Improving Patient Safety and Readmission Reduction Through Medication Reconciliation

Presented by:
Swati Gaur, MD, MBA, CMD, AGSF

November 14, 2023

ALLIANT HEALTH SOLUTIONS
QIN–QIO
Quality Innovation Network - Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP

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MEDICAL DIRECTOR, POST-ACUTE CARE
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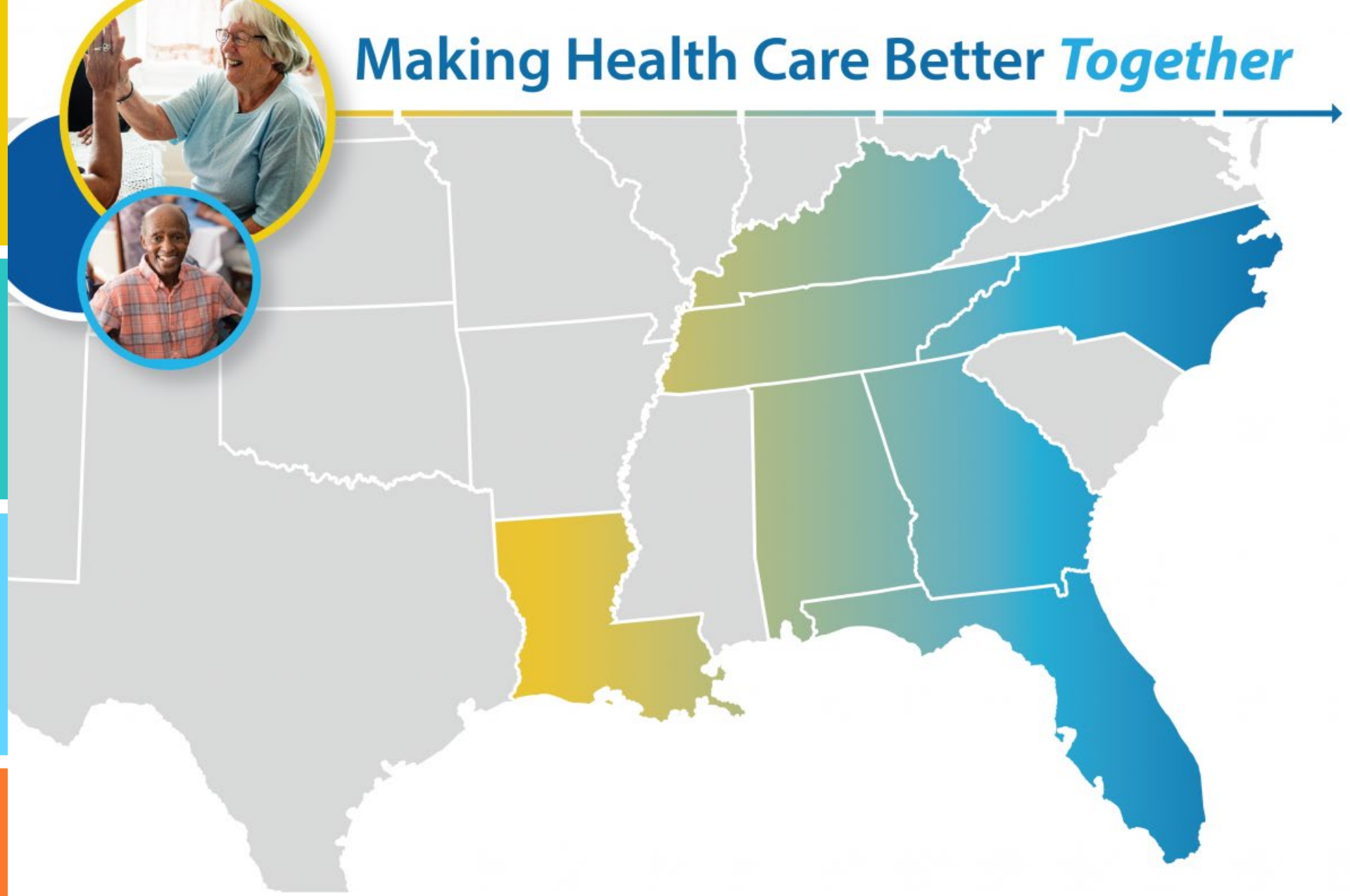
Dr. Swati Gaur is the medical director of New Horizons Nursing Facilities with the Northeast Georgia Health System. She is also the CEO of Care Advances Through Technology, a technology innovation company. In addition, she is on the EMR transition and implementation team for the health system, providing direction to EMR entity adapt to the LTC environment.

Dr. Gaur has also consulted with post-acute long-term care companies to optimize medical services in PALTC facilities, integrate medical directors and clinicians into the QAPI framework and create frameworks of interdisciplinary work in the organization.

Dr. Gaur established the palliative care service line at the Northeast Georgia Health System. She also is an attending physician in several nursing facilities. Prior to that, Dr. Gaur was a medical director at the LTC in Carl Vinson VA Medical Center and a member of the G&EC for VISN 7.



About Alliant Health Solutions

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Learning Objectives

- ✓ Describe the prevalence of potential medication errors during transitions of care and the need for a medication reconciliation process.
- ✓ Evaluate how thorough medication reconciliation processes involve the interdisciplinary team.
- ✓ Discuss the importance of the resident voice in the discussion of deprescribing during medication reconciliation.
- ✓ Learn how to access available resources and support for medication reconciliation.

The Story of Mrs. TOC

- 65-year-old PMH of CVA with right-sided residual weakness, aphasic, mostly bedbound, gastric cancer s/p subtotal gastrectomy, insulin-dependent type 2 diabetic, seizure disorder, HTN, GERD, hyperlipidemia, CAD brought to the ED by sister which she lives with because of patient having frequent falls and hypoglycemia.

- ED: patient's vital signs WNL, WBC 14.9 UA negative for UTI, CT brain without contrast, no acute pathology, CT pelvis without contrast, no acute pathology, EKG NSR, cannot rule out anterior infarct, age undetermined. Initially, glucose 20s at presentation, which jumped to 100s after treatment. Abscess of the left third digit: minor abscess of the left third digit on 2/15. She was started on cephalexin with noted symptomatic improvement, I &D on 2/16/2023. No signs of continued infection. Trf. to LTC on 2/21.

- Meds on discharge:
  - Alprazolam .5mg daily
  - Amitriptyline 25mg nightly
  - Amlodipine 10mg daily
  - ASA
  - Cephalexin 500mg 4 times a day for 7 days
  - Clopidogrel 75mg daily
  - Gabapentin 300mg three times a day
  - Hydrocodone –APAP 10mg daily
  - Detemir insulin 10U twice a day
  - Levetiracetam 1000mg twice a day
  - Losartan 50 mg daily
  - Methocarbamol 500mg three times a day as needed
  - Polyethylene glycol 17gm daily
  - Pravastatin 40 mg daily
  - Sitagliptin 50 mg daily
  - Topiramate 25 mg twice daily

Hospital discharge: It's one of the most dangerous periods for patients

Process of Transition

Discharge instructions

Faxed/accessed by LTC admissions team

Faxed/sent to LTC pharmacy

Patient arrives/meds arrive

- Assessed by MD
  Per reg within 30 days
- Meds assessed by consultant pharmacist within 30 days of admission

Meds on Discharge

- Alprazolam .5mg daily
- Amitriptyline 25mg nightly
- Amlodipine 10mg daily
- ASA
- Cephalexin 500mg 4 times a day for 7 days
- Pantoprazole 40 mg daily
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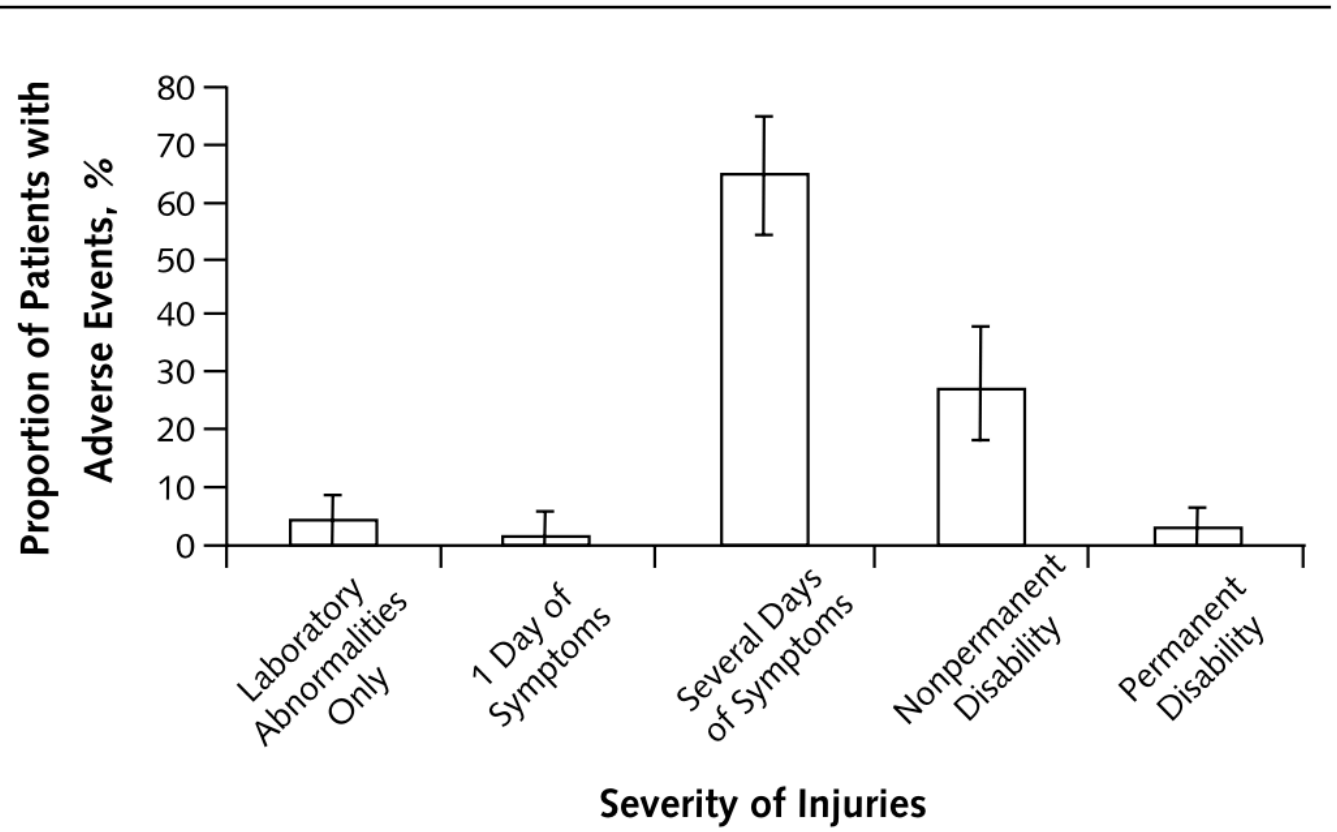
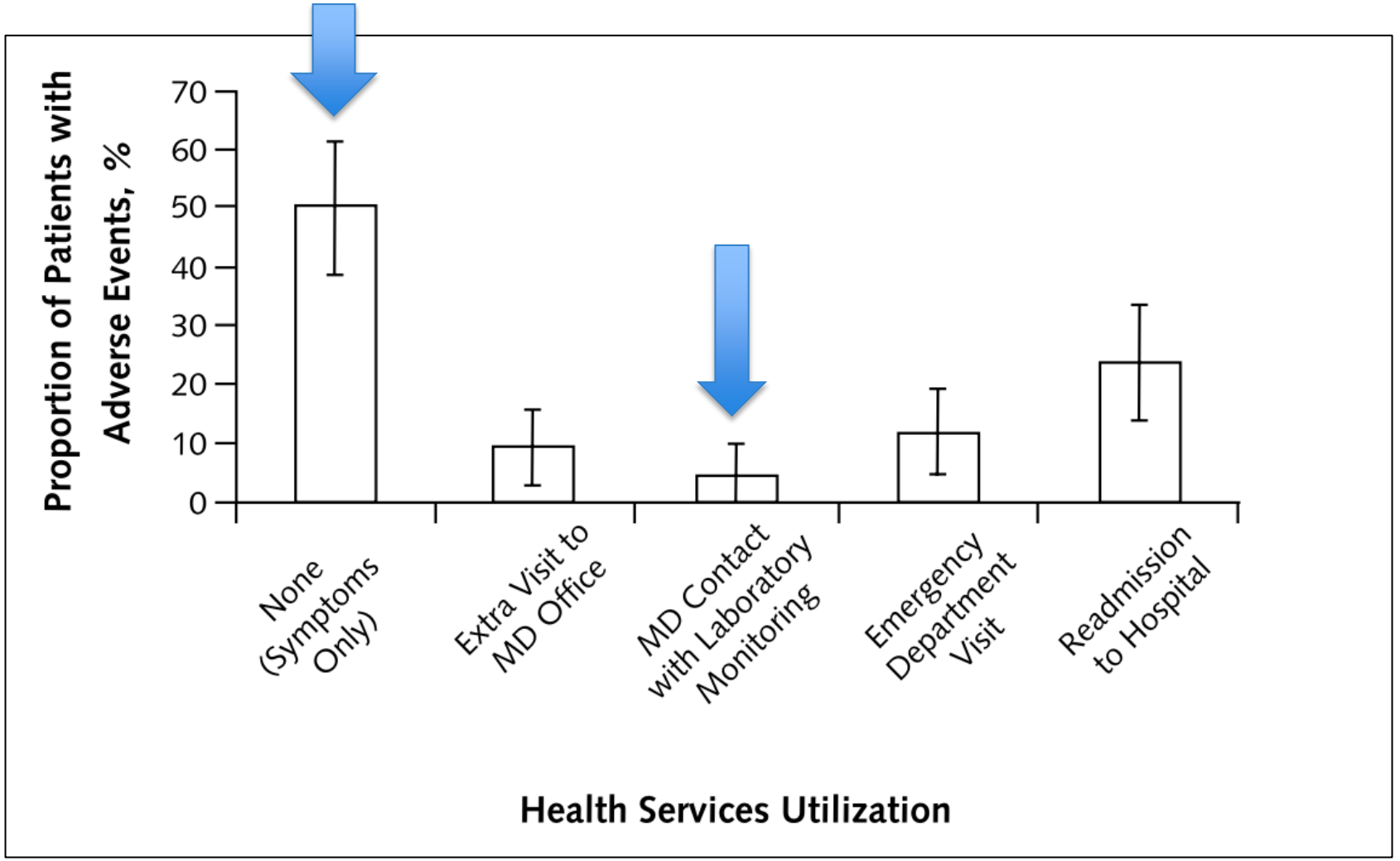
- Losartan 50 mg daily
- Methocarbamol 500mg three times a day as needed
- Polyethylene glycol 17gm daily
- Pravastatin 40 mg daily
- Sitagliptin 50 mg daily
- Topiramate 25 mg twice daily

The Prevalence of Potential Medication Errors During Transitions of Care

Figure. **Severity of injuries and health service utilization in patients with adverse events.**

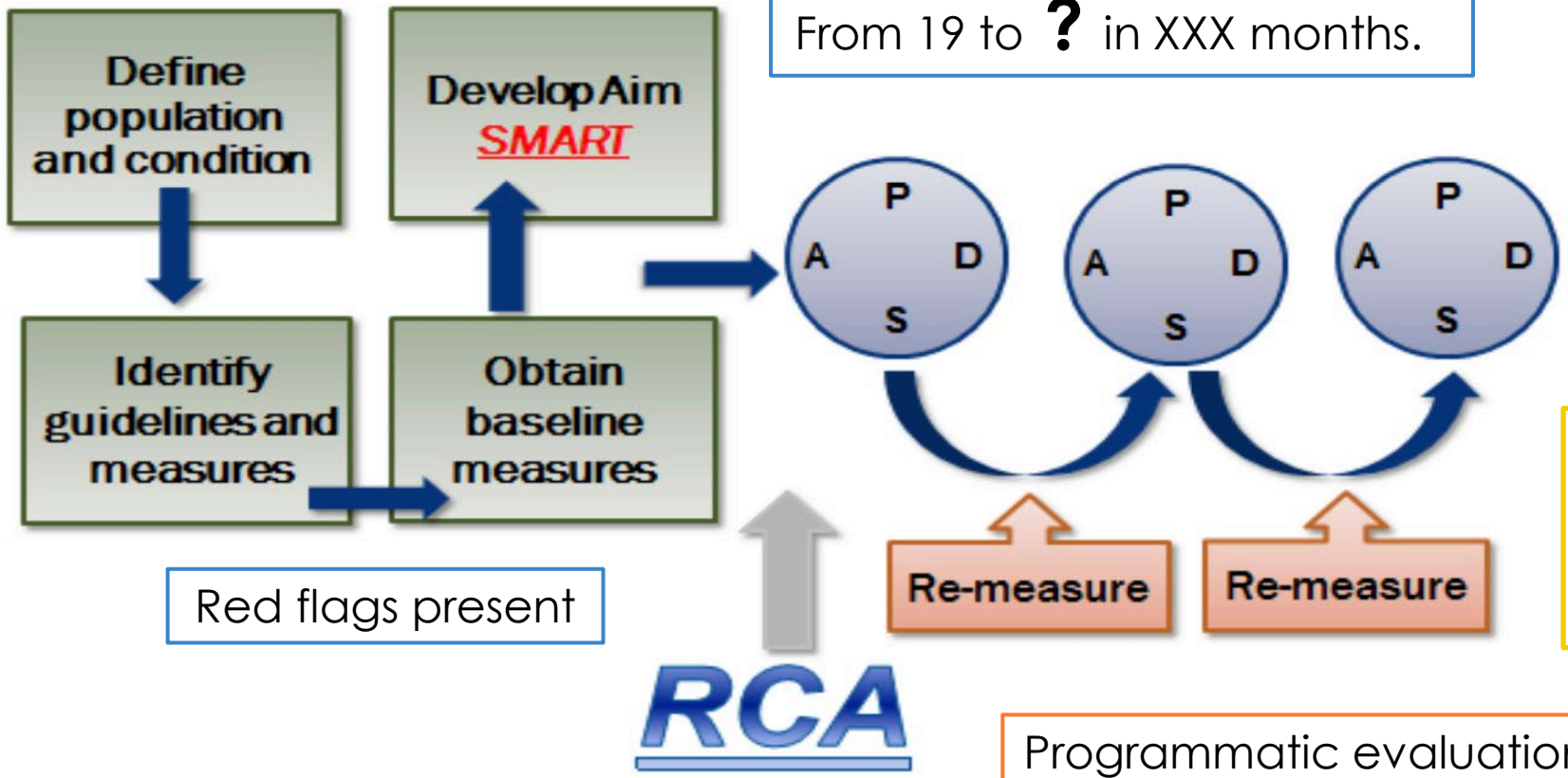


Health Services Utilization in Patients With Adverse Events



Project Flow

All admissions



From 19 to ? in XXX months.

Finetune your admission checklist

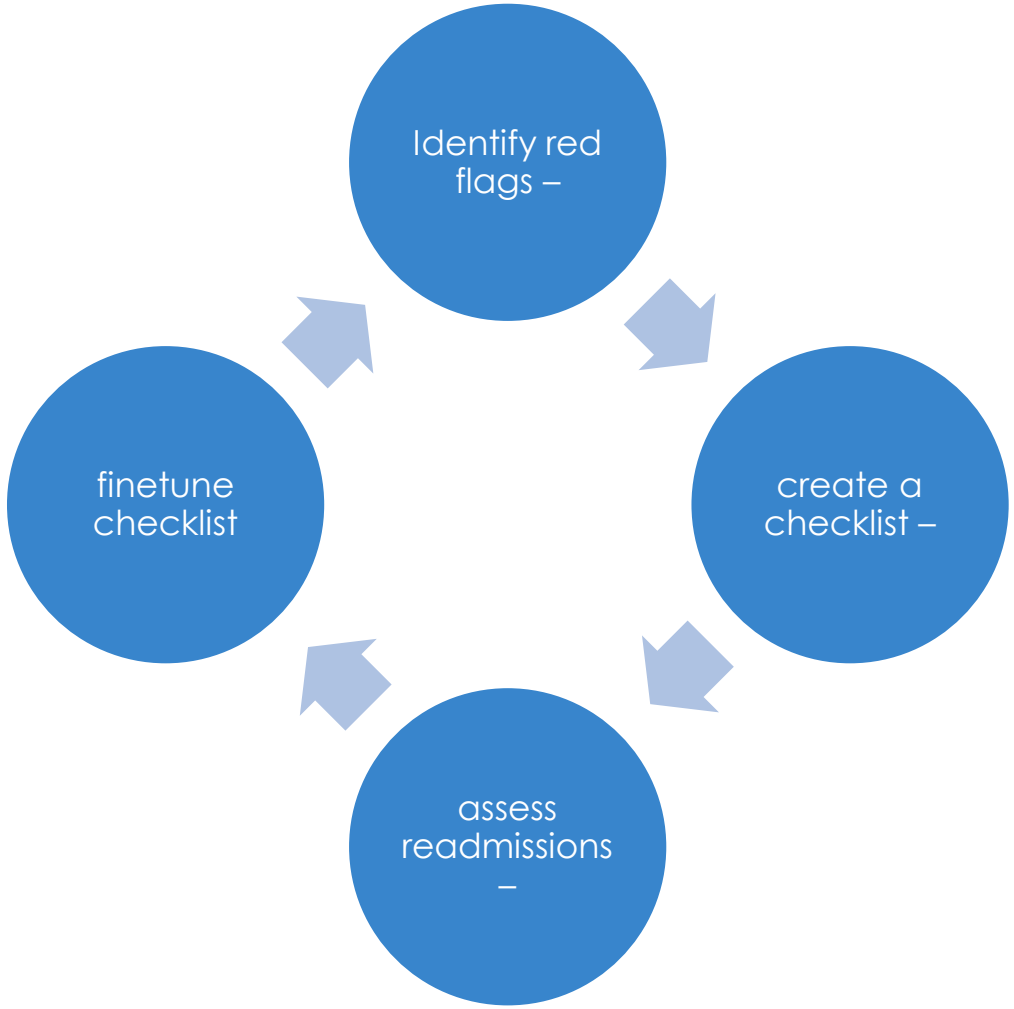
Hospital and Emergency Department admissions

Red flags present

Programmatic evaluation
Clinical evaluation

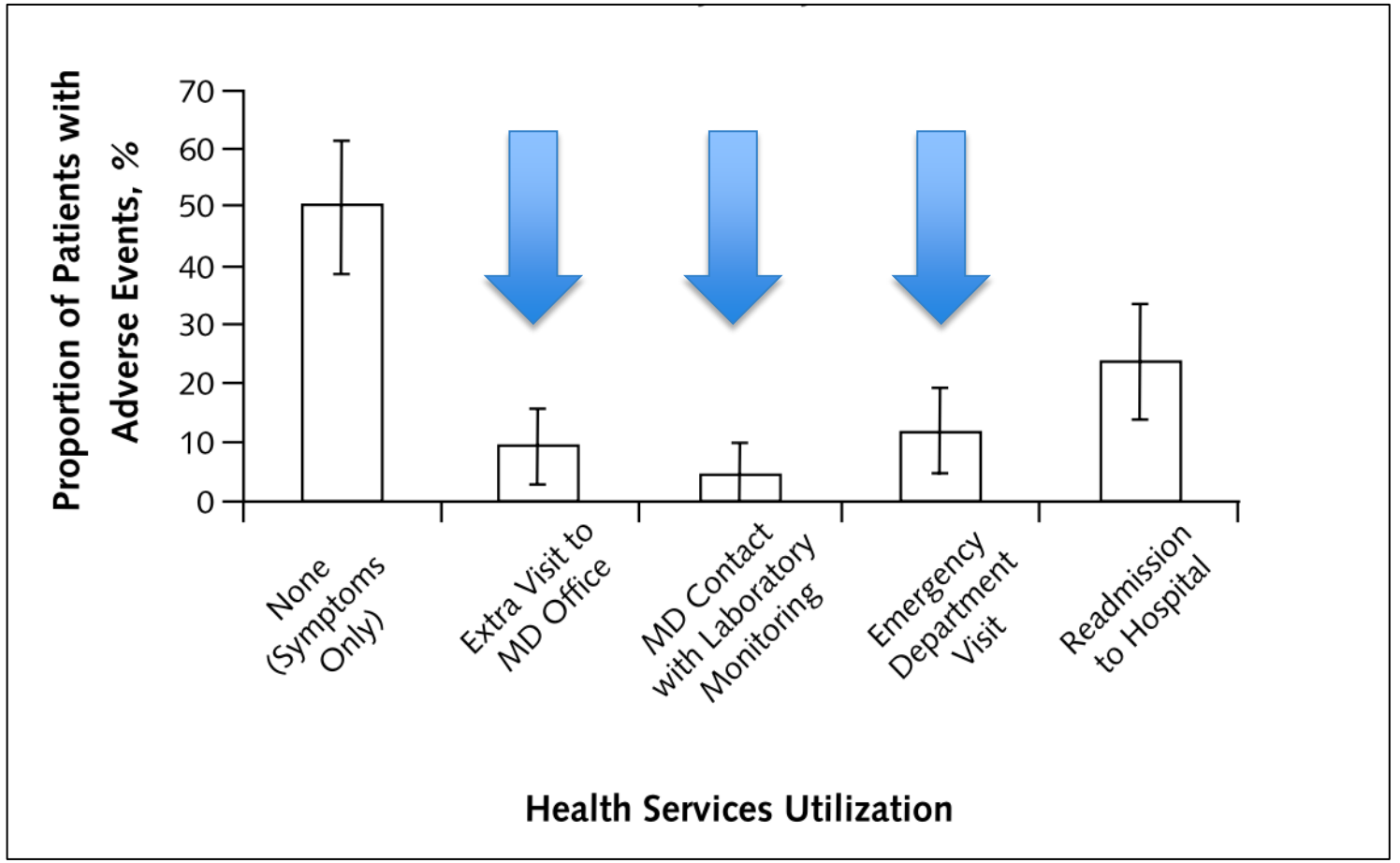
https://quality.allianthealth.org/wp-content/uploads/2020/02/QI-Workbook-Final-Version_2.pdf

Creating an Admission Team



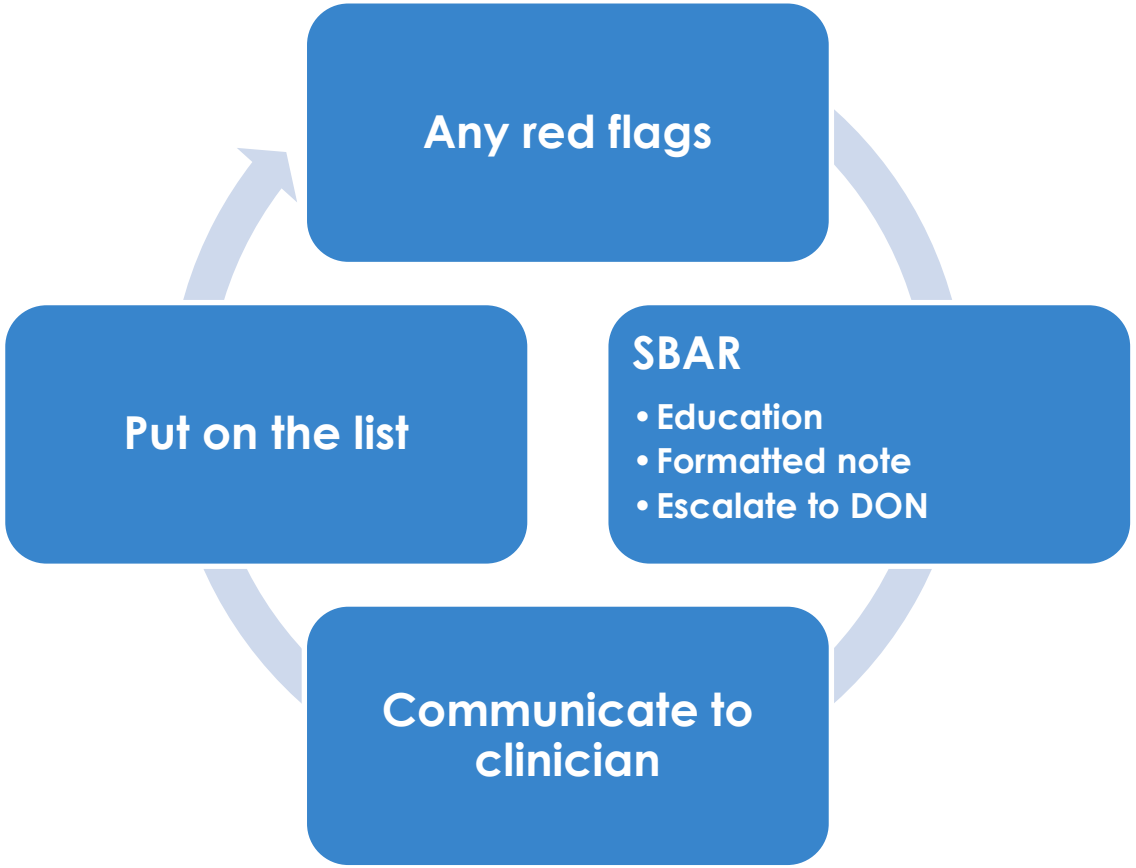
- Admission coordinator needs to be a part of the readmission team
- Nursing leadership caring for the residents
- DON
- Escalate to a clinician
  - –Can we safely provide clinical care?
  - –Collaboration with discharging physician

Health Services Utilization in Patients With Adverse Events



Interventions

Creating communication:



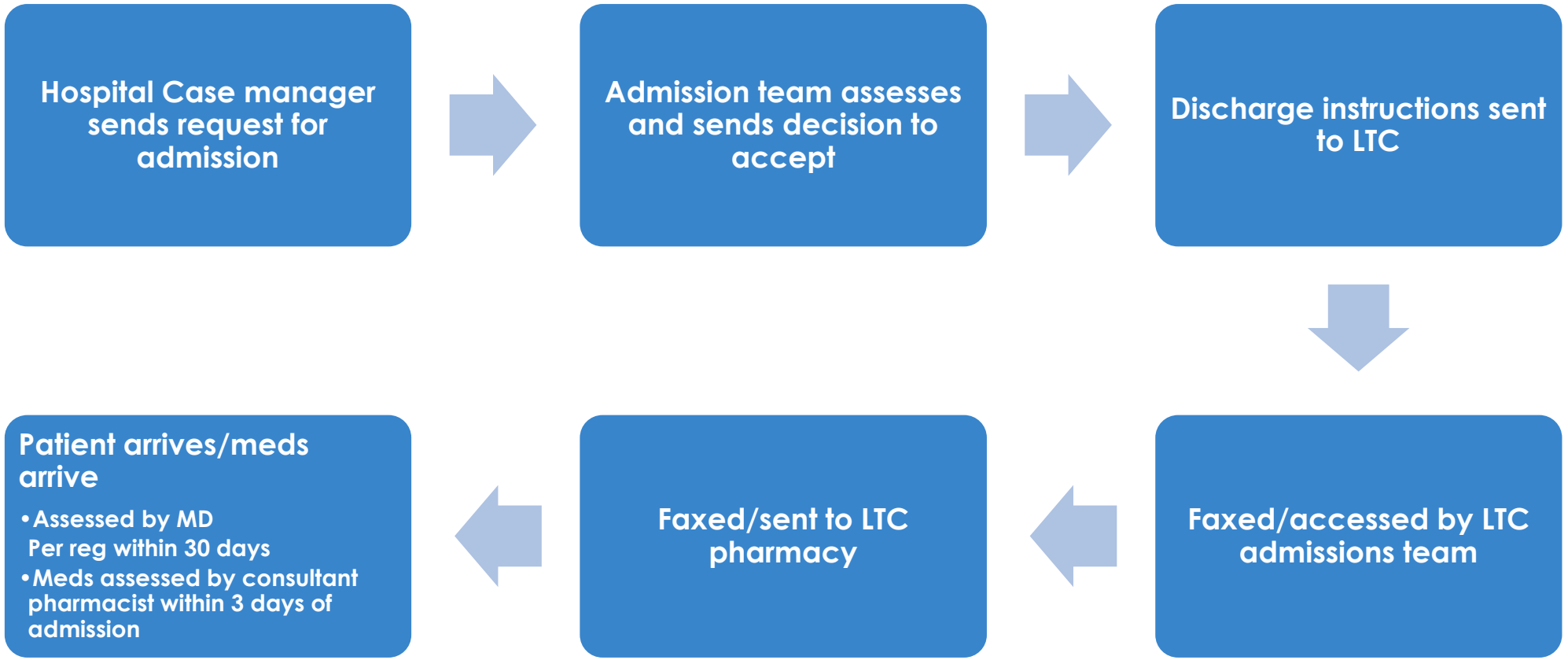
Creating capabilities:

Capability of stat labs

More frequent assessment

Medication Reconciliation Processes Involve the Interdisciplinary Team

Process of Transition



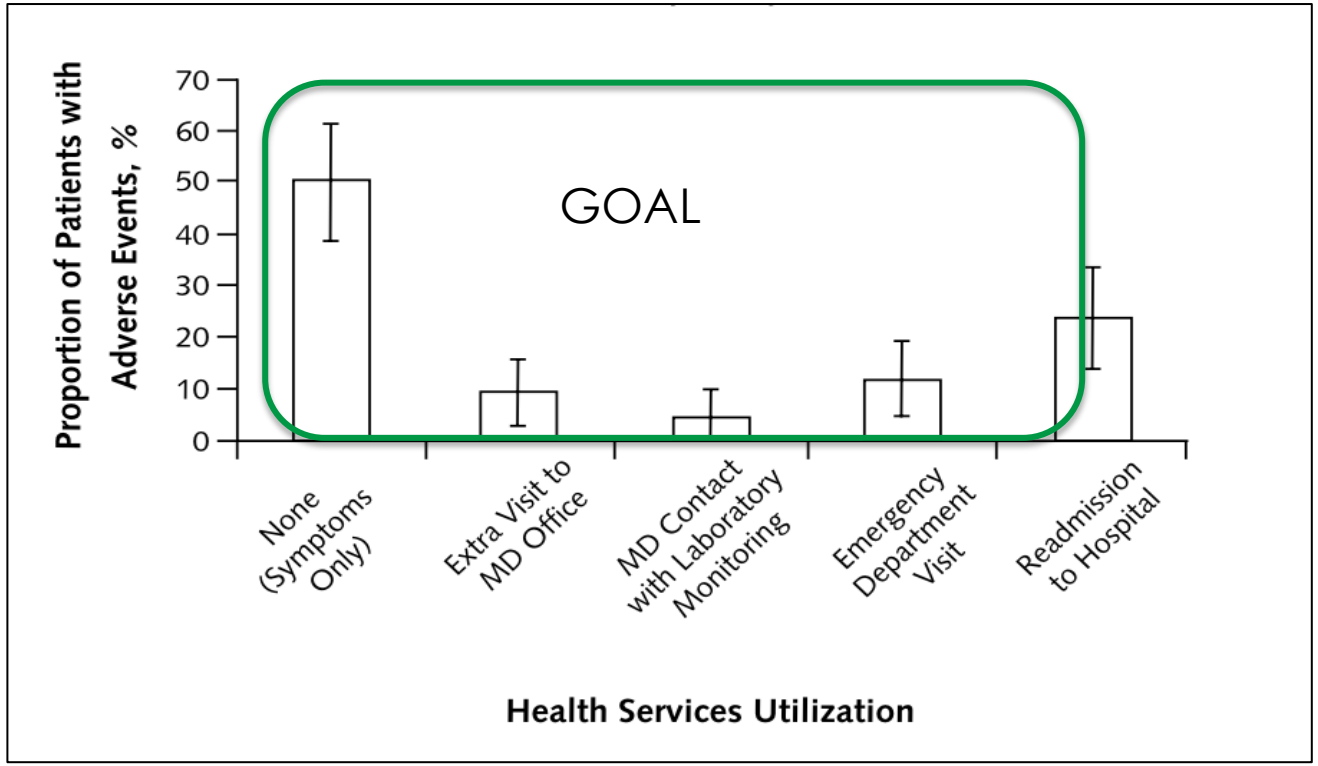
Process of Transition

Hospital Case manager sends request for admission	• Meet and educate
Admission team assesses and sends decision to accept	• Checklist of red flags • Process of escalation
Discharge instructions sent to LTC	• Is this happening?
Faxed/accessed by LTC admissions team	• Who gets this? • Create an interdisciplinary team – Admitting nurse, consultant Pharmacist, Medical director
Faxed/sent to LTC pharmacy	
Patient arrives/meds arrive	• Telehealth if prior to weekend

Annals of Internal Medicine | ARTICLE

The Incidence and Severity of Adverse Events Affecting Patients after Discharge from the Hospital

Alan J. Forster, MD, FRCPC, MSc; Harvey J. Murff, MD; Josh F. Peterson, MD; Tejal K. Gandhi, MD, MPH; and David W. Bates, MD, MSc



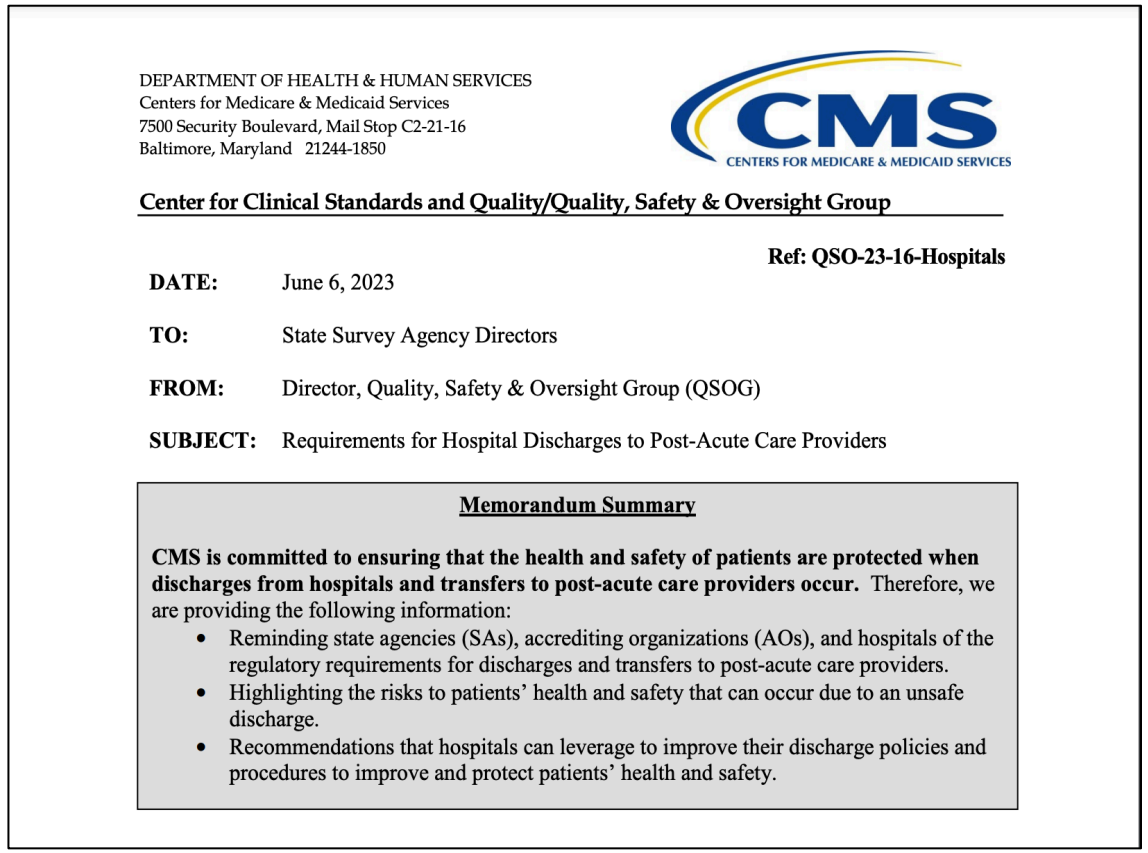
66% med error

3% lab errors

Who is your team?

What are your capabilities?

Finding Common Ground



DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
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CMS CENTERS FOR MEDICARE & MEDICAID SERVICES

Center for Clinical Standards and Quality/Quality, Safety & Oversight Group

Ref: QSO-23-16-Hospitals

DATE: June 6, 2023

TO: State Survey Agency Directors

FROM: Director, Quality, Safety & Oversight Group (QSOG)

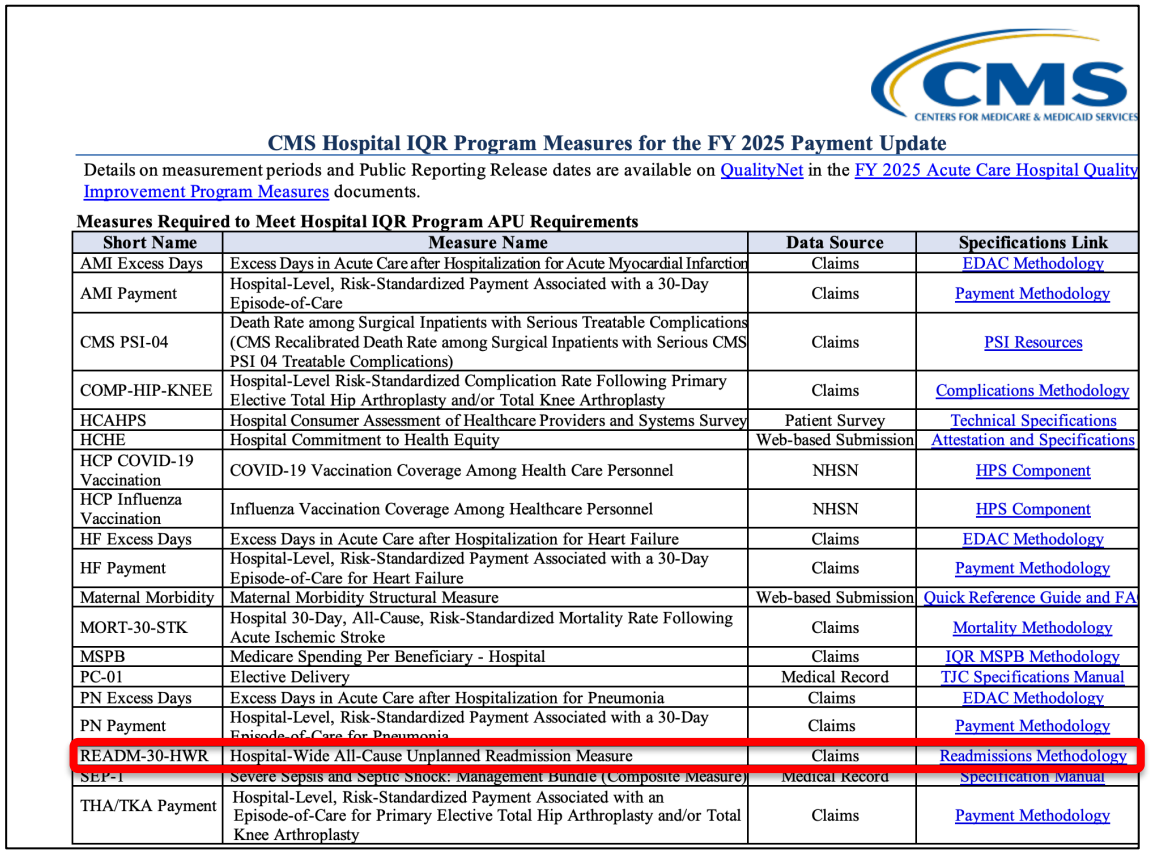
SUBJECT: Requirements for Hospital Discharges to Post-Acute Care Providers

Memorandum Summary

CMS is committed to ensuring that the health and safety of patients are protected when discharges from hospitals and transfers to post-acute care providers occur. Therefore, we are providing the following information:

- Reminding state agencies (SAs), accrediting organizations (AOs), and hospitals of the regulatory requirements for discharges and transfers to post-acute care providers.
- Highlighting the risks to patients' health and safety that can occur due to an unsafe discharge.
- Recommendations that hospitals can leverage to improve their discharge policies and procedures to improve and protect patients' health and safety.

https://www.cms.gov/files/document/qso-23-16-hospitals.pdf



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CMS Hospital IQR Program Measures for the FY 2025 Payment Update

Details on measurement periods and Public Reporting Release dates are available on QualityNet in the FY 2025 Acute Care Hospital Quality Improvement Program Measures documents.

Measures Required to Meet Hospital IQR Program APU Requirements

Short Name	Measure Name	Data Source	Specifications Link
AMI Excess Days	Excess Days in Acute Care after Hospitalization for Acute Myocardial Infarction	Claims	EDAC Methodology
AMI Payment	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care	Claims	Payment Methodology
CMS PSI-04	Death Rate among Surgical Inpatients with Serious Treatable Complications (CMS Recalibrated Death Rate among Surgical Inpatients with Serious CMS PSI 04 Treatable Complications)	Claims	PSI Resources
COMP-HIP-KNEE	Hospital-Level Risk-Standardized Complication Rate Following Primary Elective Total Hip Arthroplasty and/or Total Knee Arthroplasty	Claims	Complications Methodology
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems Survey	Patient Survey	Technical Specifications
HCHE	Hospital Commitment to Health Equity	Web-based Submission	Attestation and Specifications
HCP COVID-19 Vaccination	COVID-19 Vaccination Coverage Among Health Care Personnel	NHSN	HPS Component
HCP Influenza Vaccination	Influenza Vaccination Coverage Among Healthcare Personnel	NHSN	HPS Component
HF Excess Days	Excess Days in Acute Care after Hospitalization for Heart Failure	Claims	EDAC Methodology
HF Payment	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care for Heart Failure	Claims	Payment Methodology
Maternal Morbidity	Maternal Morbidity Structural Measure	Web-based Submission	Quick Reference Guide and FA
MORT-30-STK	Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Acute Ischemic Stroke	Claims	Mortality Methodology
MSPB	Medicare Spending Per Beneficiary - Hospital	Claims	IQR MSPB Methodology
PC-01	Elective Delivery	Medical Record	TJC Specifications Manual
PN Excess Days	Excess Days in Acute Care after Hospitalization for Pneumonia	Claims	EDAC Methodology
PN Payment	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care for Pneumonia	Claims	Payment Methodology
READM-30-HWR	Hospital-Wide All-Cause Unplanned Readmission Measure	Claims	Readmissions Methodology
SEP-1	Severe Sepsis and Septic Shock: Management Bundle (Composite Measure)	Medical Record	Specification Manual
THA/TKA Payment	Hospital-Level, Risk-Standardized Payment Associated with an Episode-of-Care for Primary Elective Total Hip Arthroplasty and/or Total Knee Arthroplasty	Claims	Payment Methodology

https://qualitynet.cms.gov/files/64c7deff2292b9001c243333?filename=IQR_FY25_CMS_Meas_Directory.pdf

Meds on Discharge

- Alprazolam .5mg daily
- Amitriptyline 25mg nightly
- Gabapentin 300mg three times a day
- Methocarbamol 500mg three times a day as needed
- Hydrocodone –APAP 10mg daily
- Levetiracetam 1000mg twice a day
- Topiramate 25 mg twice daily
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- Pantoprazole 40 mg daily
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- Polyethylene glycol 17gm daily
- Pravastatin 40 mg daily

Resources To Support Medication Reconciliation

Beers Criteria for Potentially Inappropriate Medication Use in Older Adults

SUMMARY FULL TEXT LINK

Use with Caution

Medication	Comments
Alprazolam	Avoid
Amiloride	Avoid if CrCl <30 mL/min
Amiodarone	Avoid as first-line therapy for atrial fibrillation for most patients
Amitriptyline	Avoid; has strong anticholinergic properties
Amobarbital	Avoid
Amoxapine	Avoid; has strong anticholinergic properties
Androgens	Avoid unless indicated for symptomatic hypogonadism
Apixaban	Avoid if CrCl <25 mL/min
Aripiprazole	Avoid, except in some situations (e.g. bipolar disorder, schizophrenia, short-term chemotherapy)
Asenapine	Avoid, except in some situations (e.g. bipolar disorder, schizophrenia, short-term chemotherapy)
Aspirin	Use with caution for primary prevention of cardiovascular disease and colorectal cancer; Use with caution in adults ≥70 years; Avoid in most patients with history of gastric or duodenal ulcers; avoid chronic use with >325 mg/day
Atropine (excludes ophthalmic)	Avoid; has strong anticholinergic properties
Belladonna alkaloids	Avoid; has strong anticholinergic properties
Benztropine (oral)	Avoid; has strong anticholinergic properties
Brexpiprazole	Avoid, except in some situations (e.g. bipolar disorder, schizophrenia, short-term chemotherapy)
Brompheniramine	Avoid; has strong anticholinergic properties
Butabarbital	Avoid

Choosing Wisely: From the Society for Post-Acute Long-Term Care Medicine

15. Don't provide long-term opioid therapy for chronic non-cancer pain in the absence of clear and documented benefits to functional status and quality of life.

Hydrocodone- APAP 10mg daily

Pantoprazole

11. Don't continue hospital-prescribed stress ulcer prophylaxis with Proton-Pump Inhibitor (PPI) therapy in the absence of an appropriate diagnosis in the post-acute and long-term care (PALTC) population.

13. Don't routinely prescribe or continue sedative hypnotics such as Restoril or Ambien, diphenhydramine (Benadryl), benzodiazepines, or Serotonin Modulators (Trazadone) for long-term treatment of sleep disorders in geriatric populations. Consider the use of nonpharmacological interventions (e.g., physical activity, a regular schedule or cognitive behavioral therapy.)

Alprazolam

13. Older Adults: *Standards of Medical Care in Diabetes—2022 ADA*

13.4 Because older adults with diabetes have a greater risk of hypoglycemia than younger adults, episodes of ***hypoglycemia*** should be ascertained and addressed at routine visits. **B**

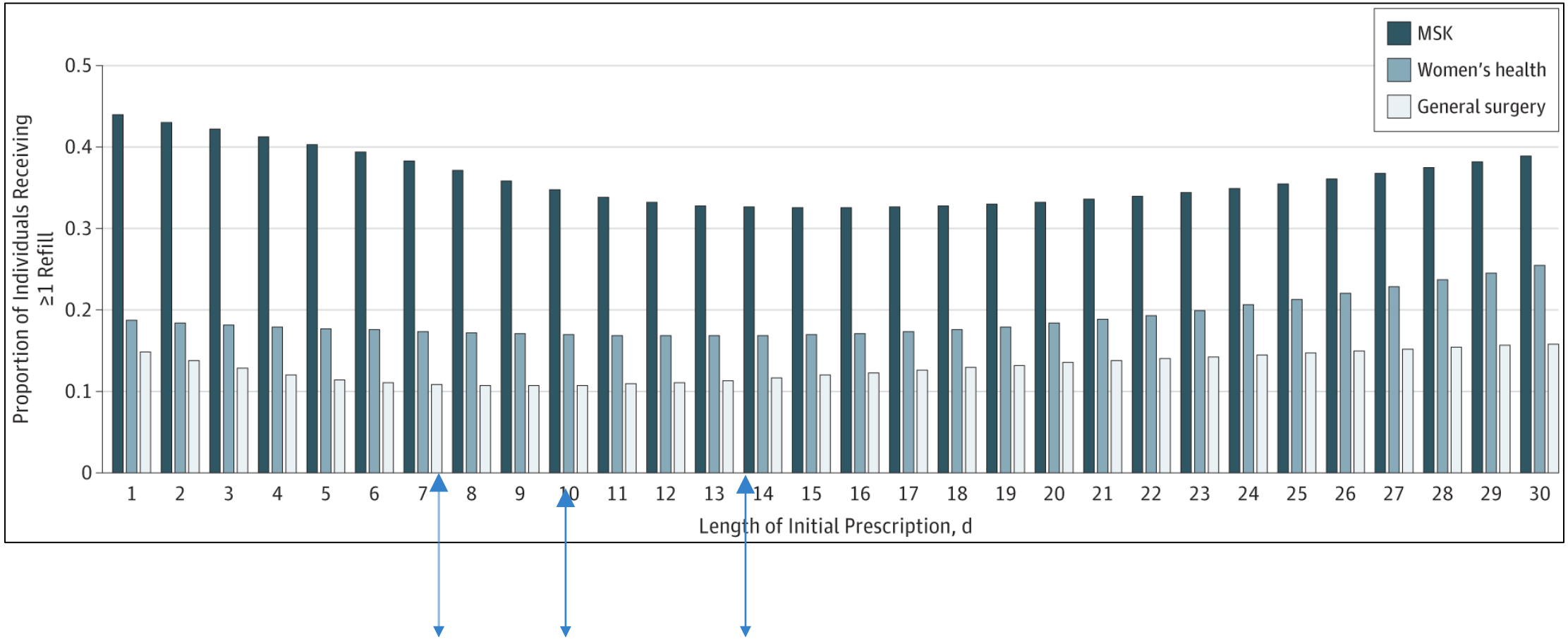
Patient characteristics/health status	Rationale	Reasonable A1C goal‡	Fasting or pre-prandial glucose	Bedtime glucose
Complex/intermediate (multiple coexisting chronic illnesses* or 2+ instrumental ADL impairments or mild-to-moderate cognitive impairment)	Intermediate remaining life expectancy, high treatment burden, hypoglycemia vulnerability, fall risk	<8.0% (64 mmol/mol)	90–150 mg/dL (5.0–8.3 mmol/L)	100–180 mg/dL (5.6–10.0 mmol/L)
Very complex/poor health (LTC or end-stage chronic illnesses** or moderate-to-severe cognitive impairment or 2+ ADL impairments)	Limited remaining life expectancy makes benefit uncertain	Avoid reliance on A1C; glucose control decisions should be based on avoiding hypoglycemia and symptomatic hyperglycemia	100–180 mg/dL (5.6–10.0 mmol/L)	110–200 mg/dL (6.1–11.1 mmol/L)

2. Don't use sliding scale insulin (SSI) for long-term diabetes management for individuals residing in the nursing home.

Take Home Considerations

- Number of spot checks
- Nursing ratios
- Erratic PO intake
- Resident rights and preferences
- Somogyi effect
- Sulfonylurea -XXX
- SGLT2 inhibitors – not a good idea

Optimal Length of Opioid Pain Prescription After Common Surgical Procedures



Multi-Modal Analgesia: Use of Gabapentin

- Park CM, Inouye SK, Marcantonio ER, et al. Perioperative Gabapentin Use and In-Hospital Adverse Clinical Events Among Older Adults After Major Surgery. *JAMA Intern Med.* 2022;182(11):1117–1127. doi:10.1001/jamainternmed.2022.3680
- ~ 970000 patients >65 Y

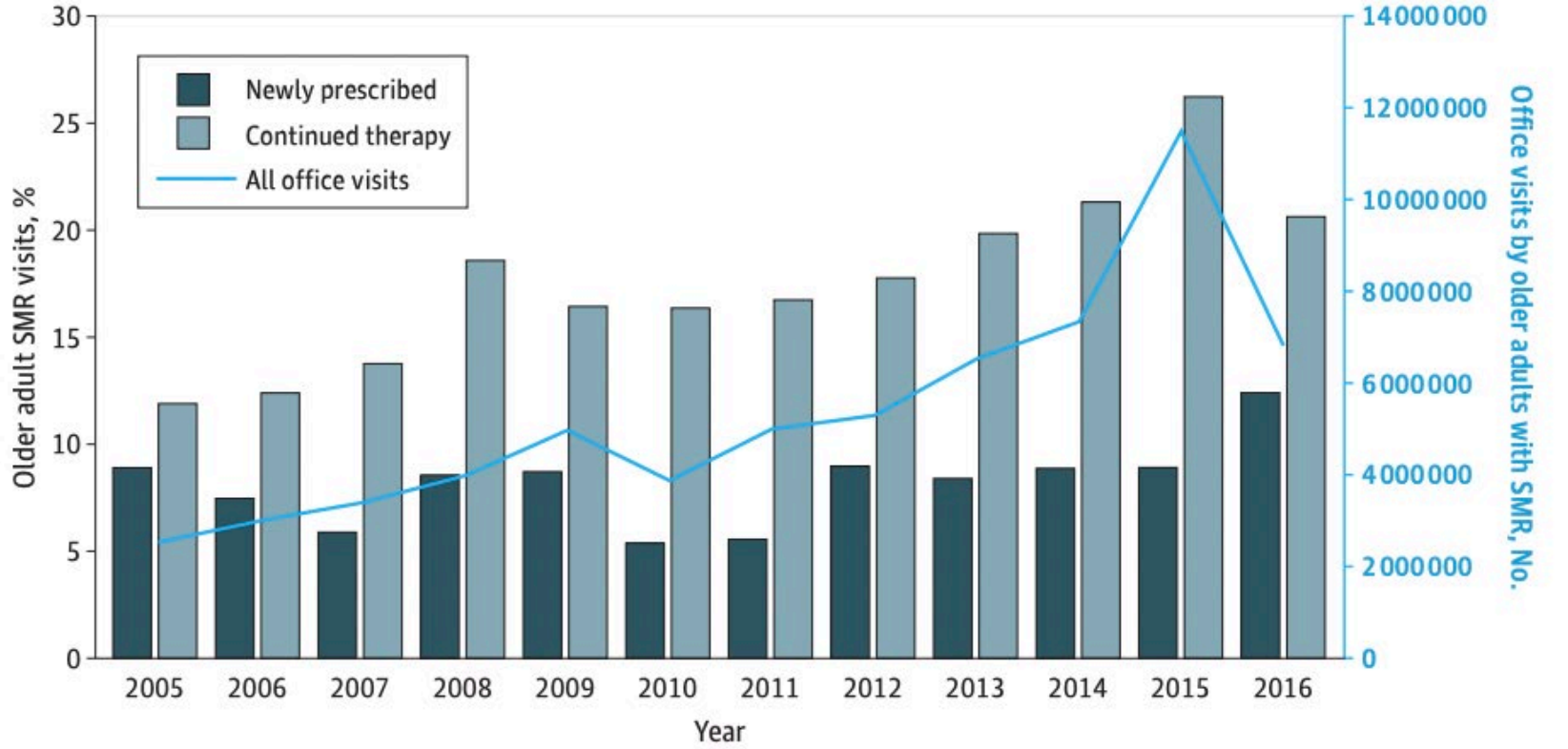
Outcome	Gabapentin user %	Nonuser %	RR
Delirium	3.4	2.6	1.28
New antipsychotic use	.8	.7	1.17
Pneumonia	1.3	1.2	1.11

Multi-Modal Analgesia: Use of Muscle Relaxants

Medications	Odds Ratio of fracture injuries	P
Muscle relaxants	1.4 (1.15-1.72)	<0.001
Long acting benzodiazepines	1.9 (1.49-2.43)	<0.001
Short Acting benzodiazepines	1.33 (1.15-1.55)	<0.001

Assessment of Physician Prescribing of Skeletal Muscle Relaxants: Soprano et al

Figure 2. National SMR Utilization Rates Among Adults Aged 65 Years or Older, Stratified by New vs Continued Use, 2005-2016



10.1001/jamanetworkopen.2020.7664

Questions?

Nursing Home and Partnership for Community Health:
CMS 12th SOW GOALS

OPIOID UTILIZATION AND MISUSE

Promote opioid best practices

•

Reduce opioid adverse drug events in all settings

PATIENT SAFETY

Reduce hospitalizations due to c. diff

•

Reduce adverse drug events

•

Reduce facility acquired infections

CHRONIC DISEASE SELF-MANAGEMENT

Increase instances of adequately diagnosed and controlled hypertension

•

Increase use of cardiac rehabilitation programs

•

Reduce instances of uncontrolled diabetes

•

Identify patients at high-risk for kidney disease and improve outcomes

CARE COORDINATION

Convene community coalitions

•

Reduce avoidable readmissions, admissions to hospitals and preventable emergency department visits

•

Identify and promote optimal care for super utilizers

COVID-19

Support nursing homes by establishing a safe visitor policy and cohort plan

•

Provide virtual events to support infection control and prevention

•

Support nursing homes and community coalitions with emergency preparedness plans

IMMUNIZATION

Increase influenza, pneumococcal, and COVID-19 vaccination rates

TRAINING

Encourage completion of infection control and prevention trainings by front line clinical and management staff

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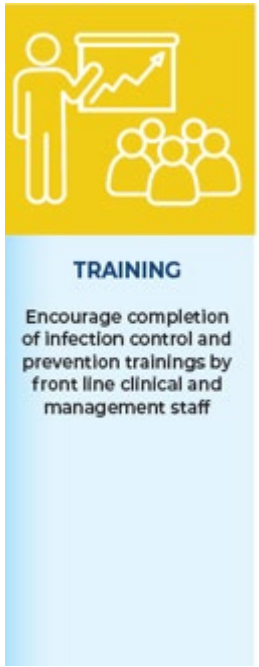
Scan the QR codes or Click the Links to Complete the Assessments!

CMS requested Alliant Health Solutions, your QIN-QIO, to work with select nursing homes to understand emerging healthcare needs in nursing homes. Alliant Health Solutions is engaging nursing home leadership in this key area to ensure plans are in place to achieve and maintain health quality and equity!

Please scan the QR code below and complete the assessment.



Nursing Home Infection Prevention (NHIP) Initiative Training Assessment

https://bit.ly/NHIPAssessment

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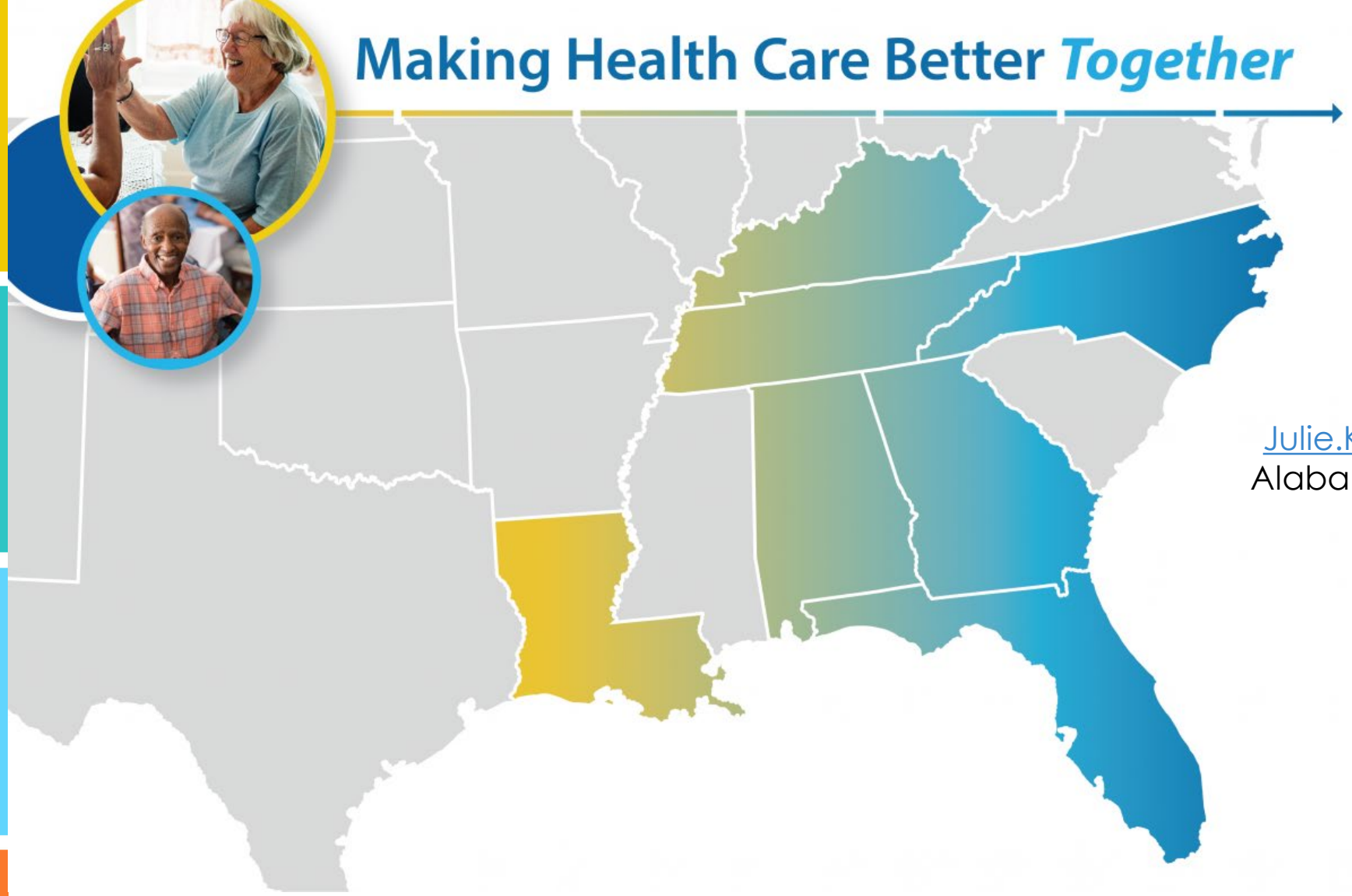

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