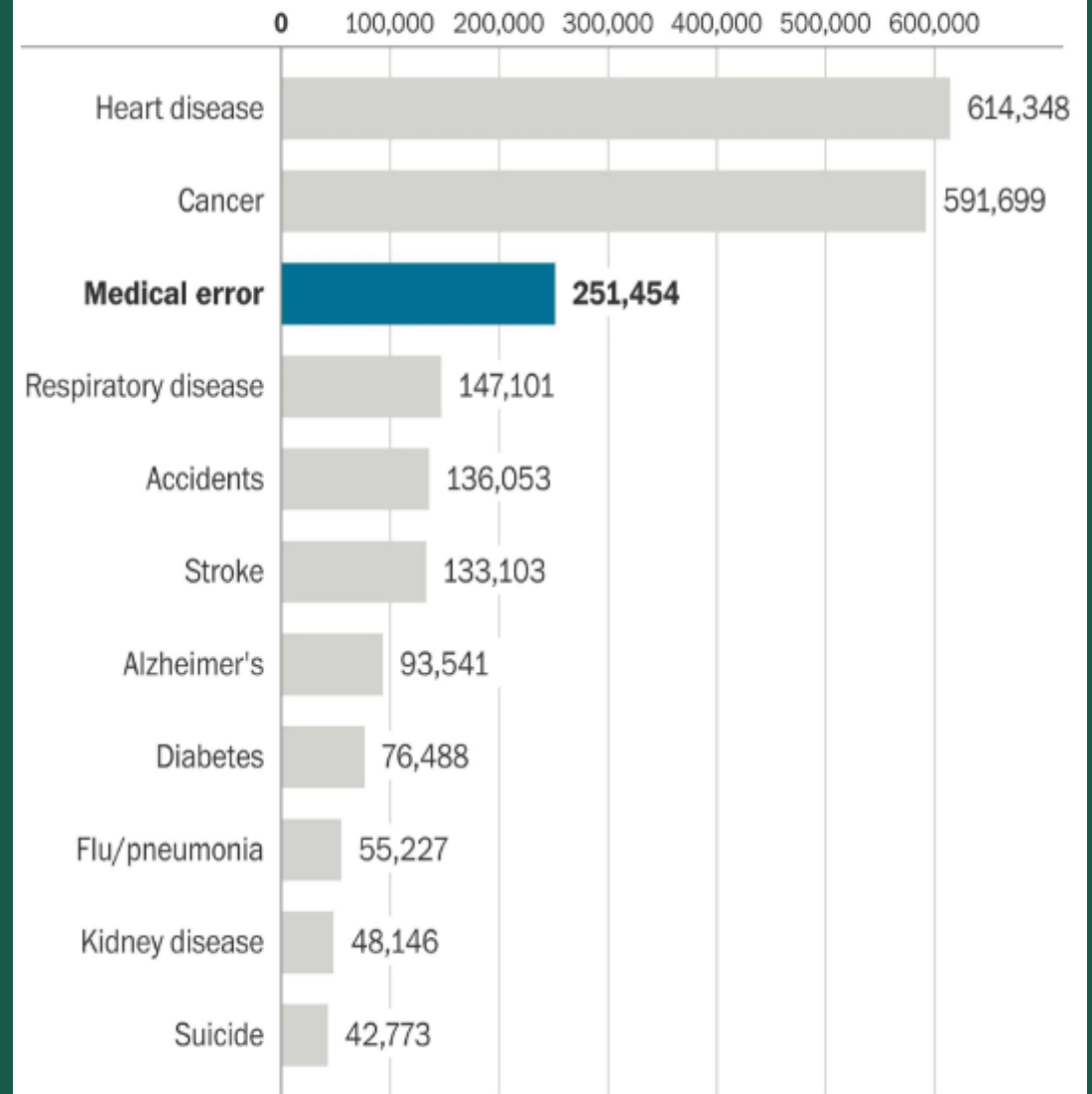
**The FDA defines a medication errors as “any preventable event that may cause or lead to inappropriate use or patient harm while the medication is in the control of the healthcare professional, patient, or consumer.”**

# What's the Why?



## Death in the United States

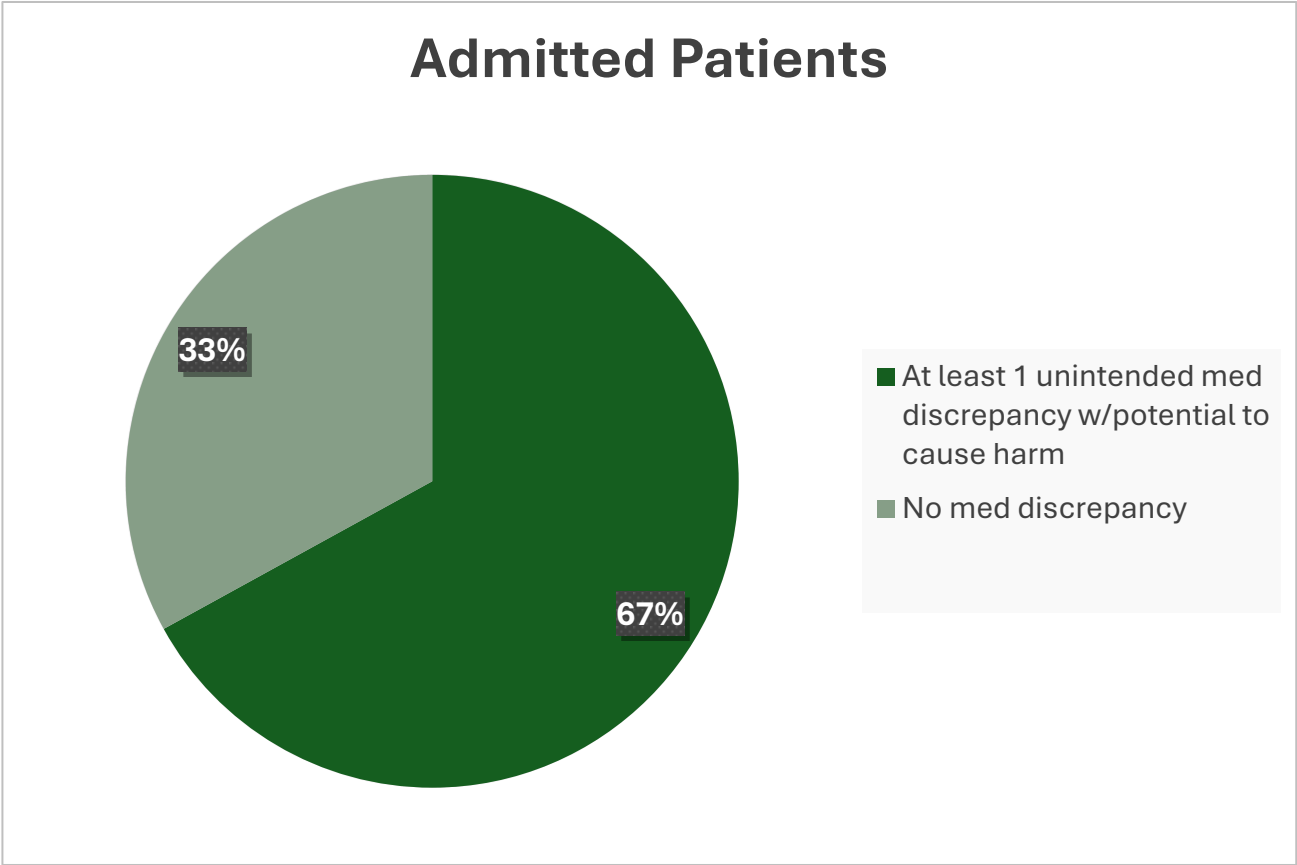
Johns Hopkins University researchers estimate that medical error is now the third leading cause of death. Here's a ranking by yearly deaths.



Source: National Center for Health Statistics, BMJ

THE WASHINGTON POST

# How Prevalent Are Medication Errors?



**530,000 injuries occur annually  
in outpatient clinics alone**

**What Do You Think Are The Most  
Common Causes?**

# The Most Common Types of Medication Errors

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- 1 Manufacturing
- 2 Medicine Selection
- 3 Monitoring
- 4 Writing the Prescription
- 5 Dispensing
- 6 Administration



# Risk Mitigation

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Medication Safety & Risk Strategies

# Look A-Like Sound A-Like

**DANGEROUS**



**HARMLESS**



NovoLIN	NovoLOG
NovoLOG	NovoLIN

SEARCH MET

- METFORMIN
- METHADONE
- METHOTREXATE**
- METHYLPHENIDATE

# Illegible Handwriting Unclear Electronic Orders

**MEDICAL CENTER HOSPITAL**  
500 - 600 W. 4TH STREET ODESSA, TEXAS PH. 232-7117

FOR Vargas, Ramon AGE \_\_\_\_\_  
ADDRESS 1574 W. 15th St DATE 6/23/95

NO REFILLS Zendol 20mg # 120 -  
20mg p.o. q6hr

REFILLS Ferrous Sulfate 300mg # 100  
300mg p.o. TID E meals

LABEL Humulin N  
30 units SQ qd  
Ram / Call

PRODUCT SELECTION PERMITTED DISPENSE AS WRITTEN

D.E.A. # \_\_\_\_\_

720 027 2726 04 02-276



# Distractions & Workload Pressures

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# Inadequate Training & Communication Breakdowns

Same Meds

Different  
Preparations

Verbal  
Orders



# Safety & Risk Strategies - Controlled Substances

Chain of  
Custody

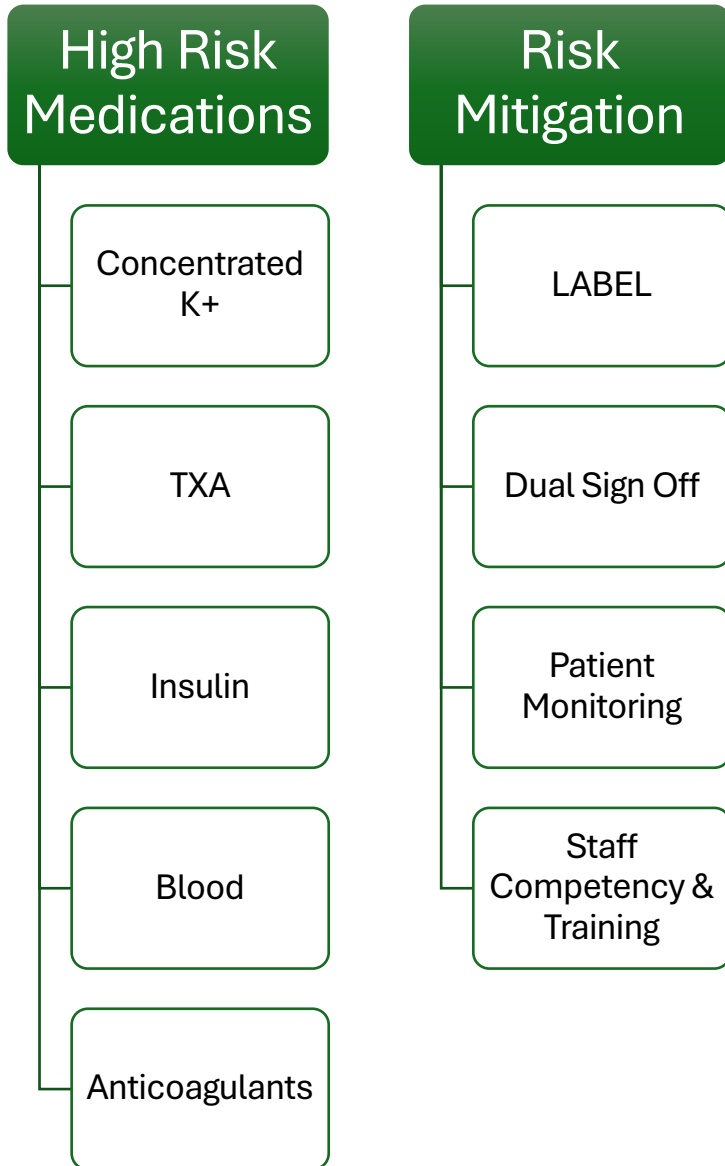
Appropriate  
Waste  
Receptacle

Shift Count

Limiting  
After Hours  
Access

Witness  
Waste

Appropriate  
Storage



# Safety & Risk Strategies High Risk Medications

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# A Patient Safety Measurement Tool for Healthcare

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 PressGaney

WHITE PAPER

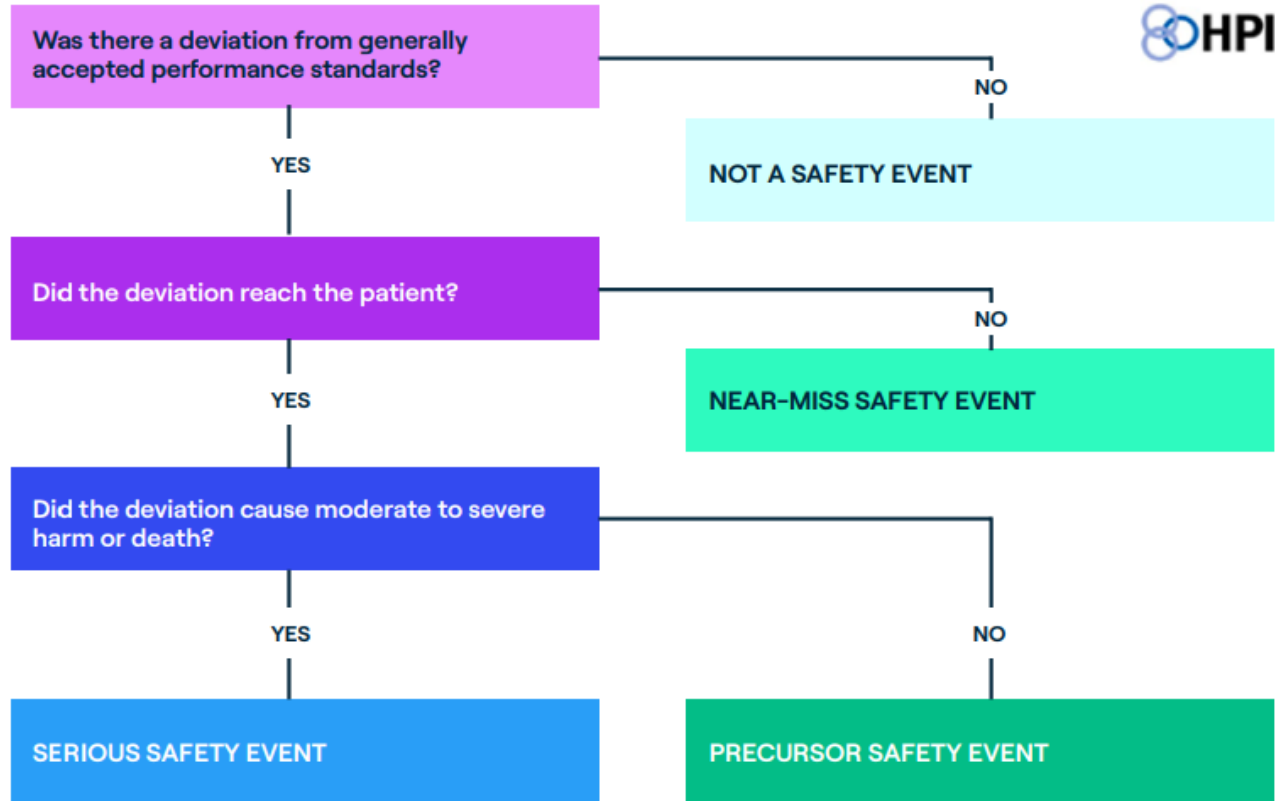
## HPI SEC & SSER

Patient safety measurement  
system for healthcare



**Figure 2**

# Safety Event Decision Algorithm

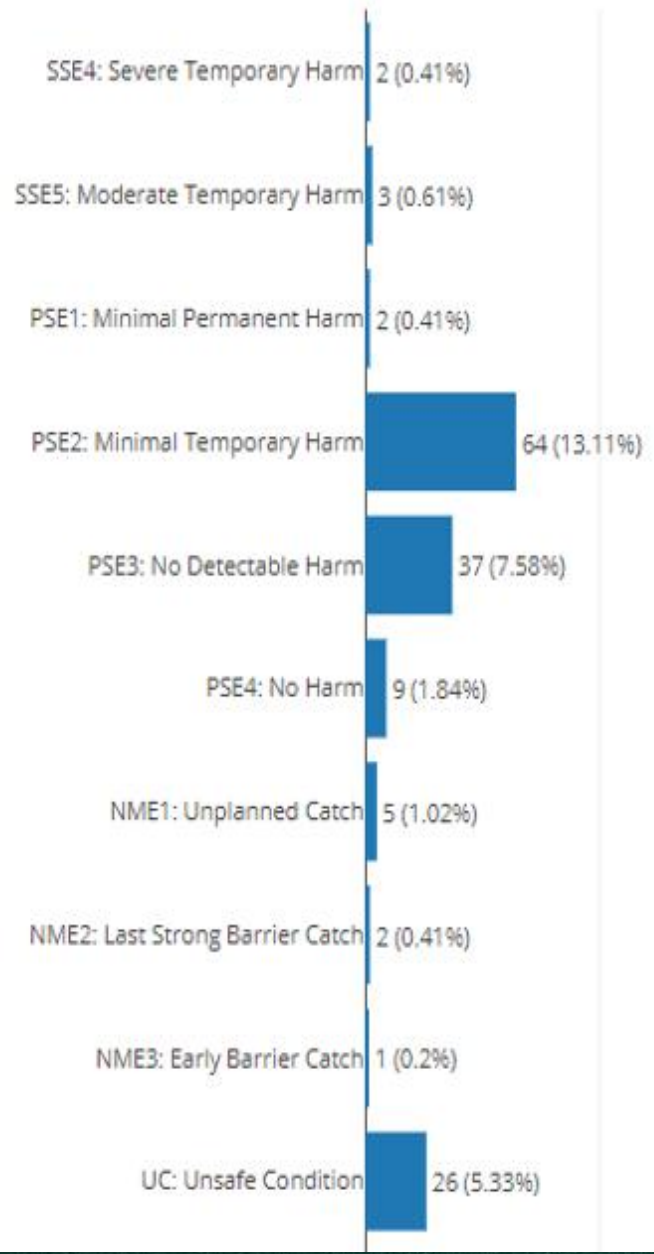


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**Table 2**

HPI SEC	CODE	LEVEL OF HARM
SERIOUS SAFETY EVENT	SSE 1	Death
	SSE 2	Severe permanent harm
	SSE 3	Moderate permanent harm
	SSE 4	Severe temporary harm
	SSE 5	Moderate temporary harm
PRECURSOR SAFETY EVENT (PSE)	PSE 1	Minor permanent harm
	PSE 2	Minor temporary harm
	PSE 3	No detectable harm
	PSE 4	No harm
NEAR-MISS SAFETY EVENT (NME)	NME 1	Unplanned catch
	NME 2	Last strong barrier catch
	NME 3	Early barrier catch

# Events by Severity



## Ranking Medication Events Utilizing Safety Event Classification (SEC)



# Case Study

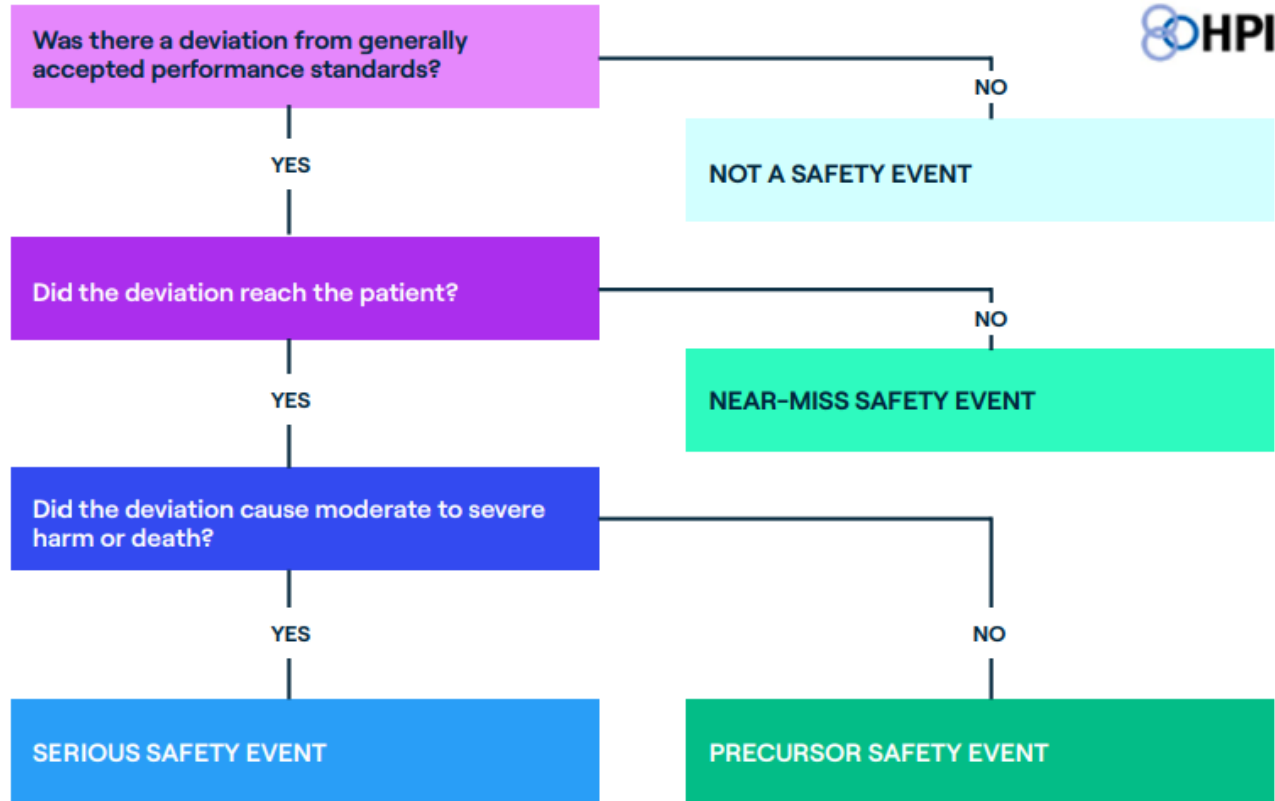
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- A patient was admitted on the med-surg unit for GI complaints. Diagnostics revealed gastric ulcers. Sucralfate PO was ordered on the MAR. After administration, the patient began to complain of shortness of breath. The other RN on shift overheard the discussions between the patient and the nurse. The other RN asked the patient's nurse what happened and come to find out, the RN administered the Sucralfate but administered it IV instead of PO.
- The second nurse immediately notified the ordering physician, put the patient on continuous telemetry, pulse ox monitoring, applied oxygen and obtained vital signs.
- After a few minutes, the patient's shortness of breath subsided and there were no subsequent reactions.



**Figure 2**

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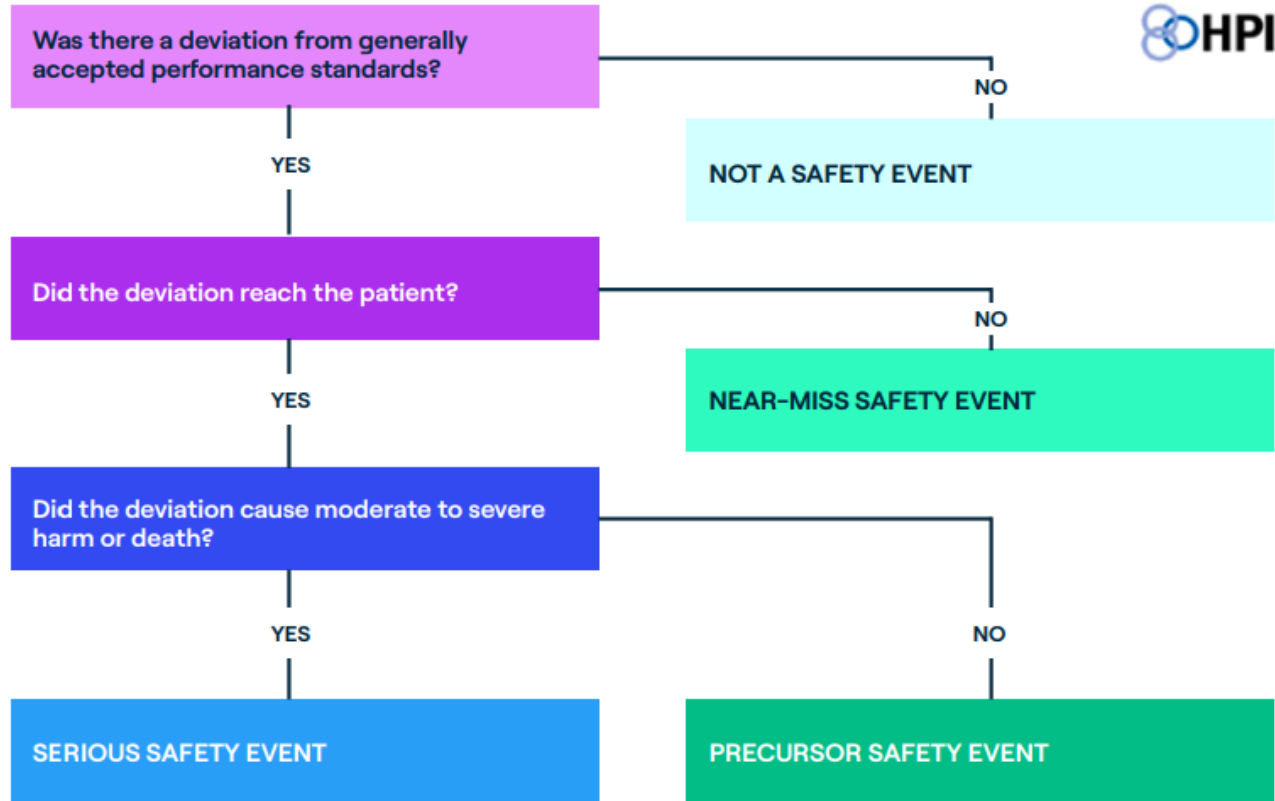
# Case Study

- Antibiotics ordered in the ER: A patient was being transferred to a higher level of care from a level 4 ER, EMS communicated their ETA was 20 minutes but showed up 5 minutes after they were on the radio. Patient needed IV antibiotics hung prior to transfer, no unit clerk so RN was also compiling all transfer paperwork. RN went to pyxis to pull ordered antibiotic, RN grabbed piggyback bag from pyxis, used BCMA and alert popped up, RN acknowledged, scanned again, alert came up, RN acknowledged– override and administered. After EMS took the patient, RN realized why the BCMA system kept alerting and went back into the Pyxis and noticed the correct antibiotic was in the pocket next to the one she grabbed.
- Cefazolin vs. Ceftriaxone



**Figure 2**

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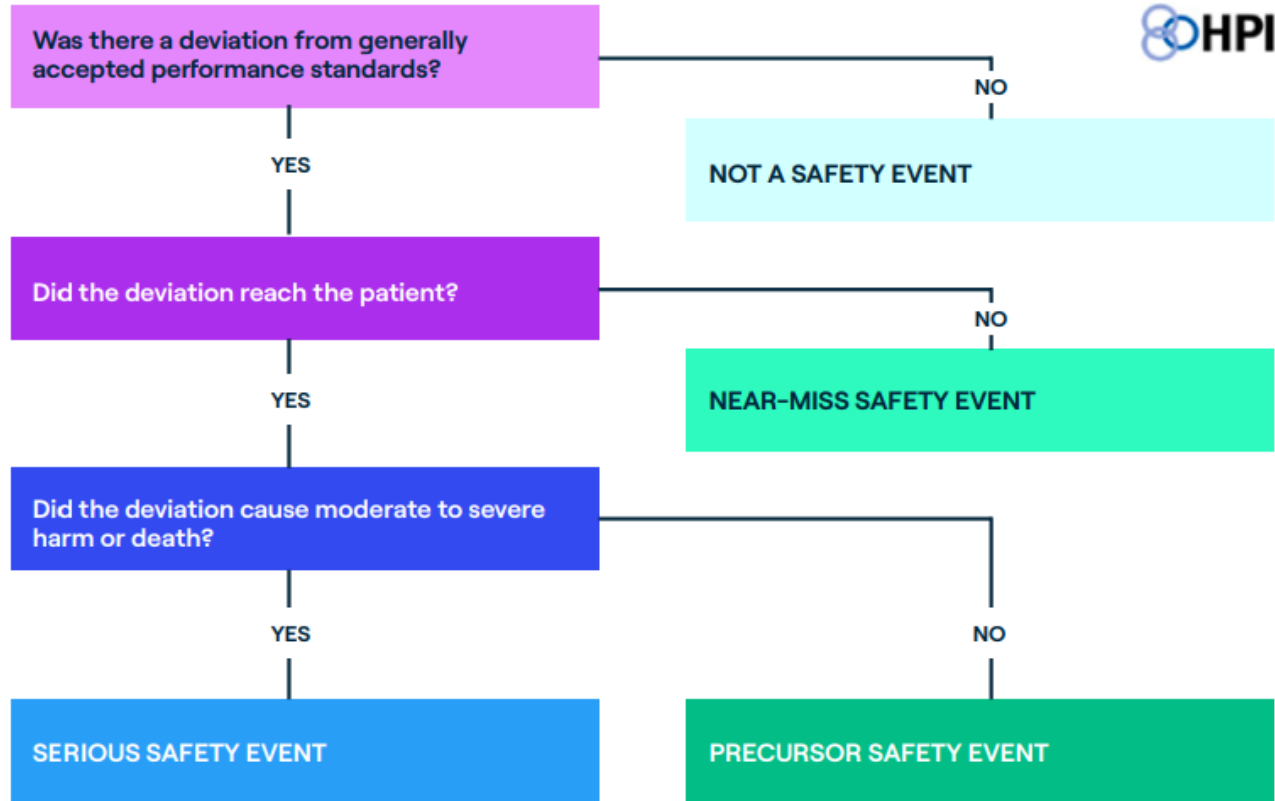
# Case Study

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- A 68-year-old male patient was admitted to the hospital for management of congestive heart failure. He had a complex medication regimen, including anticoagulants, diuretics, and antihypertensives. The patient was transferred from the ICU to a medical-surgical unit after stabilization.
- During the transfer, the patient's medication reconciliation was not completed accurately. A transcription error occurred when the nurse entered the medication orders into the electronic health record (EHR). The anticoagulant **warfarin** was mistakenly entered at **10 mg daily** instead of the intended **1 mg daily**.
- The error went unnoticed for three consecutive days. On the fourth day, the patient developed signs of internal bleeding, including hypotension, hematuria, and altered mental status. Lab results revealed a critically elevated INR of 9.5. The patient was transferred back to the ICU and required reversal agents, blood transfusions, and intensive monitoring.
- The patient survived but experienced significant harm, prolonged hospitalization, and long-term complications.

**Figure 2**

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# General Trends

Increase in claims

Claims often involve high-alert medications

Frequently linked with diagnostic errors

Under reporting is still an issue

# Copic Closed Claims

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- Alleged pain medication interaction with Benadryl resulting in death
- Overdosing Lovenox and failure to enforce guidelines regarding anticoagulant medication causing ischemic and hemorrhagic stroke
- Alleged overdose of cancer medication leading to death
- Patient in for anaphylactic shock, epinephrine error resulting in cardiac arrest
- Patient suffered severe brain damage due to medication given to relax them prior to CRNA attempting intubation



# Copic Closed Claims

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- Negligent medication administration leading to anaphylactic shock
- Medication error and negligent monitoring leading to patient demise
- Alleged negligent administration of medication, failure to obtain informed consent, resulting in kidney injury and renal failure
- Improper medication administration resulting in cardiac arrest



# Published November 14<sup>th</sup>, 2025

## UF Health Faces Lawsuit

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**2-year-old died after hospital missed a decimal point in medication dosage, leading to overdose, lawsuit says**

“Because of these errors, De’Markus received two consecutive doses of a massive overdose of oral potassium phosphate,” the lawsuit states.

De’Markus’ potassium levels rose to a fatal level, which caused him to go into cardiac arrest.

The lawsuit also alleges that medical professionals failed to respond to De’Markus’ cardiac arrest in a timely manner, and he went without breathing for at least 20 minutes.

The lawsuit says the lack of oxygen caused De’Markus to suffer irreversible brain damage, as well as “catastrophic” damage to other organs.

He spent the next two weeks on life support and showed no signs of improvement. He was taken off life support and died on March 18, 2024.

The lawsuit claims that several other supervising physicians, colleagues and pharmacists failed to catch and correct the mistake, despite the hospital’s pharmacy system issuing a “Red Flag” warning that alerted them to the excessive dosage.

**“It’s been extremely difficult since the passing of my son because to this day, I still have not known what happened.”**

**“I was never told. When I asked, it was always a vague, ‘I do not know. I do not know.’ I still have nightmares about what happened.”**

**- Dominique Page**





# Resources

- Most Common Types of Medication Errors Article

<https://www.pharmaceuticalpress.com/resources/article/what-are-the-most-common-types-of-medication-errors/>

- ISMP/ECRI List of Look Alike/Sound Alike Medications

<https://www.ismp.org/sites/default/files/attachments/2017-11/tallmanletters.pdf>

- ISMP/ECRI Minimizing Distractions

<https://home.ecri.org/blogs/ismp-alerts-and-articles-library/minimizing-distractions-and-interruptions-during-medication-safety-tasks>

- Press Ganey White Paper on HPI SEC/SSER

<https://info.pressganey.com/e-books-research/the-hpi-sec-sser-patient-safety-measurement-system-for-healthcare#main-content>

PressGaney

WHITE PAPER

## HPI SEC & SSER

Patient safety measurement system for healthcare



# Questions?

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**Thank you!**

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