Geriatric Assessment for Nurses

Clinical guide: Assessment of Medication & Polypharmacy in Older Adults

Clinical Training Guide
Learning outcomes
1. Conduct a structured medication history interview for older adults. 2. Perform medication reconciliation using a systematic approach. 3. Identify potentially inappropriate medications using: ● Beers Criteria ● STOPP (Screening Tool of Older People's Prescriptions) ● START (Screening Tool to Alert to Right Treatment) 4. Apply the Medication Appropriateness Index (MAI) to evaluate each drug. 5. Use the ARMOR Tool to determine whether medications can be optimized or deprescribed. 6. Assess adherence and compliance using patient-centered communication. 7. Identify drug–disease interactions, drug–drug interactions, duplications, and under-prescribing. 8. Formulate a nursing care plan addressing polypharmacy risks. 9. Provide patient education on safe medication use.
Required assessment tools
A. Interview & Documentation Tools ● Medication history form ● Medication reconciliation form ● Brown bag review checklist ● Adherence assessment questions (e.g., Morisky-like questions—not formal scoring) **B. Pharmacological Assessment Tools** ● Beers Criteria List (latest version) ● STOPP/START Criteria Version 2 ● Medication Appropriateness Index (MAI) tool ● ARMOR Tool Worksheet (Assess, Review, Minimize, Optimize, Reassess)
Clinical skills procedures

Step 1: Preparation

- Wash hands.
- Review patient chart and medication list.
- Prepare assessment forms and tools.
- Ensure calm environment for interview**.**

Step 2: Medication History Interview

Ask about:

- All prescribed medications
- Otc medications
- Herbal/traditional treatments
- Vitamins/supplements
- Recently stopped or changed medications
- Medication-taking schedule
- Use of medication organizers
- Reasons for missed doses
- Symptoms suggestive of side effects
- Recent hospital admissions due to medication issues

Step 3: Perform Medication Reconciliation

Compare:

1. Medication list from patient interview
2. Medication list from chart
3. Medication list from pharmacy records

Check for:

- Duplications
- Omissions
- Wrong dose/frequency
- Duration errors
- Interactions
- Allergies
- Contraindications

Step 4: Apply Evidence-Based Tools

1. Beers Criteria

- Identify medications potentially inappropriate for older adults
- Flag high-risk drugs (e.g., anticholinergics, long-acting benzodiazepines)
- Identify renal dosing issues
- Identify drug–disease interactions

2. STOPP Criteria

Check for:

- Medications that should be avoided due to:
    - Drug–drug interactions
    - Drug–disease interactions
    - Duplication
    - Falls risk
    - Renal/hepatic impairment
    - Lack of clinical indication
    - Long-term inappropriate use

3. START Criteria

Identify under-prescribing:

- Missing indicated medications
  (e.g., no statin in diabetic patient; no ace inhibitor in heart failure)

Medication appropriateness index (mai)

Evaluate each medication using 10 criteria:

1. Indication
2. Effectiveness
3. Dosage
4. Correct directions
5. Practical directions
6. Drug–drug interactions
7. Drug–disease interactions
8. Unnecessary duplications
9. Duration
10. Cost-effectiveness

Score problem areas as "appropriate," "marginal," or "inappropriate."

5. ARMOR Tool (Deprescribing-focused)

Apply the steps:

A – Assess all medications
R – Review drug list for necessity
M – Minimize number of medications
O – Optimize therapy, simplify regimen
R – Reassess periodically, monitor outcomes

Focus on:

- Function
- Cognition
- Falls risk
- Swallowing problems
- Frailty markers

Step 5: Identify Medication Problems

- Polypharmacy (≥5 medications)
- Potentially inappropriate medications
- Interactions
- Non-adherence
- Therapeutic duplications
- Lack of essential medications
- Side effects
- Medication-induced functional decline

Step 6: Document and Communicate Findings

- Write structured summary
- Highlight urgent concerns
- Communicate with supervising nurse/doctor/pharmacist

Nursing care planning guide

Nursing Diagnosis Examples

- Ineffective therapeutic regimen management related to complex medication regimen
- Risk for injury related to polypharmacy and drug interactions
- Knowledge deficit related to new medications
- Risk for falls related to sedative-hypnotics/antihypertensives

Objectives/Goals

- Patient will correctly describe their medication schedule.
- Patient will demonstrate improved adherence.
- High-risk medications will be identified and reviewed.
- Medication regimen will be simplified where possible.
- Patient will avoid drug–drug and drug–disease interactions.

Interventions

- Conduct daily medication review.
- Assess adherence using open-ended questions.
- Offer pill organizers.
- Monitor for adverse effects (BP, glucose, gait, cognition).
- Educate patient on each medication (purpose, dose, side effects).
- Collaborate with multidisciplinary team for deprescribing.
- Evaluate response to medication changes.

Evaluation Criteria

- Patient can describe medication regimen accurately.
- Adherence improves by next visit.
- Reduced number of inappropriate medications.
- Improved functional status, less dizziness/confusion.
- No new hospital visits due to medication problems.

Clinical Practice Activity

Activity Title:
Comprehensive Medication & Polypharmacy Assessment in an Older Adult

Task
Students will:

1. Interview an older patient using a structured medication history.
2. Conduct medication reconciliation using all sources.
3. Apply Beers Criteria, STOPP/START, MAI, and ARMOR to evaluate all medications.
4. Identify at least:
    - 3 inappropriate medications

- 2 omissions from START criteria
- 3 potential interactions
- 2 opportunities for deprescribing

5. Develop a brief nursing care plan.
6. Present findings in small group discussion.

Assessment criteria for students

Competency	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)
Medication History Interview	Thorough, systematic	Mostly complete	Partial	Poor
Medication Reconciliation	All errors identified	Most errors	Some errors	Minimal
Use of Beers Criteria	Correct & complete	Mostly correct	Some gaps	Incorrect
STOPP/START Application	Full identification	Partial	Minimal	None
MAI Evaluation	Accurate scoring	Mostly accurate	Partially correct	Incorrect
ARMOR Deprescribing Plan	Clear, evidence-based	Somewhat clear	Minimal	None
Critical Thinking	Highly analytical	Good	Basic	Limited
Documentation	Clear, organized	Good	Adequate	Poor
Communication	Effective, empathetic	Good	Adequate	Poor

Patient education checklist

The student must ensure the patient understands:

A. Medication Knowledge

- Name and purpose of each medication
- Correct dose and time
- How to take (with food, water, etc.)
- Duration of therapy

B. Safety

- Side effects to monitor
- When to seek medical attention
- Avoiding self-medication and duplicate drugs

C. Adherence Tools

- Pill box
- Diary/medication chart

- Phone reminders
- Family support

D. Polypharmacy Awareness

- Risks of taking many medications
- Warning signs
- Importance of periodic medication review

E. Drug–Disease Interactions

- Which medications worsen certain conditions (e.g., NSAIDs in CKD)

F. Follow-Up

- Bring all medications to appointments (“brown bag review”)
- Keep updated medication list
- Never stop medication without advice