Tools to Improve Medication Safety

Preventing and Reducing Adverse Drug Events

Oct. 27, 2015

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Let's Chat!

Please share with us in chat:

1. Reducing adverse drug events (ADEs) is important in my practice because _____.
2. The biggest barrier to reducing ADEs in my practice is _____.

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www.atomAlliance.org/ADEs

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Disclosures

- We have no financial relationships to disclose.

- We will not discuss off-label use or investigational use in our presentation.

Learning Objectives

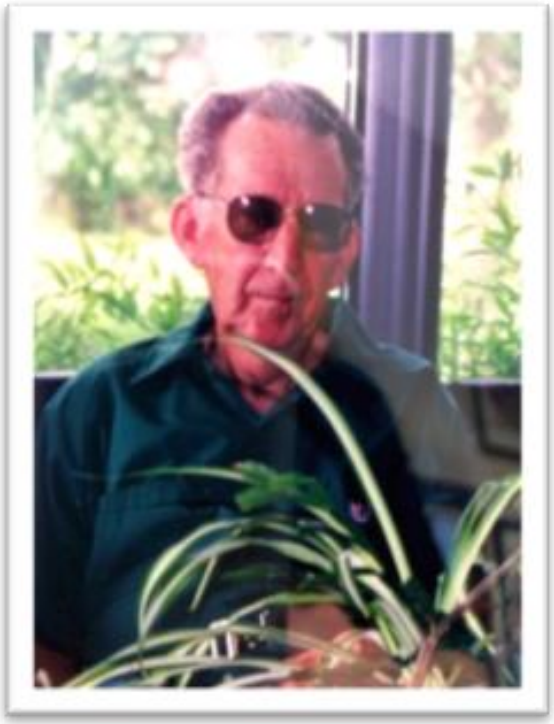
At the completion of this activity, participants will be able to:

1. Explain what Quality Innovation Network-Quality Improvement Organizations (QIN-QIOs) are and what they do.
2. Identify the QIN-QIO that serves their state and region.

Learning Objectives (cont.)

3. Apply tools in atom Alliance's Medication Safety Starter Kit to improve medication safety and everyday patient care.
4. Describe how pharmacists and other stakeholders can partner with atom Alliance to improve medication safety.

Patient Story: Debbie Miller



http://atomalliance.org/the-urgent-need-to-raise-awareness-of-opioid-safety/

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Adverse Drug Events

1.5 Million
ADEs
Each Year
in the U.S. Healthcare System

Key facts:

ADEs contribute an extra $3.5 billion in U.S. healthcare costs– up to $5.6 million per U.S. hospital.

3 ADEs will happen in about the time it takes you to read this graphic

Older adults are up to seven times more likely than younger persons to experience an ADE requiring hospitalization.

Each hospital patient suffers **one medication error per day** on average.

ADEs result in approximately 1 million emergency room visits per year.

1 million

The top two medications implicated in ADEs are insulin (for diabetes) and warfarin (a blood thinner).

Sources: Institute of Medicine
Agency for Healthcare Research and Quality
National Institutes of Health

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Polling Question

How familiar are you with Quality Improvement Organizations (QIOs) and what they do?

A. Very familiar

B. Somewhat familiar

C. Not at all familiar

What Are QIOs?

- Contracted by the Centers for Medicare & Medicaid Services (CMS)
- Help healthcare providers deliver the right care at the right time, every time
- Offer objective assistance to unite patients, providers, community organizations and other stakeholders in making care safer and more effective
- Ensure Medicare beneficiaries receive the healthcare they deserve

SOURCE: http://www.qioprogram.org/about/what-are-qios

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What Are QIOs? (cont.)

Two types of QIOs

- Two Beneficiary and Family Centered Care QIOs (BFCC-QIOs)
- Fourteen Quality Innovation Network-QIOs (QIN-QIOs)

SOURCE: http://www.qioprogram.org/about/what-are-qios

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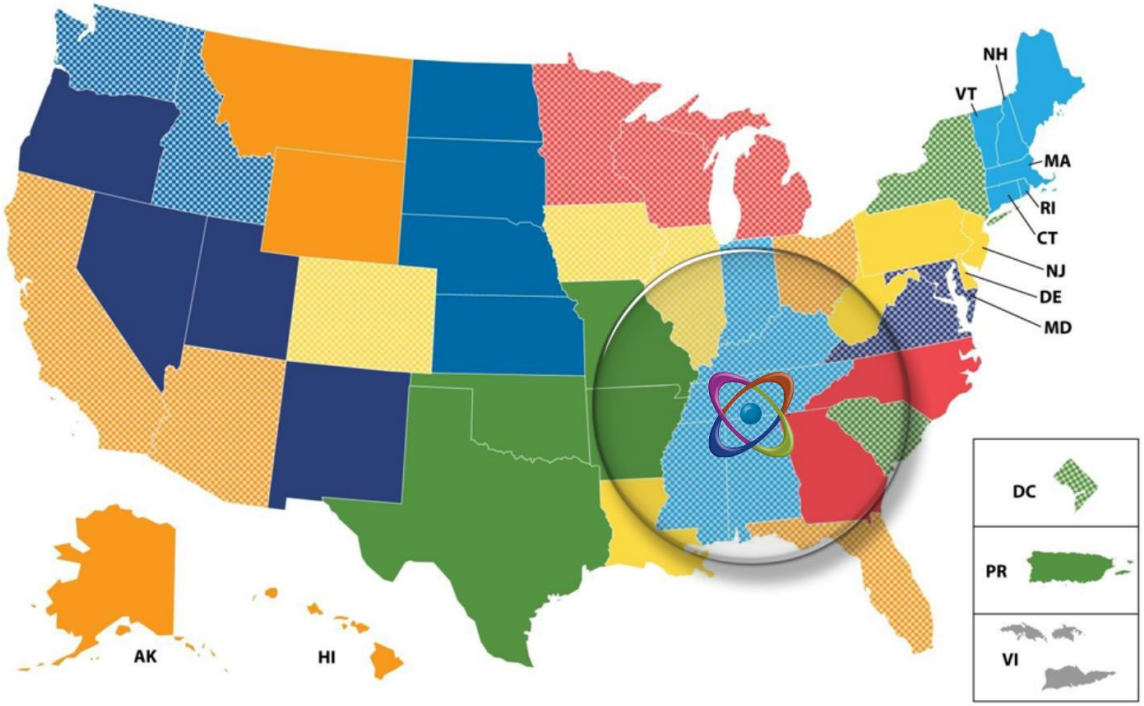
QIN-QIOs Across the Nation



- Alliant - Georgia Medical Care Foundation
- Atlantic Quality Improvement Network
- atom Alliance
- Great Plains Quality Innovation Network
- HealthCentric Advisors
- HealthInsight
- Health Services Advisory Group
- Lake Superior Quality Innovation Network
- Mountain Pacific Quality Health Foundation
- Qualis Health
- Quality Insights Quality Innovation Network
- Telligen
- TMF Quality Innovation Network
- VHQC

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AQAF
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IQH
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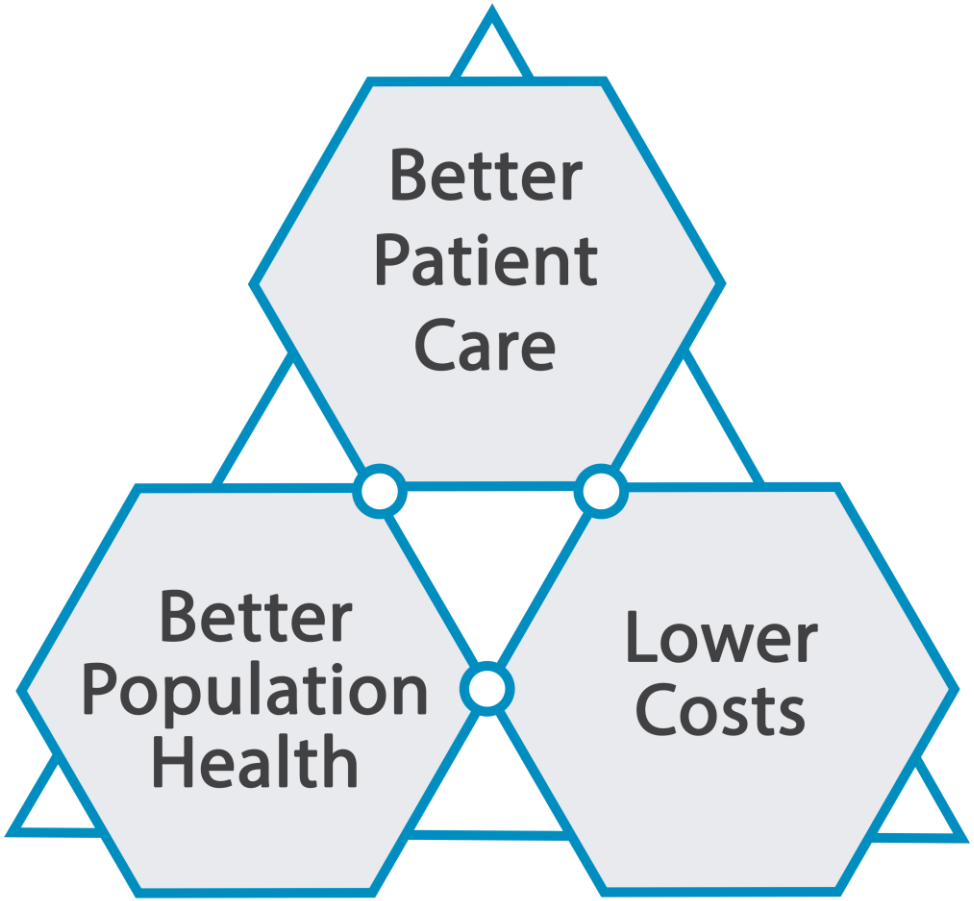

Triple Aim

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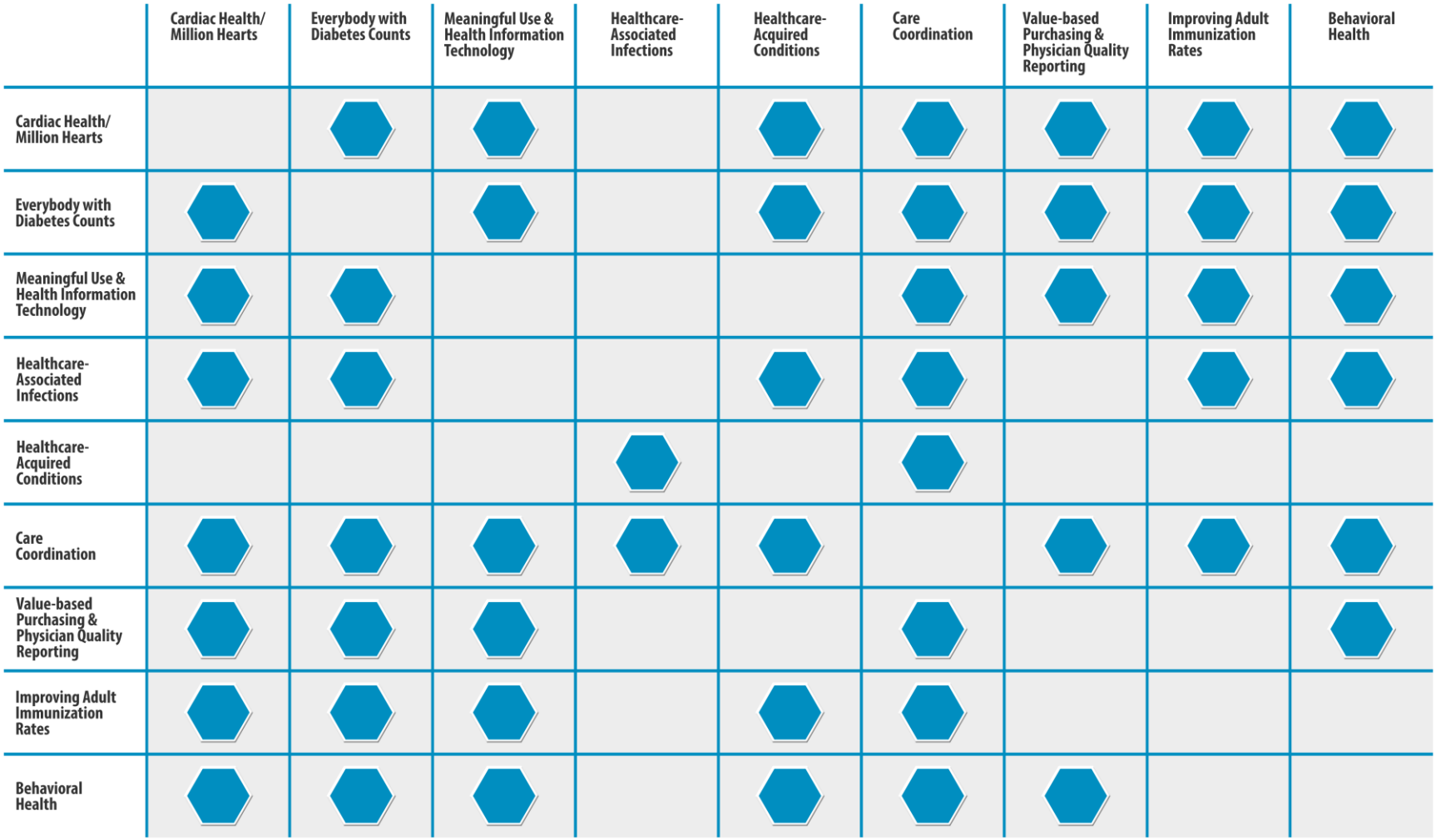
Cross-Tasking



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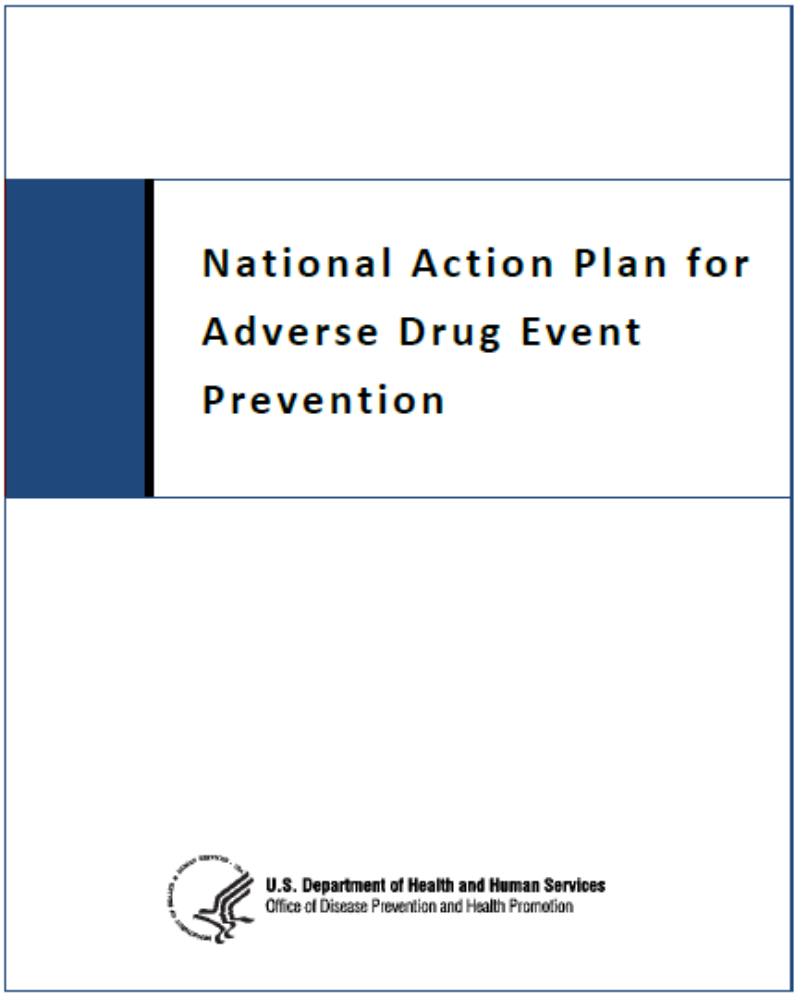
atom Alliance and Medication Safety



NATIONAL QUALITY STRATEGY
Better Care. Healthy People/Healthy Communities. Affordable Care.

http://health.gov/hcq/pdfs/ADE-Action-Plan-508c.pdf
http://www.ahrq.gov/workingforquality/index.html

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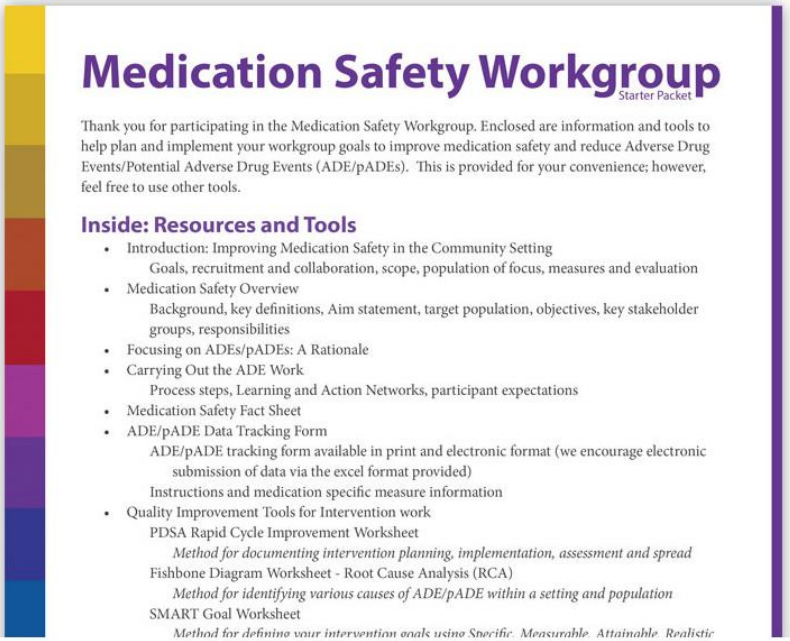
atom Alliance Med Safety Starter Kit



Medication Safety Workgroup

Starter Packet

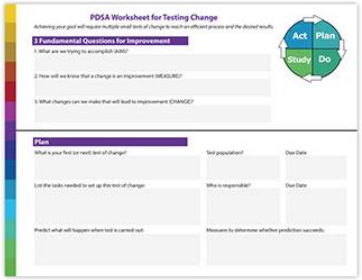
Thank you for participating in the Medication Safety Workgroup. Enclosed are information and tools to help plan and implement your workgroup goals to improve medication safety and reduce Adverse Drug Events/Potential Adverse Drug Events (ADE/pADEs). This is provided for your convenience; however, feel free to use other tools.

Inside: Resources and Tools

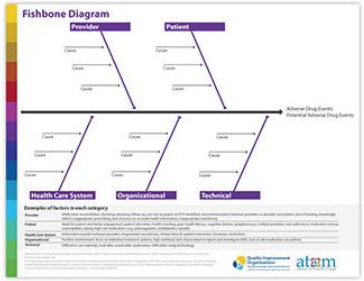
- Introduction: Improving Medication Safety in the Community Setting
  - Goals, recruitment and collaboration, scope, population of focus, measures and evaluation
- Medication Safety Overview
  - Background, key definitions, Aim statement, target population, objectives, key stakeholder groups, responsibilities
- Focusing on ADEs/pADEs: A Rationale
- Carrying Out the ADE Work
  - Process steps, Learning and Action Networks, participant expectations
- Medication Safety Fact Sheet
- ADE/pADE Data Tracking Form
  - ADE/pADE tracking form available in print and electronic format (we encourage electronic submission of data via the excel format provided)
  - Instructions and medication specific measure information
- Quality Improvement Tools for Intervention work
  - PDSA Rapid Cycle Improvement Worksheet
    - *Method for documenting intervention planning, implementation, assessment and spread*
  - Fishbone Diagram Worksheet - Root Cause Analysis (RCA)
    - *Method for identifying various causes of ADE/pADE within a setting and population*
  - SMART Goal Worksheet
    - *Method for defining your intervention goals using Specific, Measurable, Attainable, Realistic*

Download it here:
http://bit.ly/1L3qxqz

SMART GOALS Worksheet



PDSA Worksheet for Testing Change



Fishbone Diagram

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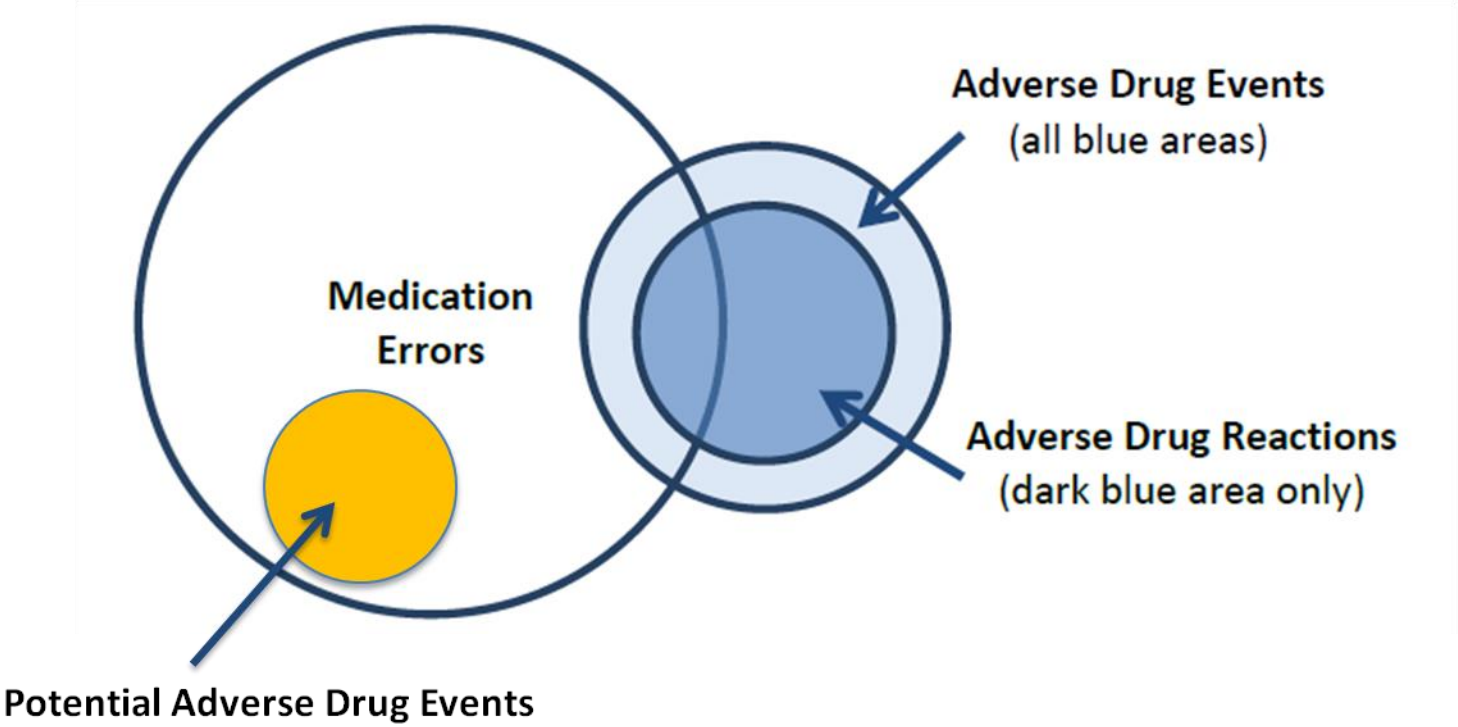
Overall Medication Safety Goals

- Improve patient safety by improving medication safety
- Reduce and prevent ADEs/potential adverse drug events (pADEs)
- Reduce preventable hospital admissions/readmissions associated with ADE/pADEs
- Integrate Medication Therapy Management (MTM)
- Improve health outcomes

Defining ADEs and pADEs



SOURCE: http://health.gov/hcq/pdfs/ADE-Action-Plan-508c.pdf
Ann Intern Med. 2004 May 18;140(10):795-801.

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Defining ADEs and pADEs (cont.)

Term	Definition	Example
Adverse Drug Event (ADE)	INJURY resulting from medical intervention related to a drug. Most are preventable.	Bleeding from Coumadin® overdose
Potential Adverse Drug Event (pADE)	Medication error that could potentially lead to ADE, stopped before harm can occur.	Patient has an order for a medication to which he/she is allergic, order changed before patient takes the medication.
Adverse Drug Reaction (ADR)	Harm directly caused by a drug at usual doses. Causal link between the drug and the harm.	Allergic reaction
Medication Error	Inappropriate use of a drug that may or may not cause harm. Preventable.	Patient receives wrong medication

SOURCE: http://health.gov/hcq/pdfs/ADE-Action-Plan-508c.pdf
Ann Intern Med. 2004 May 18;140(10):795-801

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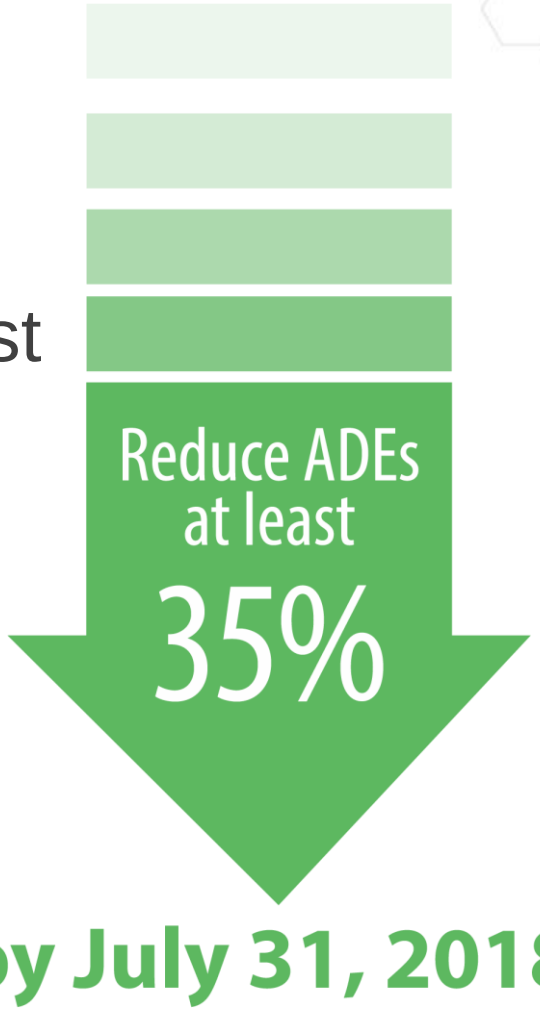
Aim Statement

Reduce ADEs among screened Medicare beneficiaries by at least 35 percent before July 31, 2018.



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Target Population

Medicare beneficiaries

Using three or more medications

One medication must be an anticoagulant, diabetes agent or opioid

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Why Focus on Anticoagulants, Diabetes Agents and Opioids?

ADEs from these medications are

- Common
- Clinically significant
- Measurable
- Preventable

National Action Plan for Adverse Drug Event Prevention
http://health.gov/hcq/pdfs/ADE-Action-Plan-508c.pdf

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Why Focus on Anticoagulants, Diabetes Agents and Opioids? (cont.)

- Anticoagulants—consistently identified as the most common causes of ADEs across healthcare settings
- Diabetes agents—common causes of hypoglycemia across inpatient and outpatient health care settings
- Prescription opioids—related deaths are one of the nation's leading preventable public health problems

National Action Plan for Adverse Drug Event Prevention
http://health.gov/hcq/pdfs/ADE-Action-Plan-508c.pdf

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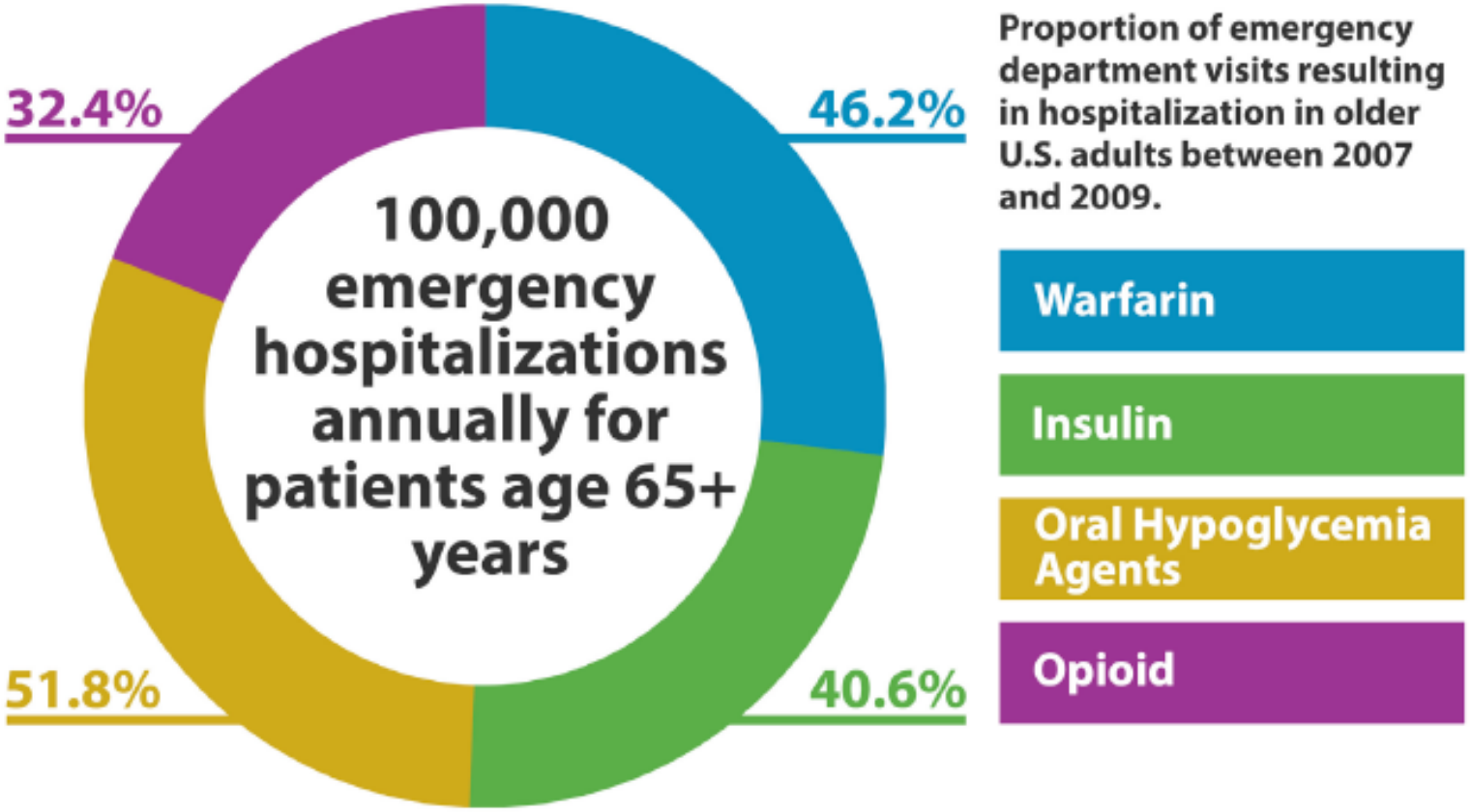
Proportion of Emergency Room Visits



SOURCE: New England Journal of Medicine 2011;365:2002-12.

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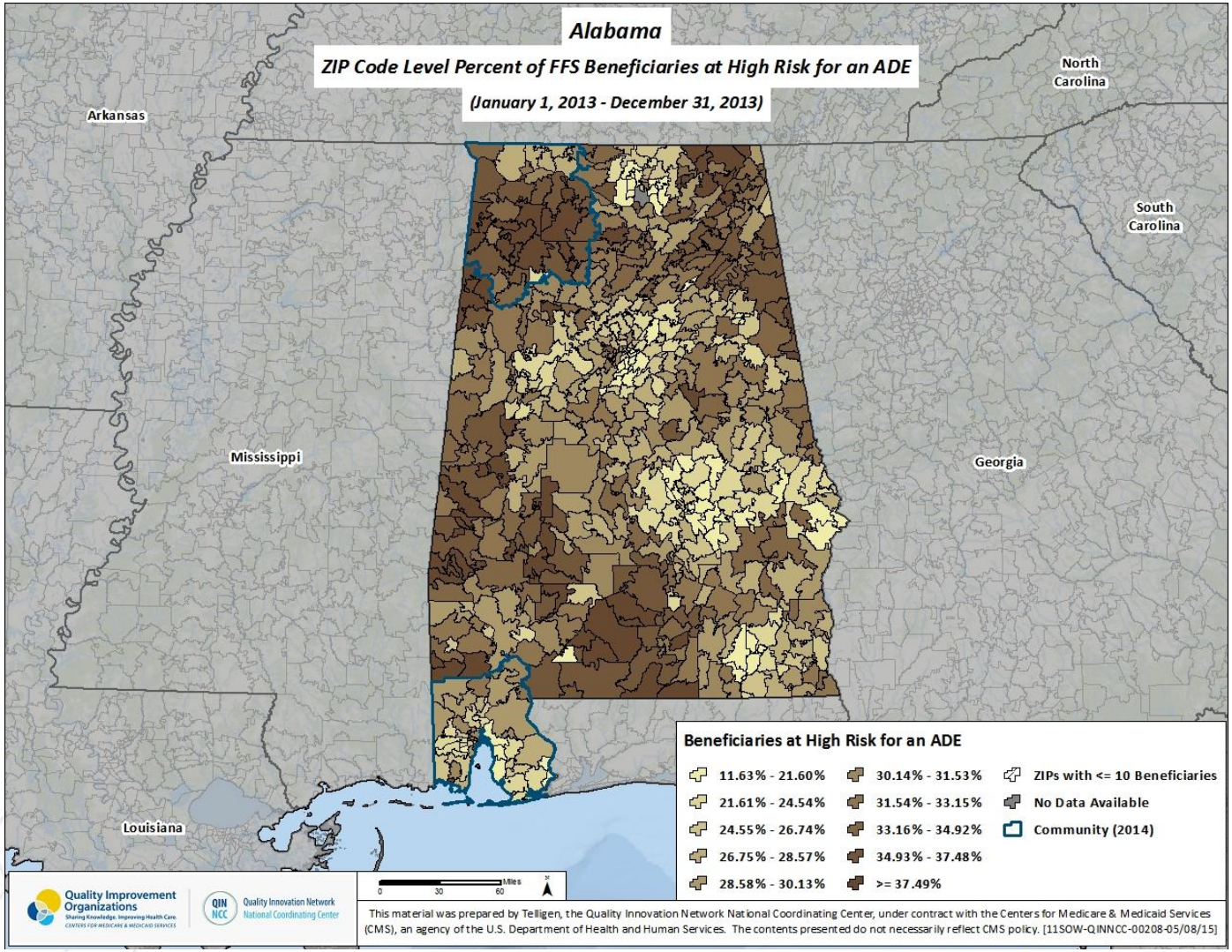
High Risk Beneficiaries: Alabama



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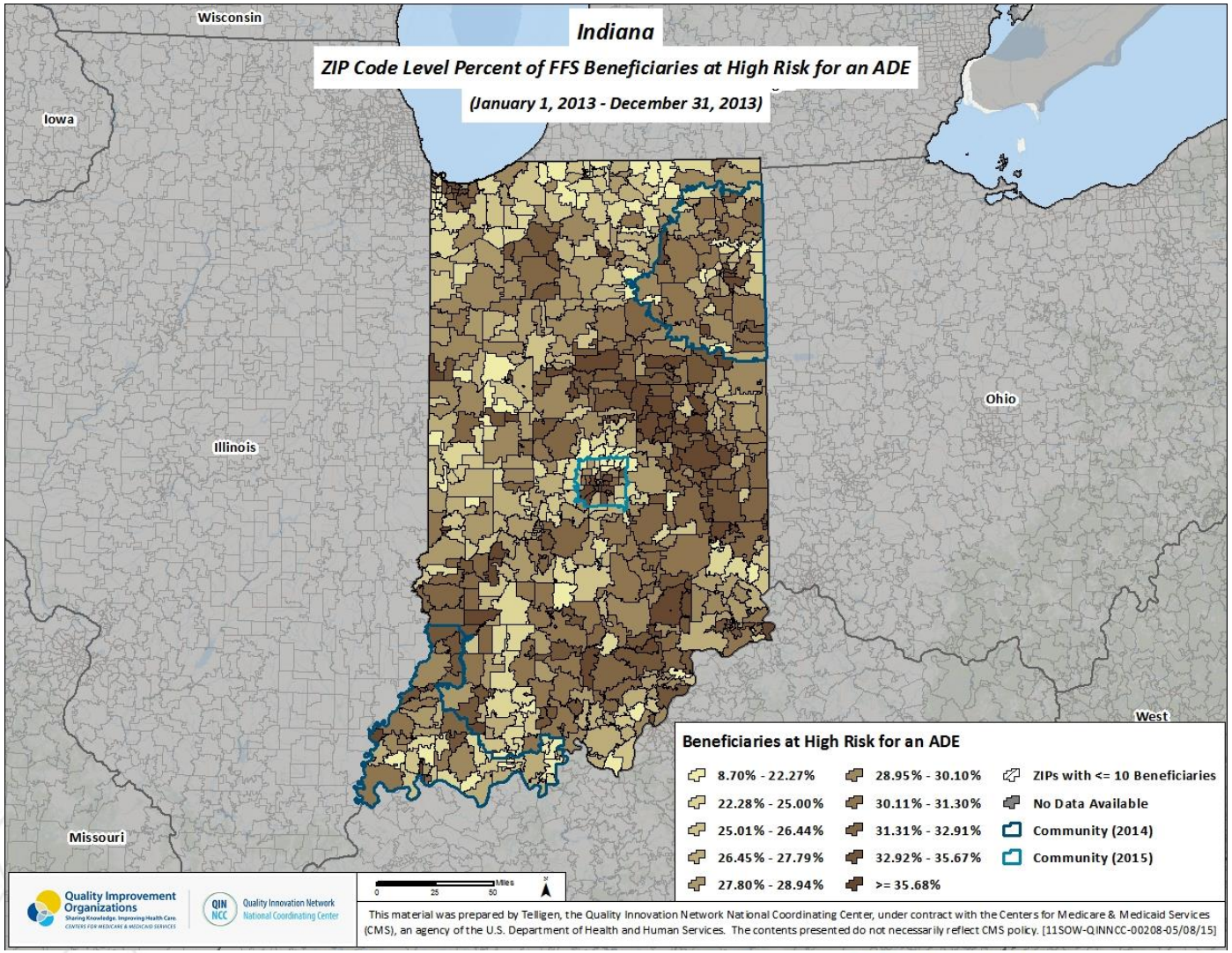
High Risk Beneficiaries: Indiana



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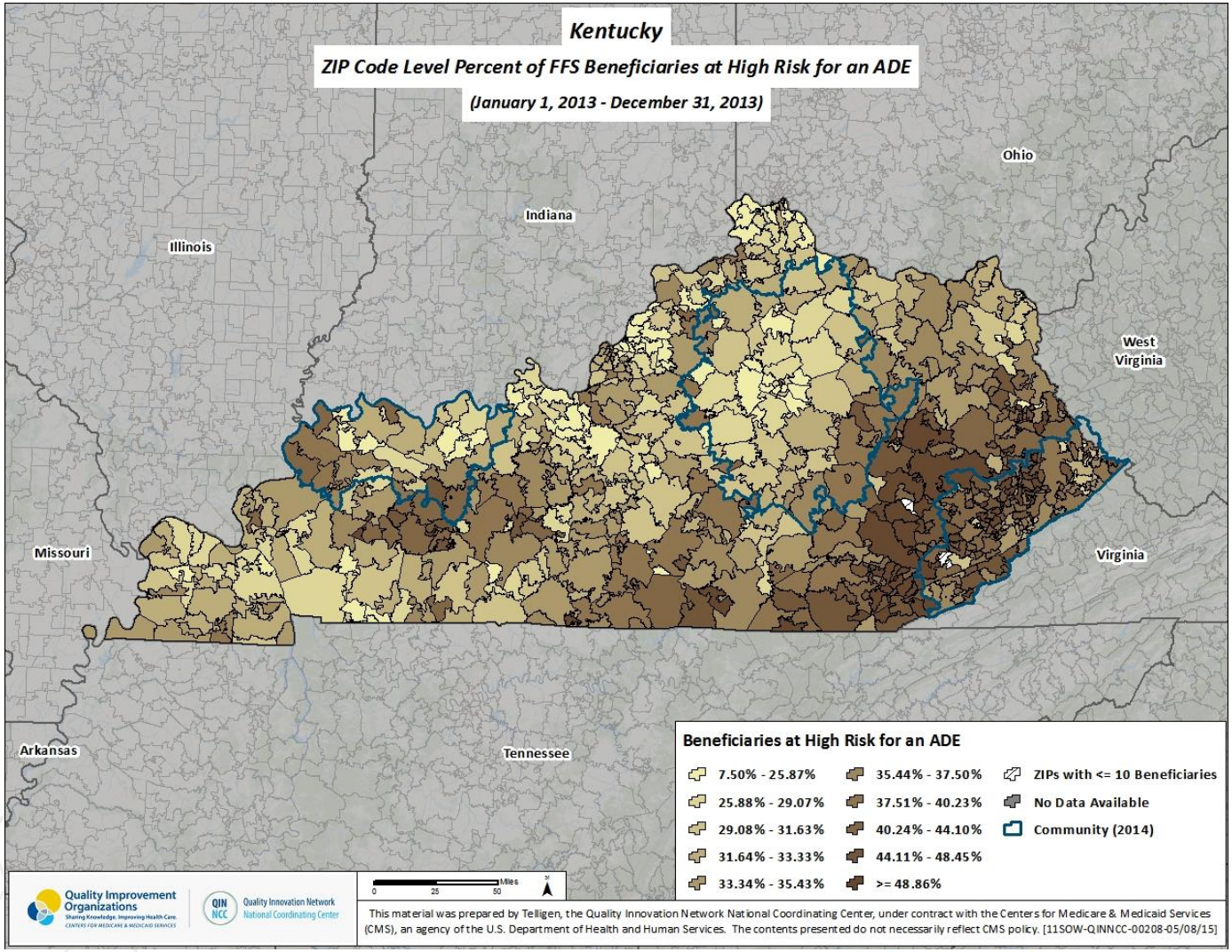
High Risk Beneficiaries: Kentucky



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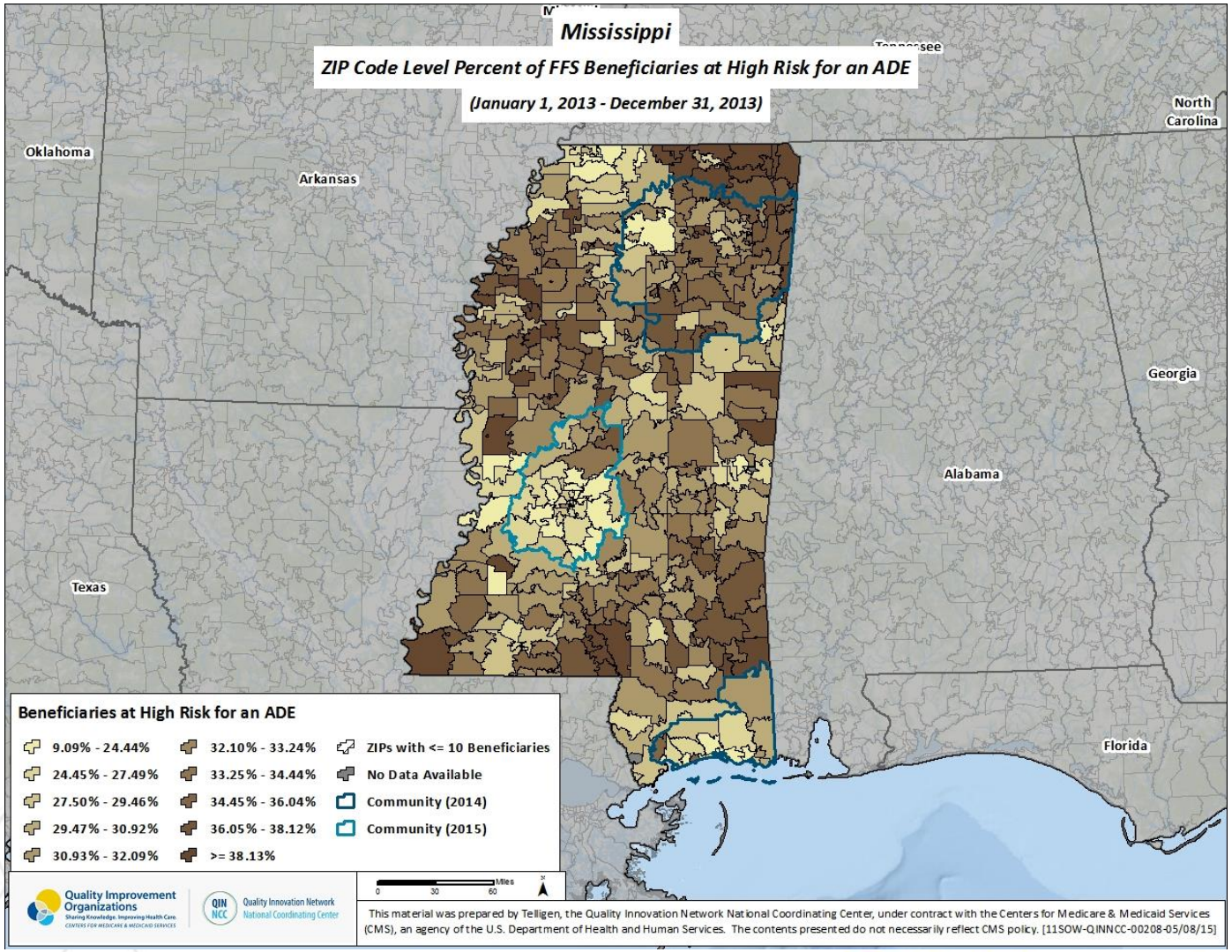
High Risk Beneficiaries: Mississippi



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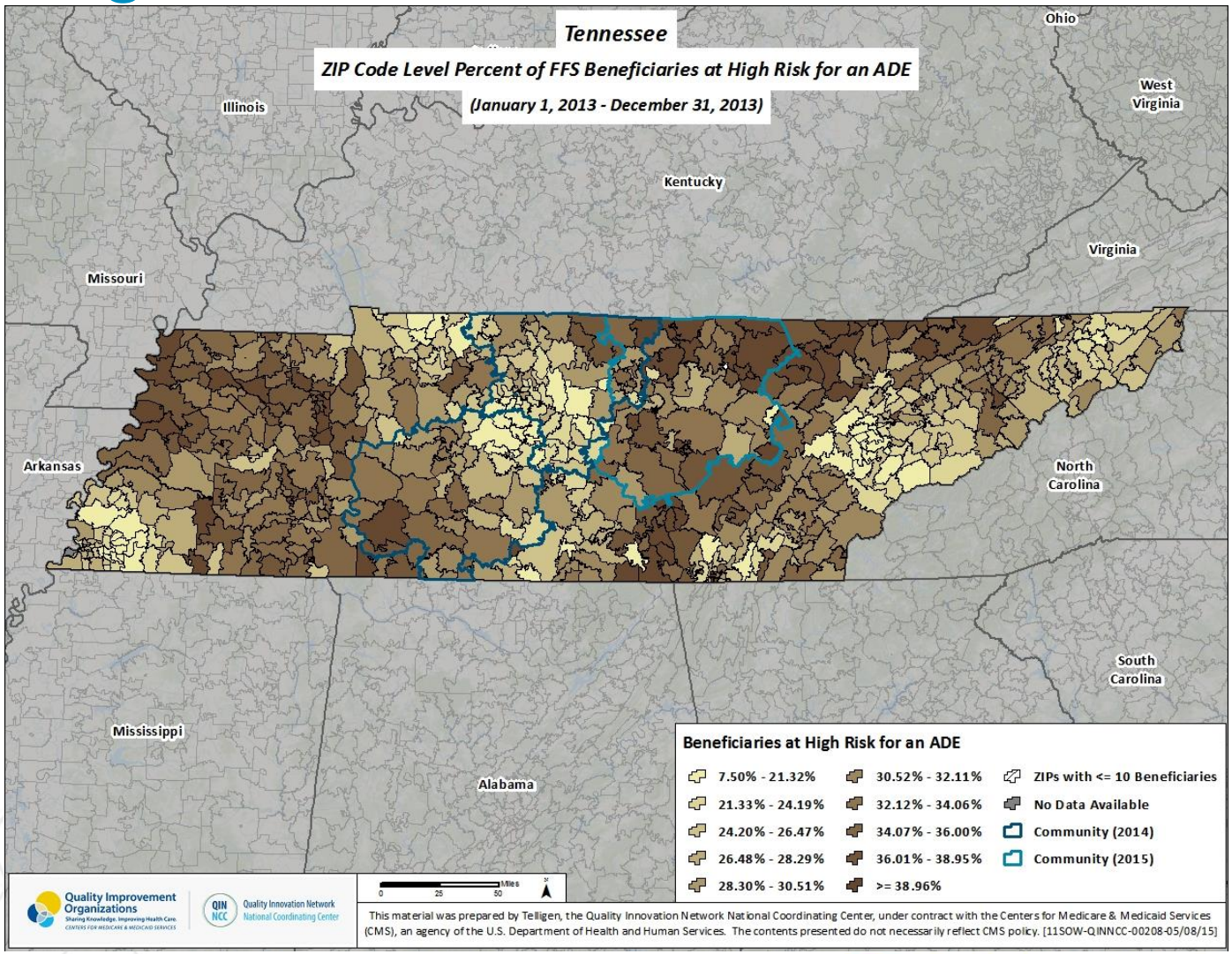
High Risk Beneficiaries: Tennessee



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Who Can Participate?

- Pharmacies including but not limited to
  - Retail
  - Long-term care
  - Hospital
  - Ambulatory care clinics
- Schools of pharmacy
- State and national pharmacy organizations
- Hospitals
- Home health agencies
- Nursing homes
- Medicare beneficiaries and family/caregivers
- Prescribers
- Healthcare payers
- Advocacy and service organizations

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Polling Question

Does your practice site currently track ADEs?

A. Yes, electronically

B. Yes, manually (e.g. post event chart review)

C. Yes, combination or another method

D. Not sure

E. No

Starter Kit

Strategies and Interventions: Data Collection

Adverse Drug Event/Potential Adverse Drug Event (ADE/pADE) Data Tracking Form

PLEASE SEE DIRECTIONS AND DRUG LISTS ON THE "INSTRUCTIONS" TAB BELOW.

Setting Name	Sample Nursing Home	Date	Jul-15
Data Collector's Name	Jane Doe	Email/phone	jane.doe@gmail.com

Our setting is focusing on patients who take

X	Anticoagulants	X	Antidiabetics	X	Opioids

Please indicate the number of patients at your setting that take at least three total medications AND at least one medication from the categories you indicated above.	100	Of those listed at left, **please indicate the number of patients screened** for ADEs and pADEs during this reporting period.	50

ADEs
identified during this reporting period

	Drug associated with ADE (can be any drug the patient is taking)	Type of injury (e.g. GI bleed, hypoglycemia, respiratory depression)	ADE associated with hospital readmission? (Y/N)
ADE 1	Warfarin	Intracranial hemorrhage	Y
ADE 2	Humalog	Hypoglycemia	N
ADE 3	Morphine	Oversedation	N
ADE 4	Penicillin	Rash	N
ADE 5			
ADE 6			

pADEs
identified during this reporting period

	Drug associated with pADE (can be any drug the patient is taking)
pADE 1	Glyburide
pADE 2	Xarelto
pADE 3	Oxycodone
pADE 4	Lisinopril
pADE 5	
pADE 6	

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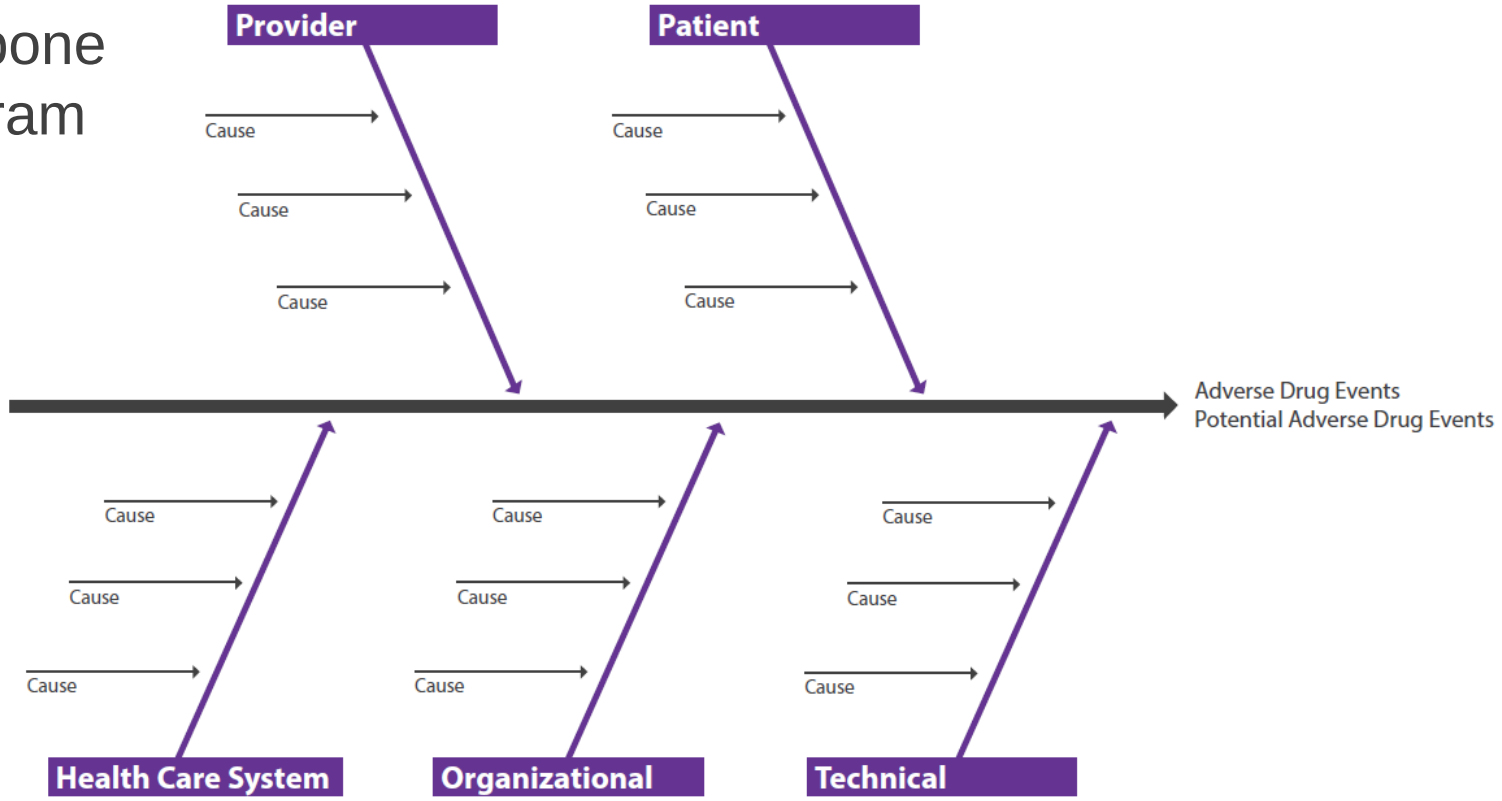
Strategies and Interventions: Quality Improvement Tools

Fishbone Diagram



National Action Plan for Adverse Drug Event Prevention
http://health.gov/hcq/pdfs/ADE-Action-Plan-508c.pdf

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Strategies and Interventions: Quality Improvement Tools *(cont.)*

Plan-Do-Study-Act (PDSA) cycle

Pharmacist Perspective

Michael W. Napp, R.Ph., CGP, FASCP
Consultant Pharmacist
Senior Care Pharmaceutical Services
Alabama

Pharmacist Perspective

Jennifer Tatum-Cranford, PharmD,
Owner, Payless Family Pharmacy,
Sparta, Tenn.

Coming Soon: Medication Safety Toolkit

- Evidence-based or proven best practice ADE prevention strategies to reduce and prevent ADEs
- Overall medication safety and specific resources for anticoagulants, diabetic agents and opioids
- Easy application in different care settings
- Easy implementation for rapid adoption and testing
- Best practices for medication reconciliation and MTM applicable to the community
- Measurable and achievable improvement goals

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Next Steps

- Join your local care coordination community

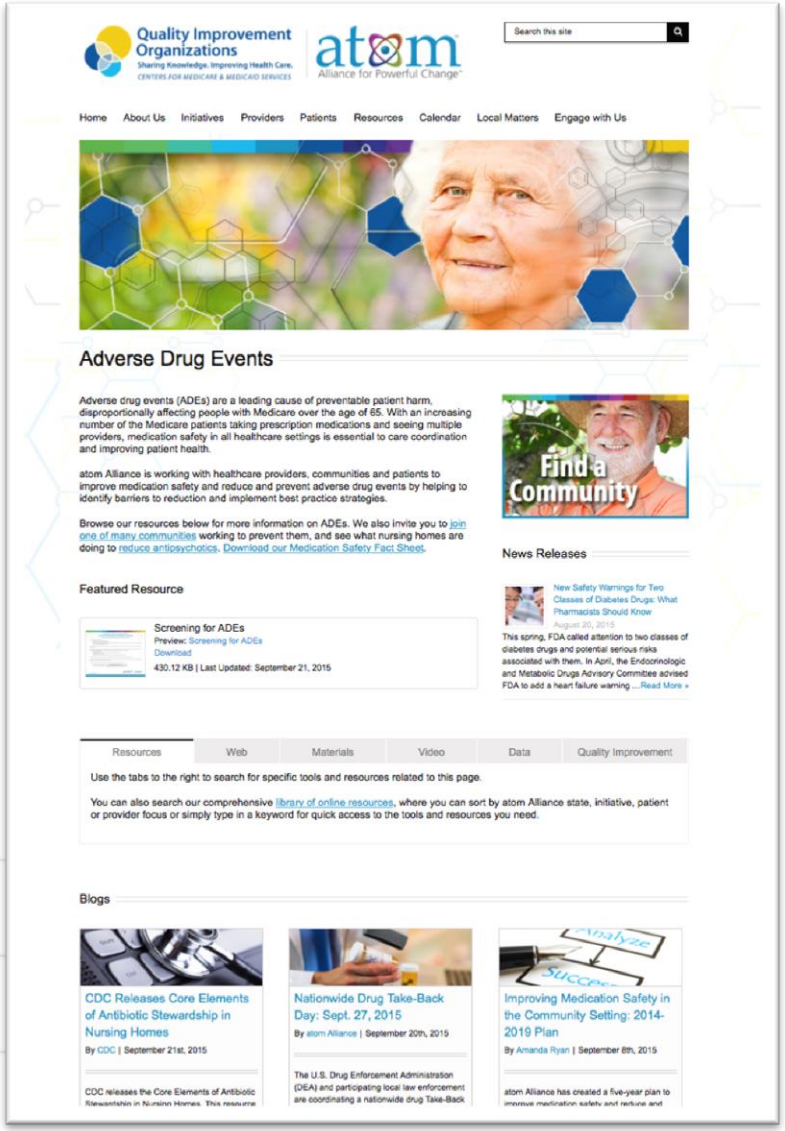
  Find yours at

  http://atomalliance.org/interactive-communities-map/
- Talk with your local atom Alliance contact to see how we can support your medication safety efforts
- Join our multi-state advisory board

Key Takeaways: Please Share in Chat

- What is one thing you learned today?
- What is one new or different step you can take to improve medication safety?

Learn More



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