HQIC Community of Practice Call

The Impact of Meaningful Medication Reconciliation on Adverse Drug Events

January 13, 2022

CMS CENTERS FOR MEDICARE & MEDICAID SERVICES
HQIC
Hospital Quality Improvement Contractors
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Introduction

Latrail Gatlin
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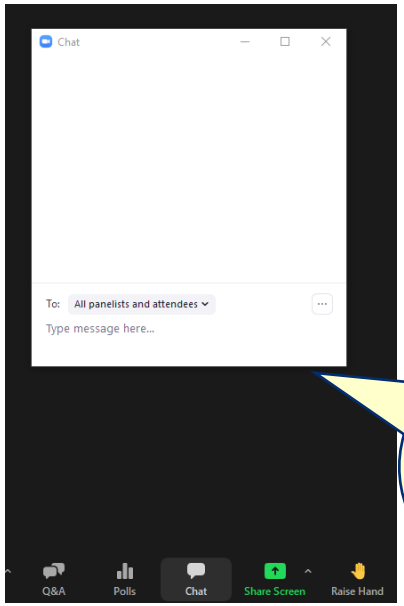
CMS

Welcome!

Who's in the Room?

Zoom Webinar Features

- **Chat**



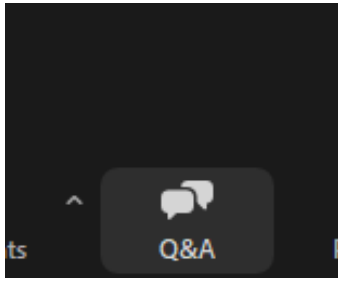
Please select **All panelists and attendees** in the dropdown list when participating in the chat.

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…

- 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

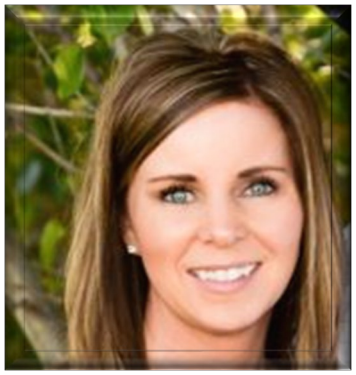
Today's Topic – **The Impact of Meaningful Medication Reconciliation on Adverse Drug Events**

- 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



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Julie Harris RPH
Director of Pharmacy, Interim CEO
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IHC/Compass HQIC

Why Focus on This Now?

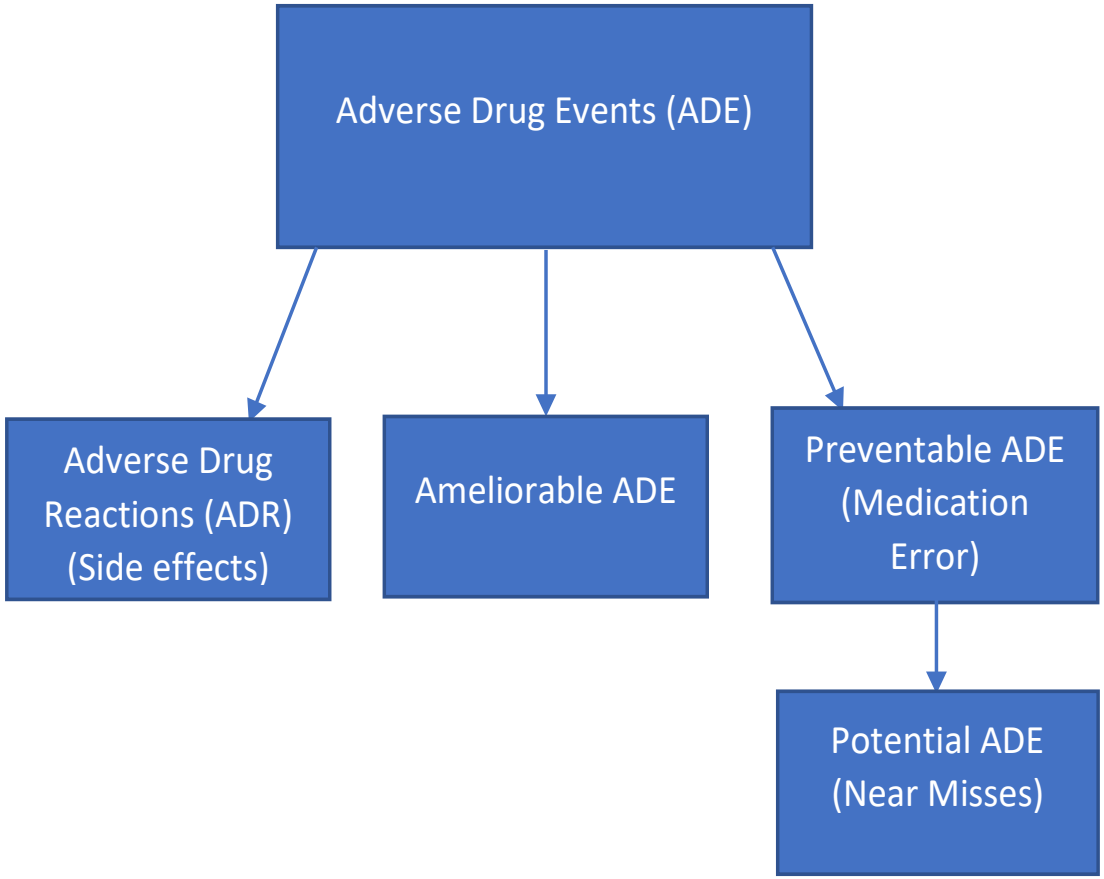
- Preventing Adverse Drug Events (ADEs) is a national priority
- Medication Reconciliation is aimed at optimizing medication safety and has been shown to be an effective strategy to prevent ADEs
- Hard-wiring meaningful medication reconciliation is more important than ever given the impact and associated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

Setting the Stage

Adverse Drug Events & Medication Reconciliation

Denton Chancey, PharmD
Clinical Pharmacy Specialist
Telligen HQIC

What is an ADE?



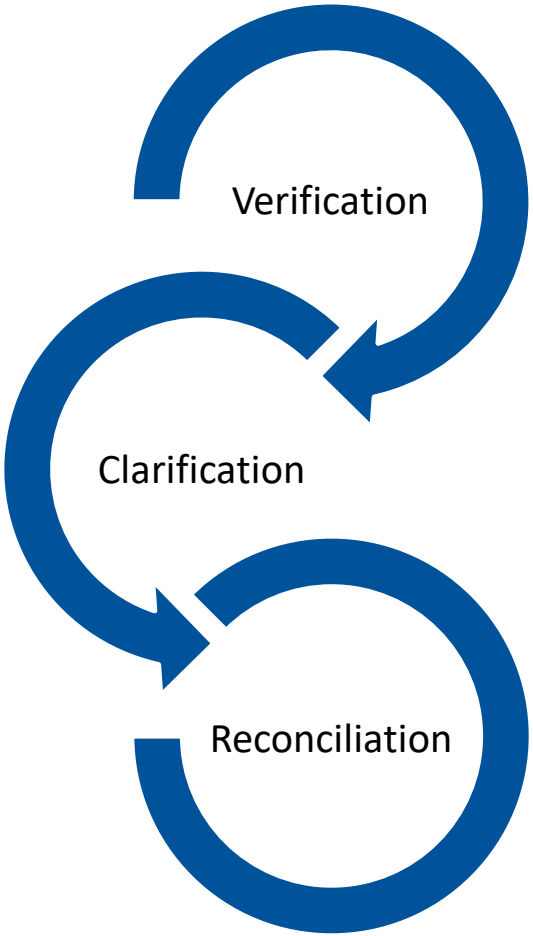
Why Focus on ADEs?

- **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

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

Three Step Process[4]: 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%[5]

OSF healthcare's journey in patient safety

John Whittington [1], Howard Cohen

Affiliations + expand

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

References

- 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.ihi.org)
- 5. Whittington J, Cohen H. OSF Healthcare's journey in patient safety. Quality Management in Health Care. 2004;13(1):53-59.

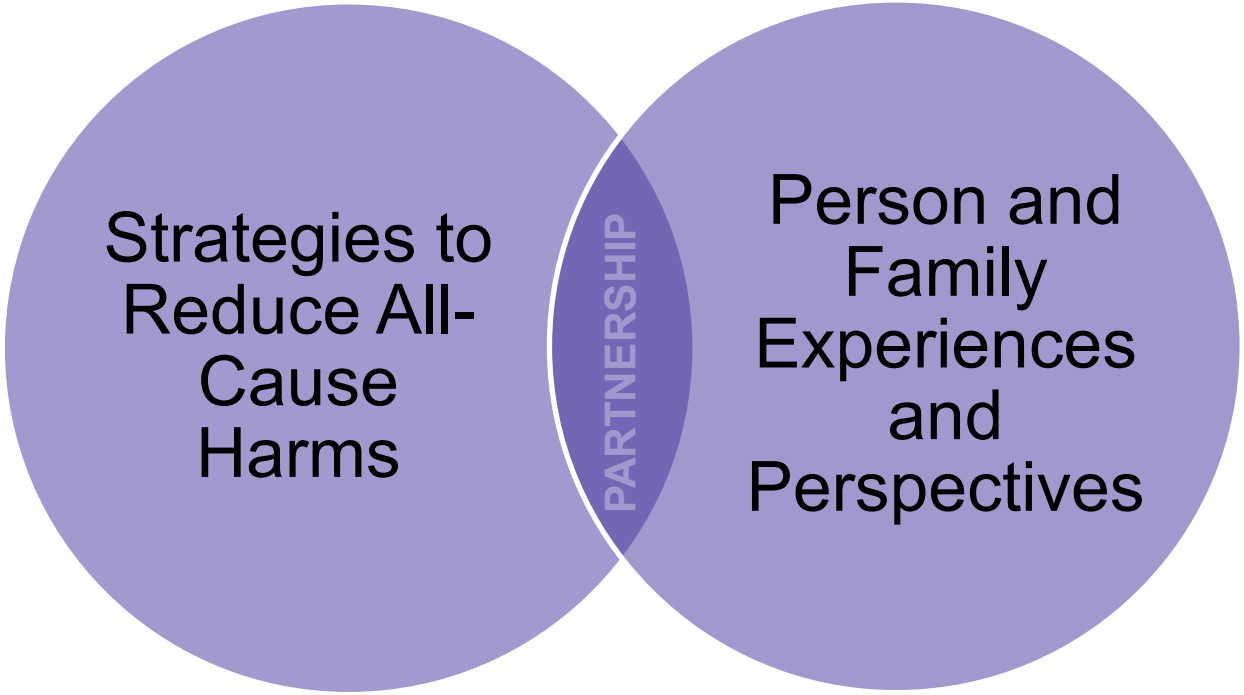
Partnering with Patients & Families to Reduce Adverse Drug Events

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

What is Person & Family Engagement?

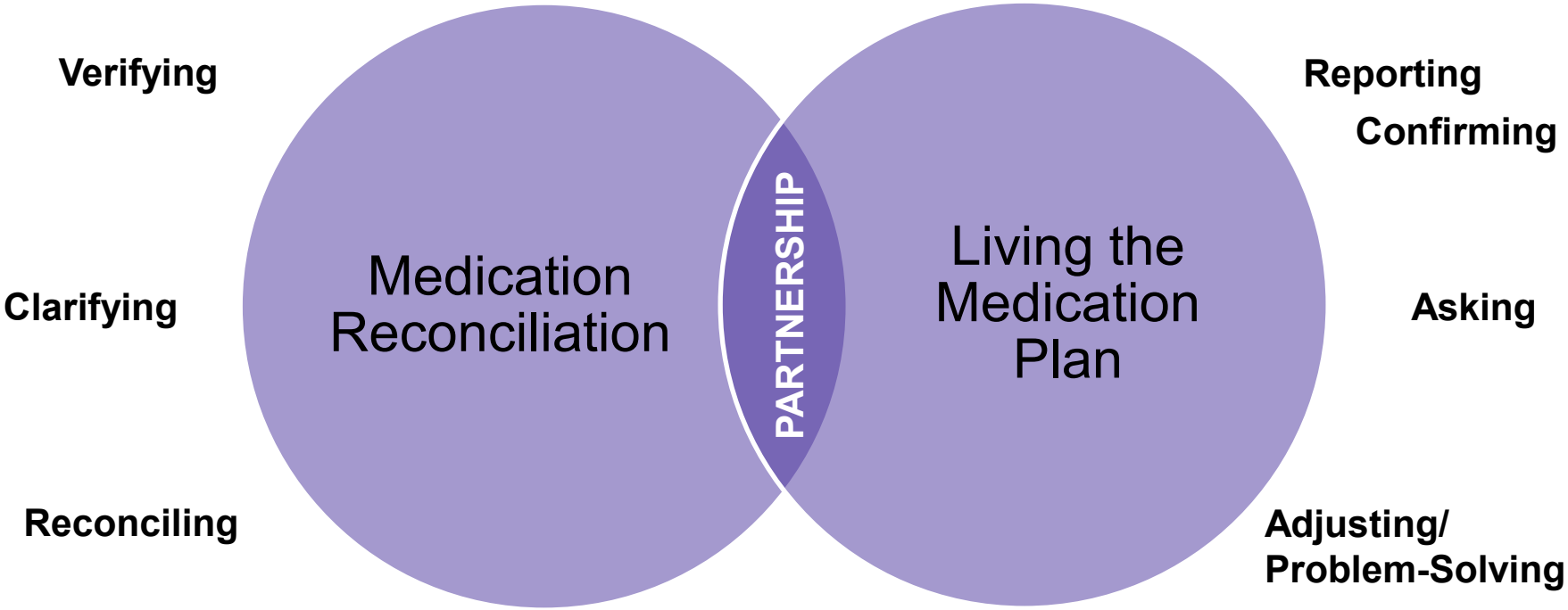
- Person & Family Engagement forms meaningful partnerships between health care professionals, patients, and family caregivers that improve health outcomes and the quality and safety of care.

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

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

Resources

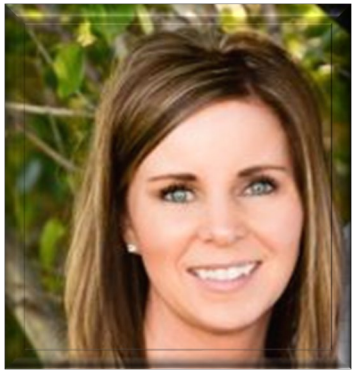
- My Medicines Form, Agency for Healthcare Research and Quality
  https://www.ahrq.gov/health-literacy/improve/precautions/tool16a.html

- ”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

Franklin County Medical Center's Medication Reconciliation Improvement Initiative



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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		
Goal Rate	**2020**	**2021**
60%	54%	69%

Patient Arm Band Scanning		
Goal Rate	**2020**	**2021**
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

Effective Medication Reconciliation: George C. Grape Community Hospital

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

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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

- **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

Admission Reconciliation

- **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.

George C. Grape Hospital Procedure

- **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.

Change In Level Of Care

- **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.

George C. Grape Hosptial Procedure

- **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

Discharge Reconciliation

- **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.

George C. Grape Hosptial Procedure

- **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.

Discharge Instructions For Patient/Caregiver

- **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.

Facilitated Panel Discussion

Facilitator

Lynda Martin, MPA BSN RN CPHQ
Senior Director Patient Safety
Qlarant
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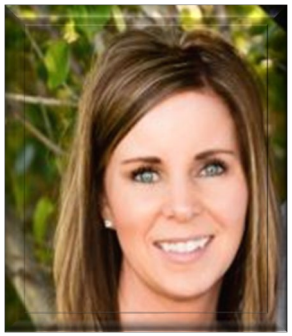
Panelists

Denton Chancey, PharmD
Clinical Pharmacy Specialist

Thomas Workman, PhD
PFE SME



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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

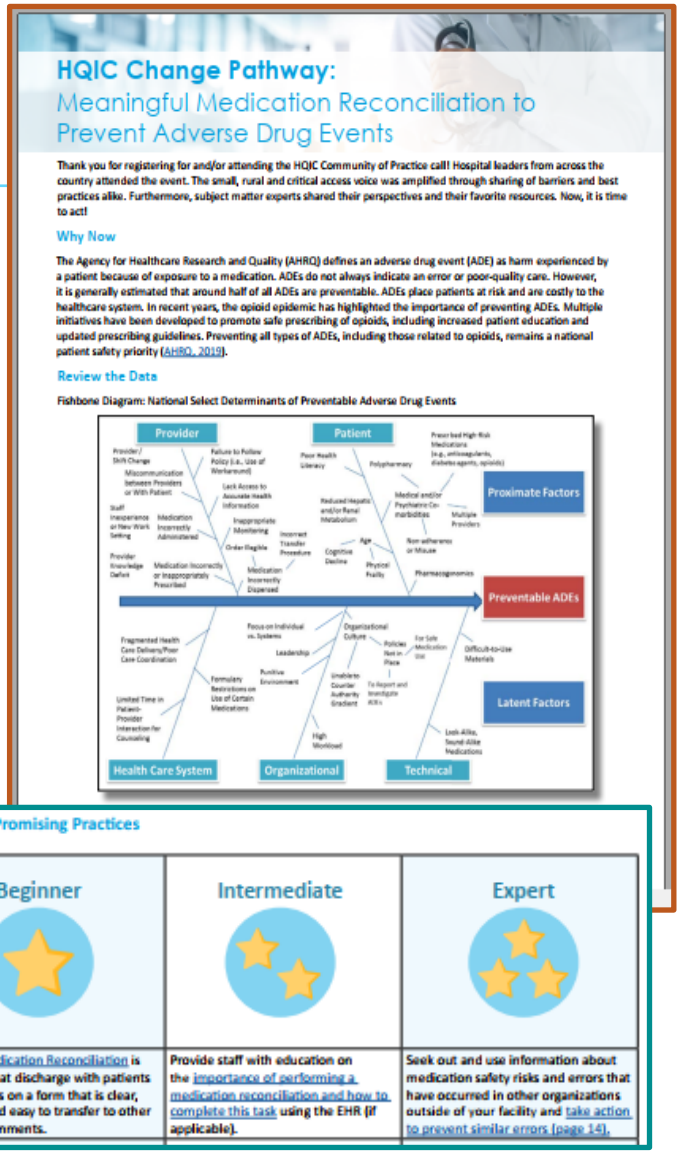
Questions to ponder:

- 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 Medication Reconciliation 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 importance of performing a medication reconciliation and how to complete this task using the EHR (if applicable).	Seek out and use information about medication safety risks and errors that have occurred in other organizations outside of your facility and take action to prevent similar errors (page 14).

Key Takeaways

- 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

Join Us for the Next Community of Practice Call!

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_ASl_l3p_TEyx_VY_YYFFeA

You will receive a confirmation email with login details.

Thank You!

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.