

Long Term Care: Medication Safety Assessment and Next Steps

Anne Myrka, RPh, MAT

Sr. Director Drug Safety & Chronic Disease Management

I PRO

9/22/2022

This material was prepared by the I PRO QIN-QIO, a Quality Innovation Network-Quality Improvement Organization, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this document do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW-I PRO-QIN-T1-A2-22-748



■ Healthcentric
Advisors
■ Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

The IPRO QIN-QIO

The IPRO QIN-QIO

- A federally-funded Medicare Quality Innovation Network – Quality Improvement Organization (QIN-QIO) in contract with the Centers for Medicare & Medicaid Services (CMS)
- 12 regional CMS QIN-QIOs nationally

IPRO:

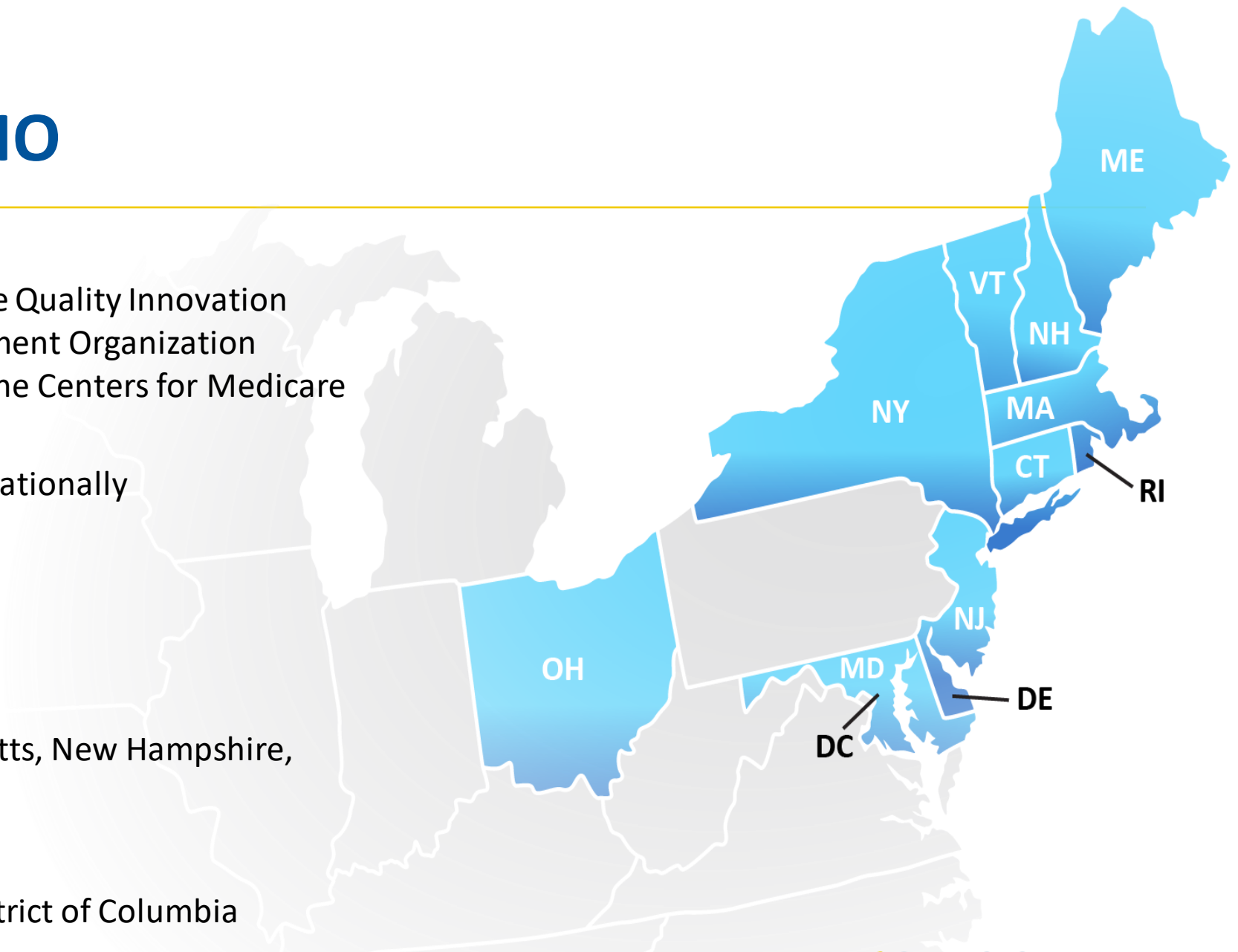
New York, New Jersey, and Ohio

Healthcentric Advisors:

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

Qlarant:

Maryland, Delaware, and the District of Columbia



Working to ensure high-quality, safe healthcare for
20% of the nation's Medicare FFS beneficiaries



- Healthcentric Advisors
- Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
EQUALITY IMPROVEMENT & INNOVATION GROUP

Agenda

- Review how Medicare beneficiaries experienced a higher rate of adverse drug events (ADEs) due to anticoagulants than for prescribed opioids.
- Provide overview of the IPRO QIN-QIO Medication Safety Assessment results.
- Discuss how more antipsychotic drugs were prescribed for nursing home residents, particularly on admission, than prior to the pandemic.
- Share how to safely manage high-risk medications such as anticoagulants, diabetes medications, antipsychotics, and antibiotics.
- Provide information on important resources for your facility and participate in our High-Risk Medication Safety Learning Circles.

Adverse Drug Events in Older People

Original Investigation

October 5, 2021

US Emergency Department Visits Attributed to Medication Harms, 2017-2019

Daniel S. Budnitz, MD, MPH¹; Nadine Shehab, PharmD, MPH^{1,2}; Maribeth C. Lovegrove, MPH¹; [et al](#)

[» Author Affiliations](#) | [Article Information](#)

JAMA. 2021;326(13):1299-1309. doi:10.1001/jama.2021.13844

Question What were the most frequent medication types and intents of use associated with emergency department (ED) visits for medication harms in the US in 2017-2019?

Findings In this cross-sectional nationally representative sample that included 60 US EDs between 2017 and 2019, annual estimates of the most frequent medication types and intents of use associated with ED visits attributed to medication harms (adverse events) were therapeutic use of anticoagulants (4.5/1000 population) and diabetes agents (1.8/1000 population) for patients aged 65 years or older; therapeutic use of anticoagulants (0.6/1000 population) and diabetes agents (0.8/1000 population) for patients aged 45 to 64 years; nontherapeutic use of benzodiazepines (1.0/1000 population) and prescription opioids (0.7/1000 population) for patients aged 25 to 44 years; and unsupervised medication exposures (2.2/1000 population) and therapeutic use of antibiotics (1.4/1000 population) for children younger than 5 years.

IPRO's Medication Safety Assessment



- Healthcentric Advisors
- Qlarant

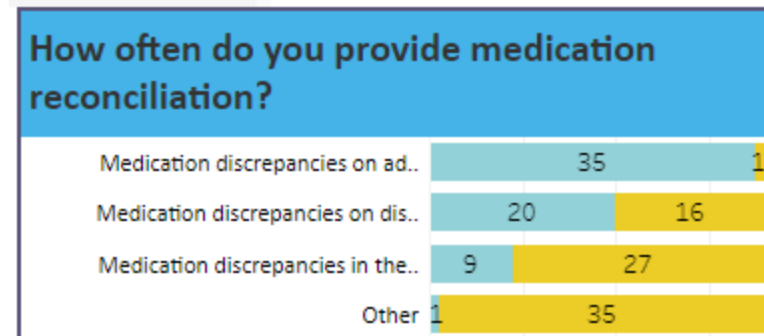
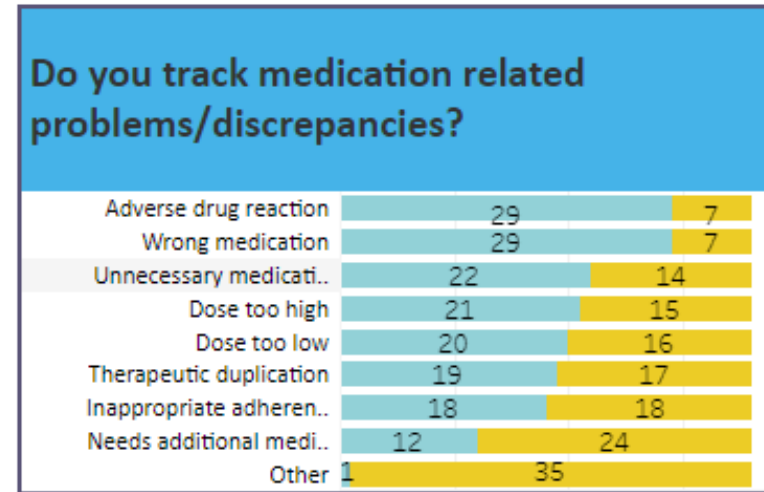
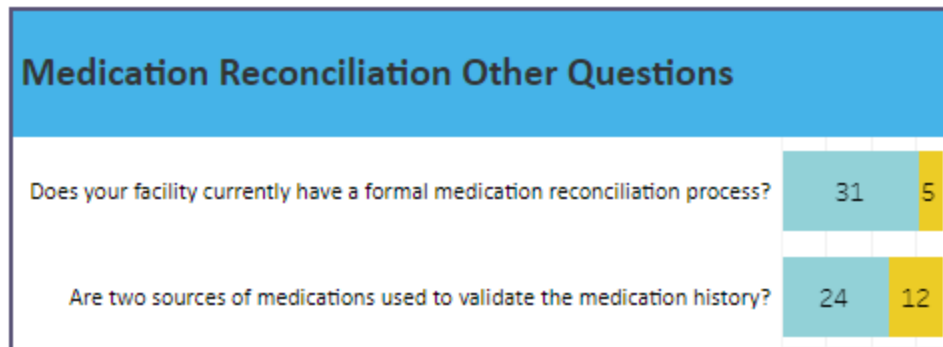
QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

Medication Safety Assessment Overview

- **Purpose:** To identify high risk medication management gaps and best practices to apply quality improvement solutions to the gaps and share best practices
- **Timeframe:** June – September 2022. The assessment remains available until November 7, 2024 for any care setting to assess themselves
- **Focus:** management of anticoagulants, diabetes medications, antibiotic stewardship, antipsychotics and medication reconciliation
- **Care settings:** hospitals, long term care facilities, primary care, home healthcare
- **Geography:** 11 states and DC
- **Results**
 - Total respondents to date: 187
 - Long term care facilities: 127 with 36 from New York with similar responses vs all other states
 - Hospital: 46
 - Home healthcare: 9
 - Primary care: 2

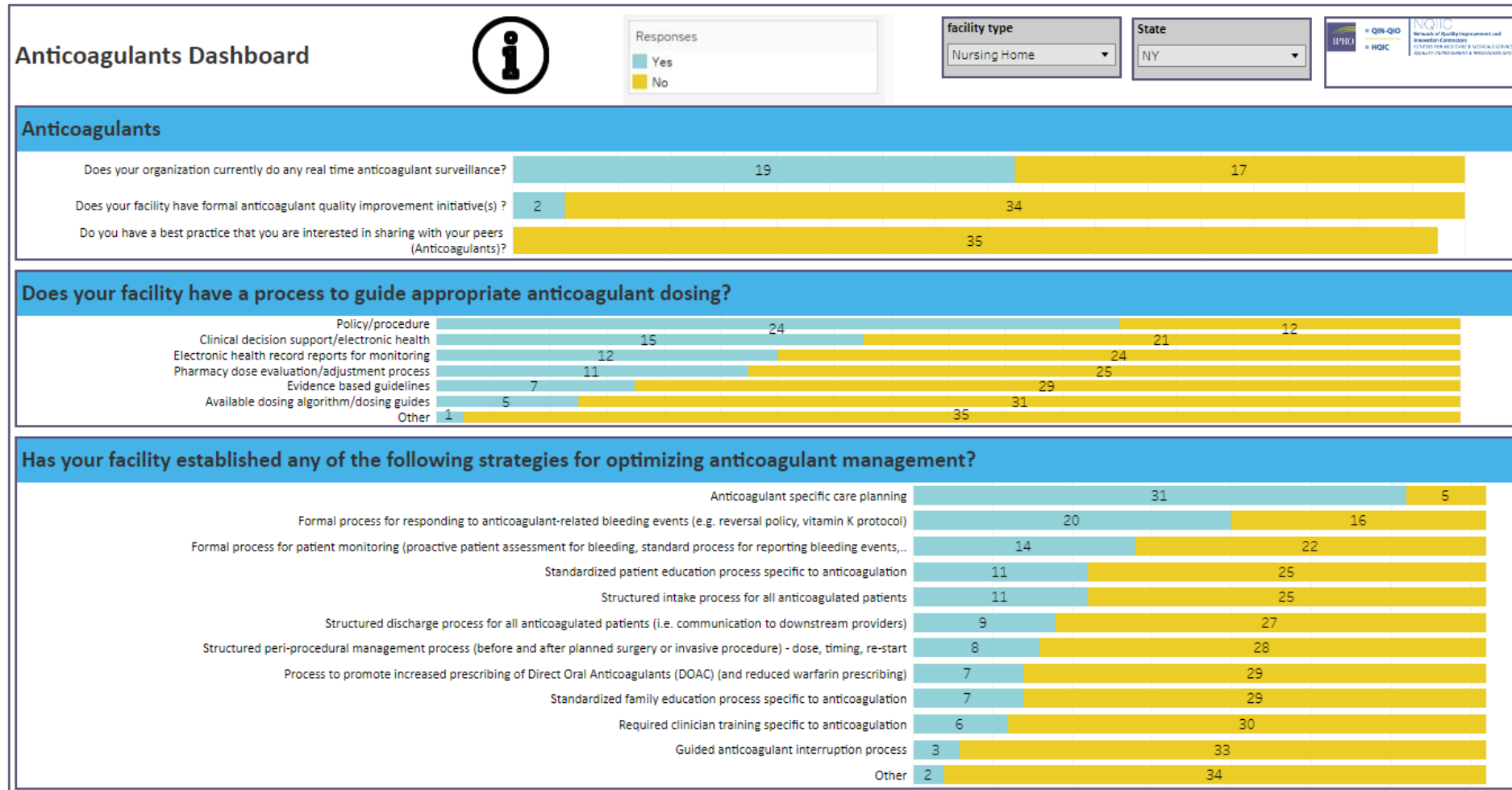
Medication Safety Assessment Results - Highlights

- Medication Reconciliation
 - NY LTCFs had similar responses vs all other states
 - 86% have a formal medication reconciliation process, but most do not use 2 sources to validate med history
 - Only around 55% of LTCFs do medication reconciliation on discharge



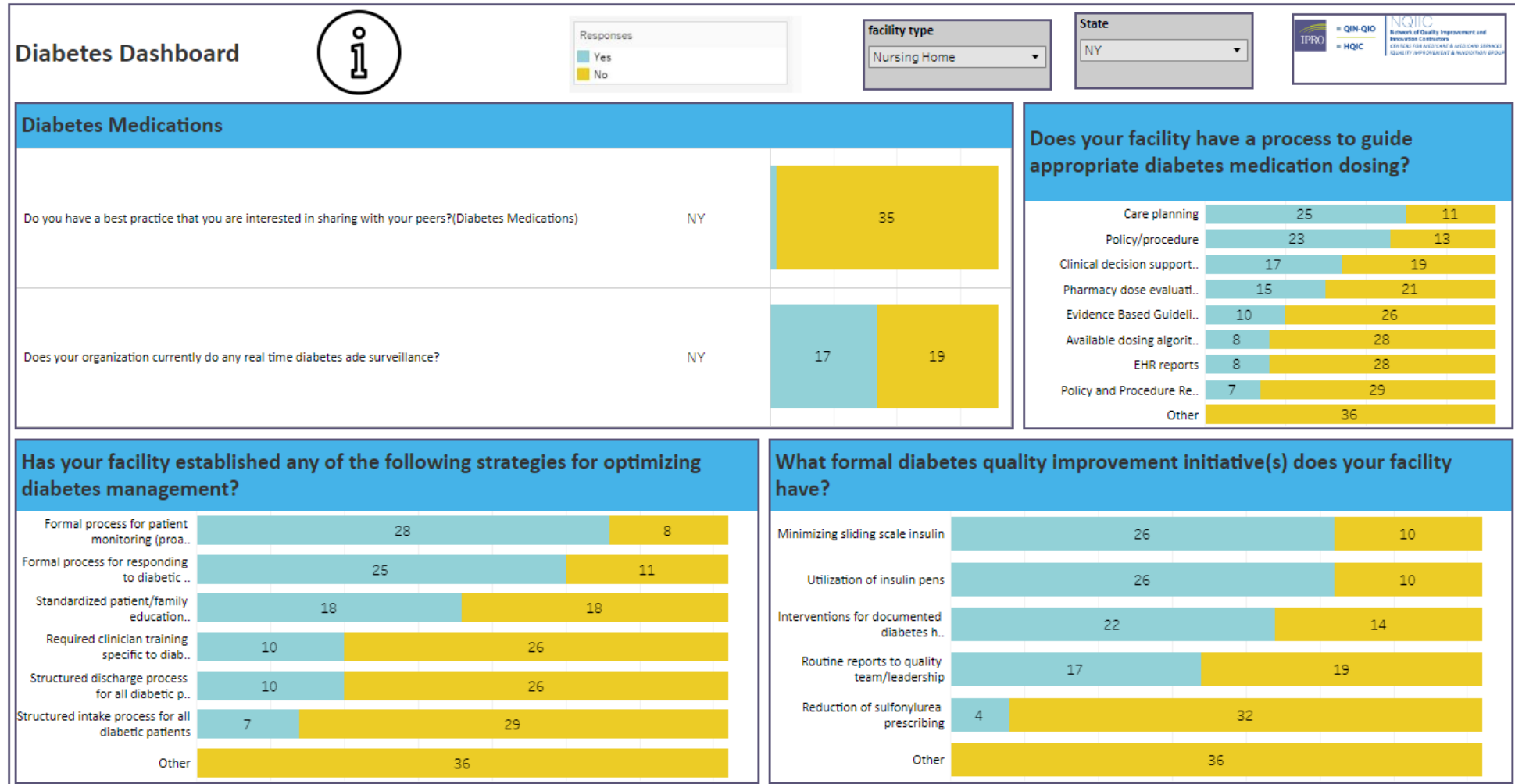
Medication Safety Assessment Results – Highlights

- Anticoagulation



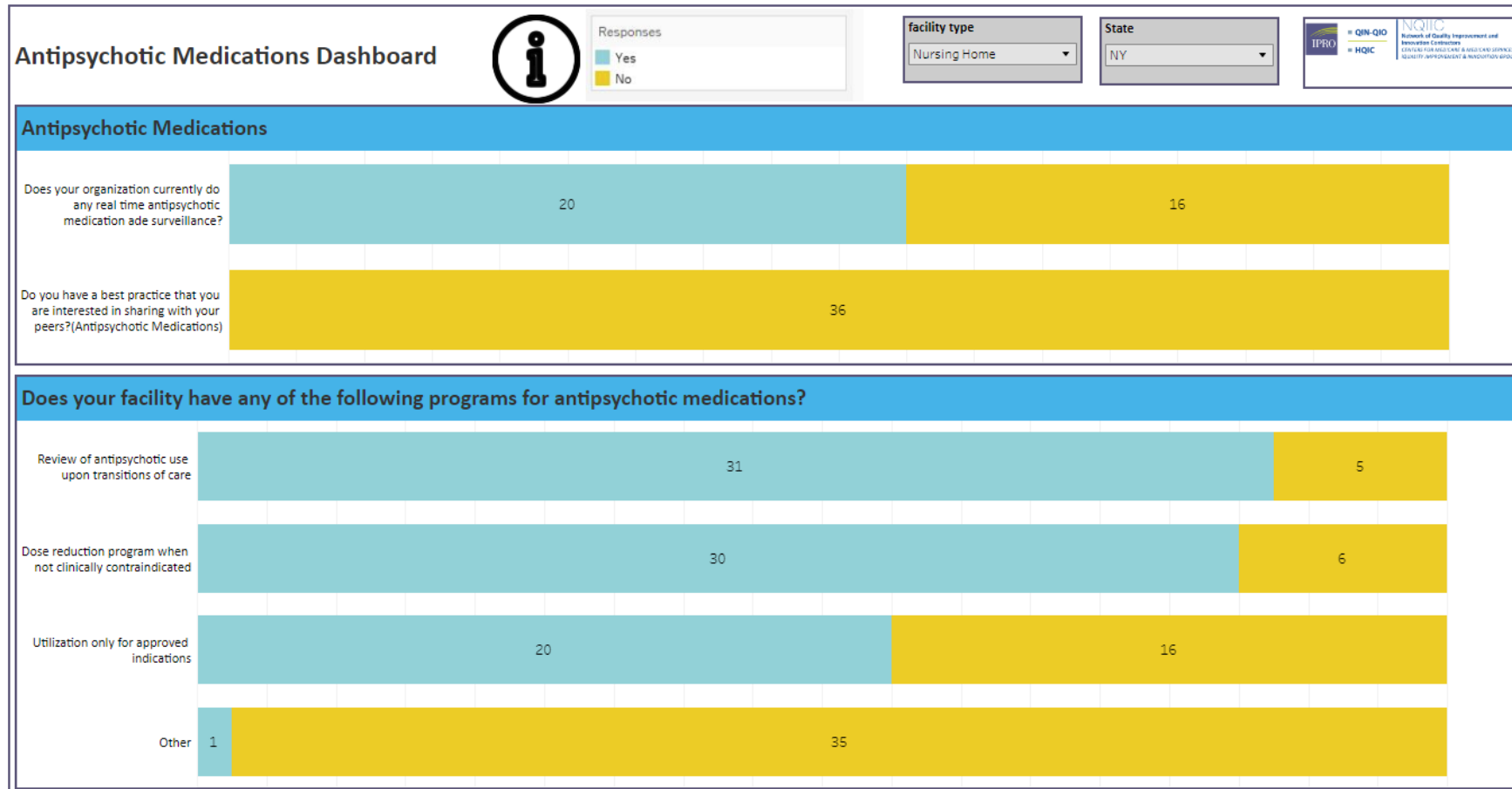
Medication Safety Assessment Results – Highlights

- Diabetes Medication



Medication Safety Assessment Results – Highlights

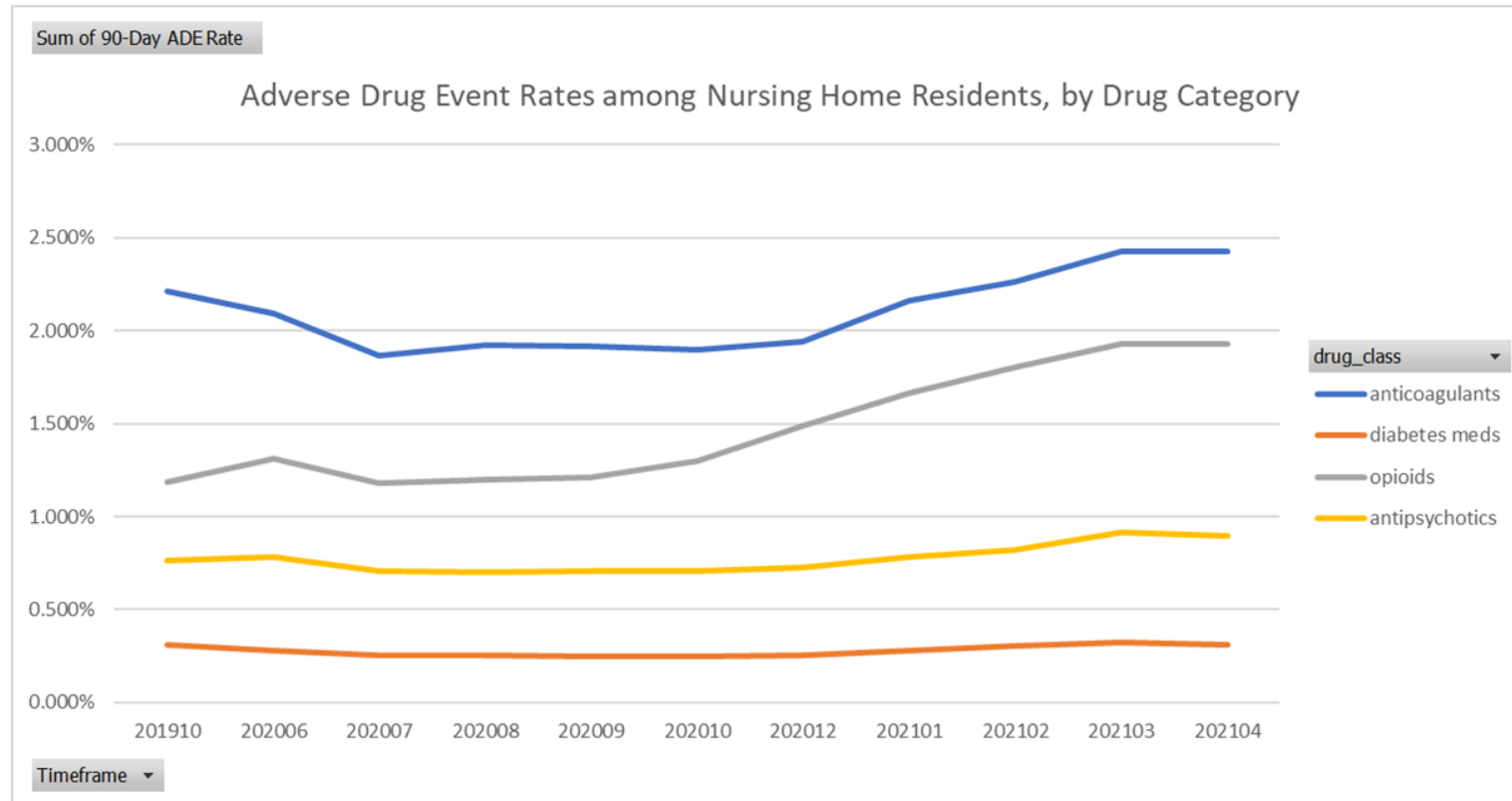
- Antipsychotics



NYS LTCF Adverse Drug Events

- CMS Measure:
 - Decrease adverse drug events in nursing homes by 13%
 - Composite measure = opioid ADEs + anticoagulant ADEs + diabetes medication ADEs/residents on one or more high risk medications
 - ADEs defined as the number of emergency department, observation stays and inpatient hospitalizations with principal diagnosis ICD-10 code indicating an ADE (e.g., bleeding or clotting event while on an anticoagulant)

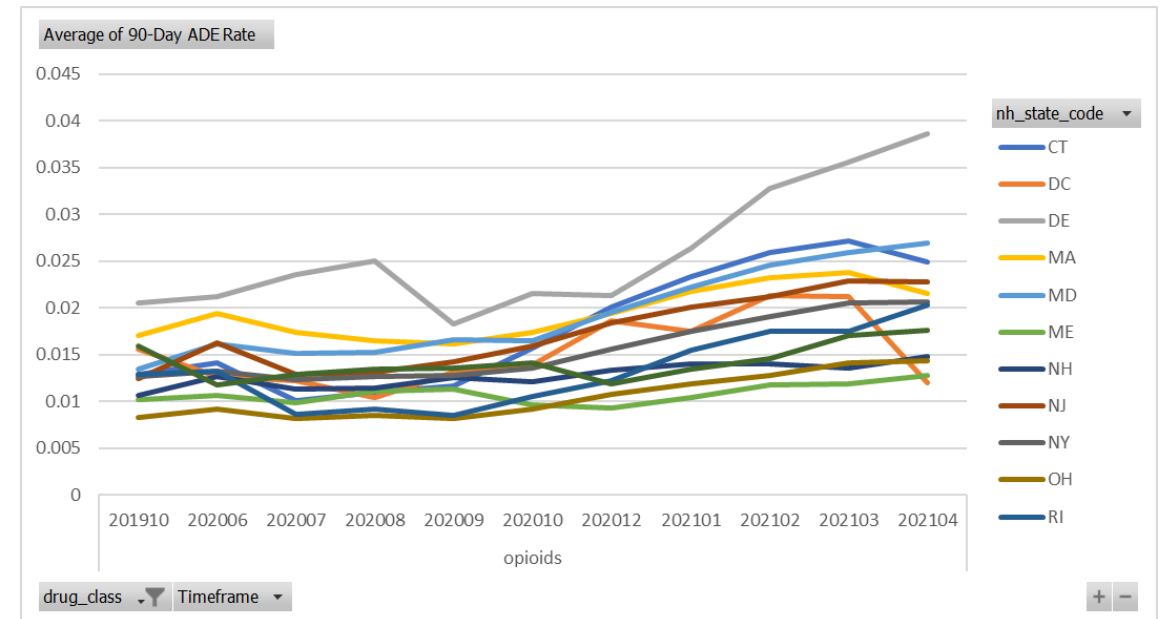
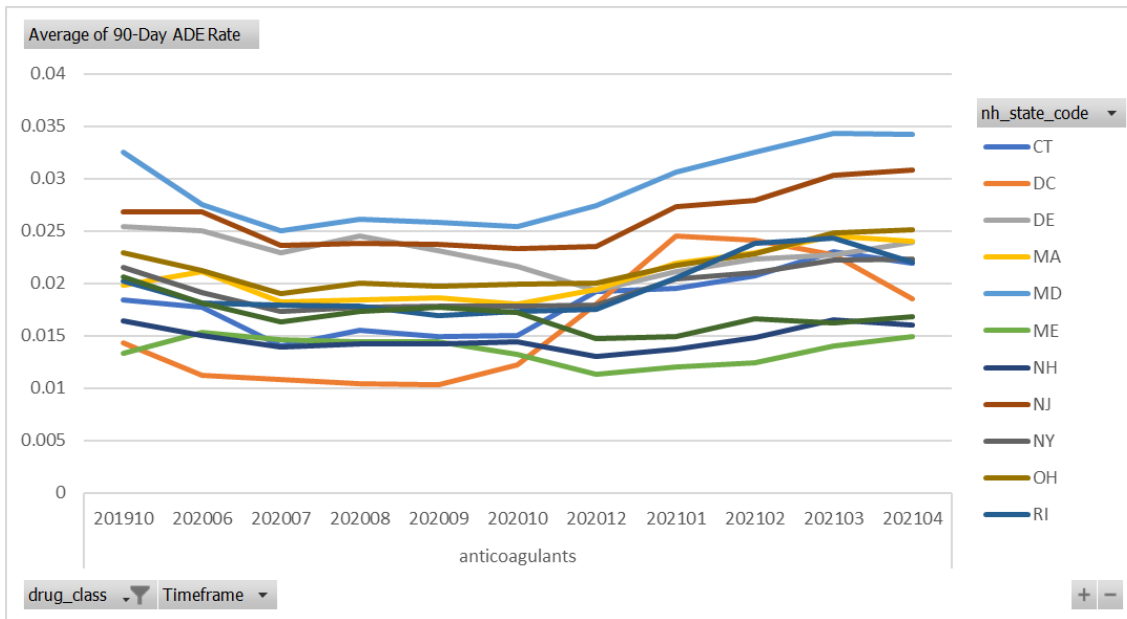
IPRO Progress on Addressing Adverse Drug Events



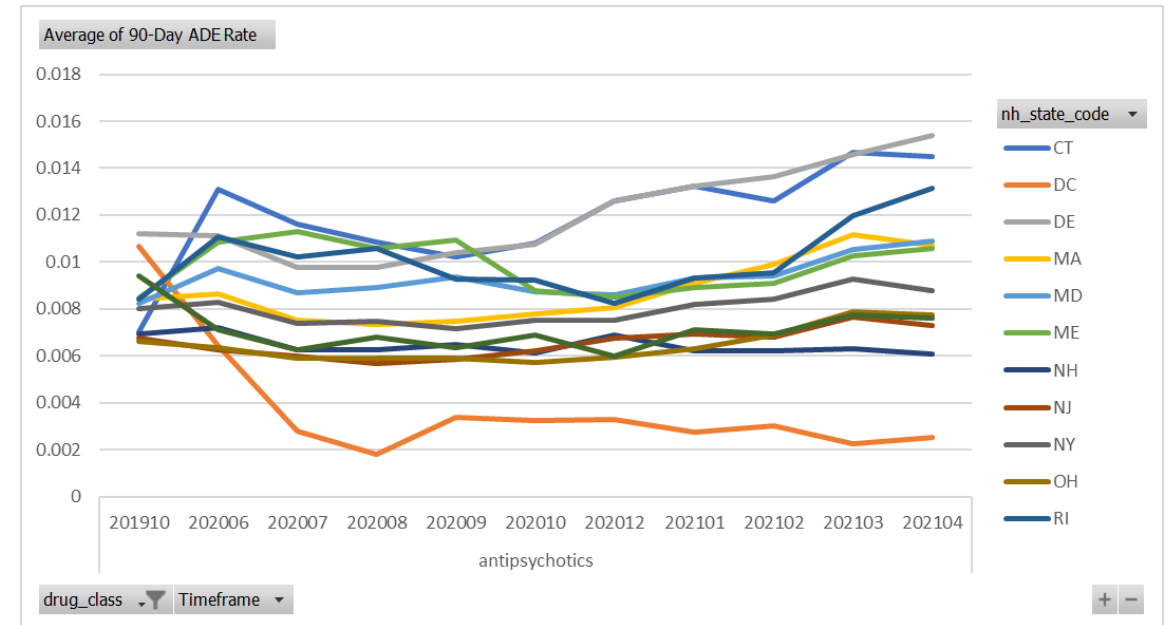
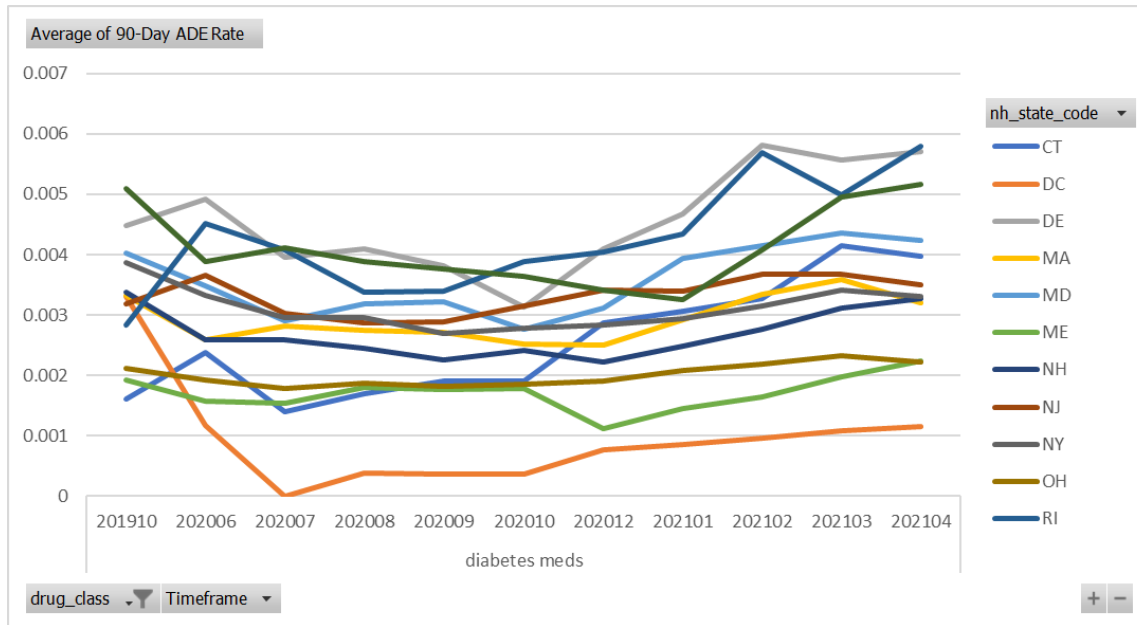
- Adverse Drug Events (ADEs) have been an important component of the QIN-QIO work for **nearly two decades**
- Graph shows baseline (10/2019) through 4/2021 ADE rates for high-risk medications (HRM) representing 1,898 nursing homes and 1,153,075 residents on one or more HRMs at baseline

Source: Medicare Fee for Service claims Parts D and A, baseline 10/2019 through 4/2021

IPRO Progress on Addressing Adverse Drug Events



IPRO Progress on Addressing Adverse Drug Events



Healthcentric
Advisors
Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
EQUALITY IMPROVEMENT & INNOVATION GROUP

COVID-19 Pandemic and Antipsychotic Drug Use – Conflicting Messages

CLINICAL DAILY NEWS

Stable use of antipsychotics in long-term care during pandemic 'reassuring': study

KIMBERLY BONVISSUTO

MARCH 7, 2022

NEWS

Rise in antipsychotics prescriptions during pandemic warrant closer look, feds say



DANIELLE BROWN

APRIL 11, 2022

SHARE ▾



Healthcentric
Advisors
Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
EQUALITY IMPROVEMENT & INNOVATION GROUP

Great!

Stable use of antipsychotics in long-term care during pandemic 'reassuring': study

KIMBERLY BONVISSUTO

MARCH 7, 2022

Data source: [IQVIA's Community LRx and LTC-LRx products](#), real-world actual data (not projected estimates), cannot separate LTC from ALF

Timeframe of study: Jan 2019 to Aug 2020

Drugs: selected psychotropic and pain medications

Authors: Vanderbilt School of Medicine, Harvard Medical School, VA TN Valley Healthcare System, University of Maryland School of Pharmacy; peer-reviewed

Methods: >64 y.o., LTC LRx claims, rates of prescribing selected drugs in LTC/ALF



Received: 17 December 2021 | Revised: 14 February 2022 | Accepted: 20 February 2022

DOI: 10.1111/jgs.17739

RESEARCH LETTER

Journal of the
American Geriatrics Society

Psychotropic and pain medication use in nursing homes and assisted living facilities during COVID-19

David G. Stevenson PhD^{1,2}  | Alisa B. Busch MD, MS^{3,4,5} |
Barbara J. Zarowitz PharmD, MSW⁶  | Haiden A. Huskamp PhD³

Stable use of antipsychotics during pandemic peak

- Medication use and initiation during the pandemic remained stable
- The use of antipsychotics and benzodiazepines among newly admitted individuals without prior use of these medications, rose nearly 30% from April to August 2020

TABLE 1 Medication use and initiation among all and newly admitted nursing home and assisted living residents

	January 2019	April 2019	July 2019	October 2019	January 2020	April 2020	July 2020	August 2020
N =	415,012	416,444	412,227	420,910	414,101	379,334	363,086	354,137
Medication use among all NH and ALF residents								
Anti-psychotics	9.4%	9.3%	9.5%	9.5%	9.7%	9.6%	10.0%	9.9%
Anti-depressants	23.2%	23.5%	23.6%	23.6%	24.0%	24.0%	24.5%	24.4%
Benzo-diazepines	9.1%	9.0%	9.0%	8.8%	8.8%	8.8%	9.1%	9.0%
Opioid analgesics (LA)	1.9%	1.9%	1.8%	1.8%	1.7%	1.7%	1.7%	1.7%
Opioid analgesics (SA)	11.3%	11.0%	11.0%	10.9%	11.0%	10.4%	10.9%	10.6%
Muscle relaxants	2.0%	2.1%	2.1%	2.1%	2.2%	2.1%	2.2%	2.2%
Mood stabilizers	10.3%	10.5%	10.7%	10.6%	10.8%	10.6%	10.8%	10.6%
Medication initiation among all NH and ALF residents								
Anti-psychotics	4.6%	4.7%	4.7%	4.8%	4.7%	4.5%	4.8%	4.7%
Anti-depressants	19.0%	19.0%	19.6%	19.4%	19.3%	18.4%	19.4%	19.0%
Benzo-diazepines	7.6%	7.5%	7.6%	7.5%	7.1%	6.9%	7.1%	7.0%
Opioid analgesics (LA)	1.5%	1.4%	1.4%	1.3%	1.2%	1.1%	1.2%	1.2%
Opioid Analgesics (SA)	8.1%	7.7%	7.9%	7.8%	7.5%	7.1%	7.4%	7.1%
Muscle relaxants	1.2%	1.2%	1.3%	1.3%	1.3%	1.2%	1.3%	1.3%
Mood stabilizers	5.9%	6.0%	6.2%	6.0%	5.9%	5.6%	5.9%	5.7%
Medication initiation among new NH and ALF admissions								
Anti-psychotics	8.7%	8.9%	9.6%	8.4%	8.8%	11.0%	12.7%	13.7%
Anti-depressants	15.3%	16.3%	17.0%	15.7%	18.5%	16.1%	18.5%	21.2%
Benzo-diazepines	16.7%	16.6%	17.2%	15.3%	16.8%	20.0%	22.3%	23.7%
Opioid analgesics (LA)	3.9%	3.6%	3.8%	3.2%	3.1%	3.9%	4.4%	4.9%
Opioid analgesics (SA)	23.9%	24.0%	24.7%	22.7%	25.0%	25.1%	29.2%	30.9%
Muscle relaxants	2.5%	2.5%	2.8%	2.5%	2.9%	2.0%	2.9%	2.9%
Mood stabilizers	8.4%	8.3%	9.0%	8.1%	9.1%	7.1%	9.2%	9.9%

Abbreviations: ALF, assisted-living facility; NH, nursing home.

Oh no!

Rise in antipsychotics prescriptions during pandemic warrant closer look, feds say



DANIELLE BROWN

APRIL 11, 2022

SHARE ▾

Data source: [IQVIA's National Prescription Audit \(NPA\) database](#), measures demand and projects national estimates of products, cannot separate LTC from ALF

Timeframe of study: Jan 2019 to June 2021

Drugs: studied only antipsychotics

Authors: a division of HHS, not peer-reviewed

Methods: did not separate current resident use or initiation or new resident initiation; assessed number of prescriptions for LTC/ALF, not rate of prescribing ("IQVIA NPA data does not include data on the size of the LTCF resident population" = no denominator), no age limit defined



ISSUE BRIEF

March 8, 2022

ANTIPSYCHOTIC MEDICATION PRESCRIBING IN LONG-TERM CARE FACILITIES INCREASED IN THE EARLY MONTHS OF THE COVID-19 PANDEMIC

KEY POINTS

- Prescriptions dispensed for antipsychotics in nursing homes and assisted living facilities increased since the beginning of the pandemic, with 20.8 million dispensed in 2020 compared to 20.5 million in 2019. This represents a 1.5% increase in total prescriptions since the beginning of the pandemic despite lower resident census levels in long-term care facilities (LTCFs).
- In 2020, the highest increase in the number of prescriptions dispensed occurred during the first quarter of the pandemic, with an increase of 7.4% compared to the first quarter of 2019. After this initial increase, the quarterly number of prescriptions for antipsychotic medications dropped close to pre-pandemic levels, despite a declining nursing home resident census and likely a declining LTCF resident census overall.
- The number of prescriptions dispensed for four out of the five most frequently prescribed antipsychotics in LTCFs increased in both 2020 and 2021 compared to pre-pandemic levels. Aripiprazole had the largest increase, of 14% in the first quarter of 2020 compared to 2019 levels.



Healthcentric
Advisors
Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
EQUALITY IMPROVEMENT & INNOVATION GROUP

ASPE Issue Brief 3/8/2022

- Stevenson, et al article doesn't fit federal narrative
- HHS counters with Assistant Secretary for Planning and Evaluation Brief
- ASPE role:
 - Policy development
 - Policy coordination
 - Legislation development
 - Strategic planning
 - Policy research, evaluation and economic analysis

INTRODUCTION

Residents of congregate long-term care settings, including nursing homes and assisted living facilities, were disproportionately affected by the COVID-19 pandemic. Since the pandemic started in January 2020, 5% of total cases and 31% of total deaths have occurred in long-term care facilities (LTCFs), representing more than 186,000 deaths of residents and staff.¹ The beginning of the year 2020 marked the highest number of COVID-19 cases and deaths in LTCFs. Facilities reported facing substantial hardships in procuring resources, and hiring and keeping staff to help control outbreaks.² Many facilities also reported added financial strains resulting from costs of personal protective equipment, testing, and acquiring and retaining staff. In addition, the lockdown and in-person visitation restrictions in LTCFs raised concerns about the impacts on resident treatment, safety, and mental health.³

These acute difficulties that arose during the COVID-19 pandemic added to other long-standing challenges and concerns related to the quality of care provided in LTCFs. Media outlets have reported on the increasing use of antipsychotics by LTCFs to help manage the challenging behaviors of residents with behavioral and psychological symptoms, a concerning trend even before the pandemic.⁴ Antipsychotic drugs are used to treat symptoms of psychiatric disorders such as schizophrenia and bipolar disorder, and have been shown to improve daily functioning in individuals with these disorders. The Food and Drug Administration (FDA) has issued a "black box" warning regarding the risks of atypical antipsychotic use among older adults with dementia. A recent news report in the *New York Times* stated that, according to Medicare's public database of nursing home ratings (Nursing Home Compare), Medicare insurance claims and resident assessment data, and facility-by-facility data that a resident advocacy group got from Medicare via an open records request and shared with the Times, at least 21% of nursing home residents (about 225,000 people) were using antipsychotics as of the fourth quarter of 2020.

ASPE Issue Brief 3/8/2022

Figure 1. Overall Antipsychotic Prescribing and Percent Difference of Total Prescribing: January 2019-June 2021



SOURCE: Internal ASPE analysis using IQVIA National Prescription Audit, 2015-2021.

The Centers for Medicare & Medicaid Services (CMS), the government agency that oversees nursing homes, tracks the use of antipsychotic medications as one of many statistics used to assess the quality of care in nursing homes and seeks to discourage over-utilization of these drugs. On November 12, 2021, CMS released State Survey Guidance stating that inappropriate use of antipsychotic medications continues to be an area of concern related to quality of care, directing oversight efforts on identifying inappropriate use and emphasizing non-pharmacologic practices.⁵ CMS also worked with the Substance Abuse and Mental Health Services Administration (SAMHSA) to issue guidance on inappropriate use of antipsychotics in older adults and people with disabilities who live in the community.⁶

The purpose of this study is to examine trends in the prescribing of antipsychotics in LTCFs during the COVID-19 pandemic. This brief presents results of a descriptive analysis using prescription claims data from January 2019 to June 2021.

IPRO QIN-QIO LTCF Antipsychotic Data

IPRO QIN-QIO has analyzed Medicare Part D drug claims data in our Nursing Home Quality Initiative on the prescribing rates of antipsychotic medications in both our recruited nursing homes and non-recruited nursing homes within our QIN 12-state region.

- Between August 2019 and June 2021 prescribing rates have increased in both recruited and non-recruited homes
- The percent change was **less** for our recruited nursing homes compared to non-recruited nursing homes, 0.6% and 3.6%, respectively

IPRO also analyzes adverse drug event (hospitalization, ED or Obs visit due to drug) rates for high-risk medications in our NHQI. In the data table below the baseline timeframe is 2019 and the remeasure is 2021:

Drug Category	Baseline ADE Rate %	Baseline Numerator/ Denominator	Remeasure ADE rate %	Remeasure Numerator/ Denominator	Absolute % Difference	Relative Improvement Rate %
Anticoagulants	2.210%	6613 /299167	2.426%	4070 /167762	-0.216%	-9.752%
Opioids	1.187%	1991 /167715	1.927%	1831 /94994	-0.740%	-62.365%
Diabetes medications	0.311%	1322 /425735	0.314%	745 /237495	-0.003%	-1.020%
Antipsychotics	0.762%	1985 /260458	0.894%	1480 /165542	-0.216%	-17.308%



Healthcentric Advisors
Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
EQUALITY IMPROVEMENT & INNOVATION GROUP

IPRO QIN-QIO HRM Interventions and Resources

- Medication Reconciliation
 - [MARQUIS Toolkit](#) applied to [skilled nursing facilities](#)
 - Medication Reconciliation on Admission Audit tools
 - Medication Reconciliation on Discharge Audit Tools
 - [Medication Discrepancy Data Collection](#) Tools
 - [Nurse to Nurse Warm Hand-Off](#) guide
 - Medication list comparison tools

Medication Reconciliation Resources



DISCHARGE MEDICATIONS: Nurse-to-Nurse Warm Handoff Guidance

This document is intended for use as a guide for nurse-to-nurse verbal communication of medication-related information required for safe patient transfer upon discharge from the sending to receiving facility.

DISCHARGE MEDICATION INFORMATION REQUIRED

- Drug name
- Drug strength (e.g., 5mg)
- Drug dose (e.g., 2 tablets)
- Route of administration
- Drug frequency
- Intended purpose(s) (e.g., indication(s)/diagnosis for use)
- Last dose given
- Next dose due
- Duration of therapy (i.e., **stop date** if applicable – examples are antibiotics, anticoagulation DVT prophylaxis post-orthopedic surgery, etc.)
- Cautions for each medication (if appropriate/applicable)

- Include post-acute monitoring instructions for **high risk medications** in the discharge instructions
 - **High-risk medications or medication classes:** antithrombotics/anticoagulants, antiseizure medications, antibiotics, cardiovascular agents, corticosteroids, electrolyte-disturbing medications (diuretics), hypoglycemics, opioids, psychoactives

Examples: warfarin - INR in 3–7 days post discharge; digoxin level 7–10 days post discharge; more examples on page 2.

- ASK IF THE RECEIVING PROVIDER NEEDS A SHORT-TERM SUPPLY OF ANY OR ALL OF THE DRUGS***
- Communication should be framed as a comparison with pre-admission medications:
 - STOP** taking the following medications
 - CONTINUE** taking these medications
 - START** taking the following new medications

- The nurse to nurse communication should be documented in the appropriate section of the medical record to reflect

*FROM _____
(name and organization) and

TO _____
(name and organization)*

*If applicable, i.e., if “sending” facility has capability and policies and procedures in place to provide short-term medication supplies

continued on next page

This material was prepared by the IPRO QIN-QIO, a collaboration of Healthcentric Advisors, Qlarant and IPRO, serving as the Medicare Quality Innovation Network-Quality Improvement Organization for the New England states, NY, NJ, OH, DE, MD, and the District of Columbia, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents do not necessarily reflect CMS policy. 1250W-IPRO-QIN-T2-A4-22-323 v.1a 4/22/2021



Safer Medication Management for Better Transition of Care

SHM recognizes the importance of equipping hospital clinicians with evidence-based strategies to prescribe, document, and reconcile medications accurately and safely at times of care transitions.

Medication reconciliation, or med rec, is the process of compiling the most accurate list of medications a patient is taking to avoid dosing or other errors.

Take responsibility for med rec with your patients by:

- Leading, coordinating or participating in med rec quality improvement efforts that incorporate best practices to improve patient outcomes.
- Grasping key evidence-based interventions, such as obtaining the best possible medication history and effective discharge medication counseling.
- Identifying patients who are at high risk for medication discrepancies due to the number and/or types of medications they are prescribed

View resources that SHM has curated to help improve your med rec practices.



Resources

[Medication Reconciliation Guide](#) →

[Med Rec ROI Calculator](#) →

[SHM's Medication Reconciliation Data Pharmacist Training – Part 1](#) →

[SHM's Medication Reconciliation Data Pharmacist Training – Part 2](#) →

[Best Possible Medication History \(BPMH\) Training Materials](#) →

The Joint Commission Journal on Quality and Patient Safety 2021; 47:646–653

Improving Medication Reconciliation with Comprehensive Evaluation at a Veterans Affairs Skilled Nursing Facility

Amy W. Baughman, MD, MPH; Laura K. Triantafylidis, PharmD, BCGP; Nicole O'Neil, PharmD, BCGP; Jeni Norstrom, PharmD, BCGP; Kelechi Okpara, PharmD; Marcus D. Ruopp, MD; Amy Linsky, MD, MSc; Jeffrey Schnipper, MD; Amanda S. Mixon, MD, MSPH; Steven R. Simon, MD, MPH

Background: Unintentional medication discrepancies due to inadequate medication reconciliation pose a threat to patient safety. Skilled nursing facilities (SNFs) are an important care setting where patients are vulnerable to unintentional medication discrepancies due to increased medical complexity and care transitions. This study describes a quality improvement (QI) approach to improve medication reconciliation in an SNF setting as part of the Multi-Center Medication Reconciliation Quality Improvement Study 2 (MARQUIS2).

Methods: This study was conducted at a 112-bed US Department of Veterans Affairs SNF. The researchers used several QI methods, including data benchmarking, stakeholder surveys, process mapping, and a Healthcare Failure Mode and Effect Analysis (HFMEA) to complete comprehensive baseline assessments.

Results: Baseline assessments revealed that medication reconciliation processes were error-prone, with high rates of medication discrepancies. Provider surveys and process mapping revealed extremely labor-intensive and highly complex processes lacking standardization. Factors contributing were polypharmacy, limited resources, electronic health record limitations, and patient exposure to multiple care transitions. HFMEA enabled a methodical approach to identify and address challenges. The team validated the best possible medication history (BPMH) process for hospital settings as outlined by MARQUIS2 for the SNF setting and found it necessary to use additional medication lists to account for multiple care transitions.

Conclusion: SNFs represent a critical setting for medication reconciliation efforts due to challenges completing the reconciliation process and the concomitant high risk of adverse drug events in this population. Initial baseline assessments effectively identified existing problems and can be used to guide targeted interventions.

Medication Reconciliation Resources

Medication Discrepancies Data Collection Tool:

For Hospital to Post-Acute Care and Long-Term Care Facility (PALTC) Transitions



CARE TRANSITIONS



Healthcentric Advisors
Qlarant



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

This Medication Discrepancy Tool was created by Care Transitions InterventionSM — Eric Coleman, MD, MPH and adapted by IPRO QIN-QIO, a Quality Innovation Network-Quality Improvement Organization, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS.
Publication # 12SOWIPRO-QIN-TA-A2-22-521 [1/12/22]

Medication Discrepancies Identified on Admission/Start of Care to PALTC					
Instructions: Please complete this form to track all medication discrepancies found upon admission or start of care. All medication discrepancies should be reconciled upon identification.					
Name of Data Collector:					
Title:					
Data Collector's Contact Information:					
Name of Hospital:					
Receiving PALTC Facility:					
Hospital Contact Person (name, email, telephone):					
Receiving PALTC Contact Person (name, email, telephone):					
Causes:					
a. Ordered medication conflicts with resident's/patient's listed allergies					
b. Discharge instructions and/or summary incomplete, inaccurate, does not match MAR, PRI, etc.					
c. Duplication (multiple drugs ordered with the same action without any rationale)					
d. Dose/frequency discrepant					
e. Drug name discrepant/incorrect					
f. Medications omitted					
g. Resident/Patient level factors (did not fill/obtain medication, did not take medication at all or as prescribed, did not understand use of the medication, need for assistance not recognized)					
h. Other					
Patient Name	Medication	Discrepancy	Cause (select from above list)	Prescriber Name	Date of Admission/Start of Care to PALTC

IPRO QIN-QIO HRM Interventions and Resources

- Anticoagulants
 - [Advancing Anticoagulation Stewardship Playbook](#) implementation
 - Warfarin Time in Therapeutic Range
 - Management of bleeding events
 - [Anticoagulation Discharge Communication](#)
 - [Management of Anticoagulation in the Peri-Procedural Period app](#)
 - [Warfarin to Direct Oral Anticoagulation switching](#)
 - Reducing “off-label” use of anticoagulants (dose for kidney function when applicable, ensure there is an appropriate diagnosis)
 - Patient education: [peri-procedural management](#), [blood thinner safety plan](#)

Anticoagulation Resources

Blood Thinner Safety Plan: Which zone are you in?

Check your "zone" often to stay healthy and safe

Circle the name of your "blood thinner":

Coumadin® (warfarin) Pradaxa® (dabigatran) Xarelto® (rivaroxaban) Eliquis® (apixaban) Savaysa® (edoxa)
Lovenox® (enoxaparin) Arixtra® (fondaparinux) Fragmin® (dalteparin) Heparin

I take my blood thinner for: _____

- I can afford & get my medication without problems
- I take medication exactly as prescribed
- I have no changes/symptoms

Warfarin Users Only:

- I get my INR tested regularly and my doctor says it's ok

GREEN ZONE

- No action needed

Changes/Symptoms

- I have trouble affording medication/insurance won't cover it
- I have trouble getting medication from the pharmacy
- I miss doses/sometimes go without taking my blood thinner
- I have symptoms such as:
Bruising Bleeding Can't eat Vomiting Upset stomach
Cold/Flu Diarrhea (24+ hours) Other
- I have a medical procedure, surgery, or major dental work scheduled
Date: _____
What I'm having done: _____

- I'm confused about the dose I need to take
- I'm pregnant or plan to become pregnant

Warfarin Users Only:

- I've started/stopped/changed the dose of another medication (prescription or over the counter) or I'm unable to have INR tested when scheduled
- My diet has changed

YELLOW ZONE! Time to take action!

- These changes or symptoms may put you at risk for bleeding or clotting!
- Call doctor's office
Doctor's name: _____
Doctor's phone: _____
 - State your name & name of your doctor
 - Describe changes/symptoms you've had
 - Write instructions the doctor has provided

Changes/Symptoms

- I'm bleeding and it will not stop
- I have severe stomach or back pain, headache, dizziness, fainting, or body weakness that will not stop, or unusual bruising
- I have black tarry (sticky like tar) stool, any color blood in stool, any color blood in vomit, vomit that looks like coffee grounds, or any shade of red (even pink) in urine
- I had a major accident, serious fall, or hit my head

RED ZONE!!

- SEEK EMERGENCY MEDICAL ATTENTION
- DIAL 911

ANTICOAGULATION ESSENTIAL COMMUNICATION ELEMENTS FOR TRANSITIONS OF CARE GUIDE



Healthcentric Advisors
Qlarant

QIN-QIO
Quality Innovation Network - Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

Purpose: Adverse drug events (ADE) have been identified as a major contributor to preventable hospitalizations and emergency department visits. This guide identifies the fundamental provider communication criteria necessary for the safe transition of care for patients receiving anticoagulants. Additionally, it can be used to evaluate your facility practices regarding communication of requisite anticoagulation-related elements to subsequent providers and identify opportunities for system improvements.

Anticoagulation Essential Communication Elements	Guidance
Anticoagulant(s) currently utilized	Subsequent providers should be informed of all currently prescribed anticoagulants, as well as recently administered agents that are likely still active in the patient's body (e.g. warfarin discontinued a day prior is expected to have continued anticoagulant activity)
Indication(s) for anticoagulation therapy	Documentation provided to downstream providers should include a clear listing of all indications for anticoagulation (AC), acute or chronic
Documentation describing whether the patient is new to anticoagulation therapy or a previous user	Whether a patient is "new to therapy" has implications for thrombotic risk, drug management (e.g. INR stability), and drug duration (e.g. orthopedic prophylaxis). As such, patient initiation of anticoagulation in previous 30 day should be clearly stated for subsequent providers. Patients who have longstanding chronic indication(s) for anticoagulation (e.g. atrial fibrillation) and who then develop a new indication that warrants more intense anticoagulation (e.g. pulmonary embolism) should be considered "new users," in that details of the acute indication and date of therapy modification be communicated.
If a patient is new to anticoagulation therapy, the start date of anticoagulation is provided	For patients who have initiated anticoagulation within the past 30 days, the explicit date of initiation of anticoagulation must be communicated. For chronic AC users who develop a new indication warranting more intense anticoagulation, the date of AC intensification should be clearly communicated to downstream providers.
Documentation indicating whether treatment for each indication is intended to be acute (short-term) or chronic (long-term)	Documentation should make it abundantly clear to subsequent providers whether anticoagulation therapy for each listed indication is intended to continue, be reduced in intensity, or discontinued



NATIONAL QUALITY FORUM
Driving measurable health improvements together



Anticoagulation FORUM

Advancing Anticoagulation Stewardship: A Playbook

More on MAPPP app and Patient/Resident Education

Blood Thinner Safety Plan: Which Check your "zone" often to stay healthy

Circle the name of your "blood thinner":

Coumadin® (warfarin) Pradaxa® (dabigatran) Xarelto® (rivaroxaban) Lovenox® (enoxaparin) Arixtra® (fondaparinux) Fragmin® (dalteparin)

I take my blood thinner for: _____

- I can afford & get my medication without problems
- I take medication exactly as prescribed
- I have no changes/symptoms

Warfarin Users Only:

- I get my INR tested regularly and my doctor says it's ok

Changes/Symptoms

- I have trouble affording medication/insurance won't cover it
- I have trouble getting medication from the pharmacy
- I miss doses/sometimes go without taking my blood thinner
- I have symptoms such as:
 - Bruising Bleeding Can't eat Vomiting Upset stomach
 - Cold/Flu Diarrhea (24+ hours) Other _____
- I have a medical procedure, surgery, or major dental work scheduled Date: _____
- What I'm having done:
 - I'm confused about the dose I need to take
 - I'm pregnant or plan to become pregnant

Warfarin Users Only:

- I've started/stopped/changed the dose of another medication (prescription or over the counter) or I'm unable to have INR tested when scheduled
- My diet has changed

Changes/Symptoms

- I'm bleeding and it will not stop
- I have severe stomach or back pain, headache, dizziness, fainting, or weakness that will not stop, or unusual bruising
- I have black tarry (sticky like tar) stool, any color blood in stool, any color blood in vomit, vomit that looks like coffee grounds, or any shade of red (even pink) in urine
- I had a major accident, serious fall, or hit my head

Quality Improvement Organizations
 Promoting Knowledge, Improving Health Care
 CENTERS FOR MEDICARE & MEDICAID SERVICES

Authentic Quality Innovation Network
 NY, DE, MD
 IPRO
 Serving New York State

This Network is for a Department

Anticoagulation Management: Risk Prevention When Surgery or Other Invasive Procedures are Planned

Anticoagulant medications, commonly referred to as "blood thinners," are safe and effective to use to prevent or treat dangerous but special precautions should be taken to prevent clotting and bleeding events when surgery and other invasive procedures, work, are planned.

Whether you have been prescribed warfarin, one of the newer oral anticoagulation therapies that do not require routine INR or have been advised to take aspirin given your potential blood clot risks, surgery and other invasive medical interventions can be dangerous bleeding if your therapy is not managed correctly.

OBJECTIVE: The patient below will help you understand and advise your doctor about blood clots and bleeding if you are prescribed...

MAPPP!

Welcome to IPRO's Management of Anticoagulation in the Peri-Procedural Period app.

[Click here to try the web-based version now!](#)

Download on the

Despite the considerable efficacy of antithrombotics and the increased number of oral anticoagulants now available, preventable bleeding and thrombotic events are still unacceptably common. While recently marketed agents require less laboratory monitoring, problems with the clinical management of anticoagulated patients persist, particularly in the peri-procedural period.

Surgery and invasive medical interventions increase the risk of bleeding, while withholding anticoagulants increases the risk of thrombosis due to the underlying condition(s) for which anticoagulation was originally prescribed. The clinical team must therefore balance these competing risks and make educated decisions regarding the decision to interrupt oral anticoagulation for a medical procedure and, if interrupted, whether to "bridge" anticoagulation with injectable anticoagulants, such as low molecular weight heparin (LMWH) in warfarin treated patients.

This guide is intended to:

- Assist clinicians in the simultaneous evaluation of procedure-related bleeding risk and underlying risk of thrombosis
- Guide decisions regarding the interruption of anticoagulation and the use of anticoagulant "bridging"
- Provide detailed guidance for drug dosing and laboratory monitoring in the peri-procedural period
- Encourage clear communication between clinicians involved in prescribing anticoagulants and performing invasive procedures

Risk factors for bleeding (type of procedure): _____
 Medication Recommendation (including the days prior to, the day of, and the days after your procedure): _____
 Date to stop taking oral anticoagulant (if applicable): ____/____/____ Dose: _____
 Date to start bridging with LMWH injections (if applicable): ____/____/____ Dose: _____
 Date to stop LMWH injections (if applicable): ____/____/____
 Date to resume LMWH injections (if applicable): ____/____/____ Dose: _____
 Date to resume oral anticoagulant (if applicable): ____/____/____ Dose: _____

My notes: _____

National Blood Clot Alliance
 Stop The Clot®

This material was prepared through a collaboration of the National Blood Clot Alliance and the Authentic Quality Innovation Network (AQIN), a Network Quality Improvement Organization for New York State, South Carolina, and the District of Columbia under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The educational content is intended for general informational purposes only. The information provided is a guideline for actual professional medical advice, care, or treatment. If you believe you have a medical health care problem or call 911 immediately. The contents do not constitute medical advice. 11/2016 AQIN-IPRO-2016-01-02

Test Your Knowledge

After reading the educational materials about anticoagulation management when surgery or invasive procedures are planned, test your knowledge by answering the questions below. Share the results with your doctor or other healthcare provider.

- The term "blood thinner" is commonly used to mean (choose one):
 - a. A medication that cools your body down when you have a fever or high temperature
 - b. A medication called an anticoagulant used to prevent or treat dangerous blood clots
- If you take warfarin to prevent blood clots, how many days before your procedure is your doctor likely to stop or interrupt treatment (choose one)? *If you do not take warfarin, skip to question 10.*
 - a. 3 days
 - b. 5 days
 - c. 7 days
- If you take aspirin to prevent blood clots, how many days before your procedure is your doctor likely to stop or interrupt treatment (choose one)? *If you do not take aspirin to prevent blood clots, skip to question 11.*
 - a. 2 to 3 days
 - b. 4 to 5 days
 - c. 7 to 10 days
- If you take a newer direct oral anticoagulant medication (apixaban/Eliquis®, edoxaban/Savaysa®, rivaroxaban/Xarelto®), how many days before your procedure is your doctor likely to stop or interrupt treatment (choose one)? *If you do not take any of these medications, skip to question 12.*
 - a. 2 to 3 days
 - b. 4 to 5 days
 - c. 7 to 10 days
- If you take the newer direct oral anticoagulant medication dabigatran/Pradaxa®, how many days before your procedure is your doctor likely to stop or interrupt your treatment (Choose one)? *If you do not take this medications, skip to question 13.*
 - a. 2 to 3 days
 - b. 3 to 5 days
 - c. 7 to 10 days
- Symptoms of blood clots in the leg include, (choose all that apply):
 - a. Swelling
 - b. Red or discolored skin
 - c. Cold skin
- Symptoms of blood clots in the lung include, (choose all that apply):
 - a. Chest pain, worsens with deep breath
 - b. Difficulty breathing
 - c. Coughing up blood
- Symptoms of stroke include, (choose all that apply):
 - a. Sudden trouble seeing, affecting one or both eyes
 - b. Sudden numbness or weakness of face, arm, or leg
 - c. Sudden confusion, trouble speaking, or understanding speech
 - d. Sudden sleepiness



- Healthcentric Advisors
- Qlarant

QIN-QIO
 Quality Innovation Network - Quality Improvement Organizations
 CENTERS FOR MEDICARE & MEDICAID SERVICES
 EQUALITY IMPROVEMENT & INNOVATION GROUP

IPRO QIN-QIO HRM Interventions and Resources

- Diabetes medications
 - [Management of Diabetes in Long-term Care and Skilled Nursing Facilities: A Position Statement of the American Diabetes Association](#)
 - [Diabetes Medication Discharge Communication](#)
 - [Diabetes Adverse Drug Events](#)

Diabetes Medication Management Resources

308

Diabetes Care Volume 39, February 2016



Management of Diabetes in Long-term Care and Skilled Nursing Facilities: A Position Statement of the American Diabetes Association

Medha N. Munshi,¹ Hermes Florez,²
 Elbert S. Huang,³ Rita R. Kalyani,⁴
 Maria Mupanomunda,⁵
 Naushira Pandya,⁶ Carrie S. Swift,⁷
 Tracey H. Taveira,⁸ and Linda B. Haas⁹

Table 2—Framework for considering diabetes management goals

	Special considerations	Rationale	A1C	Fasting and premeal blood glucose targets	Glucose monitoring
Community-dwelling patients at skilled nursing facility for short rehabilitation	<ul style="list-style-type: none"> • Rehabilitation potential • Goal to discharge home 	<ul style="list-style-type: none"> • Need optimal glycemic control after recent acute illness 	<ul style="list-style-type: none"> • Avoid relying on A1C due to recent acute illness • Follow current glucose trends 	<ul style="list-style-type: none"> • 100–200 mg/dL 	<ul style="list-style-type: none"> • Monitoring frequency based on complexity of regimen
Patients residing in LTC	<ul style="list-style-type: none"> • Limited life expectancy • Frequent changes in health impacting glucose levels 	<ul style="list-style-type: none"> • Limited benefits of intensive glycemic control • Focus needs to be on better quality of life 	<ul style="list-style-type: none"> • <8.5% (69 mmol/mol) • Use caution in interpreting A1C due to presence of many conditions that interfere with A1C levels 	<ul style="list-style-type: none"> • 100–200 mg/dL 	<ul style="list-style-type: none"> • Monitoring frequency based on complexity of regimen and risk of hypoglycemia
Patients at end of life	<ul style="list-style-type: none"> • Avoid invasive diagnostic or therapeutic procedures that have little benefit 	<ul style="list-style-type: none"> • No benefit of glycemic control except avoiding symptomatic hyperglycemia 	<ul style="list-style-type: none"> • No role of A1C 	<ul style="list-style-type: none"> • Avoid symptomatic hyperglycemia 	<ul style="list-style-type: none"> • Monitoring periodically only to avoid symptomatic hyperglycemia

GOALS AND STRATEGIES

Recommendations

- Hypoglycemia risk is the most important factor in determining glycemic goals due to the catastrophic consequences in this population. **B**
- Simplified treatment regimens are preferred and better tolerated. **E**
- Sole use of SSI should be avoided. **C**
- Liberal diet plans have been associated with improvement in food and beverage intake in this population. To avoid dehydration and unintentional weight loss, restrictive therapeutic diets should be minimized. **B**
- Physical activity and exercise are important in all patients and should depend on the current level of the patient's functional abilities. **C**



Healthcentric
Advisors
Qlarant

QIN-QIO
 Quality Innovation Network -
 Quality Improvement Organizations
 CENTERS FOR MEDICARE & MEDICAID SERVICES
 EQUALITY IMPROVEMENT & INNOVATION GROUP

Munshi et al, ADA Statement

Table 4—Advantages, disadvantages, and caveats in using glucose-lowering agents in LTC population

	Advantages	Disadvantages	Caveats in LTC population
Biguanides	<ul style="list-style-type: none"> • Low hypoglycemia risk 	<ul style="list-style-type: none"> • Many contraindications in population with high comorbidity burden 	<ul style="list-style-type: none"> • Can be used until estimated glomerular filtration rate is <30 mL/min/1.73 m²
Metformin	<ul style="list-style-type: none"> • Low cost • Known side effects • Established safety record 	<ul style="list-style-type: none"> • May cause weight loss or gastrointestinal upset in frail patients 	<ul style="list-style-type: none"> • Extended release formulation has lower complexity and fewer gastrointestinal side effects • Assess for vitamin B₁₂ deficiency
Sulfonylureas	<ul style="list-style-type: none"> • Low cost 	<ul style="list-style-type: none"> • High risk of hypoglycemia • Glyburide has the highest risk of hypoglycemia and should be avoided 	<ul style="list-style-type: none"> • Avoid if inconsistent eating pattern • Careful glucose monitoring during acute illness or weight loss • Consider discontinuing if already on substantial insulin dose (e.g., >40 units/day)
Meglitinides	<ul style="list-style-type: none"> • Short duration of action 	<ul style="list-style-type: none"> • Can be held if patient refuses to eat 	<ul style="list-style-type: none"> • Some risk of hypoglycemia • Increased regimen complexity due to multiple daily mealtime doses
TZDs	<ul style="list-style-type: none"> • Low hypoglycemia risk • Low cost • Can be used in renal impairment 	<ul style="list-style-type: none"> • Many contraindications in population with high comorbidity burden 	<ul style="list-style-type: none"> • Less concern for bladder cancer if shorter life expectancy
DPP-4 inhibitors	<ul style="list-style-type: none"> • Low hypoglycemia risk • Once-daily oral medication 	<ul style="list-style-type: none"> • High cost • Lower efficacy 	<ul style="list-style-type: none"> • Can be combined with basal insulin for a low complexity regimen
SGLT2 inhibitors	<ul style="list-style-type: none"> • Low hypoglycemia risk 	<ul style="list-style-type: none"> • High cost • Limited evidence in LTC population 	<ul style="list-style-type: none"> • Watch for increased urinary frequency, incontinence, lower blood pressure, genital infections, and dehydration
GLP-1 agonists	<ul style="list-style-type: none"> • Low hypoglycemia risk • Once-daily and once-weekly formulation 	<ul style="list-style-type: none"> • High cost • Injection 	<ul style="list-style-type: none"> • Monitor for anorexia and weight loss
Insulin	<ul style="list-style-type: none"> • No ceiling effect • Many different types can be used to target hyperglycemia at different times of the day 	<ul style="list-style-type: none"> • High risk of hypoglycemia • Matching carbohydrate content with prandial insulin if variable appetite 	<ul style="list-style-type: none"> • Basal insulin combined with oral agents may lower postprandial glucose while reducing hypoglycemia risk and regimen complexity • Continue basal-bolus regimen in patients with type 1 or insulin-deficient type 2 diabetes

DPP-4, dipeptidyl peptidase 4; GLP-1, glucagon-like peptide 1; SGLT2, sodium-glucose cotransporter 2; TZDs, thiazolidinediones.

Diabetes Medication Management Resources

PATIENT SAFETY



Diabetes Adverse Drug Events (ADEs)

Definitions:

CMS: An injury resulting from drug-related medical interventions.²

Quick Facts:

- It is generally estimated that about **half** of ADEs are preventable.³
- Antidiabetic meds, anticoagulants/antiplatelet meds and opioids account for more than 50% of ED visits for ADEs in Medicare patients.³
- Each year, ADEs account for nearly 700,000 ED visits and 100,000 hospitalizations.³

Occurrences That Could Point to a Diabetes Medication ADE²:

- Stat administration of Glucagon or IV Dextrose.
- Administration of orange juice or other high sugar food and fluids in response to blood sugar reading or symptoms.
- Stat order for lab testing including to evaluate blood sugar, fluid, and electrolyte status.
- Stat order for insulin.
- New order for and administration of IV fluids.
- Transfer to hospital

Common Effects of Diabetes Medication ADEs²:



Unconsciousness



Falls, Incoordination, Weakness, Fatigue, or Somnolence



Lightheadedness, Dizziness, Sweating, Chills, Clamminess, Elevated Temperature



Hypoglycemia, Hyperglycemia, Ketones in Urine



Headache, Abdominal Pain, Hunger, Nausea/Vomiting, Dehydration



Excessive Thirst and/or Urination



Tingling or Numbness In Lips and/or Tongue, Fruity-Scented Breath, Complaints of Blurred or Impaired Vision



Rapid Heartbeat, Rapid Respiration



Change In Mental Status, Confusion, Emotional Changes (Including New Anger, Sadness, Stubbornness)



Shakiness, Nervousness, Anxiety, Irritability, Seizures

¹ https://www.cdc.gov/medicationsafety/adult_adversedrugsafety.html

² <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/Downloads/Adverse-Drug-Event-Trigger-Tool.pdf>

³ <https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events>

This material was prepared by Alliant Quality, the quality improvement group of Alliant Health Solutions (AHS), the Medicare Quality Innovation Network - Quality Improvement Organization for Alabama, Florida, Georgia, Kentucky, Louisiana, North Carolina, and Tennessee, and adapted by the IPRO QIN-QIO, a collaboration of Healthcentric Advisors, Qlarant and IPRO, serving as the Medicare Quality Innovation Network-Quality Improvement Organization for the New England states, NY, NJ, OH, DE, MD, and the District of Columbia, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents do not necessarily reflect CMS policy. 12SOW-IPRO-QIN-TA-A2-21-371



Healthcentric Advisors
Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

DIABETES MANAGEMENT ESSENTIAL COMMUNICATION ELEMENTS FOR TRANSITIONS OF CARE GUIDE

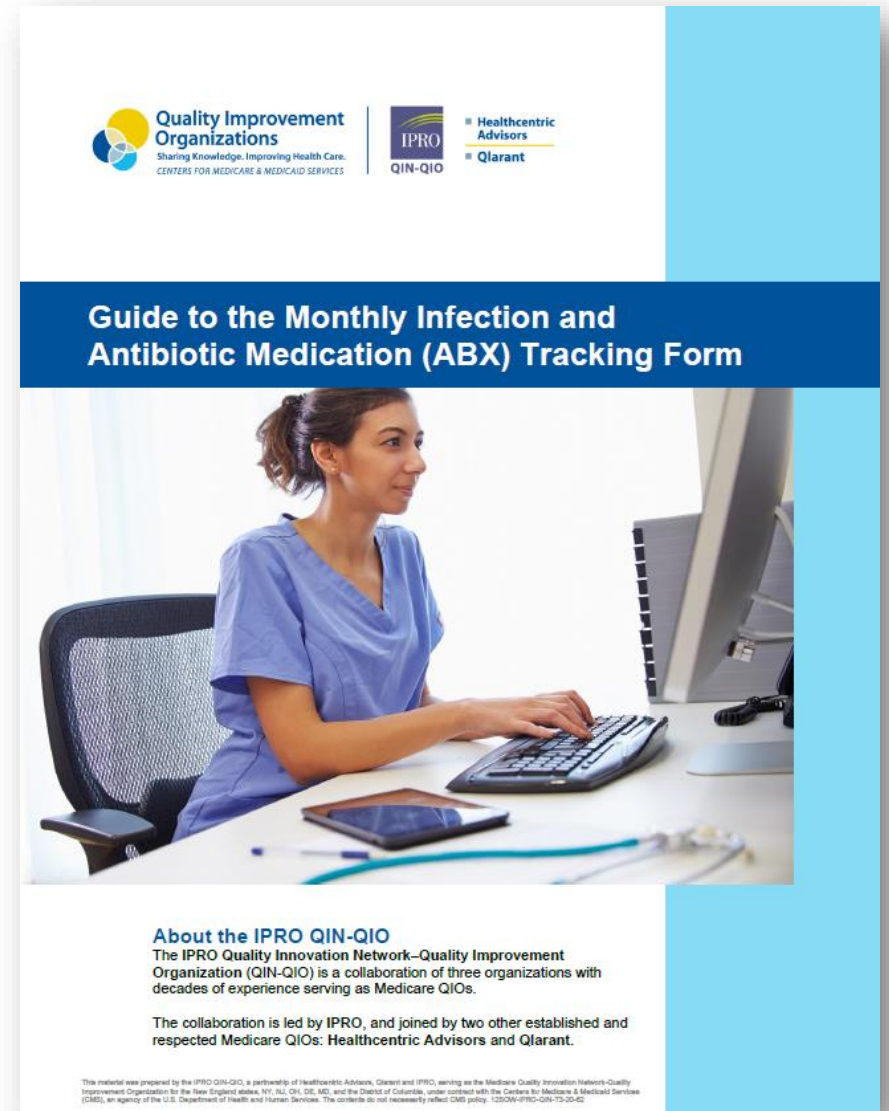


Purpose: Adverse drug events (ADE) have been identified as a major contributor to preventable hospitalizations and emergency department visits. This guide identifies the fundamental provider communication criteria necessary for the safe transition of care for patients receiving diabetes medications. Additionally, it can be used to evaluate your facility practices regarding communication of requisite diabetes-related elements to subsequent providers and identify opportunities for system improvements.

Diabetes Essential Communication Elements	Guidance
Diabetes diagnosis, including subtype classification	The diagnosis of diabetes and the sub-classification (Type 1, Type 2, gestational, iatrogenic, due to pancreatitis or pancreatic obstruction, other) should be clearly indicated as a medical condition for subsequent care providers, regardless of whether it is a primary purpose for receiving services from the index (i.e. "upstream") provider. The diagnosis is NOT to be deduced by evaluation of drug regimen or prescribed diet.
Duration of diabetes (new diagnosis or chronic)	Subsequent providers should be provided some characterization of the duration of the diabetes diagnosis and/or treatment. Newly diagnosed patients may be more unstable, and hypoglycemia risk has been shown to increase with duration of diabetes. Patients with longstanding diagnosis will likewise be at greater risk of microvascular and macrovascular complications. Such characterizations need not be exact. Terms such as "recently diagnosed" and "diabetic for 5+ years" are acceptable, although more detailed and precise information is preferred such as date of onset (month/year) according to patient medical record.
Recent blood glucose values along with blood glucose monitoring schedule with date and time for when the next blood glucose value is due	Subsequent providers should receive all blood glucose values recorded in the referring health setting in the preceding 7 days, with values over a greater monitoring period preferred. In instances in which the patient duration of stay in the "upstream" setting is less than 7 days, all values recorded in that setting should be provided to subsequent providers.
Target range for blood glucose	Subsequent providers should receive details (i.e. numeric boundaries) of the blood glucose range targeted for the individual patient while under the care of the referring (i.e. "upstream") provider.
History of hypoglycemic episodes	Subsequent providers should receive a history of hypoglycemia episodes occurring within the last 7 days, including date and time of event, whether loss of consciousness occurred, a list of the current drugs and an explanation for the hypoglycemic event.

IPRO QIN-QIO HRM Interventions and Resources

- Antibiotic Stewardship
 - [Monthly Infection and Antibiotic \(ABX\) Tracking Forms with Instructions](#)
 - Tracking and trending C. difficile, COVID-19, sepsis, UTI, and pneumonia
 - Tracking and trending antibiotic utilization
 - Infection Prevention and Control tactics and audit tools
 - Hand hygiene
 - PPE procedures
 - Environmental cleaning



Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

IPRO
QIN-QIO

Healthcentric Advisors

Qlarant

Guide to the Monthly Infection and Antibiotic Medication (ABX) Tracking Form

About the IPRO QIN-QIO
The IPRO Quality Innovation Network–Quality Improvement Organization (QIN-QIO) is a collaboration of three organizations with decades of experience serving as Medicare QIOs.

The collaboration is led by IPRO, and joined by two other established and respected Medicare QIOs: Healthcentric Advisors and Qlarant.

This material was prepared by the IPRO QIN-QIO, a partnership of Healthcentric Advisors, Qlarant and IPRO, serving as the Medicare Quality Innovation Network–Quality Improvement Organization for the New England states (NY, NJ, OH, DC, MD), and the District of Columbia, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents do not necessarily reflect CMS policy. 1250W-IPRO-QIN-173-00-02

IPRO QIN-QIO HRM Interventions and Resources

- Antipsychotics
 - [Antipsychotic Medication Adverse Drug Event guide](#)
 - Managing behavioral and psychological symptoms of dementia (BPSD)
 - Root cause analysis
 - Need to understand your facility number of antipsychotics rx since and rate of prescribing since 2019 – does it align with publications?
 - If AP's have increased – in new residents or established residents? Are new residents received from hospital?
 - Action Planning
 - Gradual dose reduction tracking, appropriate documentation

PATIENT SAFETY & BEHAVIORAL HEALTH

Antipsychotic Medication Adverse Drug Events (ADEs)

Definitions











CDC: An adverse drug event (ADE) is when someone is harmed by a medicine.¹

CMS: An injury resulting from drug-related medical interventions.²

Quick Fact About ADEs²

- It is generally estimated that about **half** of ADEs are preventable.³

Common Effects of Antipsychotic ADEs²

 Sedation	 Falls or Unsteady Gait	 Confusion	 Orthostatic Hypotension	 Loss of Facial Expressions
 Parkinsonism A neurological disorder resembling Parkinson's disease ⁴	 Destabilized Blood Sugar	 Anticholinergic Effects Examples: dry mouth, constipation, urinary retention, bowel obstruction, dilated pupils, blurred vision, increased heart rate, decreased sweating, confusion	 Cardiac Arrhythmias	 Tardive Dyskinesia A neurological disorder characterized by involuntary uncontrollable movements especially of the mouth, tongue, trunk, and limbs ⁵

Occurrences That Could Point to an Antipsychotic ADE²

- Transfer to hospital
- Call to physician regarding new onset of relevant signs or symptoms
- Addition of a new medication
- Removal of a medication

¹ https://www.cdc.gov/medicationsafety/adult_adversedrugsafety.html

² <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/OAPI/Downloads/Adverse-Drug-Event-Trigger-Tool.pdf>

³ <https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events>

⁴ <https://www.merriam-webster.com/dictionary/tardive%20dyskinesia#medicalDictionary>

⁵ <https://www.merriam-webster.com/dictionary/parkinsonism>

This material was prepared by Alliant Quality, the quality improvement group of Alliant Health Solutions (AHS), the Medicare Quality Innovation Network - Quality Improvement Organization for Alabama, Florida, Georgia, Kentucky, Louisiana, North Carolina, and Tennessee, and adapted by the IPRO QIN-QIO, a collaboration of Healthcentric Advisors, Qlarant and IPRO, serving as the Medicare Quality Innovation Network-Quality Improvement Organization for the New England states, NY, NJ, OH, DE, MD, and the District of Columbia, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents do not necessarily reflect CMS policy. 12SOW-IPRO-QIN-TA-A2-21-354

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

IPRO
Healthcentric Advisors
Qlarant

Creating an Action Plan for Managing BPSD



QUALITY IMPROVEMENT ACTION PLAN FOR MANAGING BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA	
NAME OF FACILITY:	
Team Lead(s) Administrator Director of Nursing Others	
Process or problem identified for improvement Increase education on non-medication interventions and medication therapies for BPSD for staff and outreach to prescribers on antipsychotic use and dose reductions, increase non-medication interventions in residents with BPSD and decrease the use of antipsychotic drugs in residents.	
Background leading up to need for this action plan (include findings from root cause analysis): Published reports indicate that antipsychotic use has increased since 2015 in LTC and AL. Facility # 1x-2019, 2020, 2021, 2022. Rate of prescribing since 2019 has increased by X%/decreased by X%/stayed same. Baseline number of non-medication interventions in BPSD residents collected.	
SMART Goals (Specific, Measureable, Attainable, Realistic, Time-Bound)	Baseline Measurements (For each SMART Goal, identify a corresponding baseline measurement)
1. 100% of facility/contract staff will receive education using 2 or 3 different types of media by XX/XX/XXXX. As applicable.	1. Current educational outreach and media type, including start date, distribution % for facility/contract staff
2. Increase the number of residents with BPSD for whom more than X non-medication intervention is implemented. Goal is to achieve an absolute rate of 100% for residents over the next 90-120 days. As applicable.	2. Current percentage of BPSD residents that have more than 100% medication interventions implemented and documented in care plan to date.
3. Increase the number of antipsychotic gradual dose reduction initiated by X% goal within the next 90-120 days. As applicable. (confer with Medical Director, prescribers regarding goal)	3. Number of antipsychotic gradual dose reductions initiated to date.

Scope (boundaries for where project begins and ends)	Resources needed
Antipsychotic data reported for CY2019 will serve as baseline data, along with baseline inventory of non-medication interventions. Data collection and monitoring will continue for 90 -120 days or until selected goal for eligible residents has been achieved.	Resources-
Potential barriers	Strategies to mitigate barriers
Overcoming family, resident, and staff objections change Language barrier to understanding	Utilize multi-lingual resources Provide education resources in multiple media (formats) to residents, resident caregivers and staff on multiple occasions. Provide subject matter expert access Offer incentive for implementing changes (stickers, lifesaver candies, refreshments, monetary)



Healthcentric Advisors
Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
EQUALITY IMPROVEMENT & INNOVATION GROUP

Creating an Action Plan for Managing BPSD

KEY ACTION STEPS AND PDSA CYCLES						
Action	Start Date	Target Completion Date	Process Owner	Monitoring Strategy	Findings/Lessons Learned	Recommendations/ Next Steps
RCA: Work with pharmacy to determine number of rx's, rates of prescribing 2019 – present	XX/XX	XX/XX	Identified team member or leadership (DON) with demonstrated skills in interviewing with RCA 5 Whys.	QI agenda item, Audit Tool		
RCA: Identify and quantify current use of non-medication BPSD interventions.	XX/XX	XX/XX	Identified team member or leadership (DON) with demonstrated skills in interviewing with RCA 5 Whys.	QI agenda item		
Institute policies and procedures for BPSD management	XX/XX	XX/XX	Administration/DON/Pharmacy, SW, Psych, etc.	QI agenda item, completion tracking		
Identify education resources or creating learning <u>modules</u> utilizing new resource media and content	XX/XX	XX/XX	Clinical educator, medical director, DON, administration, pharmacy	QI agenda item, completion tracking		
Deploy education	XX/XX	XX/XX	Clinical educator, medical director, DON, administration, pharmacy	Number educated		
Implement BPSD non-medication plan	XX/XX	XX/XX	All	Number of interventions initiated		
Implement AP gradual dose reductions	XX/XX	XX/XX	Prescriber, DON, pharmacy	Number of gdr's initiated		

Join Us!

- IPRO High Risk Medication Safety Learning Circle
 - Starting November 2, 2022
 - Recurring every first Wednesday of every month 2-3pm
 - Email amyrika@ipro.org to receive the calendar invitation – no pre-registration required
 - First meeting: Open discussion on what YOU need to manage your high-risk medications – we can focus on opioids, anticoagulation, diabetes meds, med rec, antibiotic stewardship, antipsychotics
 - IPRO will provide audit tools, review your data, assist with tools, resources and education
 - Goal is rapid improvement with short Plan-Do-Study-Act cycles of improvement

Thank you!

Questions? Comments?

Need more information?

Anne Myrka amyrka@ipro.org



■ Healthcentric
Advisors
■ Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
EQUALITY IMPROVEMENT & INNOVATION GROUP

Medication Safety Assessment & Opioid and Pain Management Best Practice Assessment

Still haven't taken the Medication Safety Assessment? You still can!

Website: <https://qi.ipro.org/2022/05/26/medication-safety-assessment/>

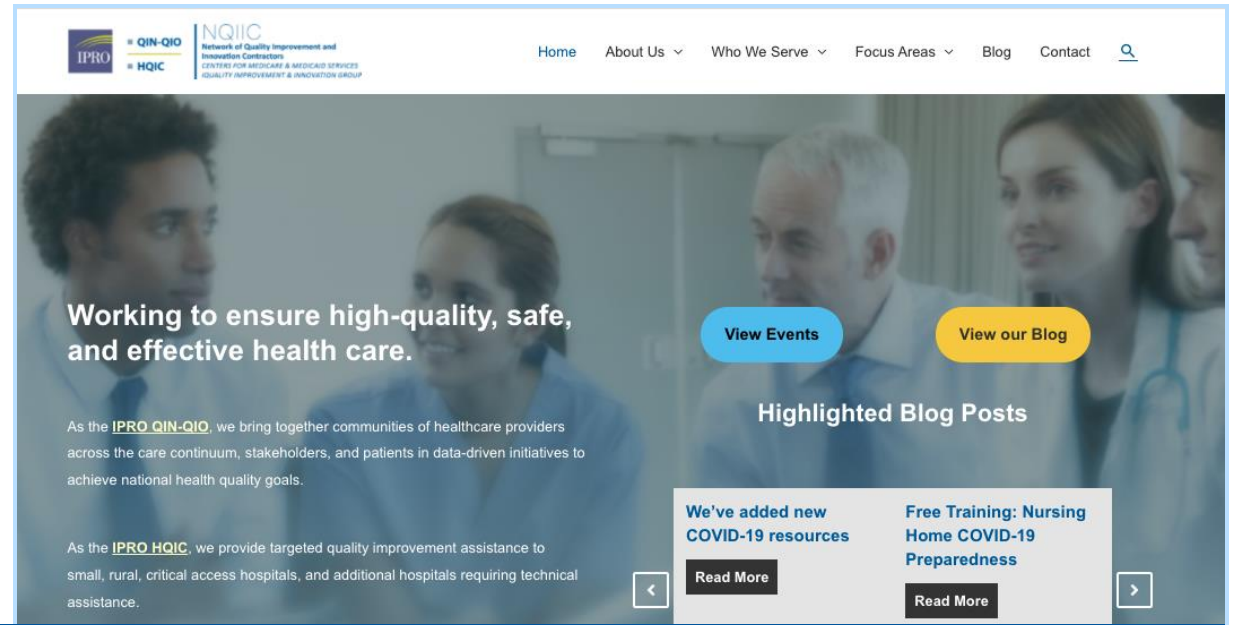
Still haven't taken the Opioid and Pain Management Best Practice Assessment either? You still can!

Website: <https://qi.ipro.org/2021/10/01/complete-the-opioid-pain-management-self-assessment/>

Learn More & Stay Connected



<https://qi.ipro.org/>



IPRO QIN-QIO HQIC Network of Quality Improvement and Innovation Contractors CENTERS FOR MEDICARE & MEDICAID SERVICES QUALITY IMPROVEMENT & INNOVATION GROUP

Home About Us Who We Serve Focus Areas Blog Contact

Working to ensure high-quality, safe, and effective health care.

View Events View our Blog

Highlighted Blog Posts

We've added new COVID-19 resources Read More

Free Training: Nursing Home COVID-19 Preparedness Read More

Follow IPRO QIN-QIO



@IPROQINQIO



@IPROQINQIO



@IPRO QIN-QIO



IPRO QIN-QIO

This material was prepared by the IPRO QIN-QIO, a Quality Innovation Network-Quality Improvement Organization, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this document do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW-IPRO-QIN-T1-A2-22-748



Healthcentric Advisors
Qlarant

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP