

Bree Collaborative Opioid Prescribing in Older Adults Guidelines

Updated: April 24, 2021

Background

In 2015, the Washington Agency Medical Director's Group (AMDG), in collaboration with clinical and academic pain experts, updated the Guideline on Prescribing Opioids for Pain including a section on section on older adults (Appendix A).¹ The guideline recognizes that opioids in this population could pose specific risks and challenges related to changing physiology and pharmacokinetics, increasingly complex interactions among polypharmacy use of drugs, especially other controlled substances (benzodiazepines, sedative hypnotics) or drugs such as gabapentinoids, presence of severe co-morbidities, declining cognitive function, and increasing social isolation and complex care support needs.² The Bree Collaborative, a public/private group dedicated to targeted initiatives to improve health care quality, outcomes, affordability, and equity, endorsed this guideline in 2017 and elaborated in key areas including prescribing for dentists, in the perioperative period, for long-term opioid therapy, and metrics for uniform measurement.

The need to focus on this topic has become increasingly compelling with the publication of a report from the Agency for Healthcare Research and Quality in 2018 that highlighted increasing rates of opioid-related hospitalizations, with the highest reported median rates in Oregon and Washington.³ While opioid prescribing and mortality specific to prescribed opioids have fallen in recent years, between 2017-2018, the CDC reported that the specific opioid related mortality rate for persons ≥ 65 years increased by 4.8%.⁴

Areas of focus are organized around clinical decision points as shown in **Table 1**. In scoping these areas, cross-cutting themes were identified that should inform the evidence review and recommendations but that were too broad to be a focus of a specific workgroup including: the social determinants of health, palliative or end-of-life care, cognitive decline or dementia, and nursing home care.

Table 1: Focus Areas

Focus Area	Goal(s)	Members
Acute prescribing including acute injuries and peri-operative	Prevent transition to long term opioid use	Debra Gordon, Darcy Jaffe, Gary Franklin
Co-prescribing with opioids (e.g., sedative hypnotics, gabapentinoids, z-drugs)	Reduce impacts on cognition, falls, delirium	Gary Franklin, Jaymie Mai, James Floyd, Michael Parchman, Shelly Gray
Non-opioid pharmacologic pain management	Evidence base and risk/benefit	Pam Davies, Jason Fodeman, Denise Boudreau, Michael Parchman
Non-pharmacologic pain management	Evidence base and risk/benefit (e.g., CBT, active exercise)	Elizabeth Eckstrom, Yusuf Rashid/Siobhan Brown, Kushang Patel, Gina Wolf, Gary Franklin, Clarissa Hsu
Types of opioid therapy- intermittent, low dose, short acting vs others	Reduce use of long-acting opioids and COT	Judy Zerzan-Thul, Jaymie Mai, Steven Stanos
Tapering/deprescribing	Differentiators with recent Bree recommendations for legacy patients	Angie Sparks, Mark Sullivan, Carla Ainsworth, Jason Fodeman, Clarissa Hsu, Dianna Vinh

Recommendations

Acute prescribing including acute injuries and perioperative pain

Providers

- **Prior to the elective procedure and to prescribing**

- Perform a risk assessment for severe acute pain and adverse effects of opioids prior to prescribing (outlined in 2015 Washington State Agency Medical Directors' Group (AMDG) guidelines, 2018 Bree perioperative supplement).
- **Engage in proactive pain management planning, including pharmacologic and nonpharmacologic methods of pain management.** Establish realistic goals and expectations with the patient and family or caregiver (if present) including: control of pain while maximizing function, minimizing adverse events, side effects, and plans to reduce and discontinue opioid therapy to avoid persistent opioid use.

Which provider will be responsible for managing ongoing acute or postoperative pain, including who will be prescribing any opioids and policy on opioid refills including need for a patient reassessment.

- **When considering dosing**

- Start at 25%-50% of what would be initiated in a younger adult and extend the dosing intervals.
- Use lowest dose for shortest duration possible, prescribing <7 days (ideally ≤3 days) (consistent with CDC guidelines **and WA pain rules**).
- Avoid complicated regimens. Consider the person's other medications (e.g., muscle relaxers, antihistamines, anticholinergics).
- Avoid using long-acting opioids for acute pain (methadone, levorphanol, fentanyl patch or opioid delivered by extended-release forms).

- **During discharge and follow-up**

- Maintain a high vigilance for exaggerated side effects (e.g., respiratory depression, constipation with need for bowel prophylaxis, delirium, psychomotor effects that may increase risk of falls).
- Track opioid use and signs of potential misuse including the emergence of opioid use disorder during acute recovery and related functional status with outcome measures (e.g., mood, mobility, activities of daily living, sleep, appetite, cognitive impairment, weight changes).
- Be attentive to varying degrees of cognitive impairment that may impact opioid and other medication safety. Provide clear oral and readable written instructions on:
 - The risks, safe use, and storage of opioids and proper disposal of controlled substances through Safe Medication Return Program.

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- Which provider will be responsible for managing ongoing acute or postoperative pain, including who will be prescribing any opioids, the policy for refills and follow-up evaluations
- Planned taper of acute opioids, including a timeline for return to preoperative or lower opioid dosing for those on chronic opioids.
- Perform medication review and reconciliation at follow up visits to ensure the patient is not continuing medication that s/he no longer needs.

Health Care Site or Delivery System

- Designates a responsible care coordinator (e.g., health service coordinator, nurse case manager, clinical pharmacist) to facilitate smooth and safe transitions specific to the opioid and pain management plan. Establish policies that support safe opioid prescribing and monitor prescribing practices and patient safety.
- Assures provider education on risk and best practices of opioid prescribing in this age group.

Evidence

Optimal pain control following surgery is important for functional recovery, the risk of post-surgical complications, and the risk of persistent postsurgical pain and is best managed using a multimodal approach.⁵ While opioids serve as the cornerstone for severe acute postoperative pain management the need for persistent use is rare. Long-term opioid use often begins with treatment of acute pain. Though not a harm per se, long-term opioid use may increase the risk of harms if not appropriately managed (AHRQ). Probability of long-term opioid use increases most sharply in the first days of therapy, particularly after 5 days or 1 month of opioids have been prescribed.⁶ There is little high-grade evidence on transition to long-term opioid use specific to advancing age by decade of life. A population study of opioid naive adults ≥ 65 years of age found 6% transitioned to persistent opioid use >90 days.⁷ In a separate study, during a 1-year follow-up period of Medicare beneficiaries new to opioids, 6.5% had transitioned to long-term opioid use.⁸ Transition rates to long-term opioid use following minor and major surgical procedures appear similar (5.9% and 6.5% respectively) and it appears that individual patient characteristics were more important than the surgical procedure.⁹ Similar rates have been reported for opioid-naive patients remaining on opioid medication 12 months after sustaining fragility fractures of the hip, proximal humerus, or distal radius.¹⁰ In comparison, 12-24% of patients with new back pain remained on opioids at 12 months though this may in part represent chronic pain care.¹¹

Multiple studies suggest a number of patient, prescriber, and system factors contribute to unintended, persistent opioid use.^{12,13,14,15} Age is associated with persistent opioid use particularly age greater than 50,^{16,17} as is white race, higher income and Medicaid dual-eligibility.¹³ Characteristics associated with long-term opioid use include low income, older, females, in poor health, with new/chronic back pain, opioid initiations with long-acting opioids or tramadol, prescriptions for other pain, sleep or antipsychotic medication and pre and/or post mental health issues.⁵ Additional patient risk factors

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include comorbid posttraumatic stress, past or current nicotine use, past or current substance use disorder, social isolation and loneliness.¹⁸ Persistent opioid use has also been associated with presence of diabetes, pulmonary disease and heart failure.¹⁹ There is substantial variation in opioid use between states even after accounting for patient and procedure characteristics associated with opioid use²⁰ suggesting influence of individual prescriber behavior and local conditions. Prescriber characteristics potentially associated with prescribing of prolonged opioid treatment include personal attitudes, knowledge, beliefs and former training.²¹ Systems level factors that may facilitate or reduce unintended prescribing include health organizations' structure, culture and processes, prescriber education and legislative rules and policies.

Bio-physiologic changes that occur with aging, accumulation of comorbidities, co-prescriptions of medication, frailty, and psychosocial changes increase risk of opioid treatment. Pharmacokinetic changes and enhanced pharmacodynamic sensitivity (i.e., more pronounced effects at equivalent doses used in younger adults) occur with all opioids with age,^{22,23} leading to recommendations to start opioid therapy with about 50% of the usual adult dosage.²⁴ The American College of Surgeons Best Practices Guidelines for Acute Pain Management in Trauma Patients (2020) recommends a decrease in the initial dose of an opioid by 25% in 60-year-old patients, and by 50% for 80-year-old patients; but to administer at the same intervals.

Initiation of opioid and antiepileptic use and polypharmacy in older adults are significantly associated with increased risk of falling in meta-analyses.²⁵ A case series of more than 500,000 adults reported a near four-fold increase in the risk of fracture associated with periods of opioid exposure compared to non-use.²⁶ Though no differences were found by age, the associated risk for fracture was highest in the first seven days of opioid initiation (adjusted incidence rate ratio: 7.81, 95% confidence interval). Long term postoperative opioid use is associated with decreased use of planned healthcare utilization such as follow up with medical appointments and participation in postoperative rehabilitation sessions.²⁷ Older adults with prolonged use of central nervous system depressant medication such as opioids report lower scores on self-reported health-related quality of life and have higher odds of having more problems performing usual activities.²⁸

Exposure to opioids for the purposes of acute pain relief can progress to physical dependence and/or the onset of opioid use disorder (OUD). Older drug users are growing in number with many presenting for substance use treatment for the first time aged 50–70 years.²⁹ There are two distinct types of problem substance users among older people; “early-onset” and “late-onset” users. “Early-onset” refers to those who have a long history of substance use, who continue to use as they age, while “late-onset” includes individuals who develop a new OUD as elders.³⁰ As individuals age, they are less likely to obtain prescription opioids illicitly and more likely to obtain prescription opioids via the medical community.³¹ One study reported that 40-50% of adults 50 and older who misused prescription opioids obtained those medications through physicians.³² Alcohol use among older adults is also increasing particularly among females, including past-month binge alcohol and is a significant safety concern for acute or persistent opioid treatment in older adults who may self-medicate loss, grief and loneliness.³³

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A range of comprehensive system-level strategies have been utilized in various settings to alleviate the problem of inappropriate prescribing of opioids.³⁴ These include organizational support, automated decision support systems, and tools for individual feedback. Systems level interventions studied to address the opioid epidemic at large include 1) state legislation and regulation, 2) prescription drug monitoring programs (PDMPs), 3) insurance strategies, 4) clinical guideline implementation, 5) provider education, 6) health system interventions, 7) naloxone education and distribution, 8) safe storage and disposal, 9) public education, 10) community coalitions, and 11) interventions employing public safety and public health collaborations. A 2020 Agency for Healthcare Research Quality (AHRQ) evidence review focused on reducing harm associated with opioid use in older adults reported interventions aimed at use of screening tools to predict opioid-related harms, but none of these tools was tested in clinical practice to assess real-world results. Other studied interventions included use of the prescription monitoring program, multidisciplinary pain education for patients, an educational pamphlet for patients, implementation of an opioid safety initiative, provision of patient information and pain management training for clinicians, a bundle of educational modalities for clinicians, free prescription acetaminophen, a nationally-mandated tamper resistant opioid formulation, and motivational interview training for nursing students.

Well executed patient handoffs at all points of transition of care, patient and caregiver education attuned to the patient's cognitive status and care coordination provide opportunities for patient safety and prevention of unintended long-term prescribing. Opioid analgesics are one of the most common medications that account for all discrepant medications at time of transfer from hospital to skilled nursing facilities highlighting the importance of medication reconciliation at time of transition of care providers. One intervention that has been shown to be feasible and to promote faster return to preoperative opioid doses and definitive opioid cessation is a telephone-based motivational-interviewing intervention focused on providing opioid tapering reductions of 25% of the total opioid dose every seven days for patients with preexisting pain and opioid use who underwent orthopedic surgery.³⁵ However, many elderly patients experience cognitive impairment, memory loss and confusion that can be confounded by sight and hearing impairment. This can lead to problems with patient counseling and adherence to medication instructions. Medication hoarding is a problem for some older adults, with prevalence of hoarding behaviors increasing with age.³⁶ Thus caregivers' perspective is important for assessing medication and when providing instructions to discontinue and properly dispose of unused quantities of opioids.

In summary, there are insufficient data based on age, risk factors and specific acute pain conditions to recommend a specific strategy for prevention of persistent acute or postoperative opioid use.³⁷ Specific approaches used to reduce unintended transition from acute to long-term opioid use include prescribing limitations,³⁸ acceptance and commitment therapy delivered by a mobile phone,³⁹ motivational interviewing, development of a multidisciplinary transitional pain service to identify at-risk patients and optimize pain management upon discharge from hospital⁴⁰ and de-prescribing algorithms.^{41,42} The practicality of implementing these types of measures is limited as is the likelihood of a single

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intervention being successful. However, the body of evidence as a whole suggests enhanced care coordination between surgeons and primary care physicians to allow for earlier identification of patients at risk for new persistent opioid use to prevent misuse and dependence⁴³ and reduced duration of a course of acute opioid treatment. In addition to a clear understanding of the patient's treatment goals and expectations, comorbidities and medication risks, cognitive and functional status, a consistent prescriber and care coordination of community resources and family support are important for pain treatment in later life.^{44,45}

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