

# HQIC Community of Practice Call

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## The Impact of Meaningful Medication Reconciliation on Adverse Drug Events

January 13, 2022

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# Introduction

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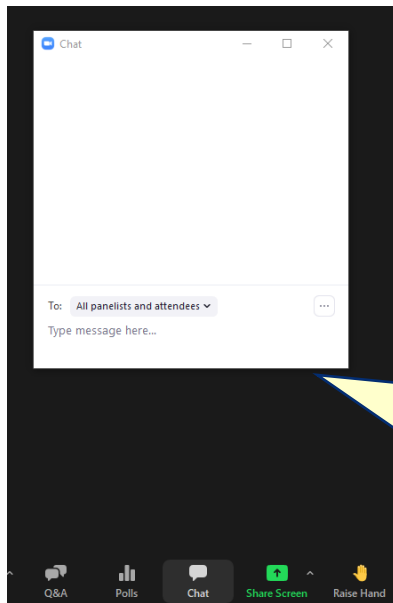
Latrail Gatlin  
Health Insurance Specialist, Division of  
Quality Improvement Innovation  
Models Testing  
iQuality Improvement and  
Innovations Group  
Center for Clinical Standards and Quality  
CMS

Welcome!

Who's in the Room?

# Zoom Webinar Features

- **Chat**



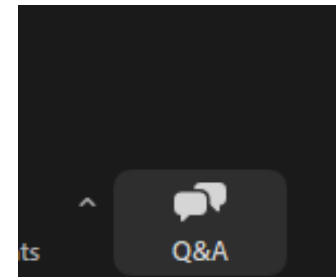
Please select **All panelists and attendees** in the dropdown list when participating in the chat.

Type your chat message here. Press the Enter or Return key to submit your message.

Hover your mouse at the bottom of the screen to locate and click on **Chat** to open.

- **Question & Answer**

Use Q&A to pose any questions to the presenters.



Only the presenters can see your questions. If appropriate, the response may be shared to all.

Hover your mouse at the bottom of your screen to locate Q&A.

## As You Listen, Ponder...

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- What excites you the most about the information provided? What information can you leverage to help expand opportunities in your communities?
- What actions will you take as a result of the call?
- Where can you begin with your facility to continue to ensure safety, and a true patient-centered approach as you engage collaboratively with others?
- Which activities do you have underway that will allow for you to expand and push forward to build on action in the next 30 days? 90 days?

# Agenda

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## Today's Topic – **The Impact of Meaningful Medication Reconciliation on Adverse Drug Events**

- Presentations by:
  - Pharmacist Subject Matter Expert (SME)
  - Patient & Family Engagement (PFE) SME
  - Two speakers from hospitals sharing their journey and stories
- Facilitated Panel Discussion
- Interactive Q&A/Open Discussion
- Leaving in Action
- Key Takeaways
- Closing Remarks

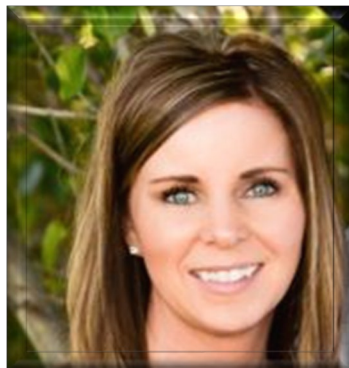
# Introduction of Speakers



**Denton Chancey, PharmD**  
Clinical Pharmacy Specialist  
Telligen HQIC



**Thomas Workman, PhD**  
Patient & Family Engagement SME  
American Institutes for Research (AIR)  
IPRO HQIC



**Lacey Fellows, RN BSN CIC**  
Quality Director  
Franklin County Medical Center, ID  
Telligen HQIC



**Julie Harris RPH**  
Director of Pharmacy, Interim CEO  
George C Grape Community  
Hospital  
IHC/Compass HQIC

# Why Focus on This Now?

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- Preventing Adverse Drug Events (ADEs) is a national priority
- Medication Reconciliation is aimed at optimizing medication safety and has been shown to be an effective strategy to prevent ADEs
- Hard-wiring meaningful medication reconciliation is more important than ever given the impact and associated challenges of the COVID-19 Pandemic on patients/families, hospitals, and providers across the care continuum

## Setting the Stage

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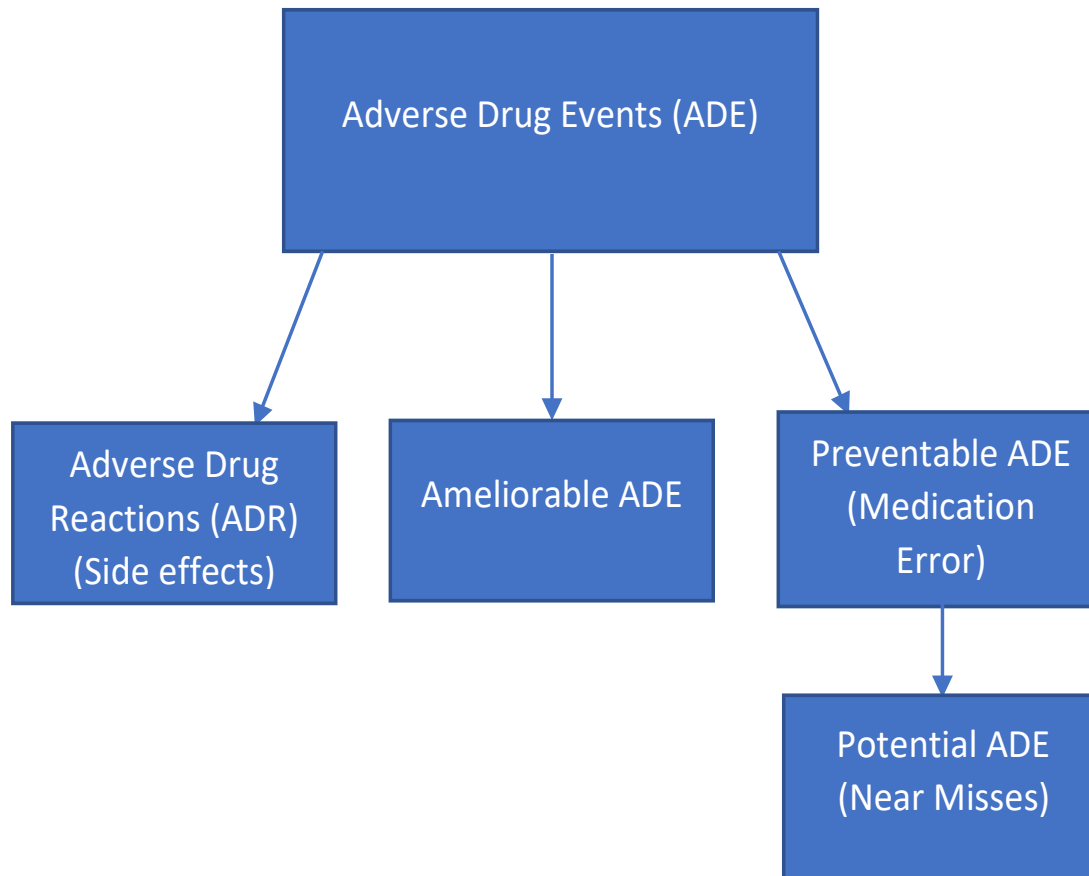
# Adverse Drug Events & Medication Reconciliation



**Denton Chancey, PharmD**  
Clinical Pharmacy Specialist  
Telligen HQIC



# What is an ADE?



# Why Focus on ADEs?

- **Impact on patients:** suffering and death
- **Impact on providers:** shame, guilt, legal liability
- **Impact on society:** economic impact for treatment, loss of productivity

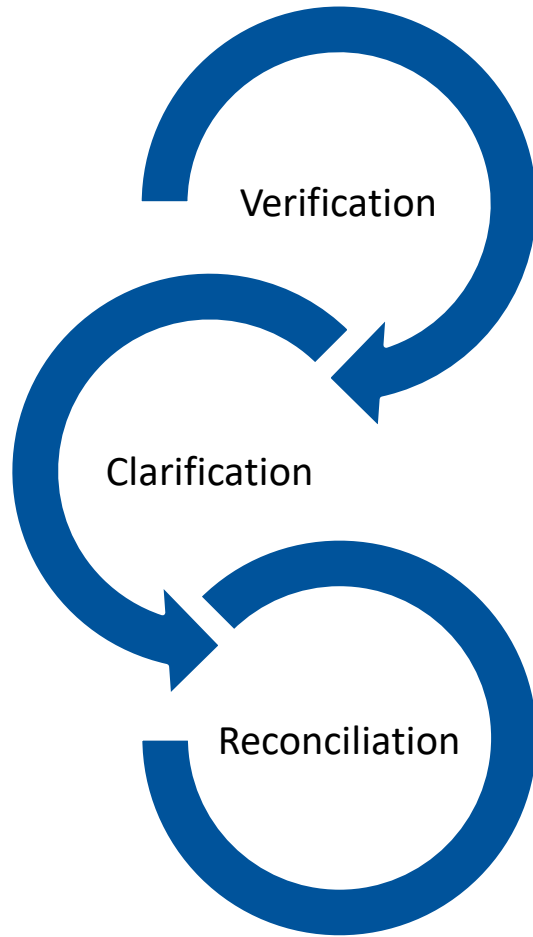


# Scope of the Problem

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- ADR alone may result in >100,000 deaths annually
- Inpatient ADR incidence rate is 6.7%, fatal incidence rate is 0.32%<sup>1</sup>
- Annual economic impact estimated at \$30.1B, or ~1% of healthcare expenditures<sup>2</sup>
- CAH's report lower rates of ADE relative to urban hospitals<sup>3</sup>

# Three Step Process<sup>4</sup>: Medication Reconciliation



- Collection of medication history
- Review of indications and dosages
- Documentation of changes

# Medication Reconciliation in Preventing ADEs

- Ensures appropriateness, prevents duplications and/or omissions
- Most effective if performed at every transition of care
- Can reduce ADE incidence by 70%<sup>5</sup>

## OSF healthcare's journey in patient safety

John Whittington<sup>1</sup>, Howard Cohen

Affiliations + expand

PMID: 14976907 DOI: 10.1097/00019514-200401000-00005

# References

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- 1. Lazarou J, Pomeranz BH, Corey PN. Incidence of adverse drug reactions in hospitalized patients: a meta-analysis of prospective studies. *JAMA*. 1998 Apr 15;279(15):1200-5. doi: 10.1001/jama.279.15.1200. PMID: 9555760.
- 2. Sultana J, Cutroneo P, Trifirò G. Clinical and economic burden of adverse drug reactions. *J Pharmacol Pharmacother*. 2013;4(Suppl 1):S73-S77. doi:10.4103/0976-500X.120957
- 3. Casey M, Hung P, Distel E, Prasad S. Identifying Adverse Drug Events in Rural Hospitals: An Eight-State Study. *University of Minnesota Rural Health Research Center Policy Brief*. May 2017. doi:<https://rhrc.umn.edu/wp-content/uploads/2017/11/1495219225IdentifyingADEsinRuralHospitals.pdf>
- 4. *How-to Guide: Prevent Adverse Drug Events by Implementing Medication Reconciliation*. Cambridge, MA: Institute for Healthcare Improvement; 2011. (Available at [www.ihc.org](http://www.ihc.org))
- 5. Whittington J, Cohen H. OSF Healthcare's journey in patient safety. *Quality Management in Health Care*. 2004;13(1):53-59.

# Patient & Family Engagement

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## Partnering with Patients & Families to Reduce Adverse Drug Events



**Thomas Workman, PhD**

Patient & Family Engagement SME

American Institutes for Research (AIR)

IPRO HQIC

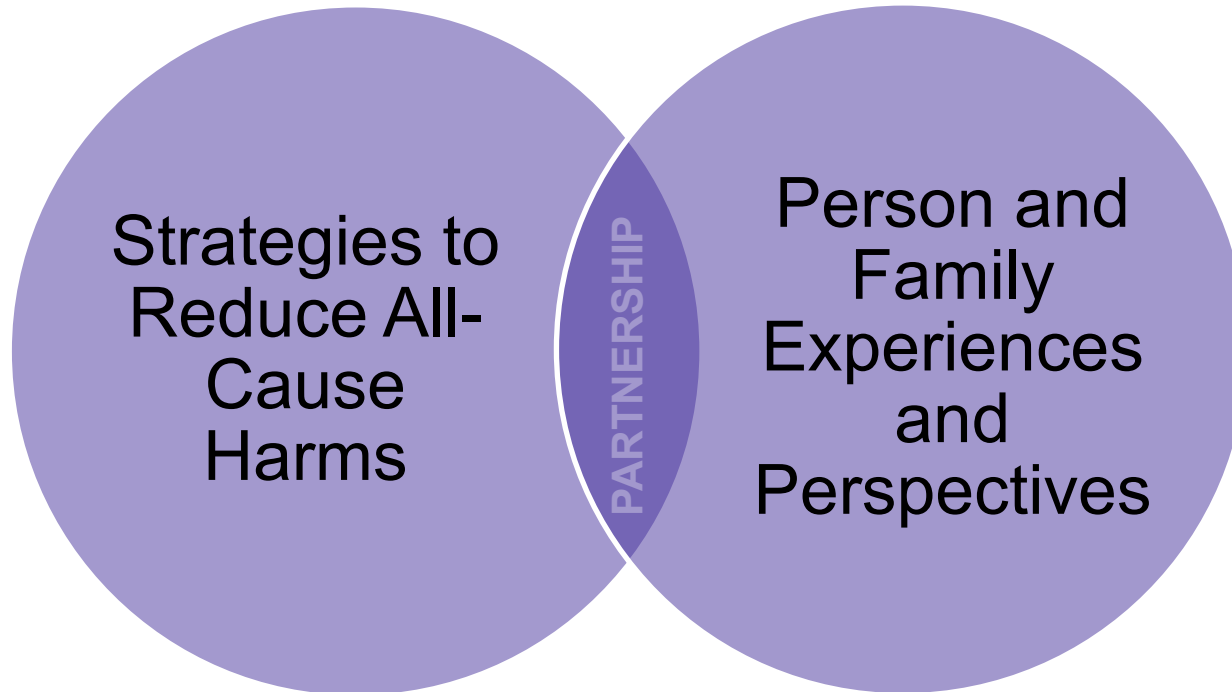
# What is Person & Family Engagement?

- Person & Family Engagement forms meaningful partnerships between health care professionals, patients, and family caregivers that improve health outcomes and the quality and safety of care.



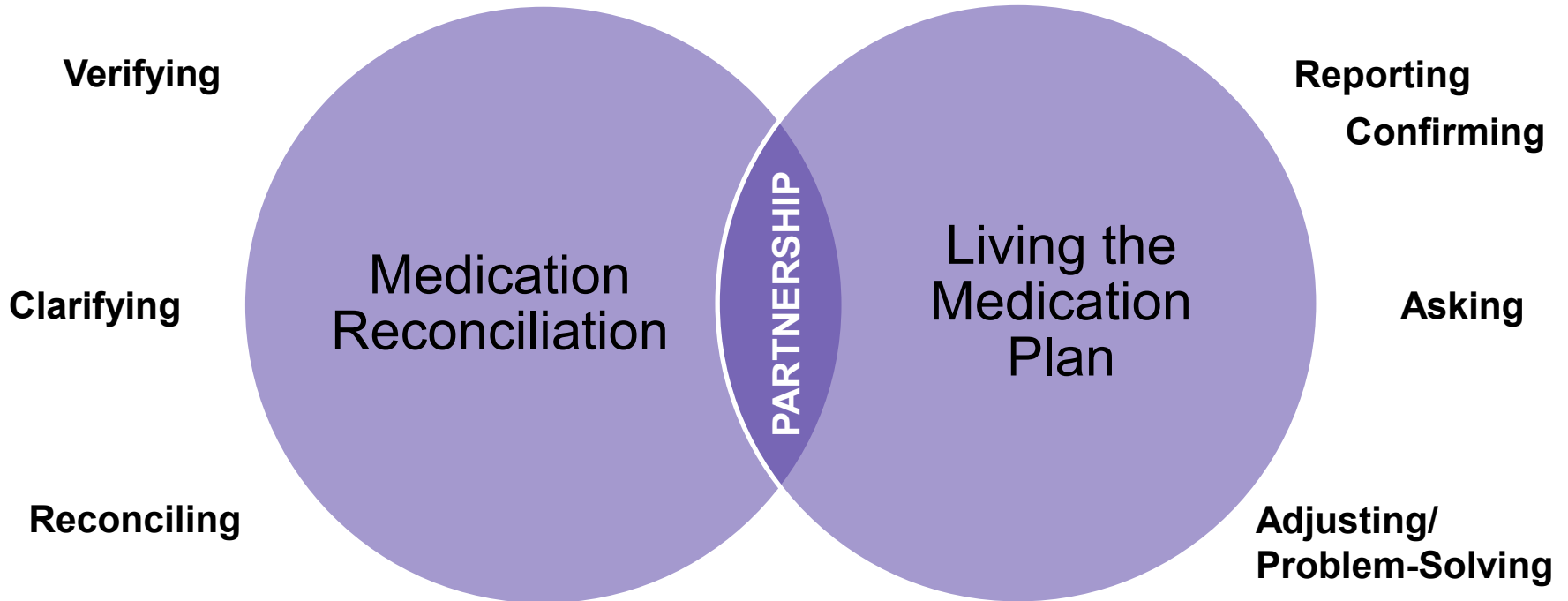


# Partnering with Patients & Families to Reduce ADEs



Meaningful partnerships between **clinicians, patients, and families** can reduce all-cause harms when patients and families: (1) are invited to **ask questions** and **share information and concerns**, especially when something doesn't "look or feel right"; (2) are included in **all discussions and decisions** about their goals and care; and (3) contribute to developing **patient-centered strategies and solutions** to reduce all-cause harms.

# Reducing ADEs



# Applying Five PFE Best Practices to Med Rec

|  |   |
|--|---|
| <p><b>1. Implementation of a planning checklist for patients who have a planned admission</b></p>                  | <p>Inviting persons &amp; family caregivers to partner on avoiding ADEs; identifying current meds, past experiences, perspectives, &amp; expectations</p>                   |
| <p><b>2. Implementation of a discharge planning checklist</b></p>  | <p>Understanding the what, when, &amp; why of meds taken after leaving the hospital &amp; creating a personal plan that ensures adherence &amp; avoids ADEs</p>             |
| <p><b>3. Conducting shift change huddles &amp; bedside reporting with patients &amp; families</b></p>              | <p>Confirming with the patient on meds taken past shift, any experiences related to meds, solving problems related to meds, &amp; reviewing the med plan for next shift</p> |
| <p><b>4. Designation of a PFE leader in the hospital</b></p>   | <p>Establishing working relationships between patients &amp; families, Pharmacists, &amp; Nurses to improve approaches to medication reconciliation</p>                     |
| <p><b>5. Active PFE Committee or other committees where patients are represented &amp; report to the board</b></p> | <p>Engaging the PFAC as advisors or co-developers in hospital wide medication reconciliation efforts</p>  |

# Resources

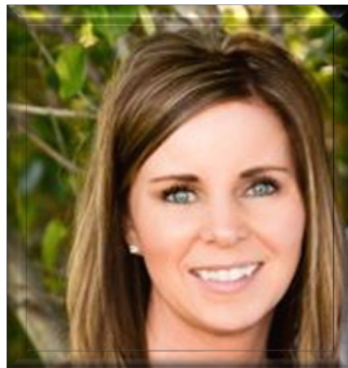
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- My Medicines Form, Agency for Healthcare Research and Quality  
<https://www.ahrq.gov/health-literacy/improve/precautions/tool16a.html>
- "Keeping Track of Medicines" page, University of Michigan Health  
<https://www.uofmhealth.org/health-library/ug5212>
- 5 Questions to Ask About Your Medications poster, Canadian Patient Safety Institute.  
<https://www.patientsafetyinstitute.ca/en/toolsResources/Documents/Updated%205%20Questions/MedSafetyPoster-EN.pdf>

# Hospital Success Story

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## Franklin County Medical Center's Medication Reconciliation Improvement Initiative



**Lacey Fellows, RN BSN CIC**  
Quality Director  
Franklin County Medical Center, ID  
Telligen HQIC

# Franklin County Medical Center



- **Location:** Preston, Idaho
- **Facility Type:** Critical Access Hospital
- **Beds:** 19
- **Services Provided:** Emergency, inpatient, swing bed, OR (inpatient & outpatient), LTC, home Health, hospice, primary care and specialty clinics

# Medication Reconciliation Improvement Initiative

## Plan:

- **Identify the problem-** *After transitioning to a new Electronic Medical Record (EMR), medication profiles were not transferring between locations properly, causing confusion during transitions of care*
- **Identify best practice-** *Upon admission, nursing staff to enter all medications as “structured.” Verify medications at discharge.*
- **Plan intervention-** *Re-educate Emergency department and Medical-Surgical nursing staff on process for entering/verifying medications*

## Do:

- **Implement intervention-** *Staff training performed using nurse score cards*
- **Collect data-** *tracked percentage of accurately completed medication profiles and identified staff members with missed opportunities*

## Study:

- **Report results-** *Shared compliance reports with all staff at monthly meetings*
- **Identify additional opportunities for improvement-** *increased patient census on med-surg floor in the last year*

## Act:

- **Narrow the focus-** *Established a new goal for inpatient unit, maintain 75% compliance with medication profile completion*

# Medication Scanning Improvement Initiative

## Plan:

- **Identify the problem-** *A review of medication errors revealed that 75% were preventable with scanning prior to administration. Additionally, patient arm band scanning was at a rate of just 30%.*
- **Identify best practice-** *Scan patient arm band and the medication prior to administration at the bedside, every time*
- **Plan intervention-** *Re-educate nursing staff on the importance of scanning patient arm bands and medications at the bedside*

## Do:

- **Implement intervention-** *Staff education performed using nurse scorecards*
- **Collect data-** *Established a baseline scanning rate. Tracked scanning rates of patients and medications. Surveyed nurse's perceptions of scanning and observed the work environment for structural barriers to compliance*

## Study:

- **Report results-** *Shared compliance reports with all staff at monthly meetings*
- **Identify additional opportunities for improvement-** *Identified inappropriate use of a medication room scanner, scanning device failures, and patient satisfaction (scanning creates unwanted noise on night shift)*

## Act:

- **Narrow the focus-** *Established new goals for scanning, maintain at 60% or greater rate of scanning medications at the bedside and a 90% rate for patient arm bands*



# Results & Lessons Learned

- **Medication Reconciliation**

- **Results:** In 2021, the units maintained a compliance rate of >75% for 8 months. The units dipped to <70% compliance rate for 3 months.

- **Medication Scanning:**

- **Results:** Nursing staff surpassed their goal for medication scanning in 2021. Although the goal for patient arm band scanning was not achieved, significant progress was made. The facility has seen a reduction in medication errors.

| Medication Scanning at the Bedside |             |             |
|------------------------------------|-------------|-------------|
| <u>Goal Rate</u>                   | <u>2020</u> | <u>2021</u> |
| 60%                                | 54%         | 69%         |

| Patient Arm Band Scanning |             |             |
|---------------------------|-------------|-------------|
| <u>Goal Rate</u>          | <u>2020</u> | <u>2021</u> |
| 90%                       | 73%         | 83%         |

- **Lessons Learned**

- The interventions implemented were not necessarily brand-new ideas, but contributed to reducing medication errors, improving consistency of care, and promoting patient education on medications at discharge

# Hospital Success Story

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## Effective Medication Reconciliation: George C. Grape Community Hospital



**Julie Harris RPH**

Director of Pharmacy, Interim CEO  
George C Grape Community Hospital  
IHC/Compass HQIC

# George C. Grape Community Hospital



- Hamburg, Iowa
- 25 bed critical access hospital
- Emergency room
- Specialty clinic

## Initiative:

**Effective Medication Reconciliation:**  
**COHESIVE CARE FROM ADMISSION TO DISCHARGE**

# National Patient Safety Goal 03.06.01

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- **GOAL:** MAINTAIN AND COMMUNICATE ACCURATE PATIENT MEDICATION INFORMATION
- **RATIONALE:** Evidence shows that discrepancies in medication information can adversely affect patient outcomes.
- **INTENT:** To identify, compare and resolve discrepancies in medications that a patient is taking and those that are newly prescribed. To ensure patients are discharged from care with clear understanding of their updated regimen.
- **AREAS OF CONCERN:** Duplicate therapy, omissions, interactions, clinical monitoring –all aspects of care



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# Admission Reconciliation

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- **GOAL:** Obtain full list of medications the patient has been taking prior to admission: Include Rx, OTC, Herbals etc.
- **SOURCE:** Good faith effort required to obtain information from all available sources
  - Patient/caregiver
  - Primary physician records
  - Pharmacy records
- **ACTION:**
  - Pharmacy contacts primary provider and pharmacy for updated medication list.



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# George C. Grape Hospital Procedure

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- **INITIAL:**

- **NURSING:** Initial admission med rec is done by nursing staff when patient presents to the hospital. This is done by patient/caregiver interview. If the patient is unable to provide information, family members are contacted for information and/or asked to bring patients current meds to the hospital for confirmation.
- **PHARMACIST:** Pharmacist confirm all medications brought in by the patient to ensure meds are identified correctly and the list is accurate.

- **FOLLOW UP**

- Compare patient information prior to admission with medications ordered on admission to identify and resolve discrepancies. Address any omissions/duplicates/interactions with admitting provider. Document any changes.
- All medication changes during stay are explained to the patient and a medication information leaflet is left in the patients room in an information booklet for patient/family for review.



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# Change In Level Of Care

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- **GOAL:** Confirm continuity of care to ensure that all medications are continued from one level of care to another throughout entire stay.
- **SOURCE:** Patient chart review.
  - EMAR
  - Physician orders
- **ACTION:** Complete review of medications added or discontinued when moving to next level of care. Ensure all new medications and/or discontinued medications are noted in the patient chart.



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# George C. Grape Hospital Procedure

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- **INITIAL**

- Active medication list printed prior to discharge from current level of care
  - Provider identifies medication orders that will remain active at new level of care and writes any additional orders for transfer
  - Pharmacy transfers active orders to new level of care and inputs any new orders in patient chart
  - Nursing staff verifies all orders prior to activation at new level of care

- **FOLLOW UP**

- Pharmacist reviews all active med orders within 24 hours for accuracy



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# Discharge Reconciliation

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- **GOAL:** Ensure patient/caregiver is provided with a complete list of medications the patient is to be taking once they are discharged from the hospital.
- **SOURCE:** Providers discharge orders
  - EMAR
  - Patients home med list on admission
    - Compare home med list with current medications to ensure any changes made due to formulary items or availability are addressed.



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# George C. Grape Hosptial Procedure

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- **INITIAL**

- Active medication list printed prior to discharge
  - Provider identifies medication orders that will remain active and writes any additional discharge orders
  - Medication Reconciliation Discharge is performed in the EMR chart with any new orders E-scribed to patient pharmacy. This allows for electronic clinical screening.
  - Patient is provided with a list of current medications and medication information handouts
  - A separate list is provided with any changes in home medications to include new medications, discontinued medications and any dosing changes.



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# Discharge Instructions For Patient/Caregiver

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- **GOAL:** Keep patient/caregiver/providers and pharmacies up-to-date on current medication regimen with documented changes
- **SOURCE:** Pharmacist or nurse meets with patient and patient family/caregiver to discuss discharge medication list. Nursing staff completes a follow up phone call 24-48 hours after discharge to ensure understanding.
- **ACTION:** Provide medication list and drug information to patient/caregiver and patient care team. Fax copy of discharge med list to primary provider & pharmacy.
  - Instruct patient to provide updated medication list to all providers, caregivers, pharmacies with any changes in therapy.
  - Instruct patient to update medication list with each change and keep a current copy of medication list with them and with their medications.



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# Facilitated Panel Discussion

## Facilitator

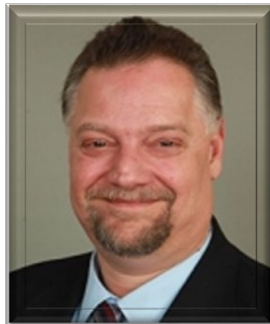


**Lynda Martin, MPA BSN RN CPHQ**  
Senior Director Patient Safety  
Qlarant  
IPRO HQIC

## Panelists



**Denton Chancey, PharmD**  
Clinical Pharmacy  
Specialist



**Thomas Workman, PhD**  
PFE SME



**Lacey Fellows, RN BSN CIC**  
Quality Director



**Julie Harris RPH**  
Director of Pharmacy,  
Interim CEO

# Interactive Q & A: Speakers & Attendees

## Facilitator



**Melissa Perry, MSW, LCSW**  
Hospital Quality Initiatives Coordinator  
IHC/Compass HQIC

## Please enter in Q&A:

- Thoughts
- Experiences
- Questions

## Questions to ponder:

- What are some **challenges, barriers and/or best practice strategies** with medication reconciliation in regards to the COVID-19 Pandemic?
- How can HQICs **best support hospitals** going forward?
- How to best **identify** and **close gaps or disparities in care** related to medication reconciliation?

# Leaving in Action

## HQIC Change Pathway for Driving Improvement

- Adapt and use to help address your opportunities and/or augment existing interventions
- Summary of LAN topics discussed
- Compilation of challenges, barriers & best practices for implementation
- Links to tools & resources for planning & executing your QI project

### HQIC Change Pathway: Meaningful Medication Reconciliation to Prevent Adverse Drug Events

Thank you for registering for and/or attending the HQIC Community of Practice call! Hospital leaders from across the country attended the event. The small, rural and critical access voice was amplified through sharing of barriers and best practices alike. Furthermore, subject matter experts shared their perspectives and their favorite resources. Now, it is time to act!

**Why Now**

The Agency for Healthcare Research and Quality (AHRQ) defines an adverse drug event (ADE) as harm experienced by a patient because of exposure to a medication. ADEs do not always indicate an error or poor-quality care. However, it is generally estimated that around half of all ADEs are preventable. ADEs place patients at risk and are costly to the healthcare system. In recent years, the opioid epidemic has highlighted the importance of preventing ADEs. Multiple initiatives have been developed to promote safe prescribing of opioids, including increased patient education and updated prescribing guidelines. Preventing all types of ADEs, including those related to opioids, remains a national patient safety priority (AHRQ, 2019).

**Review the Data**

**Fishbone Diagram: National Select Determinants of Preventable Adverse Drug Events**

| Identify Promising Practices  |   |   |
|---|---|---|
| Beginner  | Intermediate  | Expert  |
| ★   | ★★  | ★★★   |
| Ensure <u>Medication Reconciliation</u> is performed at discharge with patients and families on a form that is clear, concise, and easy to transfer to other care environments. | Provide staff with education on the <u>importance of performing a medication reconciliation and how to complete this task using the EHR (if applicable)</u> . | Seek out and use information about medication safety risks and errors that have occurred in other organizations outside of your facility and <u>take action to prevent similar errors (page 14)</u> . |

# Key Takeaways

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- Despite heightened awareness, ADEs continue to occur, are often preventable, costly to healthcare system & cause patients & clinicians significant distress
- Interventions aimed at reducing ADEs do not need to be complex or highly technical to produce meaningful outcomes
- Reconciling medication lists at times of care transitions is a key element in medication safety across the care continuum
- Medication reconciliation requires a partnership between patients/families, pharmacists & nurses to help:
  - Accurately ensure knowledge & management of medications
  - Maximize outcomes & prevent ADEs
- Involve patients/families, or PFACs, to help design medication reconciliation tools & processes to ensure all needs are met

# Final Thoughts

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# Join Us for the Next Community of Practice Call!

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Join us for the next  
Community of Practice Call on February 10, 2022  
from 1:00 – 2:00 PM ET

We invite you to register at the following link:

[https://zoom.us/webinar/register/WN\\_ASI\\_I3p\\_TEyX\\_VY\\_YYFFeA](https://zoom.us/webinar/register/WN_ASI_I3p_TEyX_VY_YYFFeA)

*You will receive a confirmation email with login details.*

# Thank You!

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*Your opinion is valuable to us. Please take 4 minutes to complete the post event assessment here: [post assessment 1.13.22](#)*

*We will use the information you provide to improve future events.*