

Polypharmacy in Older Adults

Key Prescribing Considerations from the Center for Disease Control (CDC)
Clinical Practice Guideline for Prescribing Opioids for Pain (2022)

Polypharmacy is typically defined as the use of **five or more medications** concurrently, which includes prescription drugs, over-the-counter products, and supplements.

- Persons aged ≥ 65 can be at risk for inadequate pain treatment.
- Pain management for older adults can be challenging due to polypharmacy from having various chronic conditions and age-related changes in drug metabolism, distribution, and clearance.



Risks Associated with Polypharmacy in Older Adults

Drug-Drug Interactions

Higher risk with central nervous system (CNS) depressants, non-steroidal anti-inflammatory drugs (NSAIDs), and anticholinergics. These combinations increase the likelihood of adverse events and hospitalizations.

Cognitive Impairment and Falls

Opioids can worsen baseline conditions like dementia. Polypharmacy is independently associated with reduced physical and cognitive function, even when accounting for disease burden.

Respiratory Depression and Overdose

Older adults are more susceptible even at low doses, especially with sedatives and reduced metabolism.

NSAID-Related Organ Toxicity

Use of NSAIDs as opioid alternatives or adjuncts raises risk for GI, renal, and cardiovascular complications.



Recommendations for Healthcare Providers

1.

Review All Medications

Ensure to consider all medications taken by the patient. Reconcile routinely and check for duplication, interactions, and cumulative sedation.

2.

Prescribe Lowest Effective Dose

Use the lowest effective dose. Prefer short-term, immediate-release formulations.

3.

Monitor for Adverse Effects

Implement structured assessments for sedation, confusion, constipation, and fall risk. Involve caregivers when cognitive issues are present.

4.

Avoid High-Risk Combinations

Use caution with benzodiazepines, gabapentinoids, muscle relaxants, and sedating antihistamines.

5.

Educate Patients and Caregivers

Promote safe use, storage, and disposal. Encourage reporting of symptoms like dizziness, drowsiness, or confusion.



For more information visit our website:
<https://crh.arizona.edu/> or
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References:

1. Steinman MA. Drug prescribing for older adults. In: Post TW, ed. UpToDate. Wolters Kluwer; 2025. Accessed August 7, 2025. <https://www.uptodate.com>
2. Dowell D, Ragan KR, Jones CM, Baldwin GT, Chou R. CDC clinical practice guideline for prescribing opioids for pain—United States, 2022. MMWR Recomm Rep. 2022;71(3):1-95. doi:10.15585/mmwr.r7103a1

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