Improving Patient Safety and Readmission Reduction Through Medication Reconciliation

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

November 14, 2023
Dr. Swati Gaur is the medical director of New Horizons Nursing Facilities with the Northeast Georgia Health System. She is also the CEO of Care Advances Through Technology, a technology innovation company. In addition, she is on the EMR transition and implementation team for the health system, providing direction to EMR entity adapt to the LTC environment.

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

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

About Alliant Health Solutions
Learning Objectives

✓ Describe the prevalence of potential medication errors during transitions of care and the need for a medication reconciliation process.

✓ Evaluate how thorough medication reconciliation processes involve the interdisciplinary team.

✓ Discuss the importance of the resident voice in the discussion of deprescribing during medication reconciliation.

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

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

• Meds on discharge:
  - Alprazolam .5mg daily
  - Amitriptyline 25mg nightly
  - Amlodipine 10mg daily
  - ASA
  - Cephalexin 500mg 4 times a day for 7 days
  - Clopidogrel 75mg daily
  - Gabapentin 300mg three times a day
  - Hydrocodone –APAP 10mg daily
  - Detemir insulin 10U twice a day
  - Levetiracetam 1000mg twice a day
  - Losartan 50 mg daily
  - Methocarbamol 500mg three times a day as needed
  - Polyethylene glycol 17gm daily
  - Pravastatin 40 mg daily
  - Sitagliptin 50 mg daily
  - Topiramate 25 mg twice daily
Hospital discharge: It’s one of the most dangerous periods for patients
Process of Transition

1. Discharge instructions
   - Faxed/accessed by LTC admissions team

2. Faxed/sent to LTC pharmacy

Patient arrives/meds arrive
- Assessed by MD
  - Per reg within 30 days
- Meds assessed by consultant pharmacist within 30 days of admission
# Meds on Discharge

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dosage/Regimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alprazolam 0.5mg</td>
<td>Daily</td>
</tr>
<tr>
<td>Amitriptyline 25mg</td>
<td>Nightly</td>
</tr>
<tr>
<td>Amlodipine 10mg</td>
<td>Daily</td>
</tr>
<tr>
<td>Cephalexin 500mg</td>
<td>4 times a day for 7 days</td>
</tr>
<tr>
<td>Pantoprazole 40 mg</td>
<td>Daily</td>
</tr>
<tr>
<td>Clopidogrel 75mg</td>
<td>Daily</td>
</tr>
<tr>
<td>Gabapentin 300mg</td>
<td>3 times a day</td>
</tr>
<tr>
<td>Hydrocodone – APAP 10mg</td>
<td>Daily</td>
</tr>
<tr>
<td>Detemir insulin 10U</td>
<td>Twice a day</td>
</tr>
<tr>
<td>Levetiracetam 1000mg</td>
<td>Twice a day</td>
</tr>
<tr>
<td>Methocarbamol 500mg</td>
<td>3 times a day as needed</td>
</tr>
<tr>
<td>Polyethylene glycol 17gm</td>
<td>Daily</td>
</tr>
<tr>
<td>Pravastatin 40 mg</td>
<td>Daily</td>
</tr>
<tr>
<td>Topiramate 25 mg</td>
<td>Twice daily</td>
</tr>
<tr>
<td>Losartan 50 mg</td>
<td>Daily</td>
</tr>
<tr>
<td>Sitagliptin 50 mg</td>
<td>Daily</td>
</tr>
<tr>
<td>ASA</td>
<td></td>
</tr>
</tbody>
</table>

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**Note:** Treatments and dosages may vary based on individual health conditions and medical judgment.
The Prevalence of Potential Medication Errors During Transitions of Care

*Figure.* Severity of injuries and health service utilization in patients with adverse events.
Health Services Utilization in Patients With Adverse Events

- None (Symptoms Only)
- Extra Visit to MD Office
- MD Contact with Laboratory Monitoring
- Emergency Department Visit
- Readmission to Hospital

Proportion of Patients with Adverse Events, %

Health Services Utilization
All admissions

Hospital and Emergency Department admissions

Red flags present

From 19 to ? in XXX months.

Programmatic evaluation
Clinical evaluation

Finetune your admission checklist

Creating an Admission Team

- Admission coordinator needs to be a part of the readmission team
- Nursing leadership caring for the residents
- DON
- Escalate to a clinician
  - Can we safely provide clinical care?
  - Collaboration with discharging physician
Health Services Utilization in Patients With Adverse Events

Health Services Utilization

Proportion of Patients with Adverse Events, %
Interventions

Creating communication:
- Any red flags
- SBAR
  - Education
  - Formatted note
  - Escalate to DON
- Put on the list
- Communicate to clinician

Creating capabilities:
- Capability of stat labs
- More frequent assessment
Medication Reconciliation Processes Involve the Interdisciplinary Team
Process of Transition

Hospital Case manager sends request for admission

Admission team assesses and sends decision to accept

Discharge instructions sent to LTC

Patient arrives/meds arrive
- Assessed by MD
- Per reg within 30 days
- Meds assessed by consultant pharmacist within 3 days of admission

Faxed/sent to LTC pharmacy

Faxed/accessed by LTC admissions team
Process of Transition

Hospital Case manager sends request for admission
- Meet and educate

Admission team assesses and sends decision to accept
- Checklist of red flags
- Process of escalation
- Is this happening?

Discharge instructions sent to LTC
- Who gets this?
- Create an interdisciplinary team – Admitting nurse, consultant Pharmacist, Medical director

Faxed/accessed by LTC admissions team

Faxed/sent to LTC pharmacy

Patient arrives/meds arrive
- Telehealth if prior to weekend
The Incidence and Severity of Adverse Events Affecting Patients after Discharge from the Hospital

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

66% med error

3% lab errors

Who is your team?

What are your capabilities?
Finding Common Ground

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7000 Security Boulevard, Mail Stop C2-21-16
Baltimore, Maryland 21244-1850

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

Ref: QSO-23-16-Hospitals

DATE: June 6, 2023

TO: State Survey Agency Directors

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

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

Memorandum Summary

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

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

CMS Hospital IQR Program Measures for the FY 2025 Payment Update

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

Finding Common Ground


Meds on Discharge

- Alprazolam .5mg daily
- Amitriptyline 25mg nightly
- Gabapentin 300mg three times a day
- Methocarbamol 500mg three times a day as needed
- Hydrocodone –APAP 10mg daily
- Levetiracetam 1000mg twice a day
- Topiramate 25 mg twice daily
- Cephalexin 500mg 4 times a day for 7 days
- Pantoprazole 40 mg daily
- Detemir insulin 10U twice a day
- Sitagliptin 50 mg daily
- Amlodipine 10mg daily
- Losartan 50 mg daily
- ASA
- Clopidogrel 75mg daily
- Polyethylene glycol 17gm daily
- Pravastatin 40 mg daily
Resources To Support Medication Reconciliation
<table>
<thead>
<tr>
<th>Medication</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alprazolam</td>
<td>Avoid</td>
</tr>
<tr>
<td>Amilorida</td>
<td>Avoid if CrCl &lt;30 mL/min</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>Avoid as first-line therapy for atrial fibrillation for most patients</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td>Avoid; has strong anticholinergic properties</td>
</tr>
<tr>
<td>Amobarbital</td>
<td>Avoid</td>
</tr>
<tr>
<td>Amoxapine</td>
<td>Avoid; has strong anticholinergic properties</td>
</tr>
<tr>
<td>Androgens</td>
<td>Avoid unless indicated for symptomatic hypogonadism</td>
</tr>
<tr>
<td>Apixaban</td>
<td>Avoid if CrCl &lt;25 mL/min</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>Avoid, except in some situations (e.g. bipolar disorder, schizophrenia, short-term chemotherapy)</td>
</tr>
<tr>
<td>Asenapine</td>
<td>Avoid, except in some situations (e.g. bipolar disorder, schizophrenia, short-term chemotherapy)</td>
</tr>
<tr>
<td>Aspirin</td>
<td>Use with caution for primary prevention of cardiovascular disease and colorectal cancer; Use with caution in adults ≥70 years; Avoid in most patients with history of gastric or duodenal ulcers; avoid chronic use with &gt;325 mg/day</td>
</tr>
<tr>
<td>Atropine (excludes ophthalmic)</td>
<td>Avoid; has strong anticholinergic properties</td>
</tr>
<tr>
<td>Belladonna alkaloids</td>
<td>Avoid; has strong anticholinergic properties</td>
</tr>
<tr>
<td>Benztrapine (oral)</td>
<td>Avoid; has strong anticholinergic properties</td>
</tr>
<tr>
<td>Brexpiprazole</td>
<td>Avoid, except in some situations (e.g. bipolar disorder, schizophrenia, short-term chemotherapy)</td>
</tr>
<tr>
<td>Brompheniramine</td>
<td>Avoid; has strong anticholinergic properties</td>
</tr>
<tr>
<td>Butabarbital</td>
<td>Avoid</td>
</tr>
</tbody>
</table>
Choosing Wisely: From the Society for Post-Acute Long-Term Care Medicine

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

Pantoprazole

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

Hydrocodone- APAP 10mg daily

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

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

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

<table>
<thead>
<tr>
<th>Patient characteristics/health status</th>
<th>Rationale</th>
<th>Reasonable A1C goal‡</th>
<th>Fasting or pre-prandial glucose</th>
<th>Bedtime glucose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex/intermediate (multiple coexisting chronic illnesses* or 2+ instrumental ADL impairments or mild-to-moderate cognitive impairment)</td>
<td>Intermediate remaining life expectancy, high treatment burden, hypoglycemia vulnerability, fall risk</td>
<td>&lt;8.0% (64 mmol/mol)</td>
<td>90–150 mg/dL (5.0–8.3 mmol/L)</td>
<td>100–180 mg/dL (5.6–10.0 mmol/L)</td>
</tr>
<tr>
<td>Very complex/poor health (LTC or end-stage chronic illnesses** or moderate-to-severe cognitive impairment or 2+ ADL impairments)</td>
<td>Limited remaining life expectancy makes benefit uncertain</td>
<td>Avoid reliance on A1C; glucose control decisions should be based on avoiding hypoglycemia and symptomatic hyperglycemia</td>
<td>100–180 mg/dL (5.6–10.0 mmol/L)</td>
<td>110–200 mg/dL (6.1–11.1 mmol/L)</td>
</tr>
</tbody>
</table>
2. Don’t use sliding scale insulin (SSI) for long-term diabetes management for individuals residing in the nursing home.

Take Home Considerations
- Number of spot checks
- Nursing ratios
- Erratic PO intake
- Resident rights and preferences
- Somogyi effect
- Sulfonylurea -XXX
- SGLT2 inhibitors – not a good idea
Optimal Length of Opioid Pain Prescription After Common Surgical Procedures
Multi-Modal Analgesia: Use of Gabapentin

- ~ 970000 patients >65 Y

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Gabapentin user %</th>
<th>Nonuser %</th>
<th>RR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delirium</td>
<td>3.4</td>
<td>2.6</td>
<td>1.28</td>
</tr>
<tr>
<td>New antipsychotic use</td>
<td>.8</td>
<td>.7</td>
<td>1.17</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>1.3</td>
<td>1.2</td>
<td>1.11</td>
</tr>
<tr>
<td>Medications</td>
<td>Odds Ratio of fracture injuries</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Muscle relaxants</td>
<td>1.4 (1.15-1.72)</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Long acting benzodiazepines</td>
<td>1.9 (1.49-2.43)</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Short Acting benzodiazepines</td>
<td>1.33 (1.15-1.55)</td>
<td>&lt;0.001</td>
<td></td>
</tr>
</tbody>
</table>
Assessment of Physician Prescribing of Skeletal Muscle Relaxants: Soprano et al

Figure 2. National SMR Utilization Rates Among Adults Aged 65 Years or Older, Stratified by New vs Continued Use, 2005-2016
Questions?
Nursing Home and Partnership for Community Health: CMS 12th SOW GOALS

OPIOID UTILIZATION AND MISUSE
- Promote opioid best practices
- Reduce opioid adverse drug events in all settings

PATIENT SAFETY
- Reduce hospitalizations due to c. diff
- Reduce adverse drug events
- Reduce facility acquired infections

CHRONIC DISEASE SELF-MANAGEMENT
- Increase instances of adequately diagnosed and controlled hypertension
- Increase use of cardiac rehabilitation programs
- Reduce instances of uncontrolled diabetes
- Identify patients at high-risk for kidney disease and improve outcomes

CARE COORDINATION
- Convene community coalitions
- Reduce avoidable readmissions, admissions to hospitals and preventable emergency department visits
- Identify and promote optimal care for super utilizers

COVID-19
- Support nursing homes by establishing a safe visitor policy and cohort plan
- Provide virtual events to support infection control and prevention
- Support nursing homes and community coalitions with emergency preparedness plans

IMMUNIZATION
- Increase influenza, pneumococcal, and COVID-19 vaccination rates

TRAINING
- Encourage completion of infection control and prevention trainings by frontline clinical and management staff
Scan the QR codes or Click the Links to Complete the Assessments!

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

Please scan the QR code below and complete the assessment.

Making Health Care Better *Together*

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