Medication Reconciliation: A Team Sport

October 10, 2024

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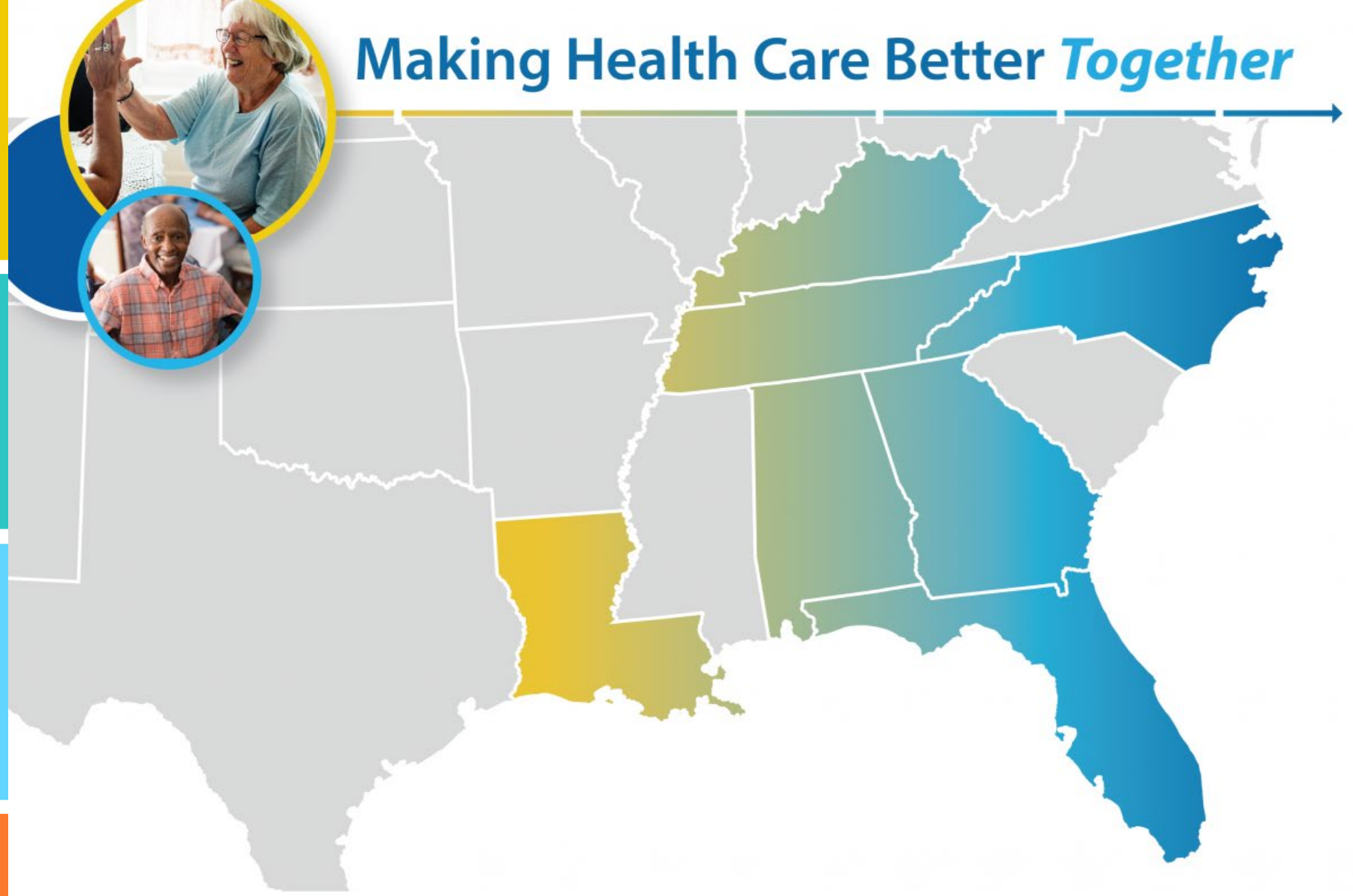
Quality Innovation Network - Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP



About Alliant Health Solutions

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Affinity Group Facilitators

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Guest Panelist: Charlotte Ingram, NP, AHS Beneficiary Family Advisory Council (BFAC) Member

Learning Objectives

- Understand the different roles of health care providers, pharmacists, staff, residents and care partners in the medication reconciliation process.
- Gain a deeper understanding of how an interdisciplinary approach can uncover "near misses" resulting from variations in the medication reconciliation process.
- Use a performance improvement team to apply the "Swiss Cheese Model" to identify and address system failures in the medication reconciliation process.

Today's Agenda

- Ice Breaker – Polling Questions
- Your Medication Reconciliation Team
- Medication Reconciliation: From a care partner and patient perspective
- Medication at Transitions of Care
- QAPI and Medication Reconciliation
- Use Tomorrow
- Resources

Polling Questions

1. You have a new admission to your facility on Friday evening. When is medication reconciliation (med rec) performed?

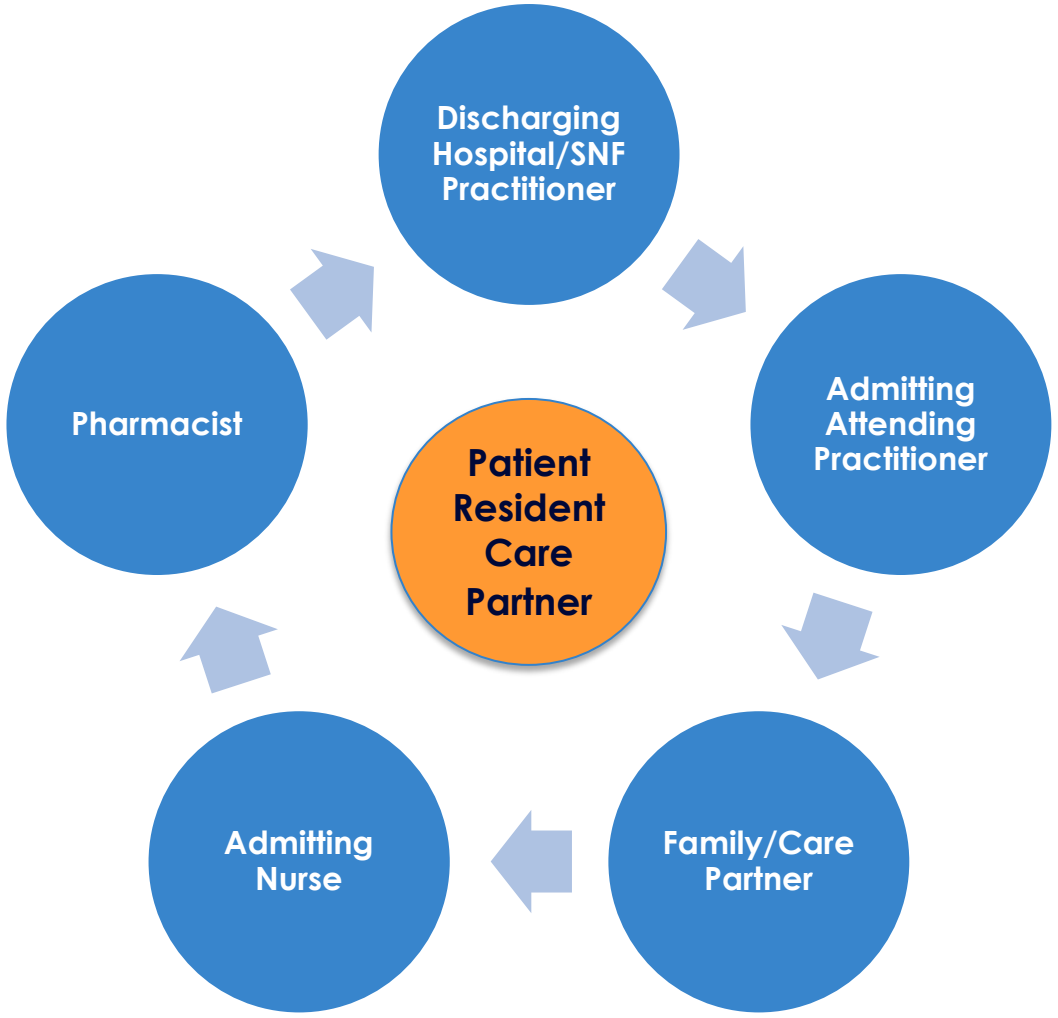
2. On average, how much time is spent reconciling medication issues per admission?
   A. 0-30minutes, C. 1-2 hours, D. Honestly, I am not sure, but I will ask.

3. During care transitions, what percent of nursing home admissions had a medication error?
   A. 16%, B. 26%, C. 36%, D. 56%

4. The patient's home pharmacy is a good source for input into medication reconciliation?
   T or F

5. My facility has a process or policy for performing med rec.
   Yes or No

Who's on Your Medication Reconciliation Team?



Who's missing?
How often?
How do you know?

“If you want to go fast - go alone. If you want to go far, go together!” - African Proverb

The Care Partner, Patient Perspective

Medication Reconciliation and Care Transition

What is medication reconciliation?

"Medication reconciliation is the process of comparing a patient's medication orders to all the medications that the patient has been taking. This reconciliation is done to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions. It should be done at every transition of care in which new medications are ordered, or existing orders are rewritten."

Source: The Joint Commission. Medication reconciliation. Sentinel event alert, Issue 35.2006. http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/se_35.htm. Accessed August 15,2016.

What is a care transition?

The movement of patients between health care locations, providers, or different levels of care (including within the same location) as their conditions and care needs change.

Source: Coleman, Eric A. Commissioned Paper: Transitional Care Performance Measurement. Performance Measurement Report, Institute of Medicine, 2006. Appendix I, pp. 250-276.

Data: Medication Errors During Transitions of Care

67% of prescription medication histories contain one or more errors

46% of medication errors occur at admission or discharge

36% of patients had medication errors at admission, *AND* **85%** of errors originated from patient's **medication history**

> 40% of medication errors are associated with incomplete reconciliation; **20%** of errors result in **patient harm**

Sullivan C, et al. Medication reconciliation in the acute care setting: opportunity and challenge for nursing. Journal of Nursing Care Quality, 2005, 20(2): 95-98.
Bates. DW, Spell N, Cullen DJ, et al. The costs of adverse drug events in hospitalized patients. Adverse Drug Events Prevention Study Group. JAMA 1997;277:307-11.
Rozich JD, Howard RJ, Justeson JM, et al. Patient safety standardization as a mechanism to improve safety in health care. JT Comm J Qual Saf. 2004;30(1):5-14.
Blumi BM. Definition of medication therapy management: development of a profession wide consensus. J Am Pharm Assoc. 2005:45:566-72.

Data: Medication Errors During Transitions of Care

2015 Research

- The median number of discrepancies across the articles was found to be **60%.** On average, patients **had between 1.2 and 5.3** discrepancies when leaving the hospital.
- More studies also found a relationship between the **number of drugs a patient was on and the number of discrepancies.**
- The variation in the number of discrepancies found in the 15 studies could be due to the fact that some studies excluded patients taking more than 5 drugs at admission.
- Medication reconciliation would be a way to avoid the high number of discrepancies that were found in this literature review and thereby increase patient safety.

Michaelsen MH, McCague P, Bradley CP, Sahm LJ. Medication Reconciliation at Discharge from Hospital: A Systematic Review of the Quantitative Literature. Pharmacy (Basel). 2015 Jun 23;3(2):53-71. doi: 10.3390/pharmacy3020053. PMID: 28975903; PMCID: PMC5597088.

2021 Research

- In general, studies demonstrated that electronic medication reconciliation reduced the odds of a medication discrepancy or ADE and may reduce the mean number of medication discrepancies
- Electronic medication reconciliation tends to reduce the risk of ADE; however, these conclusions were limited due to a lack of consistency in study settings, interventions, and outcome definitions.

Killin L, Hezam A, Anderson KK, Welk B. Advanced Medication Reconciliation: A Systematic Review of the Impact on Medication Errors and Adverse Drug Events Associated with Transitions of Care. Jt Comm J Qual Patient Saf. 2021 Jul;47(7):438-451. doi: 10.1016/j.jcjq.2021.03.011. Epub 2021 Apr 1. PMID: 34103267

Medication Errors and Discrepancies in Skilled Facilities

70% of nursing home admissions include at least one medication discrepancy and an average of 3.5 discrepancies per admission from hospital

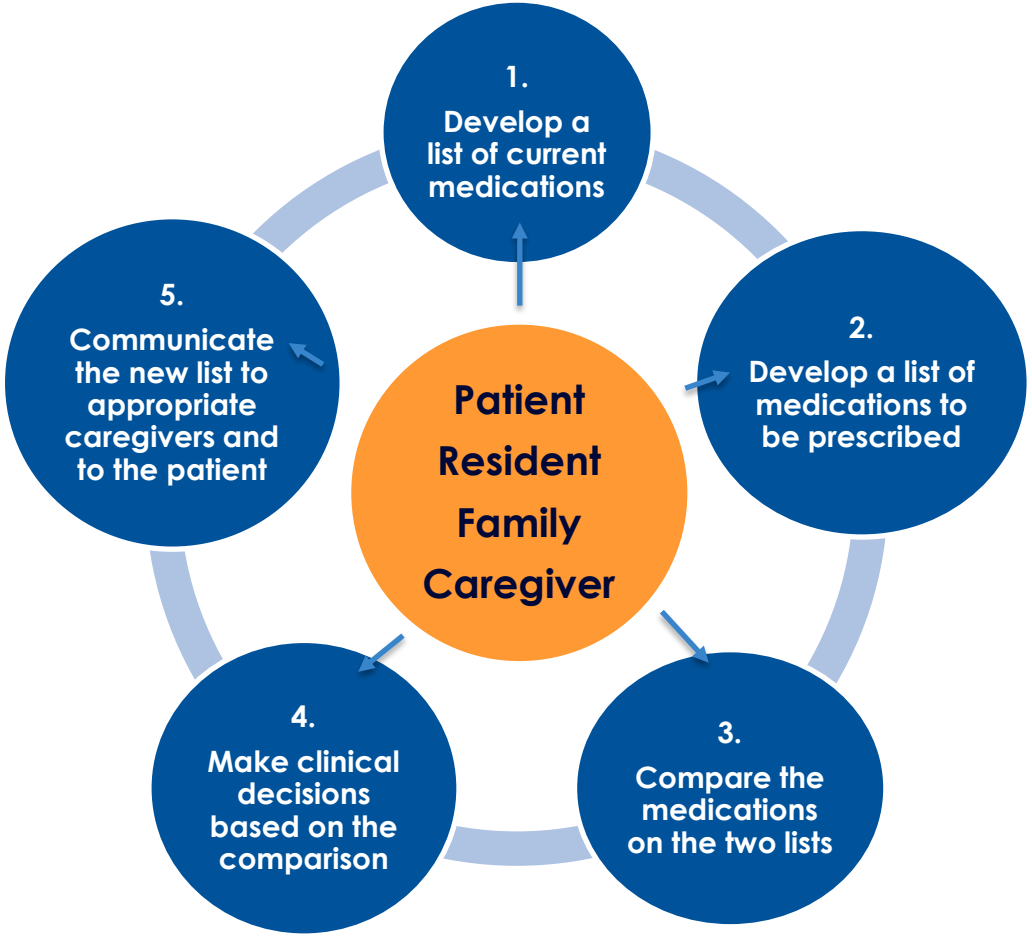
Up to **90%** of nursing home health records contained at least one medication discrepancy

A well-run medication reconciliation program improves outcomes

A nurse practitioner-run a standardized medication reconciliation process resulted in a 29.7% decrease in the rate of hospital readmissions within a 30-day period.

Tija, et al, Medication Discrepancies upon Hospital to Skilled Nursing Facility Transitions. J Gen Intern Med. 2009
Tong, et al, Nursing home medication reconciliation: a quality improvement initiative. J Gerontol Nurs. 2017
Anderson, et al. A nurse practitioner-led medication reconciliation process to reduce hospital readmissions from a skilled nursing facility. J Am Assoc Nurse Pract. 2020.

Medication Reconciliation Process



Source: https://www.ncbi.nlm.nih.gov/books/NBK2648/#:~:text=This%20process%20comprises%20five%20steps,caregivers%20and%20to%20the%20patient

Summary: Key Considerations and Reconciliation of Medications During Transitions

- Implement an effective medication reconciliation program on resident admission and discharge.
- Medication reconciliation consists of verification (Best Possible Medication History), clarification (med appropriateness), and documentation of changes and final list. Include patient and care partner input.
- Safe medication management requires effective communication during transitions of care.
- Drug regimen review at transitions should be completed as soon as feasible.

https://stock.adobe.com/images/key-to-success/101994315

QAPI and Medication Reconciliation

QAPI Calendar

Medication Safety-related measures

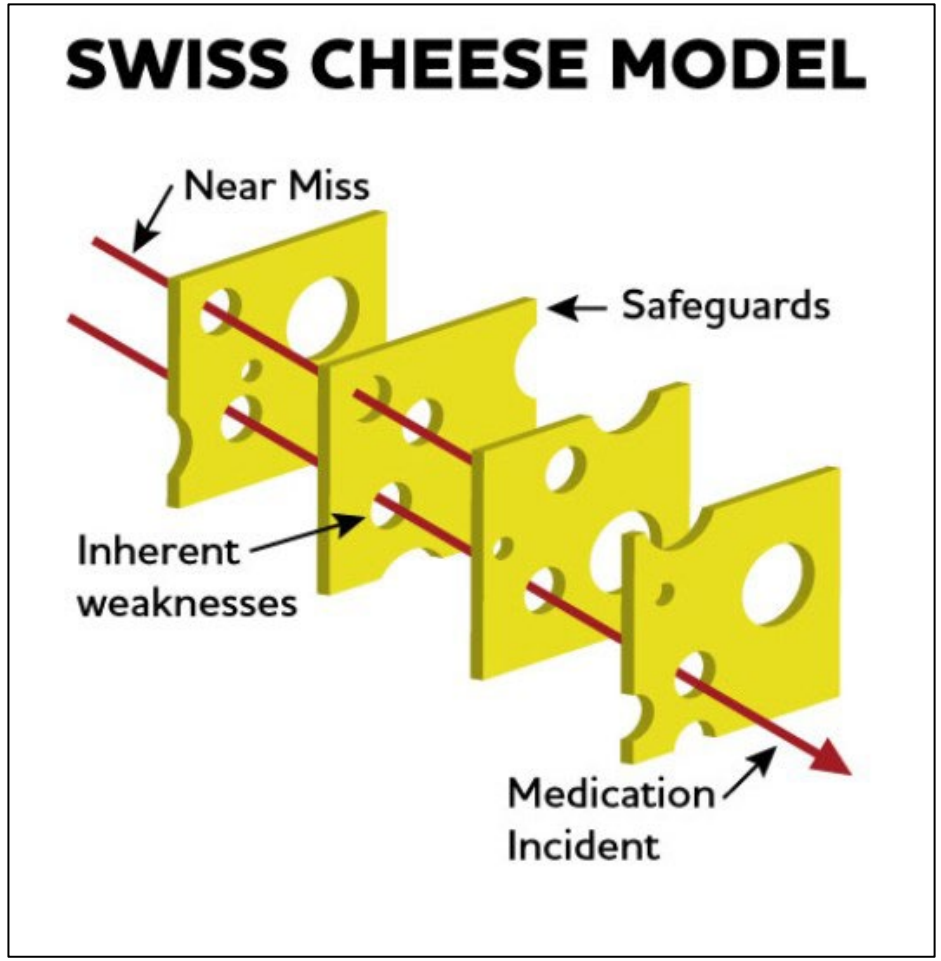
- What are we doing well?
- For whom?
- How do we know?

Pharmacy Quarterly Meeting

Agenda

- Clinical
- Consultant pharmacist
- Nursing
- Pharmacy Vendor
- Medication errors and near misses
- Open discussion (e.g., emerging patterns, patient/resident concerns, survey findings)

Visualizing Medication Safety Risks



Imagine several slices of Swiss cheese, each representing a different layer of human, technological or system safeguards in your pharmacy. Each layer has holes that reflect the inherent weaknesses in that particular safeguard. Normally, if one hole is penetrated, another slice (or safeguard) stops an error in its tracks.

But what if the holes suddenly lined up? Now, it's as though there are no safeguards at all.

The point is, no matter how many protections are put in place, there still exists the potential for a medication incident. This highlights the need for continuous evaluation of a pharmacy's risk mitigation processes to ensure safeguards and systems are effective and adaptive.

Source: https://pharmacyconnection.ca/how-swiss-cheese-can-help-visualize-medication-safety-risks/

Flow Chart

Symbol	Function
	**Ovals** represent the start of end of a process.
	**Rectangles** indicate a step in a process, e.g., a task or action.
	**Arrows** connect the parts of the process and indicate the direction of the workflow.
	**Diamonds** signify a Yes or No decision point in the process that affects the process.
	**Parallelograms** are used for input or output operations, reading data or printing results.
	**Document** shape represents the input or output of one or more documents.
	**Solid square** represents a delay in a process.

Flowcharts are important for:

- **standardization of a process → increase reliability → reduce variation → increase safety → stabilize/improve health outcomes**
- Communication
- Training new employees
- Following best practice/policy/regulations

Flow charts are also a …

- Useful tool to visualize complex processes and identify bottlenecks.
- Map of processes and identify areas for optimization.

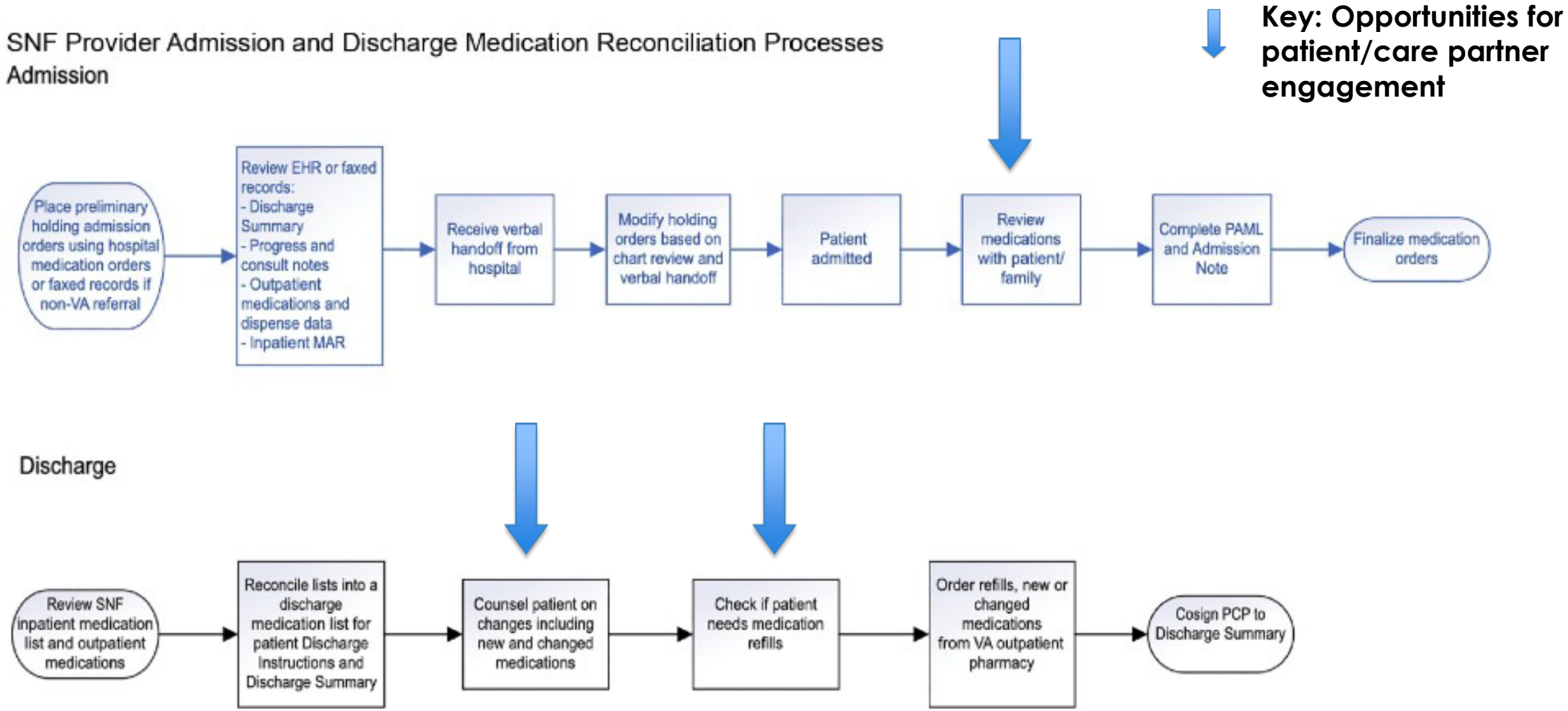
Where to use a flow chart?

- Policy/Procedures
- Orientation
- QI Team (Understand how a process currently works, Design Ideal State, Test of Change)

Create a Medication Reconciliation Flow Chart

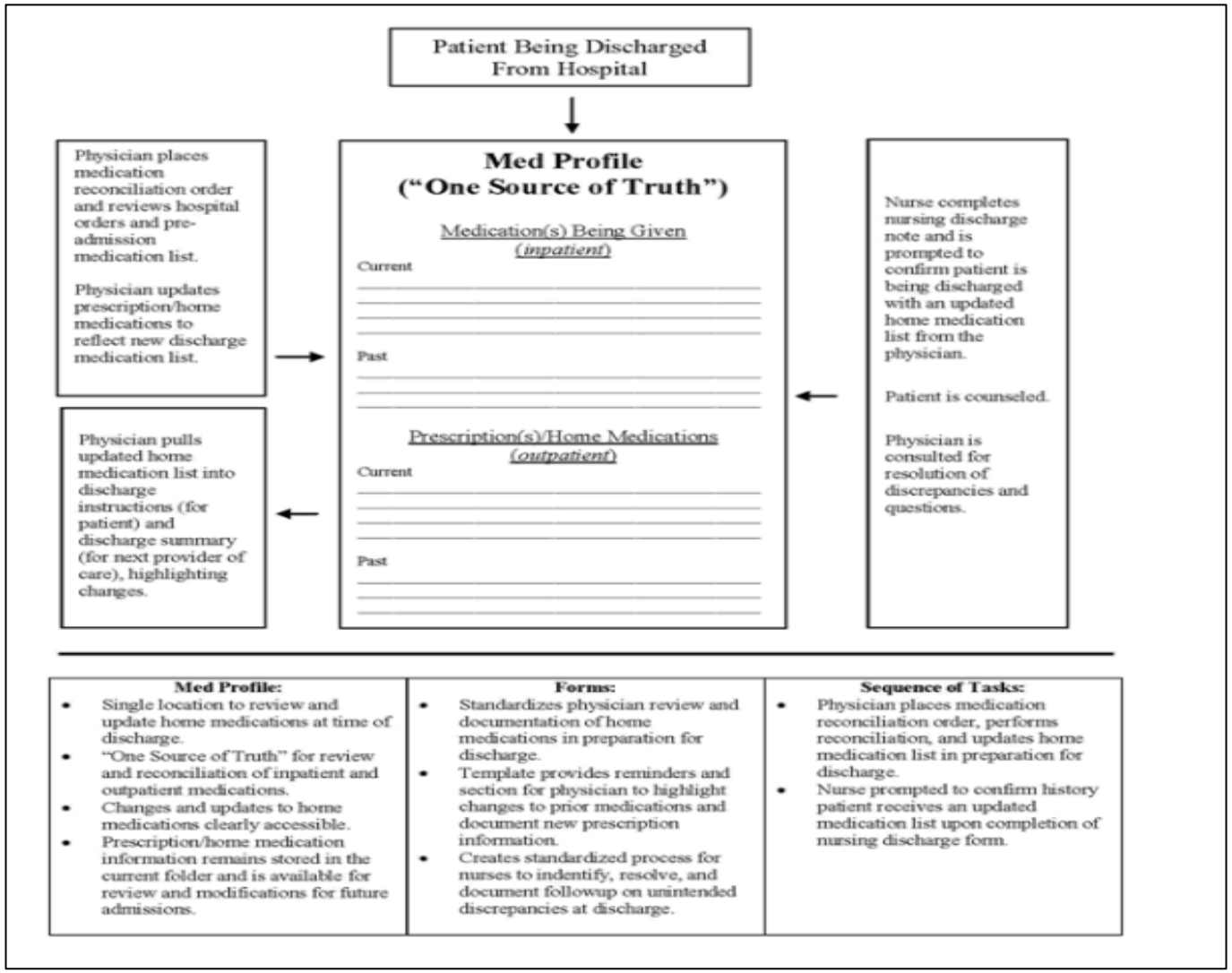
- ✓ Starting Point
- ✓ Ending Point
- ✓ Steps in between
- ✓ Yes/No Decision Points

Examples: Medication Reconciliation Flow Charts - SNF



Improving Medication Reconciliation with Comprehensive Evaluation at a Veterans Affairs Skilled Nursing Facility - Joint Commission Journal on Quality and Patient Safety

Example of a Medication Reconciliation Flow Chart



https://www.ahrq.gov/patient-safety/settings/hospital/match/figure-4.html

Agency for Healthcare Research and Quality

Medications at Transitions and Clinical Handoffs (MATCH): Toolkit for Medication Reconciliation

Guiding principles for designing a successful medication reconciliation process:

- "One Source of Truth."
- Defining roles and responsibilities for medication reconciliation.
- Integrating medication reconciliation into existing workflow.
- Flowcharting the design or redesign for medication reconciliation.
- Designing the process—considerations for various practice settings.
- Examples of electronic, paper-based, or hybrid (electronic plus paper-based) systems.

https://www.ahrq.gov/patient-safety/settings/hospital/match/chapter-3.html

Integrating Medication Reconciliation Into Your QAPI Efforts

QAPI Committee Reporting Calendar

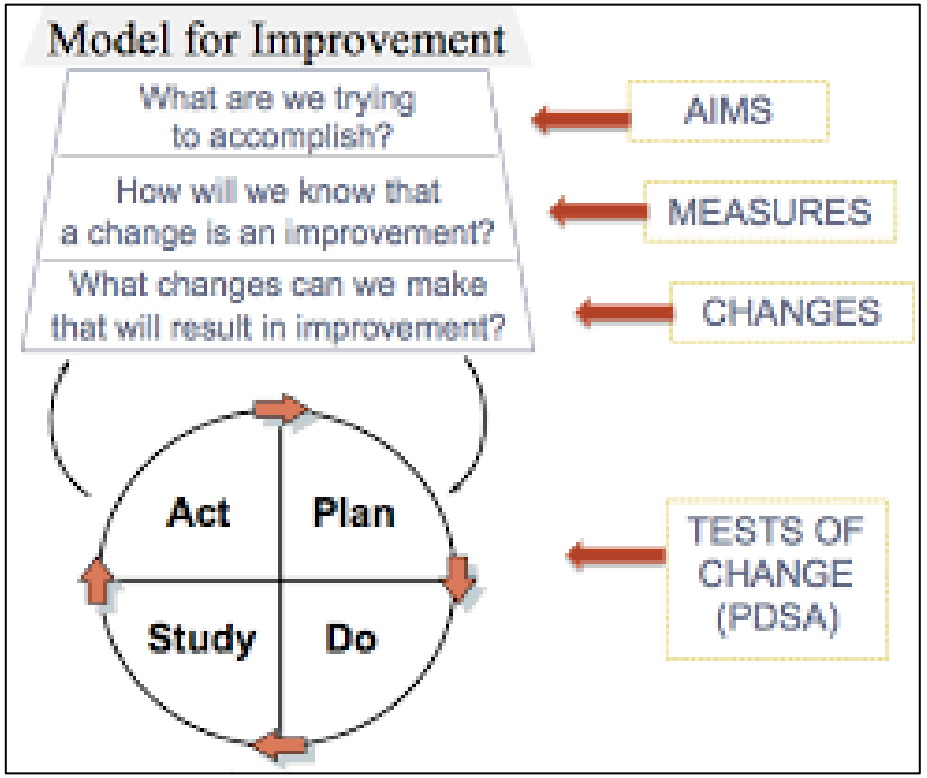
- Medication safety at least quarterly
- Sentinel event reporting
- Survey findings

Performance Improvement Team

- Multidisciplinary members, including frontline staff, patient/resident/family, external stakeholders (e.g., consulting pharmacist, referral source)
- Model for Improvement
- Report to QAPI Committee monthly, updates, etc.

QAPI Committee

- Overtime time monitors the sustainability of process improvements



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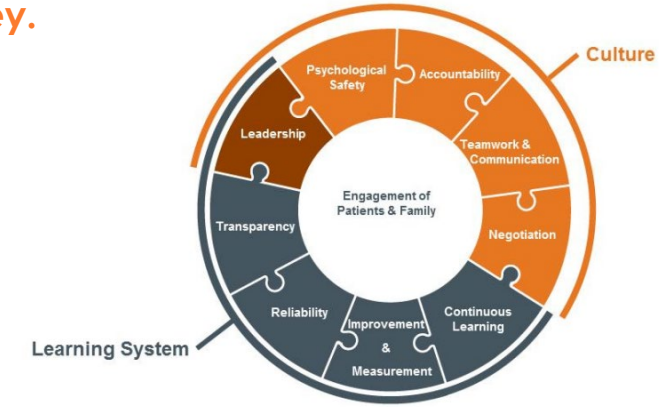
Use Tomorrow

Be Very Curious!

- Does your Medication Safety reporting/data indicate opportunities for improving your medication reconciliation process? Is "nothing to report" a red flag?
- What patterns or trends are there about "near misses"? Is this something you can learn more about while rounding?
- Do you have a medication reconciliation flowchart? If not, would it be helpful?
- Are there ways you can:
  - Integrate the patient and care partner?
  - Increase the standardization of your medication reconciliation process?
  - Make it more reliable?
  - Reduce variation in how medication reconciliation is done throughout your organization?

Touchdown

During the past 11 months, you have been an important part of this QAPI exploration journey. Thank you for sharing your success, experiences, and wisdom and asking great questions!



2023

Dec Regulatory requirement, QAPI Self Assessment (Time to plan to reassess QAPI Mini Self Assessment), effective meetings,
QAPI calendar

2024

Jan A Culture for Safe, Reliable and Quality Care
Feb Root Cause Analysis, Part 1
Mar Root Cause Analysis, Part 2
Apr Innovation: Engaging Patients, Residents, Families and Community in QAPI (Time to Reassess IHI Engaging Patients and Families in Safety: Self Assessment)
May Leveraging Excel for Effective Data and Display in NH QAPI
Jun Using Data to Tell Your QI Story
July Facility Assessment for Behavioral Health Services
Aug Addressing the Sepsis Care Gap: A Comprehensive Assessment of NH Facility Practices
Sep Breathe Easier: Strategies for Reducing COPD Readmissions
Oct Medication Reconciliation: A Team Sport

Begin.
It is not as important to find the "right place" to begin your QI journey – because systems and processes are all interconnected.

Alliant Health Solutions Tools for Improvement

Medication Reconciliation Auditing

- Medication Reconciliation Audit Tool – Discharge
- Medication Reconciliation Audit Tool – Admission

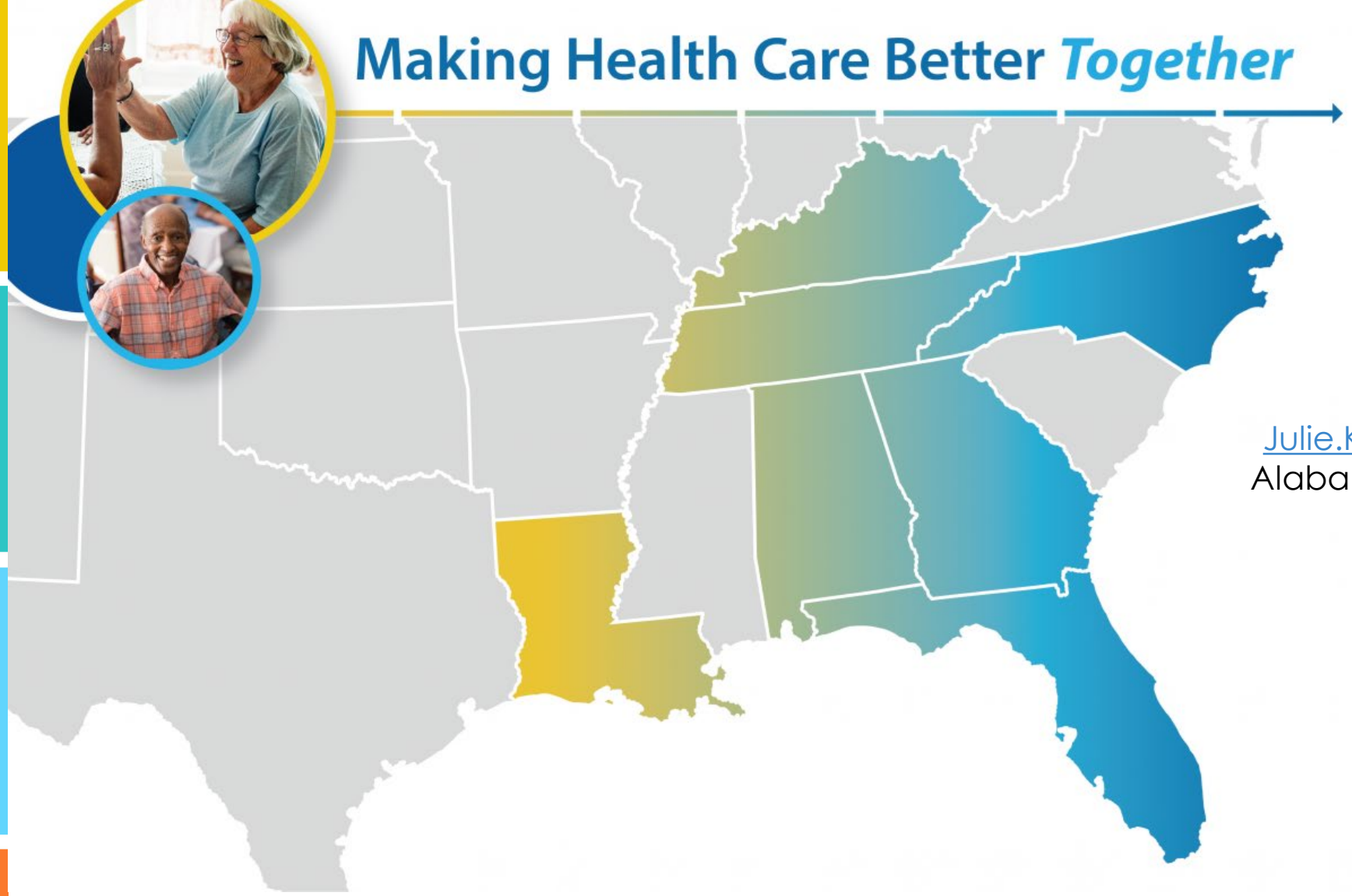
Track and Trend Medication Discrepancies

- Medication Reconciliation Data Collection Tool
- Readmissions Circle Back Interview Tool
- Preventable Readmissions Initiative Home Health Circle Back Tool
- Post Discharge Follow-Up Call Script

AHRQ Tools

AHRQ How To Create a My Medicines List

Questions?



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