Identify High Risk Medication Use & Quality Practice(s) to Support ADE Prevention and Reduction

Welcome!

- All lines are muted, so please ask your questions in chat
- For technical issues, chat to the 'Technical Support' Panelist
- Please actively participate in the poll that will pop up on the lower righthand side of your screen at the end of the presentation

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ALLIANT QUALITY

We will get started shortly!

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Objectives

- Learn Today:
  - How to identify high-risk medications
  - Review materials developed to help identify and decrease ADEs
- Use Tomorrow:
  - Discuss best practices for medication reconciliation with your staff (ADE prevention)

What is going on with this resident?

COVID

Tired

Adverse Drug Events

Depressed

Drug interactions

Socially isolated

Refresh on the 12th SOW

- Adverse Drug Events - reduce by 13%
- Selected drug classes
  - Anticoagulants
  - Diabetes medications
  - Opioids
  - Antipsychotics

Anticoagulation[1]

Strategies aimed at improving anticoagulation safety and providing high-quality anticoagulation management in LTC settings may include:

- Standardizing anticoagulation management treatment approaches across LTC settings, which may include facilitating and promoting uptake of currently available guidelines or developing LTC-specific anticoagulation management tools/resources (e.g., EHR-based clinical decision support tools)
- Determining management/oversight responsibilities for anticoagulation services

Anticoagulation[1] (continued)

- Providing strategies for facility-based active and ongoing surveillance of anticoagulation safety related metrics, including ones targeting adequate monitoring transitions to or therapy with NOACs
- Improving use of anticoagulant ADE prevention strategies/tools (e.g., dosing nomograms, clinical decision support, facility policies/guidelines, and preprinted medication orders that identify patient specific goals/target INR ranges)
- Identifying a single anticoagulation provider who takes primary responsibility for anticoagulation management

CMS ADE Trigger Tool[2]

This tool is intended to assist surveyors to identify:

1. The extent to which facilities have identified resident-specific risk factors for adverse drug events
2. The extent to which facilities developed and implemented systems and processes to minimize risks associated with medications that are known to be high-risk and problem-prone
3. When a preventable adverse event has occurred and evaluate if the nursing home identified the issue and responded appropriately to mitigate harm to the individual and prevent recurrence

CMS ADE Trigger Tool[2]

Disclaimer: Use of this tool is not mandated by the Centers for Medicare & Medicaid Services (CMS) for regulatory compliance nor does its use ensure regulatory compliance.

Only portions of the tool are included in the slides. Do not use these slides as a complete reference for the tool.

CMS ADE Trigger Tool[2]

Adverse Drug Event (ADE)	**Risk Factors -** These increase the potential for ADEs. Multiple factors increase risk.	**Triggers: Signs and Symptoms (S/S)** - Any of these may indicate an ADE may have occurred.	**Triggers: Clinical Interventions** - These actions may indicate an ADE occurred.	**Surveyor Probes -** These questions are designed to assist in the investigation. A negative answer does not necessarily indicate noncompliance
Bleeding related to antithrombotic medication use	• Anticoagulant, antiplatelet, or thrombolytic medication use • Concurrent use of more than one antithrombotic medication (e.g., use of aspirin while on anticoagulants) • History of stroke or GI bleed • NSAID medication use while on anticoagulants • Antibiotics use while on anticoagulants • Amiodarone use while on anticoagulants • Dietary changes affecting vitamin K intake (e.g., dark leafy greens)	• Elevated PT/INR, PTT • Low platelet count • Bruising • Nosebleeds • Bleeding gums • Prolonged bleeding from wound, IV, or surgical sites • Blood in urine, feces, or vomit • Coughing up blood • Abrupt onset hypotension	• Stat order for PT/INR, PTT, platelet count, or CBC • Abrupt stop order for medication • Administration of Vitamin K • Transfer to hospital	• Does the medical record include documentation of clinical indication? • Is there evidence the facility routinely monitors lab results of all residents on anticoagulant/antiplatelet therapy? • Is there a system to ensure lab results, including PT/INRs, are appropriately communicated to the physician including when panic values are obtained? • Is there evidence that the facility educates caregivers on risk factors and symptoms and signs that may be indicative of excessive bleeding due to antithrombotic medications? • Are residents/families educated regarding the risks associated with antithrombotic medication use and the signs and symptoms of excessive bleeding? • Is there evidence of system to alert prescribers and nursing staff when anticoagulants are combined with other drugs which increase the risk of bleeding

CMS ADE Trigger Tool[2]

Adverse Drug Event (ADE)	Risk Factors	Triggers: Signs and Symptoms (S/S)	Triggers: Clinical Interventions	Surveyor Probes
Thromboembolism related to anticoagulant medication use	• Anticoagulant medication used; • Prolonged immobility • Recent major surgery • Prior history of venous thromboembolic events • Consistently sub-therapeutic PT/INR	• Pain or tenderness and swelling of upper or lower extremity • Increased warmth, edema and/or erythema of affected extremity • Unexplained shortness of breath • Chest pain • Coughing • Hemoptysis • Feelings of anxiety or dread	• Stat order for PT/INR • Stat chest x-ray, • Transfer to hospital	• Is there evidence the facility routinely monitors lab results of all residents on anticoagulant/antiplatelet therapy? • Is there a system to ensure lab results, including PT/INRs, are appropriately communicated to the physician including when sub-therapeutic values are obtained? • Is there evidence that the facility educates caregivers on risk factors and symptoms and signs that may be indicative of thromboembolism?

Diabetes[1]

- Consider individual patient characteristics in selecting diabetes agents and glycemic targets
- Use protocols to
  - Assess risk during initial evaluation
  - Reassess risk periodically
- Assess cause of prior events
- Support development of standardized tools for insulin administration (e.g., insulin infusion protocols)
- Ensure consistency in order sets

Diabetes[1] (continued)

- Use standardized, evidence-based order sets (avoid free text)
- Conduct root cause analysis of hypoglycemic events when appropriate
- Capture critical information associated with hypoglycemic events at admission or discharge:
  - Prior history of hypoglycemic episodes
  - Past diabetes medication management
  - Level of glycemic control
  - Assessment of patient's cognitive abilities, literacy level, visual acuity, dexterity, cultural context, and financial resources for acquiring outpatient diabetic medications and supplies

CMS ADE Trigger Tool[2]

Adverse Drug Event (ADE)	Risk Factors	Triggers: Signs and Symptoms (S/S)	Triggers: Clinical Interventions	Surveyor Probes

Hypoglycemia related to use of antidiabetic medication	• Insulin use
	• Sliding scale insulin use
	• Oral hypoglycemic medication use
	• Decrease in oral intake while taking antidiabetic medication
		• Hypoglycemia (e.g., <50 mg/dl)
		• Falls
		• Headache
		• Shakiness, nervousness, anxiety
		• Sweating, chills, clamminess
		• Irritability, impatience
		• Change in mental status
		• Emotional changes (including new anger, sadness, stubbornness)
		• Lightheadedness, dizziness
		• Hunger
		• Nausea
		• Complaints of blurred or impaired vision
		• Tingling or numbness in lips and/or tongue
		• Weakness, fatigue, or somnolence
		• Incoordination
		• Seizures
		• Unconsciousness
		• Rapid heartbeat
			• Stat administration of Glucagon or IV dextrose
			• Administration of orange juice or other high sugar food or fluids in response to blood sugar reading or symptoms
			• Transfer to hospital
				• Does the care plan reflect interdisciplinary monitoring for:
				  • Signs/symptoms of hypoglycemic episodes?
				  • Changes in oral intake?
				• Is there evidence blood glucose testing and insulin administration are coordinated with meals?
				• Is there evidence the facility has addressed any pharmacy recommendations?
				• If sliding scale insulin is used, does the medical vs. benefits? Clinical rationale?
				• If an EHR is used, are finger stick glucose testing results incorporated into it?
				• Is there evidence that finger stick glucose results are routinely reviewed for effectiveness as part of the care plan?
				• Does the facility have low blood sugar protocols in place?
				• Is there a system to ensure lab results, including finger stick blood glucose results, are appropriately communicated to the physician and the dietician including when panic values are obtained?

CMS ADE Trigger Tool[2]

Adverse Drug Event (ADE)	Risk Factors	Triggers: Signs and Symptoms (S/S)	Triggers: Clinical Interventions	Surveyor Probes
Ketoacidosis related to insulin therapy	• Diabetic residents with concurrent illnesses • Infection • Diabetic residents with consistently high blood glucose levels • Episodes of high physical and/or emotional stress or trauma • A diabetic resident that frequently declines antidiabetic medications or consumes foods not included in diet	• Lab results indicating: • Profound dehydration • Elevated blood glucose • Ketones in urine • Excessive thirst • Frequent urination • Nausea/vomiting • Abdominal pain • Weakness/fatigue • Shortness of breath • Fruity-scented breath • Confusion • Rapid respirations • Elevated temperature	• Stat order for lab testing including to evaluate blood sugar and fluid and electrolyte status • Stat order for insulin • New order for and administration of IV fluids • Transfer to hospital	• Is there evidence of a system for routine monitoring of blood sugar? • If the resident refuses antidiabetic medication or consumes foods not included in usual/planned diet, is there evidence of an interdisciplinary plan to address refusals that includes the prescriber and the family, as appropriate? • For residents with risk factors for ketoacidosis, does the care plan reflect multi-disciplinary monitoring for signs/symptoms of ketoacidosis? • Is there evidence that the facility routinely educates caregivers on risk factors and symptoms/signs of ketoacidosis? • Does the facility have elevated blood sugar protocols in place?

Opioids[1]

- Determine the adequacy of diagnostic and procedural coding for capturing opioid-related overdose events.
  - Develop, assess, and validate novel measures for identifying and recording opioid ADEs.
- Address strengths and limitations of using process measures to identify opioid ADEs.
- Study associations between process measures and risk of opioid ADEs.
- Improve access to more integrated EHR data with linked pharmacy and outcomes data.

Opioids[1] (continued)

- Identify appropriate ADE surveillance metrics for opioid ADEs in inpatient and outpatient settings.
- Develop better surveillance definitions for opioid-related overdose events.
  - Clarify criteria for identifying opioid ADEs that occur in the normal course of care versus those arising as a result of opioid misuse and abuse.
- Identify appropriate ADE surveillance metrics for opioid ADEs.
- Improve the capabilities and use of PDMPs.
  - Promote increased use of PDMP systems by providers.
  - Maintain funding for PDMP development at the State and Federal level.
  - Strive for real-time data reporting and cross-setting interoperability for PDMPs

CMS ADE Trigger Tool[2]

Adverse Drug Event (ADE)	Risk Factors	Triggers: Signs and Symptoms (S/S)	Triggers: Clinical Interventions	Surveyor Probes

Change in mental status/delirium related to opioid use	• PRN or routine use of opioid medication
	• Opioid naiveté (someone who has not been taking opioids)
	• Opioids used in combination with 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
		• Falls
		• Hallucinations
		• Delusions
		• Disorientation or confusion
		• Light-headedness, dizziness, or vertigo
		• Lethargy or somnolence
		• Agitation
		• Anxiety
		• Unresponsiveness
		• Decreased
		  • BP
		  • Pulse
		  • Pulse oximetry
		  • Respirations
			• Administration of Narcan
			• Transfer to hospital
			• Call to physician regarding new onset of relevant signs or symptoms
			• Abrupt stop order for medication
				• 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 residents are routinely assessed for pain, including monitoring for effectiveness of pain relief and side effects of medication (e.g., over-sedation)?
				• If receiving PRN and routinely, is there consideration for the timing of administration of the PRN?
				• Can staff describe signs/symptoms of over-sedation?
				• 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

CMS ADE Trigger Tool[2]

Adverse Drug Event (ADE)	Risk Factors	Triggers: Signs and Symptoms (S/S)	Triggers: Clinical Interventions	Surveyor Probes
Prolonged constipation, ileus, or impaction related to opioid medication use	• Opioid medication use (routine or PRN) • Uncontrolled pain • Recent abdominal surgery • Advanced age • Diagnosis of dementia, Parkinson's, multiple sclerosis, or quadriplegia • Low fluid intake or dehydration • Decreased mobility	• Constipation (lack of bowel movement for three or more days or straining to move bowels regardless of frequency) • Bloating or abdominal distension • Abdominal pain • Headaches associated with symptoms above • Diarrhea or leaking stool • Decreased bowel sounds • Nausea/vomiting • Decreased or absent ability to urinate • Rapid heartbeat • Sweating • Fever • Low or elevated BP	• New orders for laxative, stool softeners, suppositories and/or enema • New order for abdominal x-rays • Transfer to hospital	• Is there evidence of a bowel regimen in place such as routine orders for stool softener/laxative? • For residents with risk factors for constipation, does the care plan reflect interdisciplinary monitoring for signs/symptoms of constipation and an interdisciplinary plan to prevent it including dietary management? • Is fluid intake monitored? • Are residents/families taught signs/symptoms of constipation and the importance of reporting them? • Are bowel movements (frequency and size) monitored routinely by nursing staff? • Is bowel status routinely addressed by the physician? • Upon the initiation of opioids, did the prescriber acknowledge the increased of risk of constipation and adjust the plan of care as indicated? • Is there a protocol in place to address constipation (e.g., a process to provide routine or standing order bowel medications when a resident hasn't had a bowel movement)? If so, is the staff aware of and compliant with the protocol?

Antipsychotics

While antipsychotics were not addressed in the national action plan, most of the recommendations for anticoagulation, diabetes, and opioids can be extrapolated to antipsychotics.

CMS ADE Trigger Tool[2]

Adverse Drug Event (ADE)	Risk Factors	Triggers: Signs and Symptoms (S/S)	Triggers: Clinical Interventions	Surveyor Probes
Change in mental status/delirium related to psychotropic medication use (including antipsychotics, antidepressants, anxiolytics, and hypnotics)	• PRN or routine use of psychotropic medication • Use of more than one psychotropic medication including more than one drug from the same class or different classes • Advanced age • Polypharmacy	• Falls • Confusion • Sedation • Cardiac arrhythmias • Orthostatic hypotension • Destabilized blood sugar • Akathisia • Parkinsonism • Anticholinergic effects	• Transfer to hospital • Call to physician regarding new onset of relevant signs or symptoms • New order for restraint • Abrupt stop order for medication	• Does the medical record include consistent documentation of clinical indication, e.g., do physician notes, care plan, and tracking sheets all address the same indication? • If receiving PRN and routinely, is there consideration for the timing of administration of the PRN? • Is there evidence of a system for ensuring the resident is routinely assessed for effectiveness of the medication and signs/symptoms of adverse drug reactions/events? • Is there a system for monitoring for involuntary movements? • Is there evidence that the facility has attempted gradual dose reduction or rationale documented if not attempted? • Is there evidence the facility implements nonpharmacological approaches and interdisciplinary management of the condition that the medication targets? • Is there evidence in the medical record that the resident or representative were involved in decisions related to medication use?

Lessons From the Field

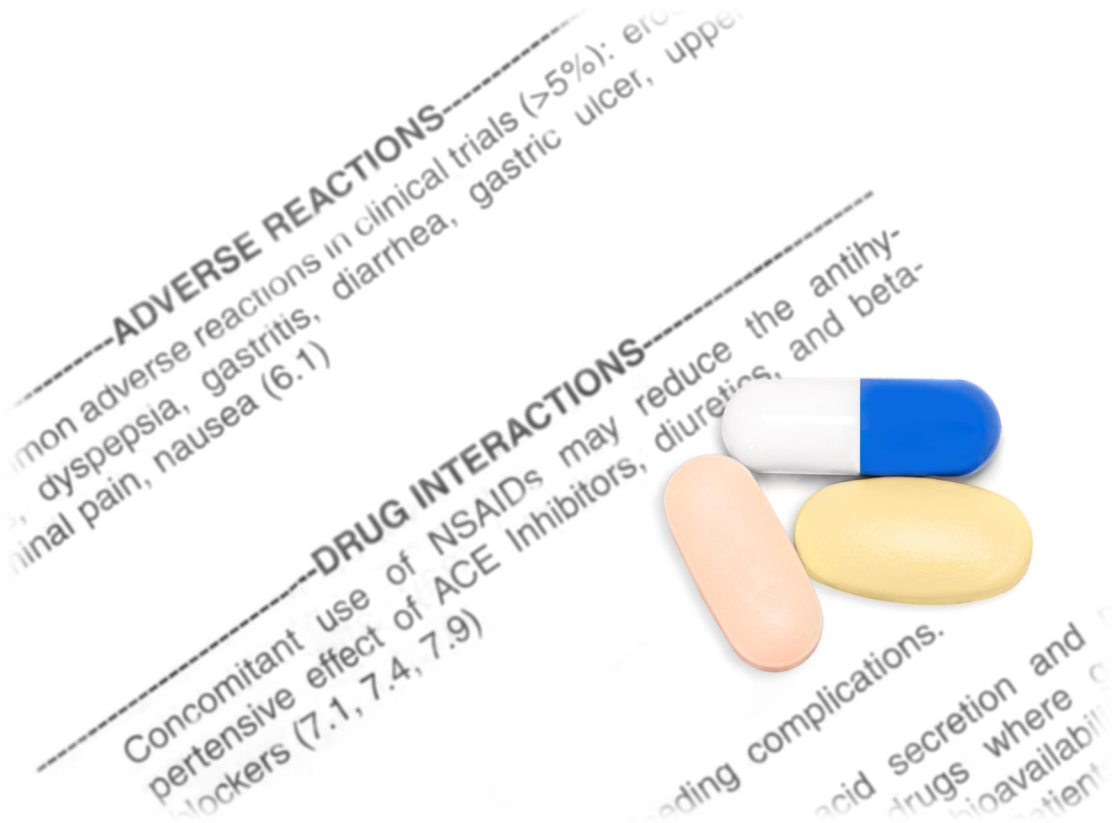
- Remote consultant pharmacists
  - Breakdown in regular communication with staff
  - Possible issues with med rooms, med passes and destruction of medications
- Anticoagulation issues with COVID positive residents
  - Consider implementation of increased blood work as clotting has been identified in these cases

Lessons From the Field (continued)

- Change to EVERY resident has their own glucometer instead of trying to properly clean the meter to use between rooms
  - Proper glucometer cleaning is specific to the glucometer
  - General guidelines can be found on the CDC website
- There is new and emerging technology of continuous glucose monitoring that could remove these issues. More information to come.

Medication Reconciliation

Listen to the August 18th LAN



https://www.youtube.com/watch?v=pc-61A4Qh0w&feature=youtu.be

References

1. https://health.gov/hcq/pdfs/ADE-Action-Plan-508c.pdf
2. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/Downloads/Adverse-Drug-Event-Trigger-Tool.pdf

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Objectives Check In!

- Learn Today:
  - How to identify high risk medications
  - Review materials developed to help identify and decrease ADEs
- Use Tomorrow:
  - Discuss best practices for medication reconciliation with your staff (ADE prevention)

Complete this sentence in Chat: *I will…*

CMS 12th SOW AIMS

Behavioral Health Outcomes & Opioid Misuse

- ✓ Promote opioid best practices
- ✓ Decrease high dose opioid prescribing and opioid adverse events in all settings
- ✓ Increase access to behavioral health services

Patient Safety

- ✓ Reduce risky medication combinations
- ✓ Reduce adverse drug events
- ✓ Reduce C. diff in all settings

Chronic Disease Self-Management

- ✓ Increase performance on ABCS clinical quality measures (i.e., aspirin use, blood pressure control, cholesterol management, cardiac rehab)
- ✓ Identify patients at high-risk for developing kidney disease & improve outcomes
- ✓ Identify patients at high risk for diabetes-related complications & improve outcomes

Quality of Care Transitions

- ✓ Convene community coalitions
- ✓ Identify and promote optical care for super utilizers
- ✓ Reduce community-based adverse drug events

Nursing Home Quality

- ✓ Improve the mean total quality score
- ✓ Develop national baselines for healthcare related infections in nursing homes
- ✓ Reduce emergency department visits and readmissions of short stay residents

Making Health Care Better *Together*

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Upcoming Events

Nursing Homes Tuesdays, 2pm ET/1pm CT	Community Coalitions Thursdays, 12:30 pm ET/11:30am CT
October 20th, 2020: Understanding and using QAPI elements in day to day care processes	September 24th, 2020: Opioid Use in the Aging Population ***Special 60-minute Presentation***
November 17th, 2020: Preventing and Managing C. difficile	October 29th, 2020: Blood Glucose Targets And Adapting Treatment Goals For Special Populations
December 15th, 2020: Preventing Healthcare Acquired Infections (including immunization stats)	December 17th , 2020: Gear up for the New Year! Positioning your Organization to Gather, Track, and Use Data in 2021
January 2021: TBD	January 2021: TBD

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