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# Unmasking Medication Safety Blind Spots

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Applying for CE credit or need a Certificate of Participation?  
Be sure to snap a pic of the code shown at the end of this session.

CE Deadline: 09/30/25



*Howdy!*

# Presenters

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**Erin Moody, PharmD**  
Director of Pharmacy  
Paris Regional Health



**Morgan Greutman, PharmD, BCPS**  
Clinical Pharmacy Specialist  
Paris Regional Health

*Howdy!*

# Disclosures



The presenters have no real or perceived conflicts of interest related to this presentation

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# Learning Objectives



*At the end of this session, participants should be able to:*

- Identify medication reconciliation challenges and potential solutions.
- Recognize the value of bedside barcode scanning and real-time audits.
- Recall strategies ensure effective implementation of medication safety initiatives and improve reporting culture.

# Poll Question #1



What level of medication safety presence is currently at your facility? [Select all that apply]

- A. None
- B. Review of internal med errors
- C. Review of external med errors
- D. Interdisciplinary medication safety workgroup

# MEDICATION SAFETY WORKGROUP



# Medication Safety – Why should we care?



- **To Err is Human: Building a Safety Health System**
  - Landmark report that highlighted medication errors are a significant cause of harm and death
- National Academy of Medicine reported that each of the annual **1.5 million hospitalized patients experience an average of 1 medication error/day**
- The reported incidence of **medication errors in acute hospitals is approximately 6.5 per 100 admissions**
- Voluntarily reported medication errors significantly underestimate the true scope of the issue; **one study found they captured only 13 out of 1,000 clinically significant prescribing errors identified retrospectively**

Sources: 1. Institute of Medicine (US) Committee on Quality of Health Care in America. *To Err Is Human: Building a Safer Health System*. Washington (DC): National Academies Press (US); 2000. Available from: <https://pubmed.ncbi.nlm.nih.gov/25077248/>; 2. Aspden P, Wolcott J, Bootman JL, Cronenwett LR, eds for the Committee on Identifying and Preventing Medication Errors. *Preventing Medication Errors: Quality Chasm Series*. Washington, DC: The National Academies Press; 2007; 3. Tariq RA, Vashisht R, Sinha A, et al. Medication Dispensing Errors and Prevention. [Updated 2024 Feb 12]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519065/>; 4. Westbrook JI, Li L, Lehnborn EC, et al. What are incident reports telling us? A comparative study at two Australian hospitals of medication errors identified at audit, detected by staff and reported to an incident system. *Int J Qual Health Care*. 2015;27(1):1-9.

# Medication Safety: Social media comments

[REDACTED]  
[REDACTED] Patient was given 300 units of insulin by a new grad at my first hospital and coded. Got dextrose and lived tho and was fine thank goodness

5-5

Reply



♡ 2086

Nurse thought they were giving iv Tylenol which goes over 15 mins, they connected a bag of Levo that was bedside and ran the entire bag of Levo over the 15 mins, pt coded and got ROSC, pt brain dead

Postpartum nurse came to nicu to medicate mom who was doing skin to skin with infant. Pushed iv meds into wrong line and gave it to the baby instead 🤔

Nurse at a major pediatric hospital ran a tube feed into a NICU patient's ET tube. Punishment was her having to talk about the mistake in an educational video about sentinel events and it was made into an EDUCATION MODULE that all nurses at that hospital had to complete.



Source: Trauma.bae (@trauma.bae) (2025). <https://www.tiktok.com/@trauma.bae/video/7501075258993085727>

# Medication Safety: Social media comments, cont.



[Redacted]  
[Redacted] RN gave 1,000 units of regular insulin in ER. Patient made it to ICU and had an NSTEMI bc of it. No clue what the outcome was. That nurse is now celebrating nurses week  
🌟unemployed🌟  
5-5   Reply   ...   1910

[Redacted] A nurse gave a patient  
[Redacted] what she thought was a bowel prep. He couldn't tolerate it so they put in an NG and gave it that way. It was dialysate. He died.  
5-5   Reply   26.2K  
View 282 replies

Baby born at 26w coded, all postpartum floor crash carts (3) had no meds, baby didn't make it

my nurse (i'm also a nurse) pushed 1mg epi IV instead of .5mg IM for anaphylaxis. Sent me to ICU with a heart attack at 27. 🤔 🤔

Wrong heparin was stocked in NICU and caused multiple babies to 🤔. Now heparin is a 2 RN verification in that entire hospital system.

Source: Trauma.bae (@trauma.bae) (2025). <https://www.tiktok.com/@trauma.bae/video/7501075258993085727>

# Medication Safety – ISMP Best Practices



## Institute for Safe Medication Practices Best Practice 14: Learn from External Risks

- Actively use external medication error reports (e.g., ISMP) to identify & prevent similar issues in your facility.
- Establish a routine process for reviewing both internal & external medication risks.

## The Case for a Medication Safety Officer (MSO): Essential Leadership

- Centralized Leadership
- Expert & Champion
- Data-driven Improvement
- Systemic Accountability

Sources: 1. Institute for Safe Medication Practices (ISMP). A call to action. The case for medication safety officers (MSO) [White paper]. Horsham, PA: ISMP. 2018.  
2. Institute for Safe Medication Practices (ISMP). *ISMP Targeted Medication Safety Best Practices for Hospitals*. ISMP; 2024.

# Medication Safety – Accrediting Body



## CMS Conditions of Participation

- 482.21: Quality assessment and performance improvement program
  - Program must include an ongoing program that shows measurable improvement in health outcomes and reduce medical errors
    - Must track adverse patient events

## The Joint Commission (TJC)

- MM.07.01.03 – The hospital responds to actual or potential adverse drug events, significant adverse drug reactions and medication errors.
  - Hospital complies with internal and external reporting requirements for actual or potential adverse drug events, significant adverse drug reactions, and medication errors.

Sources: 1. *Conditions of Participation for Hospitals*, 42 C.F.R. § 482.21 (2024). *Electronic Code of Federal Regulations*, [www.ecfr.gov/current/title-42/chapter-IV/subchapter-G/part-482/subpart-C/section-482.21](http://www.ecfr.gov/current/title-42/chapter-IV/subchapter-G/part-482/subpart-C/section-482.21). 2. "MM.07.01.03." *Comprehensive Accreditation Manual for Hospitals*. By The Joint Commission. Joint Commission Resources, 2025.

# Paris Regional Health Medication Safety Timeline



Clinical  
Specialist  
June 2023

Medication  
Reconciliation  
performance  
improvement  
project  
September  
2023

Medication  
Safety  
Workgroup  
January 2024

Great catch  
program  
February 2024

Medication  
Safety Rounds  
May 2024

Source: Paris Regional Health. Not for reuse without permission of Paris Regional Health.

# Medication Safety: Front Line Engagement



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# Paris Regional Health Medication Safety Workgroup



- **Team makeup:**

- CNO, DOP, Risk officer, Quality director, Nursing and pharmacist informaticist, unit leadership, education, and hospitalist team (RN and provider)

- **Mission:**

- *To promote safe medication management strategies through education and evaluation of outcomes for patients. Our goal is to prevent harm to patients receiving medications through proactive assessments, internal event analysis and other pertinent data analysis.*

- **Agenda:**

- **Standing items**

- Monthly – Internal event discussion, great catch selection, ISMP newsletter review, PI project updates
- Quarterly – Medication event trends/review of system changes, IV pump utilization report, hypoglycemic event review, medication safety rounding audit findings

# PRH Great Catch Program

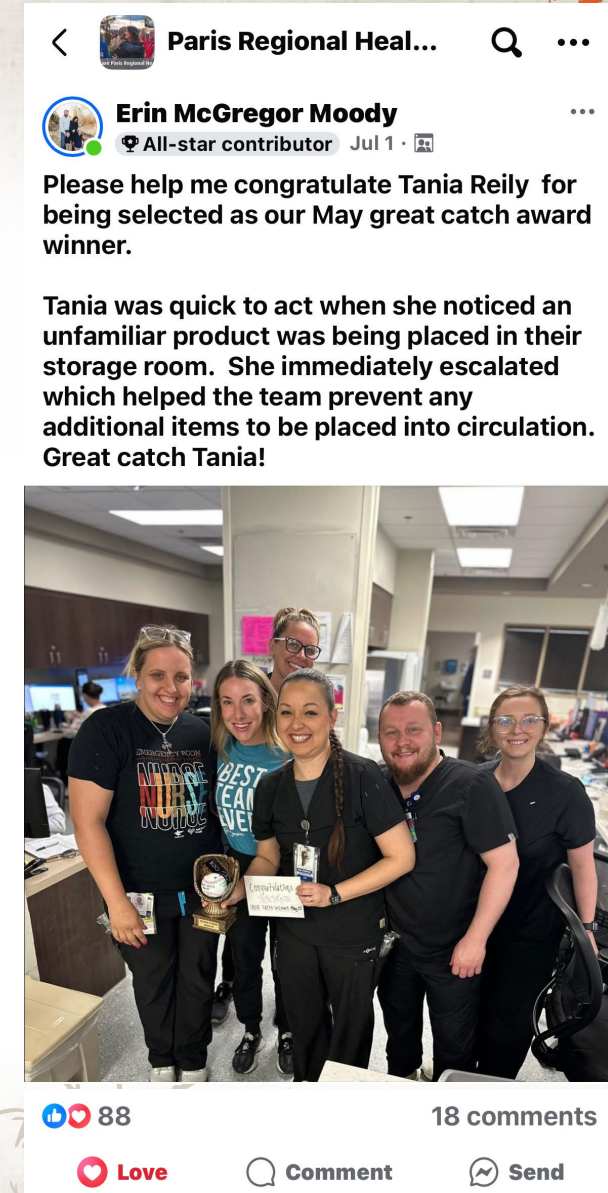
- **Great catches/near misses are compiled monthly and are de-identified**
  - Best Catch is voted on monthly at Medication Safety Workgroup
- **Started program in February 2024**
  - Great Catch reporting increased by 255% (20 vs. 71) and medication-related error reporting has increased by 386% (94 vs. 457)
  - Avg # of great catches/month
    - 1/24–6/24 (first 6 months of the program)
      - 3.8 catches/month
    - 12/24–5/25
      - 9.8 catches/month (most recent 6 months of the program)



Image sources Paris Regional Health.  
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# PRH Great Catch Program, *continued*

- Great catch recipients receive the traveling trophy, \$20 gift card, recognition on the employee Facebook page
  - Individual thank you letters and a meal voucher to all nominees



# PRH Medication Safety Newsletter

- Monthly newsletter focused on timely medication safety alerts (internal or external), drug information and/or policy reminders
- Continuing education focused on front-line team members
- Suggestions for increased readership:
  - Interactive portion
  - Hand deliver newsletters to the unit
  - Post on automated-dispensing cabinets
  - Send email out to all users

Source: Paris Regional Health. Not for reuse without permission.

## MEDICATION SAFETY NEWSLETTER

Paris Regional Health

Making communities healthier

### IN THIS ISSUE:

- Insulin pump policy
- Epinephrine IM vs IV
- Test your knowledge!

**EPINEPHRINE – KNOW THE DOSE DIFFERENCE BETWEEN IM AND IV**  
It's critical to use the right epinephrine concentration for the correct route. IM (intramuscular) dosing for allergic reactions

### INSULIN PUMP POLICY

PRH has a policy, "Insulin Pump and Continuous Glucose Management" to address patient's admitted with an insulin pump. Key takeaways include:

1. On admission, identify the presence of the insulin pump and **notify the physician**.
2. Patient must be oriented and capable of insulin pump self-management.
3. You need an order from the physician to continue the patient's insulin pump.
  - a. The order must include the **type of insulin, basal rate, and bolus dose for hyperglycemia/meals**.
  - b. Document the order, inform pharmacy, so this order can be added to the MAR.
4. You must **obtain patient consent** for the insulin pump upon admission to the hospital. The consent is attached to the policy referred to above.
5. Once consented and documented **utilize the "Insulin Pump Basal/Bolus-Blood Glucose Record"** for documentation of the patient's insulin dose and blood glucose (also attached at the end of the policy).

### TEST YOUR KNOWLEDGE!

1. Where do you find the insulin pump policy patient consent?
  2. What concentration of epinephrine is appropriate for IM/anaphylaxis use?
- Please send your answers to Morgan Greutman via TigerConnect by 6.30.25 to be entered into a drawing for a coffee card.



## MEDICATION SAFETY NEWSLETTER

PARIS REGIONAL HEALTH  
MAY 2025



### MEDICATION SCANNING

Report scanning issues to the pharmacy immediately (e.g., barcode won't scan). We'll investigate and help correct the error for safe medication administration.

### IN THIS ISSUE:

- MEDICATION SCANNING
- NATIONAL ERROR ALERT
- MEDICATION RECONCILIATION CASE STUDY

### NATIONAL MEDICATION ERROR ALERT

**This is a nationally reported error from the Institute of Safe Medication Practices (ISMP).**

A critical medication error occurred when an elderly patient, unable to chew their prescribed aspirin, **received it intravenously**. Due to a lack of readily available oral syringes, **the nurse dissolved the tablets and drew the solution into a parenteral syringe**. This syringe was then handed to a student without specifying the oral route, leading to the incorrect intravenous administration. The error was caught after half the dose was administered.

### TAKEAWAYS:

1. NEVER USE A PARENTERAL SYRINGE FOR ORAL MEDICATION ADMINISTRATION.  
**\*\*CALL PHARMACY IF YOU NEED AN ORAL SYRINGE\*\***
2. CLEARLY COMMUNICATE THE ROUTE OF ADMINISTRATION DURING MEDICATION HANDOFFS.

# PRH Medication Safety Skills Fair



- **Voluntary come-and-go skills fair held over three days**
- **Stations:**
  - Hands-on medication reconciliation
  - Titratable drips case study (heparin and insulin drip cases)
  - Medication Safety Newsletter
- **84 nursing attendees**
  - Rehab (20 nurses), Med/Surg (18 nurses)
- **Nursing feedback**

## **Survey: what did you like:**

- Hands-on practice, well organized, not too lengthy, how to enter a complicated med rec, learning more about med recs, allowing for questions



Source: Paris Regional Health. Not for reuse without permission of Paris Regional Health.

# PRH Medication Safety Skills Fair, *continued*



## Outcomes:

- Added clarifying language in our DKA protocol on when to switch fluids (on the nursing eMAR)
- Added clarifying language on DKA protocol boluses (initial bolus, bolus for BG > 650)
- aPTT lab pop up added when documenting on the IV spreadsheet on heparin drips
- Idea to add medication safety newsletters to automated dispensing cabinets

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# MEDICATION RECONCILIATION



| Home Meds (9)                                                                                                                          |                      | Last Action                              | Last Taken                        |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|-----------------------------------|
| <b>Acyclovir 200 Mg Capsule</b><br>(Acyclovir)<br>200 Mg PO 5XD 5 Days #25 CAP Ref 0                                                   | Reviewed<br>Reported | Reviewed<br>██████████<br>7/20/23 @ 1456 | <br>7/19/23 @ 0...                |
| <b>Furosemide 40 Mg Tablet</b><br>(Furosemide)<br>40 Mg PO BID 30 Days #60 TAB Ref 0                                                   | Reviewed             | Reviewed<br>██████████<br>5/13/25 @ 1107 | <br>Unknown Da...<br>Unknown Dose |
| <b>Ipratropium/Albuterol Sulfate 3 MI Vial</b><br>(Duoneb 2.5 Mg-0.5 Mg/3 MI Vial*)<br>3 MI INH Q6H PRN<br>PRN FOR SHORTNESS OF BREATH | Reviewed<br>Reported | Reviewed<br>██████████<br>5/13/25 @ 1107 | <Last Taken>                      |
| <b>Levothyroxine Sodium 88 Mcg Tab</b><br>(Synthroid*)<br>88 Mcg PO QDAY 30 Days #30 TAB Ref 0                                         | Reviewed<br>Reported | Reviewed<br>██████████<br>7/20/23 @ 1456 | <Last Taken>                      |
| <b>Levothyroxine Sodium 112 Mcg Tab</b><br>(Synthroid*)<br>112 Mcg PO QDAY 30 Days #30 TAB Ref 0                                       | Reviewed<br>Reported | Reviewed<br>██████████<br>7/20/23 @ 1456 | <br>7/19/23 @ 0...                |
| <b>Metformin HCl 1,000 Mg Tablet</b><br>(Metformin Hcl)<br>500 Mg PO BID 30 Days #30 TAB Ref 0                                         | Reviewed<br>Reported | Reviewed<br>██████████<br>5/13/25 @ 1103 | <Last Taken>                      |
| <b>Metoprolol Tartrate 25 Mg Tab</b><br>(Metoprolol)<br>25 Mg PO BID 30 Days #60 TAB Ref 0                                             | Reviewed<br>Reported | Reviewed<br>██████████<br>5/13/25 @ 1103 | <Last Taken>                      |
| <b>Omeprazole Magnesium 20 Mg Tablet.Dr</b><br>(Prilosec Otc)<br>20 Mg PO QDAY 30 Days #30 TAB Ref 0                                   | Reviewed<br>Reported | Reviewed<br>██████████<br>5/13/25 @ 1103 | <Last Taken>                      |
| <b>Zolpidem Tartrate 10 Mg Tab</b><br>(Ambien)<br>5 Mg PO QHS PRN 30 Days #30 TAB Ref 0<br>PRN sleep                                   | Reviewed<br>Reported | Reviewed<br>██████████<br>5/13/25 @ 1103 | <Last Taken>                      |

## Poll Question #2



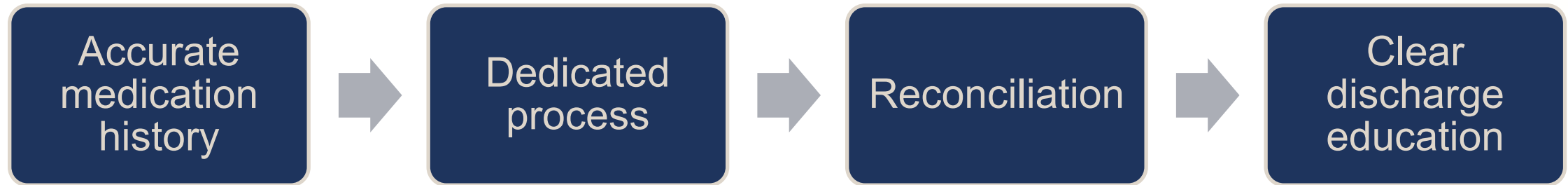
Who currently performs medication reconciliations at your facility? [Select all that apply]

- A. Not sure
- B. ER nurses only
- C. Performed at every transition by nursing
- D. Pharmacy medication reconciliation program

# Medication Reconciliation Standards



- **The Joint Commission National Patient Safety Goal 03.06.01**
  - Maintain and communicate accurate patient medication information
- **ISMP Targeted Medication Safety Best Practice 21**
  - Prevent medication errors during transitions of care through:



Sources: 1. "NPSG 03.06.01" *Comprehensive Accreditation Manual for Hospitals*. By The Joint Commission. Joint Commission Resources, 2025; 2. Institute for Safe Medication Practices (ISMP). *ISMP Targeted Medication Safety Best Practices for Hospitals*. ISMP; 2024

# Medication Reconciliation Challenges



**Time**

**Home medication  
list contains  
prior discharge  
medications**

**Limited training  
of nurses**

**Unreconciled  
medications  
continued by the  
hospitalist**

**Lack of medication  
reconciliation  
once admitted to  
the floor**

Source: Paris Regional Health. Not for reuse  
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# PRH Medication Reconciliation Program



- **What we've done:**
  - **9.2023** – Collected baseline data on medication reconciliation in the ER
  - **11.2023** – Nursing education with the ER team
  - **11.2023** – Began performing random bedside medication reconciliation audits (shift focus to accuracy)
  - **2.2024** – **Utilize EHR report to assess if the med rec was completed/not completed**
  - **10.2024** – Began retroactively auditing medication reconciliations from the weekends
  - **2.2025** – **Added medication reconciliation intervention to all status boards**
  - **3.2025** – Medication Safety Skills Fair medication reconciliation hands on case
  - **4.2025** – Started teaching hands-on medication reconciliation education in nursing orientation

# Med Rec: Where We Are Today



- Continuing daily EHR report/reaching out to unit managers for incomplete medication reconciliations
- Continuing to audit 10 patients/month bedside
- Reporting monthly #s through medication safety
- Future goals:
  - Dedicated pharmacist in the ER

|                 | October 2024           | November 2024          | December 2024          | January 2025           | February 2025          | March 2025            | April 2025            | May 2025              |
|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|
| # not completed | 32<br>-2 direct admits | 22<br>-3 direct admits | 34<br>-3 direct admits | 52<br>-4 direct admits | 21<br>-2 direct admits | 15<br>-1 direct admit | 15<br>-1 direct admit | 29<br>0 direct admits |



**Added med rec intervention to all status boards**

Source: Paris Regional Health. Not for reuse without permission of Paris Regional Health.

# Medication Reconciliation Solutions



Assess completion through daily reports

Assess accuracy through bedside audits

Formally report if a process breakdown occurs

Optimize your EHR to show if the med rec has been completed

Source: Paris Regional Health.  
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# BARCODE MEDICATION ADMINISTRATION (BCMA)



Source: <https://scanavenger.com/blog/how-wireless-barcode-scanners-enhance-patient-safety-protocols/>. Accessed 6/23/25

## Poll Question #3

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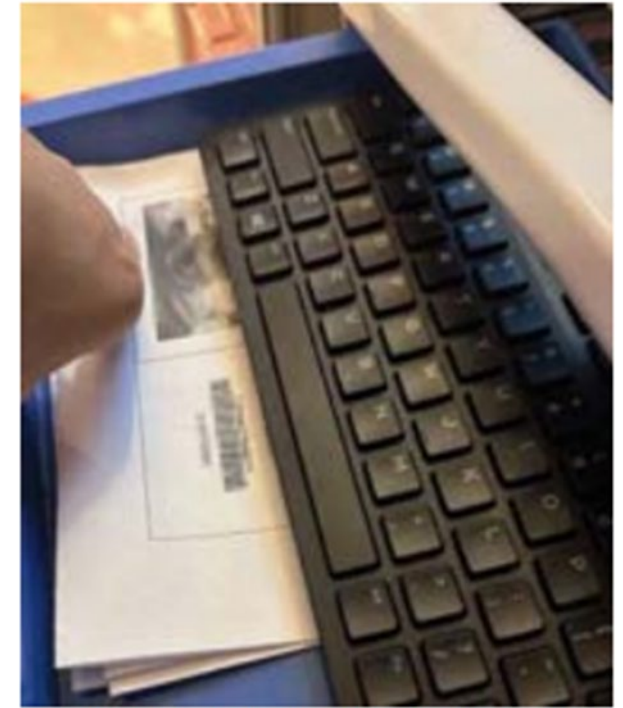
What level of direct observation is occurring at your facility for medication administration? [Select all that apply]

- A. Not sure/none
- B. Nursing performs direct observations
- C. Pharmacy performs direct observations
- D. Interdisciplinary team performs direct observations

# National Proxy Scanning Error



- **Child receives wrong drug due to proxy scan**
  - A pediatric patient received another patient's IV leucovorin due to staff scanning a patient sticker not the patient's armband
- **ISMP recommendations:**
  - Regularly observe BCMA practices within your organization
  - Educate staff on why it is harmful to use a proxy scan
  - Work with your IT teams to allow for the scanning of the patient barcode only, not a sticker



**Figure 1.** Printed copies of patient ID barcodes that nurses were using as a proxy scan.

Source: Institute for Safe Medication Practices. (2025, April). *ISMP Medication Safety Alert!® Nurse AdviseERR*, 23(4).

# BCMA Standards



- **The Joint Commission National Patient Safety Goals 01.01.01**
  - Improve the accuracy of patient identification
- **ISMP Targeted Medication Safety Best Practice 18 (2025) – Maximize the use of barcode verification prior to medication and vaccine administration by expanding use beyond inpatient care areas**
  - Target areas with an increased likelihood of a short or limited patient stay
  - Regularly review compliance and other metric data to assess utilization and effectiveness of safety technology
  - First introduced as a best practice in 2023
    - 8 related ISMP Medication Safety Alerts published since

## Sources:

1. "NPSG 01.01.01" *Comprehensive Accreditation Manual for Hospitals*. By The Joint Commission. Joint Commission Resources, 2025
2. ISMP Targeted Medication Safety Best Practices for Hospitals 2024-2025. Accessed 06/10/2025

# BCMA



## Why it's NOT being done

- Technical issues
  - Barcode issues
  - Computer/scanner resources/functionality
- Workflow and time constraints
  - Pressure
  - Inefficiency
- Alert fatigue
- Cultural norm
- Lack of policy knowledge/enforcement
- Perception of decreased nursing autonomy

| Study                       | Med Admins Observed | Workarounds Observed |
|-----------------------------|---------------------|----------------------|
| Van der Veen, et al. (2020) | 5793 admins         | 3633 (62.7%)         |
| Mulac et al. (2021)         | 213 patients        | 152 patients (71%)   |

### Sources:

1. Hong, J, et al. *JAMIA*. 2021;28(2):232-238
2. Van der Veen, et al. *J Clin Nurs*. 2020;29(13-14):2239-2250
3. Mulac et al. *BMJ Q&S*. 2021;30(12):1021-1030

# BCMA, continued



*"A lot of people—and I've been guilty of this as well—carry their scanner around and scan the patient and then give the med and have no idea what happened on the computer when they do it...[but] I feel pretty confident that I've already checked the meds...well part of the issue also is that I don't want to be hauling that COW [Computer on Wheels] back and forth up and down the hallways all day, and...if that can save me a minute or two, then I'm going to do it because I feel confident enough."—Cardiology Nurse 7*

Source: 1. Hong, J, et al. *JAMIA*. 2021;28(2):232-238

32 | **CE Credit Deadline: 09/30/25**

# BCMA, *continued*



## Why it SHOULD be done

- It's the **right** thing to do
  - Ensure the 5 rights: patient, medication, dose, route and time
- Error reduction
- Regulatory implications
- Reimbursement
- Public perception

| Study               | Outcomes                                                                                                                                                                                                                                                                                      |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Poon et al. (2010)  | <ul style="list-style-type: none"><li>• Error rate non BCMA units: 776/6723 (11.5%)</li><li>• Error rate BCMA units: 495/7318 (6.8%)</li><li>• Relative error rate reduction of 41.4%</li></ul>                                                                                               |
| Owens et al. (2020) | <ul style="list-style-type: none"><li>• ER setting pre/post BCMA</li><li>• Error rate prior imp: 20/676 (2.95%)<ul style="list-style-type: none"><li>• 16/20 were wrong dose</li></ul></li><li>• Error rate post imp: 5/656 (0.76%)</li><li>• Overall reduction of med errors 74.2%</li></ul> |

### Sources:

- 1, Poon et al. *NEJM* 2010;362:1698-1707
2. Owens et al. *JEN*. 2020;46(6):884-891

# BCMA, *continued*



## Leapfrog reporting

- Validate that each of the items are being performed

21a – Identify a committee

- P&T
- Quality Committees

21b/c – Engage IT

21d – Observe

21e – Report

| 21) Which of the following mechanisms does your hospital use to reduce and understand potential BCMA system “workarounds?” |                                                                                                                  |                                                       |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| a)                                                                                                                         | Has a formal committee that meets routinely to review data reports on BCMA system use                            | <input type="radio"/> Yes<br><input type="radio"/> No |
| b)                                                                                                                         | Has back-up equipment (e.g., extra scanners, portable computers, batteries, and mice) for BCMA hardware failures | <input type="radio"/> Yes<br><input type="radio"/> No |
| c)                                                                                                                         | Has a Help Desk that provides timely responses to urgent BCMA issues in real-time                                | <input type="radio"/> Yes<br><input type="radio"/> No |
| d)                                                                                                                         | Conducts real-time observations of users at the unit level using the BCMA system                                 | <input type="radio"/> Yes<br><input type="radio"/> No |
| e)                                                                                                                         | Engages nursing leadership at the unit level on BCMA use                                                         | <input type="radio"/> Yes<br><input type="radio"/> No |

Source: 2025 Leapfrog Hospital Survey V2. 5/2/2025

# BCMA – Medication Safety Rounds

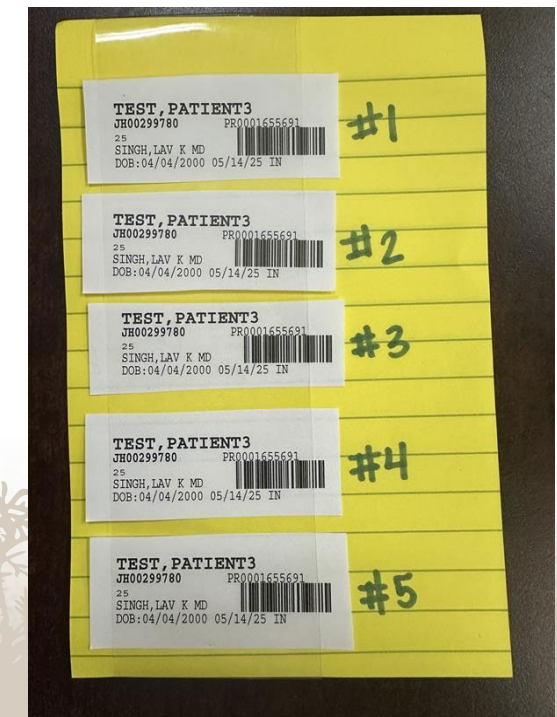
- Paris Regional Timeline

- **06/2024**

- First performed by DOP, Clin Spec and Director of Quality
      - Findings: Proxy scanning on almost all units, scanners at desk, patient barcodes on note cards, wows not being utilized, medications left unattended, barcode “sheets”

- **11/2024**

- Optimized EHR report to capture if armband or sticker had been scanned
    - Limited ability of who could print armbands to minimize duplicates
      - Pharmacy, Registration, L&D and Rehab unit secretary



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# BCMA – Medication Safety Rounds



- **Real-time Observations**
  - Engage multiple disciplines to perform formalized rounds and obtain data
  - Include: IT, Pharmacy, Quality, etc.
  - Collect data and summarize for unit leader/senior leadership
    - Utilize paper forms or online forms to summarize findings

| Medication Safety tracer                                                                                                                                                                                                                                                                                                                                                                           | Yes | No | N/A |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
| <b>1. Pyxis pull (watch a RN/LVN pull from pyxis)</b> <ul style="list-style-type: none"> <li>Were medications removed from Pyxis for more than one patient?</li> </ul>                                                                                                                                                                                                                             |     |    |     |
| <b>2. Pyxis pull (watch a RN/LVN pull from pyxis)</b> <ul style="list-style-type: none"> <li>If applicable, was an independent double check performed on high-risk medications (ex: insulin, anticoagulants)? Did the second nurse look at the med and the dose prior?</li> <li>For controlled substances, was the waste physically witnessed and recorded in Pyxis with another nurse?</li> </ul> |     |    |     |
| <b>2. Barcode scanning (actively watch a medication administration)</b> <ul style="list-style-type: none"> <li>Did the RN/LVN scan the patient's wristband and their medication appropriately (at bedside)?</li> </ul>                                                                                                                                                                             |     |    |     |
| <b>3. Medication education (actively watch a medication administration)</b> <ul style="list-style-type: none"> <li>Did the RN/LVN educate the patient on the medication(s) and any potential side effects?</li> </ul>                                                                                                                                                                              |     |    |     |
| <b>4. Line tracing (if applicable)</b> <ul style="list-style-type: none"> <li>Did the RN/LVN trace the infusion, syringe, or tubing to an IV lure lock/piggyback port and trace the tubing to the point of origin to assure connections are made appropriately and correctly?</li> </ul>                                                                                                           |     |    |     |
| <b>5. PPE</b> <ul style="list-style-type: none"> <li>Are gloves worn for all medication administration (oral, IV, IM, etc)?</li> </ul>                                                                                                                                                                                                                                                             |     |    |     |
| <b>6. IV pump</b> <ul style="list-style-type: none"> <li>Is the IV pump programmed correctly and started when fluids or IVPBs are hung?</li> </ul>                                                                                                                                                                                                                                                 |     |    |     |
| <b>7. Medication reconciliation</b> <ul style="list-style-type: none"> <li>Look at the patient's chart, was a medication reconciliation performed upon admission?</li> </ul>                                                                                                                                                                                                                       |     |    |     |
| <b>Other:</b>                                                                                                                                                                                                                                                                                                                                                                                      |     |    |     |

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# METRIC VALIDATION



# Metrics Matching Practice – Expectations



- **Define the expectation before driving change**
  - BCMA: set a goal (95%)
  - Medication reconciliation: Workflow, who performs and when, how to monitor, where to report, etc.
- **Gain the attention of your senior leadership team**
  - Leverage monetary, regulatory and publicly reported data
    - CMS requirements
    - Leapfrog requirements: BCMA, CPOE and medication reconciliation
    - TJC
- **Hard conversations with leaders**
  - Provide details, but protect the front line
  - Culture creates habits (good and bad) – identify champions
  - Define best practice and make it policy

# Metrics Matching Practice – Gather & Validate



- Optimize technology
  - Medication reconciliation:
    - EHR report to identify completed or not
      - Complete does not equal accurate – must still perform accuracy audits

|              | Pre-Education<br>9/23-11/23 | Post-Education<br>12/23-2/24 | Daily Meditech<br>Report<br>3/24-5/24 | Standardized<br>Accuracy Tracking<br>6/24-1/25 | Intervention Added to<br>Status Board<br>2/25-5/25 |
|--------------|-----------------------------|------------------------------|---------------------------------------|------------------------------------------------|----------------------------------------------------|
| Total audits | 28                          | 27                           | 32                                    | 51                                             | 31                                                 |
| Accuracy     | 49.9%                       | 44.4%                        | 46.9%                                 | 72.4%                                          | 60.6%                                              |

- Intervention added to status board

|                 | October 2024           | November 2024          | December 2024          | January 2025           | February 2025          | March 2025            | April 2025            | May 2025              |
|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|
| # not completed | 32<br>-2 direct admits | 22<br>-3 direct admits | 34<br>-3 direct admits | 52<br>-4 direct admits | 21<br>-2 direct admits | 15<br>-1 direct admit | 15<br>-1 direct admit | 29<br>0 direct admits |



Added med rec intervention to all status boards

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# Metrics Matching Practice – Gather & Validate



- **Surface level data vs. what's really happening**

- Utilize existing committees to discuss the data, not just present it
- BCMA rates with and without work arounds

**Work around intervention**



**2024**

| C. Bar Code Scanning (Goal $\geq$ 95%) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |     | Benchmark 2023 |
|----------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|
| 1. Medication Scanning                 | 91% | 90% | 90% | 89% | 90% | 90% | 91% | 92% | 92% | 91% | 90% | 88% | 90% | 90%            |
| 2. Patient Scanning                    | 92% | 92% | 92% | 91% | 91% | 91% | 92% | 93% | 93% | 92% | 84% | 86% | 91% | 91%            |

**2025**

| C. Bar Code Scanning (Goal $\geq$ 95%) | Jan | Feb | Mar | Apr | May |  |     | Benchmark (2024) |
|----------------------------------------|-----|-----|-----|-----|-----|--|-----|------------------|
| 1. Medication Scanning                 | 88% | 90% | 90% | 89% | 90% |  | 90% | 90%              |
| 2. Patient Scanning                    | 87% | 89% | 89% | 88% | 89% |  | 89% | 91%              |

- **Vocalize issues:**

- BCMA rates reported out at huddles
- Identify users not meeting goal
- Lean on senior leadership/quality team for support

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# Metrics Matching Practice – Gather & Validate



- Medication Safety Rounds
  - Interventions: Eliminate sticker scanning, removal of scanners from desks, medication reconciliation education

|                                 | ADC Pull for<br>1 Patient | High Risk<br>Meds/Narc<br>Wasted App. | BCMA    | Med<br>Education | Line Tracing | PPE     | Pump<br>Programming | Med Rec |
|---------------------------------|---------------------------|---------------------------------------|---------|------------------|--------------|---------|---------------------|---------|
| Pre-<br>Intervention<br>(n=13)  | 31.25%                    | 50.00%                                | 83.33%  | 50.00%           | 77.78%       | 41.67%  | 100.00%             | 16.67%  |
| Post-<br>Intervention<br>(n=17) | 58.33%↑                   | 100.00%↑                              | 88.24%↑ | 60.00%↑          | 100.00%↑     | 68.75%↑ | 100.00%             | 84.62%↑ |

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# Focused Effort



- **Medication Reconciliation**

- Define the expectation, workflow, etc.
- Provider, nursing, pharmacy, etc.
- Completion rate
  - Easier to identify, but shouldn't replace...

- **ACCURACY!**

- **BCMA**

- Obtain your compliance rate
- Identify workarounds/barriers through real time audits
- Eliminate proxy scanning

- **Medication Safety**

- FTE
  - None, partial or full
- ASHP Toolkit
  - ISMP quarterly action agenda
  - Medication safety/error review reporting schedule

# Team Effort

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*“There was an important job to be done and Everybody was sure that Somebody would do it.*

*Anybody could have done it, but Nobody did it.  
Somebody got angry about that because it was Everybody’s job.*

*Everybody thought that Anybody could do it, but Nobody realized that  
Everybody wouldn’t do it.*

*It ended up that Everybody blamed Somebody when Nobody did what  
Anybody could have done.*

**- Charles R. Swindoll**

Source: Charles R. Swindoll Quotes” Goodreads [https://www.goodreads.com/author/quotes/5139.Charles\\_R\\_Swindoll](https://www.goodreads.com/author/quotes/5139.Charles_R_Swindoll) accessed 6/20/2025

# Assessment Question #1

---



Which of the following is a potential solution to low completion rates for medication reconciliation?

- A. Focus on completion numbers solely
- B. Write up team members for not completing med recs
- C. Implement a new, complex system without adequate training
- D. Optimize your EHR to show medication reconciliation completion at all transitions of care

# Assessment Question #1

---



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# Assessment Question #2

---



Which of the following is **NOT** recommended to prevent proxy scanning at your organization?

- A. Regularly observe BCMA practices within your organization.
- B. Educate staff on the dangers and risks of proxy scanning.
- C. Work with IT teams to allow for the scanning of the patient barcode only, not a sticker or label not affixed to the patient.
- D. Implement a "buddy system" where a second person verbally verifies all scans.

# Assessment Question #2

---



Which of the following is **NOT** recommended to prevent proxy scanning at your organization?

- A. Regularly observe BCMA practices within your organization.
- B. Educate staff on the dangers and risks of proxy scanning.
- C. Work with IT teams to allow for the scanning of the patient barcode only, not a sticker or label not affixed to the patient.
- D. Implement a "buddy system" where a second person verbally verifies all scans.

# Assessment Question #3

---



Which of the following is an effective strategy to improve reporting culture for medication safety events at your organization?

- A. Focus on system improvements rather than individual blame for human error
- B. Provide immediate financial incentives for every safety incident reported by staff
- C. Restrict reporting access to senior leadership
- D. Publicly reprimand individuals who make medication errors to deter others from similar mistakes

# Assessment Question #3

---



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UNIVERSITY CONFERENCE

# Thanks y'all!



**Erin Moody**

[erin.moody@lifepointhealth.net](mailto:erin.moody@lifepointhealth.net)

**Morgan Greutman**

[morgan.greutman@lifepointhealth.net](mailto:morgan.greutman@lifepointhealth.net)