

Welcome!

We will get started promptly at 12 noon.

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Adverse Drug Events

Name: Charlotte Gjerloev and Anne Myrka

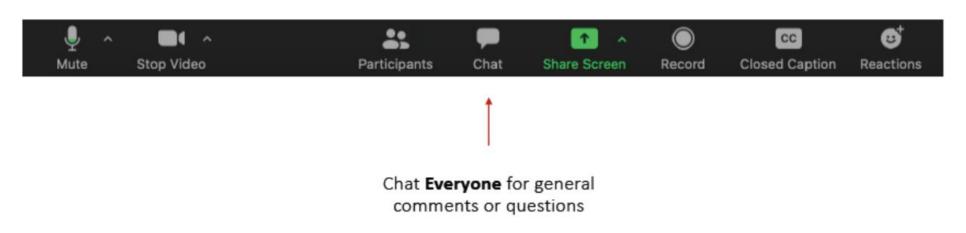
Date: January 27 and February 2



Use Chat to introduce yourself & ask questions

How to use Zoom

At the bottom of your screen, you will see a black bar with icons:





Welcome!

- Today's session is being recorded
- Although we want active participation, we ask that you please keep yourself on 'mute' during the presentation

 Please introduce yourself (name, organization & role, location) using the Chat feature



The IPRO QIN-QIO

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- 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:

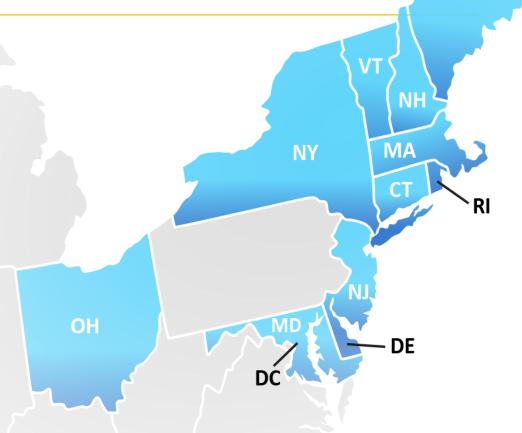
New York, New Jersey, and Ohio

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**



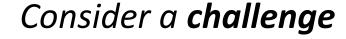
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ME

IPRO QIN-QIO small Talk series January-June 2022

Our *small Talks* are short, impactful presentations designed to meet your needs during this uniquely challenging time.

Two different topics will be presented on a monthly basis and each **small Talk** will:



Identify interventions

Guide you to a specific **result** or outcome







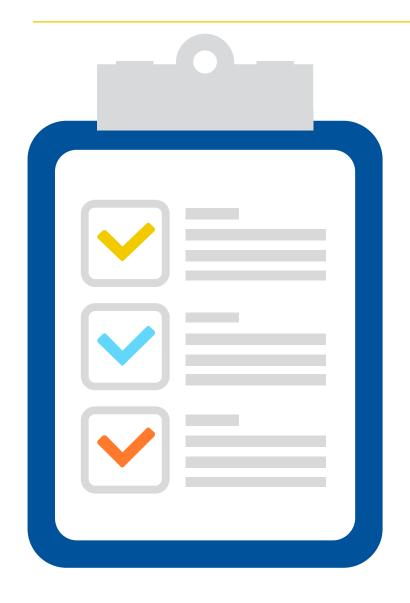
Adverse Drug Events

Name: Charlotte Gjerloev and Anne Myrka

Date: January 27 and February 2



Quick Overview



- CHALLENGE: Nursing home residents are vulnerable to experiencing adverse drug events (ADEs) that result in emergency department visits, hospitalizations, and readmissions.
- Intervention: Instituting processes that identify, prevent, and resolve medication discrepancies and ADEs.
- Result: Decrease in ADEs that result in emergency department visits, hospitalizations, and readmissions.



Challenge

- Nursing home residents are vulnerable to experiencing adverse drug events (ADEs) that result in emergency department visits, hospitalizations, and readmissions.
- The highest ADE rates in the elderly are due to three high-risk classes:
 - Anticoagulants
 - Opioids
 - Diabetic Agents
- ADEs have been increasing during the COVID-19 pandemic and often occur during care transitions.



Medication Discrepancies & Adverse Drug Events

Definitions

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

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

Quick Facts About ADEs

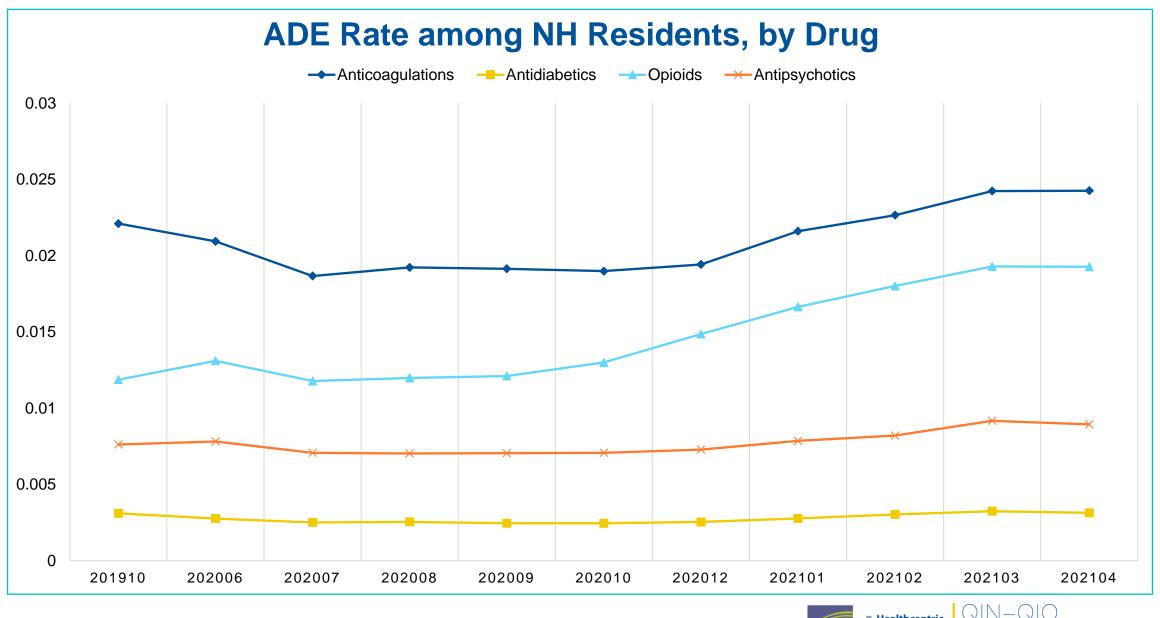
- It is generally estimated that about half of ADEs are preventable.
- Antidiabetic meds, anticoagulants/antiplatelet meds and opioids account for more than 50% of Medicare patient Emergency Department (ED) visits.
- Each year, ADEs account for nearly 700,000 ED visits and 100,000 hospitalizations.
- Estimated 70% of patients experience an actual or potential unintended discrepancy at hospital discharge
- ADEs and issues with medication reconciliation across care settings are major drivers for hospital readmission



Medication Discrepancies

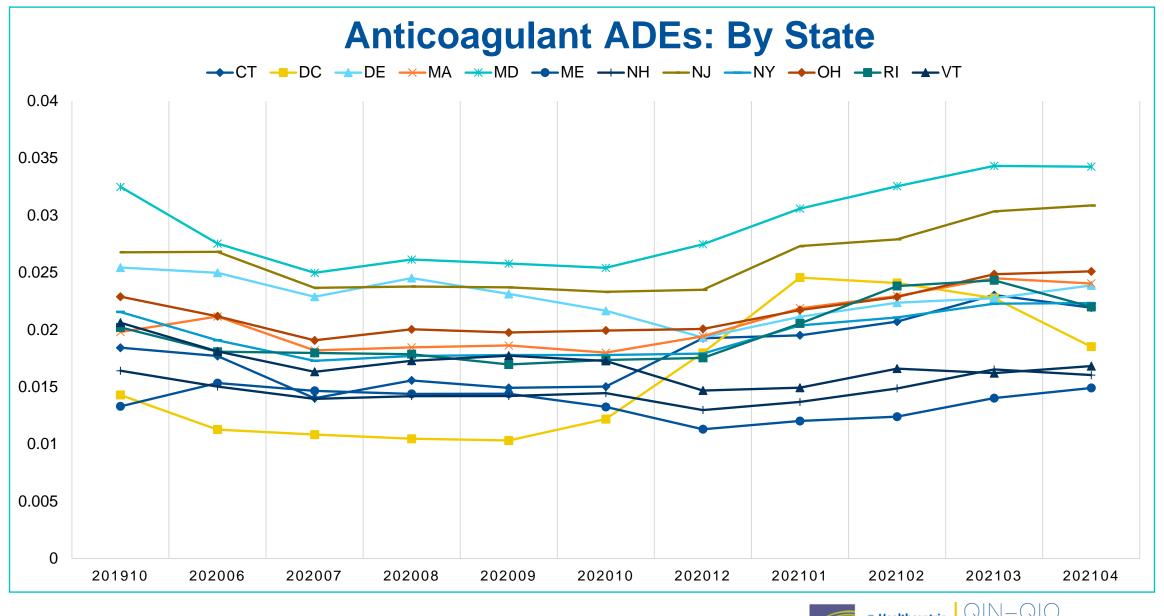
- Unintended or unexplained/undocumented differences among medication lists across different sites of care. Examples are:
 - Omissions
 - Duplications
 - Dose/frequency/route of administration errors
 - Drug name discrepant/incorrect
- Sometimes discrepancies are differentiated as "intended" or "unintended" – intended discrepancies would have the rationale documented
- Medication discrepancies are identified and resolved through a comprehensive medication reconciliation program

Healthcentric



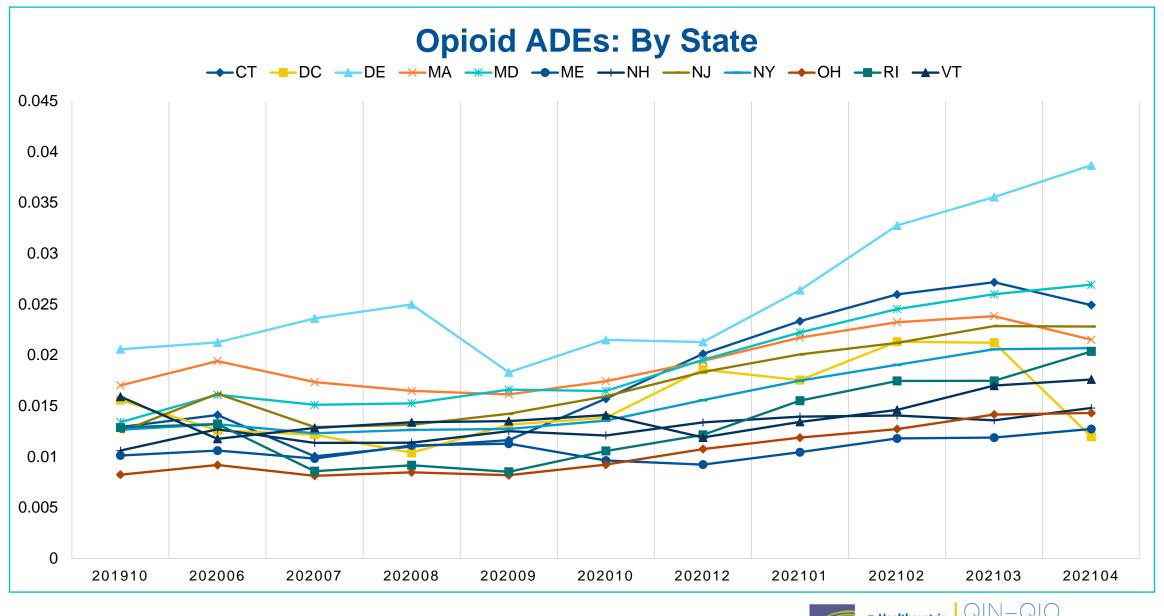


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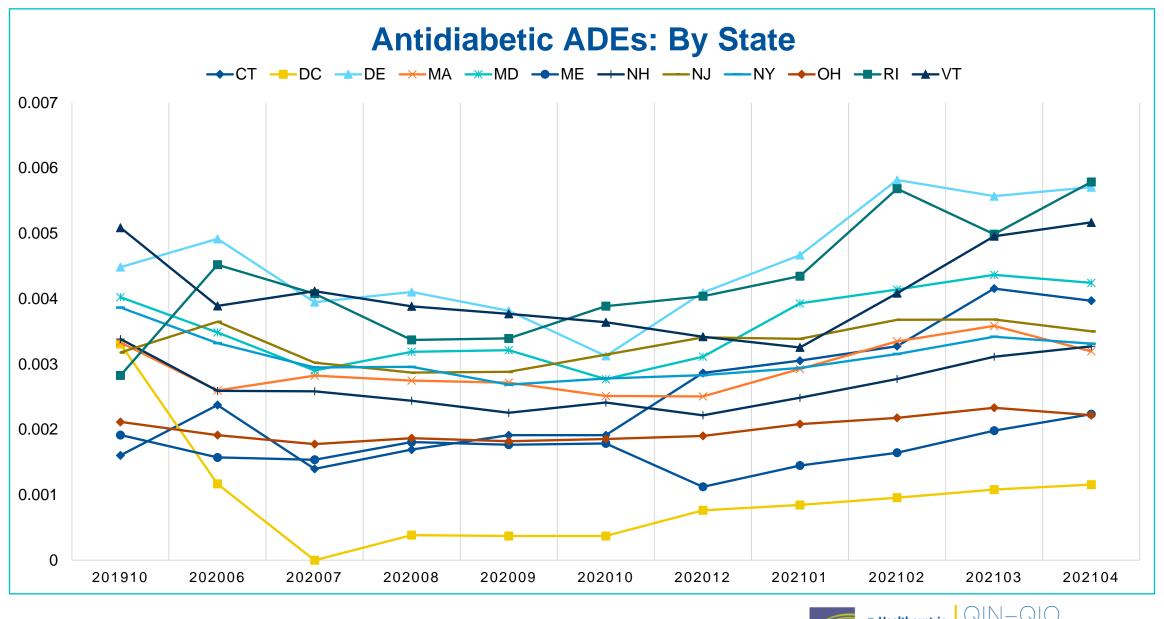


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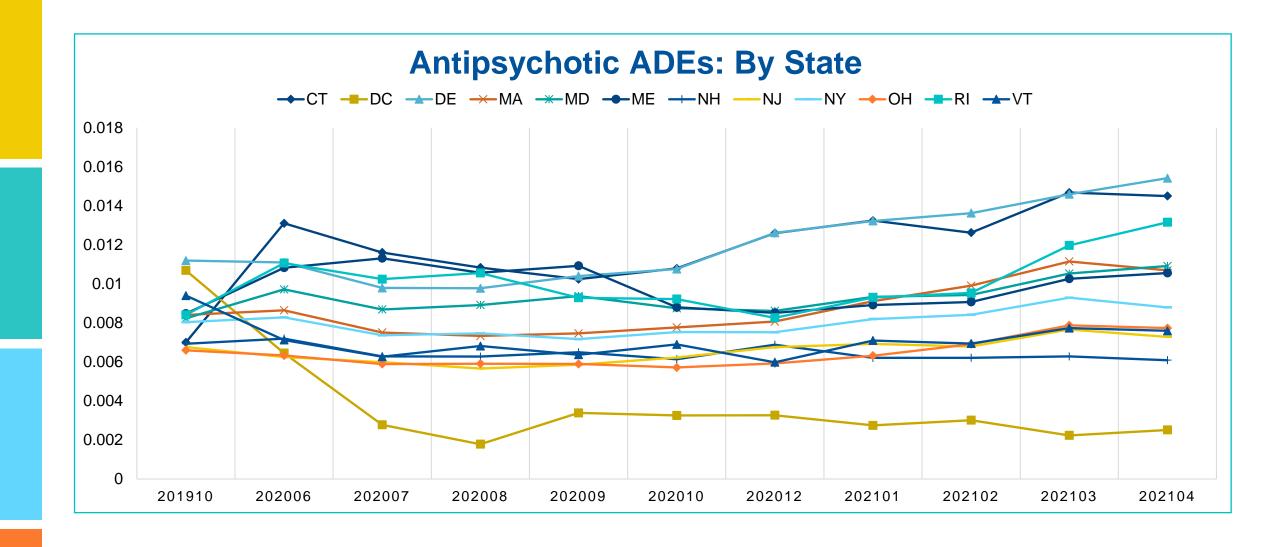


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Preventing and Reducing Adverse Drug Events in Nursing Homes

The National Action Plan for Adverse Drug Event Prevention:

Anticoagulants, Opioids, and Diabetes Agents

- ✓ Communication failures
- Suboptimal management systems
- ✓ Inadequate access to medication lists and lab results

"Medication reconciliation as a care transitions strategy is important to reduce potential medication discrepancies."



Interventions

- What can nursing homes do about this?
 - Identify medication discrepancies and root causes during care transitions
 - Identify risks for potential ADEs and proactively care plan for early identification and resolution
- What specific action can nursing homes take?
 - Use the tools and resources we'll introduce during the presentation
 - Establish a quality improvement plan for eliminating or modify root causes of discrepancies or ADEs
- How do they do it? What and who do they need to accomplish this?
 - Incorporate medication discrepancy and ADE resolution into QAPI program



Examples of Drug Categories and Drugs Associated with Preventable Adverse Drug Events (pADE) (High Risk Medications)

Drug Category/Drug		pADE	
Analgesics	NSAIDs (ibuprofen, naproxen, etc.)	GI bleeding, renal impairment, hypertension	
	opioids	CNS depression, constipation, cardiac events, falls	
Antibiotics		Various – CNS, skin eruptions, drug interactions, GI and cardiac events	
Anticholinergics –"Beer's List"		Confusion, urinary retention, blurred vision, falls, increased heart rate, constipation, etc.	
Anticoagulants	Warfarin, apixaban, rivaroxaban, dabigatran, edoxaban	Bleeding, drug interactions	
	Heparin, enoxaparin, other	Bleeding, blood dyscrasias	
Cardiovascular agents	digoxin	High blood levels – GI upset, nausea, diarrhea, visual disturbances, low heart rate	
	diuretics, vasodilators	hypotension	
Central Nervous System agents	benzodiazepines	Sedation, falls	
	antipsychotics	Anticholinergic effects (some); parkinsonism	
Hypoglycemics	Insulin, sulfonylureas (glyburide, glipizide)	hypoglycemia	

Identifying & Care Planning for Preventable ADEs: CMS Nursing Home ADE Trigger Tool

Adverse Drug Event Trigger Tool

Adverse Drug Event (ADE) Change in mental status/delirium related to opioid use	Risk Factors - These increase the potential for ADEs. Multiple factors increase risk. PRN or routine use of opioid medication Opioid naiveté (someone who has not been taking opioids) Opioids used in combination with Triggers: Signs and Symptoms (S/S) - Any of these may indicate an ADE may have occurred. Falls Hallucinations Delusions Disorientation or confusion Light-headedness, dizziness, or vertigo	Triggers: Clinical Interventions - These actions may indicate an ADE occurred. • Administration of Narcan • Transfer to hospital • Call to physician regarding new onset of relevant signs or symptoms • Abrupt stop order for	 Surveyor Probes - These questions are designed to assist in the investigation. A negative answer does not necessarily indicate noncompliance. Is there an assessment and determination of pain etiology? Does the resident's pain management regime address the underlying etiology? For a change in mental status, is there evidence that the physician conducted an evaluation of the underlying cause, including medications? Is there evidence of a system for ensuring that 	
	sedatives or other opioids History of opioid abuse Opioid tolerance Severe pain Low fluid intake/dehydration Low body weight History of head injury, traumatic brain injury, or seizures	somnolence Agitation Anxiety Unresponsiveness Decreased BP Pulse Pulse Pulse oximetry Respirations	medication	residents are routinely assessed for pain, including monitoring for effectiveness of pain relief and side effects of medication (e.g., oversedation)? If receiving PRN and routinely, is there consideration for the timing of administration of the PRN? Can staff describe signs/symptoms of oversedation? Is there evidence of a system for ensuring "hand off" communication includes the resident's pain status and time of last dose? Do the resident, family, and direct caregivers know signs and symptoms of over-sedation and steps to take if noted (e.g., alert the nurse)? Is there evidence the facility implements non-pharmacological pain management approaches? Is there a system to ensure extended-release formulations are delivered correctly (e.g., medications not crushed)?

Red Flags



Possible Symptoms of Drug Therapy Problems

- New or increased confusion
- New or increased depression
- Delirium
- New or worsening insomnia
- Parkinson's-like symptoms
- Rash
- New Incontinence

- Weakness or lethargy
- Loss of appetite
- Falls
- Changes in speech
- Bruising, bleeding, blood in stool
- Nausea, vomiting

Know baseline resident characteristics

Be attuned to worsening condition

Listen to patients/residents and care partners regarding changes in resident status

Take any information provided seriously

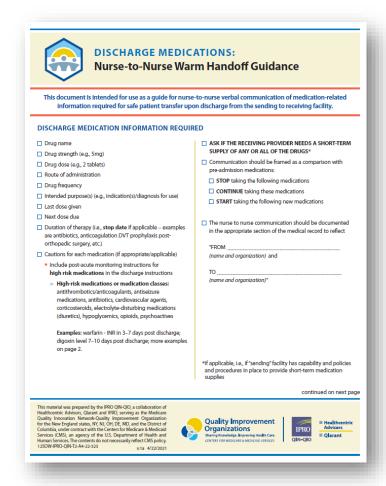
Create care plans which include active monitoring for medication related red flags



Interventions

 Decreasing ADEs begins with good admission medication communications and medication reconciliation that identifies and solves discrepancies and drug therapy problems

Supporting Resource: Nurse-to-Nurse Warm Handoff Guidance

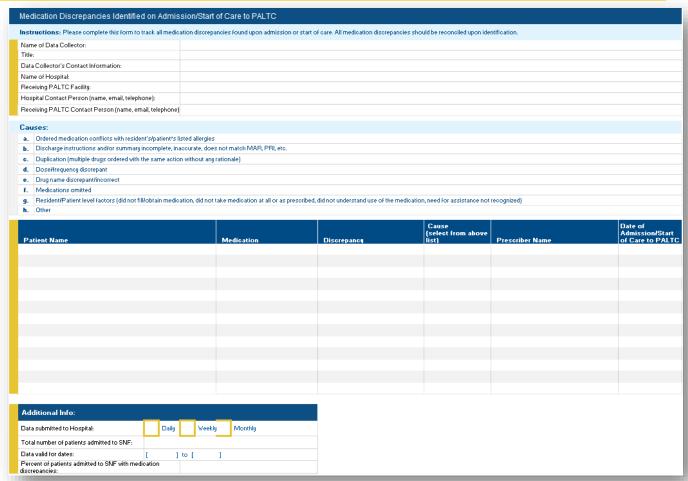


EXAMPLE OF DISCHARGE MEDICATION CO	MMUNICATION SCRIPT					
The patient should STOP taking the following medical	tions:					
1. Glyburide 10 mg						
2. Tramadol 50 mg	,					
. Lisinopril 10 mg						
The patient should CONTINUE taking the following me	edications:					
Warfarin 3 mg: Take 1 tablet by mouth every day						
Purpose: anticoagulant, atrial fibrillation	- , , , ,					
 LAST dose taken: 3/8/21 at 8am 						
 NEXT dose due: 3/9/21 at 8am 						
CAUTION: Contact doctor upon signs/symptoms of it	bleeding or blood in urine, stool, or sputum.					
FOLLOW-UP: An INR test needs to be completed with	hin 3-7 days after discharge					
The patient should START taking the following medica	ations:					
NovoLog* FlexPen*: Inject 10 units subcutaneously 5-	10 minutes before meals					
Purpose: Type 2 Diabetes						
 LAST dose given: 3/8/21 at 12pm 						
 NEXT dose due: 3/8/21 before evening meal 						
 CAUTION: Contact doctor if low blood sugar leads to dizziness, confusion, weakness, or headache. 						
FOLLOW-UP: Check blood glucose level prior to next	t dose					
Levofloxacin 500mg: Take 1 tablet by mouth every morning						
Purpose: antibiotic, upper respiratory infection						
 LAST dose given: 3/8/21 at 8am 						
• NEXT dose due: 3/9/21 at 8 am						
 STOP DATE: 3/14/21 						
3. Hydrocodone/Acetaminophen 5/500 mg: Take 1 tablet	by mouth every 4–6 hours as needed					
 Purpose: Chronic back pain 						
 LAST dose given: 3/8/21 at 12pm 						
 NEXT dose due: 3/8/21 at 4pm 						
 CAUTION: May cause drowsiness and/or dizziness. D May cause constipation. 	o not take any other products containing acetaminophen.					
FOLLOW-UP: Reassess need and pain control as needed						
DO YOU NEED A SHORT TERM SUPPLY OF ANY OR AL	L OF THE DRUGS?					
FROM:	TO:					
(Name and Organization)	(Name and Organization)					



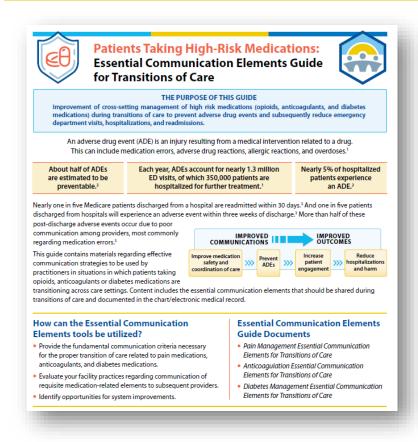
Collecting Data: The Medication Discrepancy Data Collection Tool







Supporting Resource: High-Risk Medications Essential Communication Elements Guide for Transitions of Care

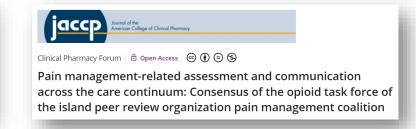


Evidence-based peer-reviewed high-risk medication management elements that should be communicated to subsequent providers upon any transition of care.

Guides for:

- Anticoagulation
- Pain Management
- Diabetes Management





Access tools from IPRO QIN-QIO Resource Library:

https://qi-library.ipro.org/2021/08/17/anticoagulant-essential-communication-elements-guide/https://qi-library.ipro.org/2021/08/17/pain-management-essential-communication-elements-guide/https://qi-library.ipro.org/2021/08/17/diabetes-essential-communication-elements-guide/



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Communication Tools

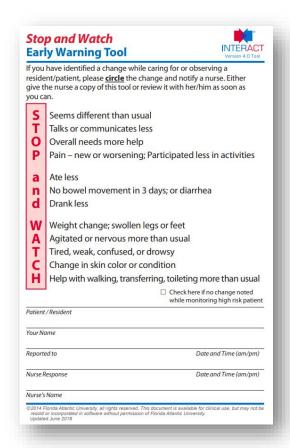
INTERACT Version 4.0 Tools

For Communication Within the Nursing Home

- · Stop and Watch Early Warning Tool
- · Stop and Watch Early Warning Tool Spanish
- Stop and Watch Early Warning Tool Creole
- SBAR Communication Form
- Medication Reconciliation Worksheet for Post-Hospital Care

For Communication Between the Nursing Home and Hospital

- Engaging Your Hospitals Tip Sheets
- SNF/NF Capabilities List
- SNF/NF Hospital Transfer Form
- SNF/NF Hospital Data List
- Acute Care Transfer Checklist
- Hospital Post-Acute Transfer Form
- Hospital Post-Acute Data List





SBAR Communication

- Situation reason for call in 5-10 seconds
- Background the context, specific objective data
- Appearance/Assessment your assessment of the problem
- Review/Recommendation –
 what do we need to do?





What to look for

- MDS section N, Medication Regimen Review Audit for accuracy and if it is addressed in the plan of care.
- Quality Measures (can be accessed through CASPER)
 - short stay residents with new antipsychotic medications
 - short stay residents who are re-hospitalized
 - long stay residents on antipsychotic medications
 - long stay residents on antianxiety or hypnotic medications
- Action: Consider taking any identified issues/ADEs to your QAPI team for a potential Performance Improvement Project (PIP).

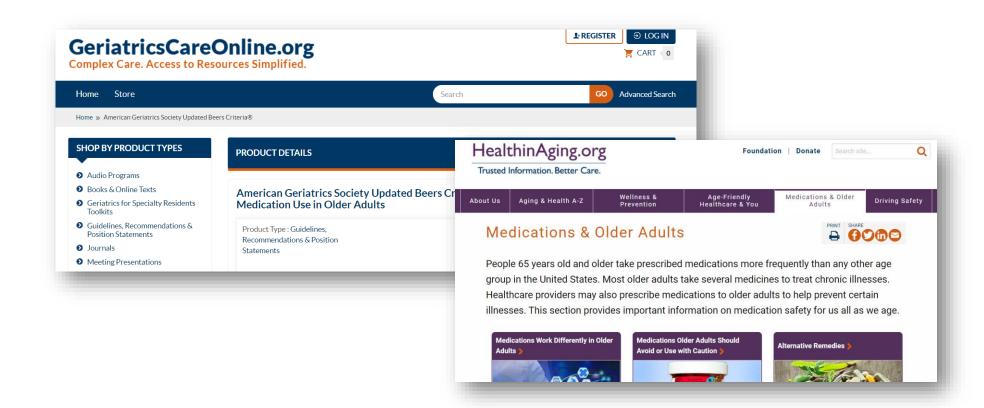


QAPI

- Identifying ADEs starts with admission orders to identify and resolve medication discrepancies
- Use the Medication Discrepancy Data Collection Tool
 - The tool is structured to help nursing homes (and any post-acute care and long-term care setting) categorize and collect data on different types of medication discrepancies.
 - The categorized data can be used to inform a discussion with the discharging hospital, and data can be aggregated and presented as chart (e.g., a pareto chart) to help hospital and nursing home partners identify specific processes with opportunities for improvement.
- Consider ways to track or include in QAPI meeting
 - Consider focusing data collection on residents who are admitted on high-risk medications.
 - Use other resources to enhance cross-setting communication
 - Nurse-to-Nurse Warm Handoff Guidance
 - High-Risk Medications Essential Communication Elements Guide for Transitions of Care
 - SBAR Communication



Other - High Risk Medication Resources



Access other resources from IPRO QIN-QIO Resource Library:

https://qi-library.ipro.org/2022/01/19/american-geriatrics-society-updated-beers-criteria-for-potentially-inappropriate-medication-use-in-older-adults/ (membership required for access) https://qi-library.ipro.org/2022/01/19/medications-older-adults/



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Resources for Safe Medication Use

Drug Product	Active Ingredient(s)	Dosage Form(s)	Reasons/Comments
Abilify MyCite kit	(aripiprazole)	Tablet	Drug-device combination
Absorica	(ISO tretinoin)	Capsule	Mucous membrane irritant
Abstral	(fenta NYL)	Tablet	Note: Sublingual tablet; do not suck, chew, or swallow whole.
AcipHex	(rabeprazole)	Tablet	Slow-release
AcipHex Sprinkle	(rabeprazole)	Capsule	Slow-release; Note: contents are intended to be sprinkled on food or liquid but should not be chewed or crushed.
Acticlate	(doxycycline hyclate)	Capsule; Tablet	Film-coated; tablet is scored and may be split; Note: 150 mg tablets can be broken into two-thirds or one-third to provide a 100 mg and 50 mg strength, respectively
Actiq	(fenta NYL)	Lozenge	Slow-release; Note: this lollipop delivery system requires the patient to slowly allow dissolution. If chewed and swallowed, may result in a lower peak concentration and bioavailability.
Actonel	(risedronate)	Tablet	Irritant; Note: chewed, crushed, or sucked tablets may cause oropharyngeal ulceration.
Actoplus Met Xr	(combination)	Tablet	Slow-release
Adalat CC	(NIFEdipine)	Tablet	Slow-release
Adderall XR	(amphetamine salts)	Capsule	Slow-release (a)

Be aware of medications that should not be crushed



Benefits of Boosters

Recent evidence shows that among healthcare and other frontline workers, COVID 19 vaccine effectiveness has decreased over time, especially in those 65 and older, at preventing infection or milder illness with symptoms.

- Boosters shots increase immune response
- Boosters shots provide improved protection against becoming infected with COVID-19
- Booster shots help prevent COVID-19 with symptoms

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html





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Please unmute yourself or use the chat feature to share questions, ideas, success strategies, and/or lessons learned



Improvement is a Team Support



Leaving in Action

Tips for success:

Access these tools from the IPRO QIN-QIO Resource : https://qi-library.ipro.org/

 Small steps of change: for example, start implementing the new process on one unit for two weeks, then evaluate and adjust as needed

Reach out to our IPRO QIN-QIO team with questions or needs



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Let Us Know More...



Your feedback is critically important and will help guide us as we prepare future small Talks and other educational events.

Please take just a few minutes to complete our session evaluation (link is in chat).







Access our calendar of events to view upcoming sessions:

https://qi.ipro.org/upcoming-events/

Enhancing Transitions to the Community Thurs - Feb 10 @ 12pm Wed - Feb 16 @ 12pm Check in with the QIO - Office Hours

- Share how it's going with your new intervention(s)
- Ask questions
- Learn from your peers

Next session: 2/17 @ 12pm

 https://healthcentricadvisors.zoom.u s/j/85491530818?pwd=SUlld3QyZllv QURJTVBFdzJndnRqdz09





Thank You

Thank you for your continued partnership and commitment to quality improvement.

