Managing pain in frail elders

Learn about challenges and strategies for optimizing pain management in frail elders.

By Staja “Star” Booker, MS, RN, PhD(c), Dorota Anna Bartoszczyk, MSN, RN, OCN, and Keela A. Herr, PhD, RN, AGSF, FAAN

Managing pain in any older adult poses unique challenges. But older adults who are frail are more likely to experience chronic pain, acute pain, or both. What’s more, they stand a greater chance that their pain won’t be managed effectively.

Although experts’ definitions of frailty differ, the term generally refers to a state of increased vulnerability to stressors (such as pain) and difficulty regaining homeostasis after an adverse health event. Frail elders show declines in muscle strength, balance, mobility, physical activity, cognition, endurance, nutrition, and weight. This puts them at risk for persistent pain, comorbidities, polypharmacy, falls, and delirium. Effective pain management not only provides relief and comfort but also helps them regain homeostasis, avoid injury, improve physical and psychosocial functioning, prevent deconditioning, and optimize quality of life.

To manage pain effectively in frail elders, healthcare providers must accurately identify and assess pain and related factors, provide appropriate treatment tailored to each patient, perform timely evaluation, and clearly communicate and document the patient’s condition. High-quality pain management is even more critical for frail elders with cognitive or mental health impairment, those who experience frequent care transitions, and those at the end of life. Considering the impact of pain on these elders’ health, a palliative care approach could prove beneficial.

However, limited evidence exists for best practices in pain management for frail elders, primarily because research that guides pain practice decisions commonly excludes this population. This article discusses recommendations for assessing, treating, evaluating, and documenting pain in frail elders based on the best available evidence.

Challenges to recognizing and evaluating pain in frail elders

As with all patients, assessment is a critical first step in managing pain in frail elders. Yet interdisciplinary healthcare professionals generally underassess and undertreat pain, which can further decrease a frail elder’s physical and cognitive reserve.

Various issues contribute to challenges in recognizing and evaluating pain accurately in frail elders.

- **Misconceptions.** Many people mistakenly believe pain sensitivity or perception decreases with age and cognitive changes. In fact, some older adults, including those with dementia, have a higher pain threshold and higher pain tolerance, which contribute to a slower response to pain and a perception of lower pain intensity. These changes may make them more vulnerable to unrecognized pain and loss of pain as a warning sign. On the other hand, in certain racial and ethnic groups (such as African Americans), pain sensitivity may increase with age due to low pain thresholds and low tolerance, resulting in earlier recognition of pain and a perception of greater pain intensity. Such differences make these groups more likely to experience severe pain and pain-related treatment disparities.

- **Multiple chronic conditions.** Older adults average three or more chronic health conditions, many of which cause pain. This puts them at greater risk for increased pain severity. (See Sources of pain in older adults.)

- **Sensory, cognitive, and mental health impairments.** Both indi-
Sources of pain in older adults

The conditions listed below commonly cause pain in frail elders and other older adults. Many are easily recognized while others often are overlooked.

<table>
<thead>
<tr>
<th>Pathologic</th>
<th>Procedural</th>
<th>Adverse Incidents</th>
<th>Other Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Arthritis</td>
<td>• Activities of daily living, turning, and transferring</td>
<td>• Contractures</td>
<td>• Anxiety</td>
</tr>
<tr>
<td>• Bunions</td>
<td>• Catheter or I.V. line insertion, injections, blood draws, blood glucose sticks</td>
<td>• Drug-induced neuropathies</td>
<td>• Depression</td>
</tr>
<tr>
<td>• Cancer</td>
<td>• Oral care</td>
<td>• Fixed positioning on pressure points</td>
<td>• Labored breathing at end of life</td>
</tr>
<tr>
<td>• Cardiovascular conditions (such as stroke, myocardial infarction)</td>
<td>• Pressure caused by blood pressure cuff</td>
<td>• Incontinence-induced rashes</td>
<td>• Physical elder abuse</td>
</tr>
<tr>
<td>• Chronic obstructive pulmonary disease and asthma</td>
<td>• Range-of-motion and rehabilitative activities</td>
<td>• Poorly fitting dentures</td>
<td>• Trauma, including falls, bruises, fractures, sprains, strains, and concussions</td>
</tr>
<tr>
<td>• Gastroesophageal reflux disease</td>
<td>• Surgery</td>
<td>• Pressure ulcers</td>
<td></td>
</tr>
<tr>
<td>• Gout</td>
<td>• Wound care</td>
<td>• Prolonged immobility</td>
<td></td>
</tr>
<tr>
<td>• Diabetic neuropathy and ulcers</td>
<td></td>
<td>• Skin tears</td>
<td></td>
</tr>
<tr>
<td>• Shingles and post-herpetic neuropathy</td>
<td></td>
<td>• Fixed positioning on pressure cuff</td>
<td></td>
</tr>
<tr>
<td>• Osteoporosis, spontaneous fractures, and spinal stenosis</td>
<td></td>
<td>• Oral care</td>
<td></td>
</tr>
<tr>
<td>• Peripheral vascular disease</td>
<td></td>
<td>• Range-of-motion and rehabilitative activities</td>
<td></td>
</tr>
<tr>
<td>• Pneumonia and influenza</td>
<td></td>
<td>• Activities of daily living, turning, and transferring</td>
<td></td>
</tr>
<tr>
<td>• Trigeminal neuralgia</td>
<td></td>
<td>• Catheter or I.V. line insertion, injections, blood draws, blood glucose sticks</td>
<td></td>
</tr>
<tr>
<td>• Pneumonia and influenza</td>
<td></td>
<td>• Pressure caused by blood pressure cuff</td>
<td></td>
</tr>
<tr>
<td>• Peripheral vascular disease</td>
<td></td>
<td>• Range-of-motion and rehabilitative activities</td>
<td></td>
</tr>
<tr>
<td>• Arthritis</td>
<td></td>
<td>• Surgery</td>
<td></td>
</tr>
<tr>
<td>• Gastroesophageal reflux disease</td>
<td>• Wound care</td>
<td>• Contractures</td>
<td></td>
</tr>
<tr>
<td>• Gout</td>
<td></td>
<td>• Drug-induced neuropathies</td>
<td></td>
</tr>
<tr>
<td>• Diabetic neuropathy and ulcers</td>
<td></td>
<td>• Fixed positioning on pressure points</td>
<td></td>
</tr>
<tr>
<td>• Shingles and post-herpetic neuropathy</td>
<td></td>
<td>• Incontinence-induced rashes</td>
<td></td>
</tr>
<tr>
<td>• Osteoporosis, spontaneous fractures, and spinal stenosis</td>
<td></td>
<td>• Poorly fitting dentures</td>
<td></td>
</tr>
<tr>
<td>• Peripheral vascular disease</td>
<td></td>
<td>• Pressure ulcers</td>
<td></td>
</tr>
<tr>
<td>• Pneumonia and influenza</td>
<td></td>
<td>• Prolonged immobility</td>
<td></td>
</tr>
<tr>
<td>• Trigeminal neuralgia</td>
<td></td>
<td>• Skin tears</td>
<td></td>
</tr>
<tr>
<td>• Urinary tract infection</td>
<td></td>
<td>• Fixed positioning on pressure cuff</td>
<td></td>
</tr>
</tbody>
</table>

• Sociocultural factors. Sociocultural background can influence how an older adult interprets, tolerates, responds to, and communicates pain. African-American, Hispanic, and Latino elders may experience greater pain-related disparities in assessment and treatment and are more likely to be considered frail because they tend to have more comorbidities. For effective pain management, healthcare providers must be aware of these disparities and respond appropriately to patients’ cultural beliefs and differences.

Barriers to reporting pain
Several barriers may prevent frail older adults from reporting pain accurately—or reporting it at all. They include:
• inaccurate beliefs about pain
• desire to maintain a sense of control
• feeling ignored or misunderstood
• inability to communicate the pain experience.

To compound the problem, communication among healthcare providers may be inadequate. For instance, a patient’s report of pain may not be conveyed to other team members.

PENS approach
The PENS approach (Pain, Expectations/Emotions, Nutrition, Sleep), developed by Mark Greenwood of Aero Med Spectrum Health, is a communication tool for managing pain and suffering in frail elders; promoting transparent and effective communication among patients, healthcare providers, and caregivers; and targeting pain-related factors that are particularly relevant for vulnerable older adults. (For all older adults with pain, assess frailty using a validated screening tool.)

Pain
In light of atypical pain presentations of many frail elders, skillful and comprehensive assessment is crucial to identify pain. Review the patient’s medical history for potentially painful conditions. Recognize that older adults may display other signs and symptoms related to pain, including fatigue, inability to sleep, appetite loss, and delirium.

Also determine if the older adult can self-report pain, which is the most reliable source of information. Most older adults with mild to moderate cognitive impairment can self-report pain to some degree. To determine if your patient can self-report reliably, ask him or her to mark the location on a pain scale that represents severe pain. If the marked location aligns with severe pain, assume the patient can self-report, and go to step A. Otherwise, skip to step B.
Step A
If the older adult can self-report pain, assess pain characteristics:

- **Pain present or absent**: Ask simple questions using words beyond just “pain.” For instance: “Are you experiencing any pain or discomfort right now? Do you feel sore or achy anywhere in your body? Can you tell me about your pain or discomfort?” To accommodate elders’ lower energy and cognitive reserves, give them adequate time to respond and describe their pain.

- **Source or cause**: Ask if the patient has (or review health records to identify) chronic conditions known to be painful, as well as acute injury or trauma, discomfort stemming from procedures, or other potential causes of pain.

- **Intensity**: To measure pain intensity, use a valid, reliable self-report pain assessment (numerical or descriptive). Because frail elders may have problems focusing and concentrating, offer a less demanding pain tool (one that’s shorter and easier to understand) that demonstrates nursing-sensitive quality indicators. Generally, older adults prefer verbal descriptor scales, such as the Iowa Pain Thermometer—revised (IPT-r). Some African-Americans, Hispanics, Latinos, and Asians may prefer the Faces Pain Scale—revised (FPS-r). Be sure to determine the patient’s individual preference.

- **Tolerability**: Perception of pain tolerability in older adults and the impact of pain on functioning (such as activities of daily living [ADLs] and rehabilitative therapy) are important in planning the patient’s care. Use the Functional Pain Scale to evaluate tolerability and the impact of pain on the patient’s passive and active functions, such as the ability to perform ADLs and other self-care and social activities.

- **Quality**: Ask if the patient feels burning, dullness, sharpness, aches, or pricking. These quality descriptors help determine if the patient’s pain is nociceptive or neuropathic. However, in

---

**Analgesic trial for suspected pain in noncommunicative older adults with cognitive impairment**

You can use this analgesic trial to confirm suspected pain in an older adult who’s unable to report pain. It’s not a treatment plan, so be sure to monitor your patient closely during the trial.

**Criteria for an empiric analgesic trial**
Initiate an empiric analgesic trial if:

- the patient has a pathologic condition that’s likely to cause pain or proxy-report of behaviors indicating pain or changes in function,
- the patient’s behaviors suggest pain (as assessed by a pain behavior tool),
- these behaviors continue after interventions to treat other related causes (such as delirium or agitation), including ensuring basic needs are met and comfort measures are provided, and
- pain behaviors don’t respond to complementary therapies (such as nondrug interventions).

**Implementing the trial**
Using a stepped approach, advance each medication or dose titration as described below, then evaluate the patient’s response.

**Step 1a**: Administer acetaminophen 500 to 1,000 mg every 6 hours for 24 hours, as prescribed, not to exceed 3,000 mg in a 24-hour period in a frail elder. If the oral or rectal route isn’t accessible, another option is i.v. acetaminophen for injection (Ofrimiv) 15 mg/kg every 6 hours or 12.5 mg/kg every 4 hours. Use with caution in frail elders with malnutrition. (Note: i.v. acetaminophen is expensive and unlikely to be used except in acute-care postoperative settings.)

**Step 1b**: If pain behaviors or function improve, assume pain was the cause. Continue acetaminophen as a routine medication, add appropriate complementary interventions, and document assessment findings.

**Step 2a**: If pain behaviors continue, consider topical lidocaine or pregabalin 25 mg/day, to a maximum dosage of 300 mg/day for suspected neuropathic pain, or a topical nonsteroidal anti-inflammatory drug if pain is localized; observe behaviors and drug effects.

**Step 2b**: If behaviors improve, assume pain was the cause, document assessment, and establish a multimodal treatment plan evaluating treatment options’ risks and benefits.

**Step 3a**: If pain behaviors continue, consider a single low-dose, short-acting opioid (such as hydrocodone, oxycodone, or morphine) or buprenorphine transdermal patch 5 mcg/hour, to a maximum dosage of 10 mcg/hour; observe behaviors and drug effects.

**Step 3b**: If pain behaviors persist, titrate the opioid dosage upward by 25% to 50% until therapeutic effects, bothersome side effects, or adverse effects occur.

**Step 4**: If pain behaviors continue after a reasonable analgesic trial, explore other potential causes. If desired, consult a pain management specialist.

Adapted with permission from Pasero C, McCaffery M. *Pain Assessment and Pharmacologic Management*. St. Louis, MO: Mosby-Elsevier; 2011; 126.
For older adults who are able to self-report, move on to the “Expectations/Emotions” section. For older adults unable to self-report, go to Step B.

**Step B**

In older adults with delirium or severe cognitive impairment who can’t self-report, use this alternative approach to pain assessment.

- Search for potential sources of pain common in frail elders, including comorbidities, relevant diagnoses, and other conditions that might be overlooked (as described above).
- Observe for pain-related behaviors, such as grimacing, moaning, and postural changes. Use the Pain Assessment in Advanced Dementia (PAINAD) tool or another valid and reliable pain behavior tool. (For a list of these tools, visit [http://prc.coh.org/PAIN-NOA.htm](http://prc.coh.org/PAIN-NOA.htm)).
- Pain behavior tools assess for behaviors that may be pain related, as well as increases or decreases in these behaviors. However, a pain behavior score derived from a pain behavior tool isn’t comparable to a pain intensity score derived from a numeric rating scale. You need to rule out other factors that may cause similar behaviors, such as delirium. If delirium is present, assess for possible untreated or undertreated pain. Staff should be educated to use the selected tool to establish baseline behavior and monitor for changes that suggest pain, evaluate response to treatment with the same tool across transitions and settings, and incorporate the selected pain tool into facility procedures for assessing pain in nonverbal older adults.
- Obtain a proxy report from family members, professional caregivers, or unlicensed personnel (such as nursing assistants) regarding changes in the patient’s activities or function that may be pain related. Nursing assistants can screen for pain using a pain behavior scale, referring to the nurse for a thorough assessment. If you suspect the patient has pain or if pain behaviors persist after his or her basic physiologic needs have been assessed and comfort measures are implemented, initiate and evaluate a time-limited analgesic trial starting with acetaminophen, as indicated and prescribed. (See *Analgesic trial for suspected pain in noncommunicative older adults with cognitive impairment*.)
- Usually, the decision to treat pain in older adults with dementia is linked to behavior changes. Because frail elders have compromised homeostasis and (with cognitive impairment) delayed pain recognition, improvement in pain behaviors may be slow. If behaviors do improve, assume pain was the cause of those behaviors and conduct a risk-benefit analysis to determine the best treatment plan that incorporates the safest complementary interventions and analgesics, if needed.

Next, move on to “Expectations and emotions”.

**Expectations and emotions**

Determine realistic expectations and goals for the patient:

- If the patient can self-report, ask, “What are your expectations for pain relief?”
- Develop a comfort-function-mood goal by determining acceptable pain levels and goals for daily functional activity and mood improvement or maintenance. Know that zero pain may not be a realistic goal.
- If the frail elder is unable to develop a comfort-function-mood goal, engage family and other caregivers to help develop this goal.
- Recognize that frail elders are at greater risk for declining psychosocial function, so evaluating and maintaining or improving mood are important goals. Many frail elders experience depression and anxiety, both of which can exacerbate pain. On the other hand, depression may prevent some frail elders from reporting pain.
- Ask simple questions to elicit information about mood, in addition to using a valid assessment scale, such as the Geriatric Depression Scale (available at [hartfordgn.org](http://hartfordgn.org)). If the frail elder is unable to answer questions due to dementia, you can use a standardized tool, such as the Cornell Scale for Depression in Dementia.

**Nutrition**

Untreated and undertreated pain may lead to altered eating patterns and nutritional status. Some frail elders are already undernourished and exhibit anorexia of aging. In a patient with a poor appetite and extremely low weight, poor nutritional status affects pharmacodynamics and pharmacokinetics.
- Ask the patient about nausea,
hunger, and thirst; inquire whether he or she has eaten. Patients with nausea may be unable to take oral pain medications. But keep in mind that some behaviors thought to be pain-related may actually stem from basic needs, such as hunger and thirst.

- If the patient can’t self-report, observe eating and elimination patterns to establish a baseline; then monitor for changes from baseline.
- Weigh the patient regularly, as weight changes may necessitate altered medication dosages.
- Monitor bowel and bladder elimination, which can affect drug elimination. Also, constipation may limit use of opioids (known to cause constipation) or necessitate a specific bowel regimen.

Sleep
Insufficient sleep can significantly affect pain levels and may contribute to development of widespread pain in older adults. To assess the impact and interference of pain on the patient’s sleep, ask:

- “Have you been sleeping well?” and “Does your pain affect your ability to fall asleep or stay asleep?”
- If the patient is unable to self-report, observe and monitor sleep patterns to establish baseline sleep behavior, which may include insomnia unrelated to pain. Changes from baseline may suggest the potential cause of the patient’s pain.
- Determine an appropriate nighttime pain-medication regimen; for example, consider if the patient wants to be awakened to take pain medications. In acute-care settings, know that family members and other unauthorized persons shouldn’t access a frail elder’s patient-controlled analgesia pump during sleep, as this could lead to inadvertent oversedation and respiratory depression.
- Use the Pittsburgh Sleep Quality Index (hbinstitute.com/files/PSQIa.pdf) for a formal assessment of sleep quality.

Clinical treatment
Optimal treatment of pain in frail elders poses a challenge due to research gaps and lack of evidence specific to this vulnerable population. However, clinical guidelines for managing pain in older adults, such as those from the American Geriatrics Society and the British Pain Society/British Geriatrics Society, provide recommendations that can be applied to frail elders.

To meet the patient’s preferences and goals, consider such issues as frailty level, comorbidities, past and current medications, medication availability, polypharmacy, potential treatment risks, cognitive and functional status, and available social support. Treatment should begin as soon as possible to maximize effectiveness; it should be individualized to the patient’s comfort-function-mood goal for pain management.

End-of-life considerations
End-of-life circumstances affect decisions regarding pain treatment goals and choices. For patients at the end of life, advanced directives stating treatment preferences may be useful. The Institute of Medicine’s 2014 report, Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life, highlights the importance of managing pain in older adults near death, given that up to 46% of older adults suffer pain during the last month of life. Honor the patient’s treatment choices, despite risks related to use of opioids if these are necessary to ensure relief from pain and suffering.

Be aware that you may need to administer pain medications via the oral transmucosal, rectal, or vaginal route or through a subcutaneous access port. Don’t administer pain medications intramuscularly in an older adult; this route is particularly problematic in frail elders, whose body composition limits effective analgesic absorption and distribution. For unmanageable pain and suffering, consider the option of palliative sedation.

Geriatric interdisciplinary treatment team
Pain complexity in frail elders warrants an interdisciplinary approach that includes nurses, physicians, pharmacists, social workers, physical and occupational therapists (to maintain the patient’s function), a recreational therapist or psychologist (for therapeutic activities to maintain or improve psychological and social function), a nutritionist (for individualized meal planning to prevent further undernourishment), pastoral care (for spiritual guidance), and family or other personal caregivers to support implementation of multimodal pain treatment.

Remember—frail elders rely heavily on caregivers, such as family members, certified nursing assistants, or personal care assistants, for help in implementing pain interventions. So consider and assess these caregivers’ educational, financial, and emotional needs and their ability to assess the patient’s pain and administer treatments safely.

Multimodal treatment approach
A systematic approach aids planning and implementation of appropriate multimodal treatment. Using a combination of complementary and pharmacologic interventions as needed, this approach minimizes reliance on medications and decreases potential adverse effects. Treatment options may vary with the level of pain intensity; using the stepped approach, analgesics in steps 2 and 3 can be added to step 1 as pain intensifies and function declines. (See Selected examples of treatment interventions for frail older adults.)
Selected examples of treatment interventions for frail older adults

This diagram shows the various treatment options for patients with different levels of pain intensity. Treatment options in steps 2 and 3 may be combined and/or added to step 1, depending on the individual patient pain etiology, comorbidities, patient preference, and individualized plan of care.


Complementary interventions
Before using a complementary intervention with a frail elder, carefully consider whether it’s appropriate given the patient’s limitations, capabilities, and safety concerns. Multiple chronic conditions, cognitive limitations, and physical impairment can affect the use of various strategies; also, frail elders may need closer monitoring. For example, progressive relaxation and guided imagery may not be possible for a patient with cognitive challenges who can’t understand instructions. Instead, use more passive activities, such as simple relaxation techniques (for instance, massage or heat application). However, know that frail elders with thin, sensitive skin are at risk for skin damage from heat or cold application, necessitating careful monitoring of these techniques.

For frail elders with exhaustion, weakness, and fatigue, consider using the following complementary interventions to relieve pain:
- simple cognitive behavioral techniques, such as education, distraction, reminiscence therapy, and selected coping strategies
- relaxation techniques, such as music therapy, humor, and paced breathing
- pet visitations and animal-assisted therapy
- physical interventions, including heat or cold application, therapeutic massage, positioning changes, assistive devices, and pressure-relieving and redistribution devices
- movement therapies, such as simple movements (for instance, passive range of motion, tai chi, and physical therapy)
- spiritual interventions, such as mindfulness meditation or prayer
- nutritional supplements and herbal preparations
- environmental modifications, such as noise and light reduction, aromatherapy, rest, a sleep protocol, and meaningful interpersonal interactions.

Pharmacologic interventions
Because frail elders are more vulnerable to adverse effects of analgesics, healthcare providers must conduct a risk-benefit analysis before pharmacologic treatment begins. Age-related changes in pharmacokinetics and pharmacodynamics, the likelihood of multiple chronic conditions that increase the risk of adverse effects, polypharmacy, and misconceptions about pain medications can affect the success of drug therapy. Under-nourishment and sarcopenia (common in frail elders) also alter phar-
Pharmacokinetic and pharmacodynamic changes manifest as altered drug absorption, distribution, metabolism, and elimination. For example, age-related increases in fat-to-water ratio, decreased plasma protein (such as albumin), and impaired liver and kidney function can lead to unpredictable responses to drugs. Pharmacogenetics (genetic differences in drug metabolism) also can affect drug metabolism, response, and effectiveness. Therefore, elderly patients typically require lower dosages and careful monitoring for adverse effects.

Before therapy starts, obtain baseline laboratory values for renal and liver function. Drug therapy should be tailored to the individual patient, with frequent monitoring to evaluate effectiveness and check for adverse effects. The widely acknowledged principle of pharmacologic treatment in older adults—careful dosing (start low), titration (go slow), and therapeutic evaluation (get to goal)—is especially important for vulnerable frail elders. (See Drugs that may be unsafe or inappropriate for frail elders.)

Opioids. Use of these agents in frail elders must be considered carefully. Although evidence in these patients is limited, recent studies raise concerns about opioid adverse effects, including cognitive changes and increased risk of falls (particularly as impaired gait is common in frail elders). Nonetheless, opioid therapy may be a reasonable choice for patients whose pain is severe enough to affect function and quality of life. Be sure to discuss the risks and benefits with the patient and family.

For opioid-naïve older adults, careful dosing and monitoring are particularly essential. The starting dosage should be 25% to 50% of the normal adult starting dosage. A short-acting opioid should be tried first, with the dosage increased slowly until the patient achieves the pain-relief goal.

All patients receiving opioids should be screened for the risk of substance abuse and addiction. An opioid’s impact on function and development of tolerance, dependence, adverse effects, or addiction should guide dosage adjustments and the decision to continue opioid therapy. Be aware that although many clinicians use an equianalgesic chart as a guide when changing a frail elder from one opioid to another, no good evidence exists for this practice.

Managing adverse effects. Successful pain management hinges on anticipating, monitoring for, preventing, and managing adverse effects (such as nausea, constipation, and sedation). For patients using opioids, initiate a bowel regimen for opioid-induced constipation and consider using a bowel performance scale. Make sure an airway management plan for opioid-induced sedation and respiratory depression is in place. For patients receiving sedating pain medications, implement fall precautions.

Pain evaluation

To optimize pain management, re-assess and evaluate your patient regularly to monitor for improvement or deterioration in pain or function, as well as for adverse drug effects. Reported changes in pain intensity can help determine treatment effectiveness. Here are additional ways to evaluate whether your patient’s pain is being managed effectively:

• Evaluate whether the patient has attained or progressed toward comfort-function-mood goals. Reinforce positive outcomes, such as decreased pain intensity,

Drugs that may be unsafe or inappropriate for frail elders

Many frail elders have multiple chronic diseases and take multiple medications, increasing the risk of adverse effects. Multiple medications may be unnecessary or inappropriate, may cause dangerous drug-drug or drug-disease interactions, or may have overlapping mechanisms of action.

The American Geriatric Society’s Beers Criteria, updated in 2015, identifies medications that may be inappropriate for older adults, typically due to drug-drug or drug-disease interactions. Pain medications that should be avoided in older people (particularly frail elders) include:

• meperidine
• noncyclooxygenase (COX)-selective nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin in doses above 325 mg/day
• COX-1 selective NSAIDs, such as indomethacin and ketorolac
• pentazocine
• skeletal muscle relaxants
• selected short- and long-acting benzodiazepines.

These medications place older adults at greater risk for GI bleeding, confusion, hallucinations, renal injury, falls, and fractures, although concerns vary with the specific drug. Acetaminophen is recommended as a first-line agent for mild pain, but concerns of the Food and Drug Administration have led to changes in dosing recommendations. Generally, acetaminophen is safe if the 24-hour dose doesn’t exceed 4,000 mg in healthy older adults or 2,000 to 3,000 mg in frail older adults. Doses above these levels increase liver toxicity risk. Perform a detailed medication history to identify redundant and inappropriate medications, as well as previously used treatments that successfully treated the patient’s pain. (For more information on the Beers Criteria, see www.americangeriatrics.org/files/documents/beers/BeersCriteriaPublicTranslation.pdf.)

What about morphine?

Although the Beers criteria don’t include morphine, this drug should be used cautiously in older adults (and in any patient with renal or hepatic impairment) because its active metabolite may increase the risk of toxicity and delirium.
increased ability to ambulate, functional improvements, and a decrease in pain-related sleep disturbances.

- Monitor for a reduction in pain-suggestive behaviors, agitation, and other neuropsychiatric signs and symptoms common in patients with cognitive impairment.
- Implement a medication risk evaluation and mitigation surveillance program that includes determining treatment effectiveness, tolerability, adherence, dose sensitivity, and safety compliance as a part of treatment monitoring. Use this program throughout the duration of treatment and evaluate results regularly.
- Assess the need for additional pain management education for the patient, family members, and other caregivers.

Communicating and documenting the pain-management plan

Recognizing that good communication is essential to optimal patient outcomes, The Joint Commission released recommendations for advancing effective communication, cultural competence, and patient-and-family-centered care. Written, electronic, and verbal communication of the pain-management plan must be consistent and accurate—especially for frail elders experiencing frequent transitions between care levels and settings. Failure to communicate pertinent information during care transitions can lead to fragmented treatment planning and poor pain outcomes.

Essential information to communicate during care transitions includes:
- pain management history
- pain assessment tools and scales used
- complementary and pharmacologic interventions tried and shown to be either effective or ineffective
- patient goals for pain outcomes

Clinical decision-making tools, such as alerts in the electronic health record regarding inappropriate or high-alert medications, flag alerts for frail elders, and embedded standard communication and pain assessment tools, may promote effective communication and documentation.

Effective pain management in frail elders is an ongoing team effort that entails accurate assessment, best selection and careful monitoring of multimodal treatments, evaluation of treatment, and clear documentation. A thoughtful, informed approach can promote the high-quality pain management frail elders deserve.

Staja “Star” Booker is a PhD candidate at The University of Iowa College of Nursing in Iowa City. Dorota A. Bartoszczyk is a staff Nurse at The University of Iowa Hospitals and Clinics and a PhD student at The University of Iowa College of Nursing in Iowa City. Keela A. Herr is a professor, associate dean of faculty, and co-director of the Cosmay Center for Gerontological Excellence at The University of Iowa College of Nursing in Iowa City.

Selected references


Greenwood MJ, Bennett EJ. The PENS acronym in emergency medicine and nursing: a structured communication tool to manage pain and suffering. Poster presented at the Global Conference on Emergency Nursing and Trauma Care; September 18, 2014; Dublin, Ireland. globalconference.com/resources/updateable/pdf/EMER%20FINAL%20Oral%20programme.pdf


1. Which statement about pain in frail elders is correct?
a. Pain sensitivity decreases with age.
b. Pain perception decreases with age.
c. Patients with dementia may have a lower pain threshold and tolerance.
d. Patients with dementia may have a higher pain threshold and tolerance.

2. Which statement about sociocultural factors related to pain in frail elders is correct?
c. Sociocultural background does not affect how older adults tolerate pain.
d. Sociocultural background does not affect how older adults communicate pain.

3. How do sensory, cognitive, and mental health impairments affect pain?
a. Mental health impairments alter the description and communication of pain.
b. Mental health impairments rarely affect the description and communication of pain.
c. Delirium is associated with a decreased pain response.
d. Anxiety is associated with a decreased pain response.

4. When assessing the intensity of pain in a frail elder who can self-report, you should consider that:
a. using a longer pain-assessment tool will provide the nurse with more complete information.
b. some African-Americans, Hispanics, Latinos, and Asians don’t like the Faces Pain Scale—revised (FPS-r).
c. it is best to avoid using assessment tools that are numerical or descriptive in nature.
d. older adults prefer verbal descriptor scales, such as the Iowa Pain Thermometer—revised (IPT-r).

5. Which of the following is a good tool for assessing pain tolerability in frail adults who can self-report?
a. Activities of Daily Living score
b. Iowa Pain Thermometer
c. Faces Pain Scale
d. Functional Pain Scale

6. Which of the following is a good tool for assessing pain in frail adults who cannot self-report?
a. Pain Assessment in Advanced Dementia
b. Functional Pain Scale
c. Activities of Daily Living score
d. Iowa Pain Thermometer score

7. Your frail older patient who has cognitive impairment and is noncommunicative will begin an analgesic trial for suspected pain. Which statement about this trial is correct?
a. Patients with pain behaviors that don’t respond to complementary therapies are not eligible.
b. You will be administering acetaminophen 500 to 1,000 mg every 6 hours for 24 hours as prescribed, not to exceed 3,000 mg in a 24-hour period in a frail elder.
c. You will be administering acetaminophen 500 to 1,500 mg every 8 hours for 24 hours as prescribed, not to exceed 3,500 mg in a 24-hour period in a frail elder.
d. If the patient’s pain behaviors stop after analgesia administration, add topical lidocaine or a topical nonsteroidal anti-inflammatory agent (NSAID).

8. Your frail older patient is on medication for depression. When assessing and managing his pain, you should consider that depression:
a. can exacerbate pain.
b. is independent of pain reporting.
c. increases the likelihood of pain reporting.
d. lessens the incidence of pain.

9. Your frail older patient has severe, persistent pain that significantly reduces her function level. Which of the following would you expect her primary care provider to prescribe?
a. Acetaminophen
b. Topical counterstimulant
c. Topical NSAID
d. Opioid

10. Which of the following may be added as a strategy to manage moderate pain (step 2) in the frail elder patient?
a. Acetaminophen
b. Topical counterstimulant
c. Topical NSAID
d. High-dose opioid

11. Which is an appropriate complementary therapy intervention for a patient who is cognitively challenged?
a. Progressive relaxation
b. Massage
c. Guided imagery
d. Mindful meditation

12. Which statement about the effects of drugs in elders is correct?
a. Impaired liver and kidney function can lead to unpredictable responses to drugs.
b. Older patients typically require higher dosages of pain medications.
c. Dosages of pain medications should be increased rapidly to achieve the desired effect.
d. Older patients tend to respond in a predictable fashion to medications.

13. According to the American Geriatric Society’s Beers Criteria, pain medications that should be avoided in the elderly include all the following EXCEPT:
a. meperidine.
b. skeletal muscle relaxants.
c. acetaminophen.
d. indomethacin.

14. The starting dosage for opioids in opioid-naive older adults should be:
a. 5% to 10% of the normal adult starting dosage.
b. 15% to 20% of the normal adult starting dosage.
c. 25% to 50% of the normal adult starting dosage.
d. 50% to 75% of the normal adult starting dosage.