



Non-Pharmacological Pain Management

Shirley Sullivan

RN, BSN

May 31, 2023



Quality
Insights

QIN-QIO

Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
iQUALITY IMPROVEMENT & INNOVATION GROUP



PAIN in Nursing Home Residents

- Prior studies estimate that >40% of long-stay nursing home (NH) residents experience persistent pain
- Pain medication in the elderly population has increased risk of unwanted side effects
- Non-pharmacological pain management can be effective way to help to manage pain without side effects
- Pain Assessment
- Pain Management Plan (Pain Care Plan)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6382036/#:~:text=Pain%20is%20defined%20as%20a,pain%20experienced%20by%20other%20people.>

<https://pubmed.ncbi.nlm.nih.gov/28267065/>



Definition of Pain

- Unpleasant sensory and emotional experience that can be acute, recurrent, or persistent
 - Acute pain
 - Chronic pain
- Not part of normal aging
- Resident report of pain is the best indicator of pain
 - Recognize many residents do not or cannot report pain

Conditions That Cause Chronic Pain

- 80% of residents have some condition that can be associated with pain
- Common causes/underlying disease
 - Musculoskeletal
 - Neurologic conditions
 - Medications
 - Diabetes



Adverse Effects of Pain

- Depression/anxiety
- Decreased mobility/functional impairment
- Agitation/aggression
- Sleep disturbance
- Weight loss



Adverse Effects of Unrelieved Pain

- **Functional decline**
 - Decline in activities of daily living (ADLs)
 - Increased risk of falls
- **Immobility**
 - Contractures
 - Skin breakdown
 - Incontinence
 - Deconditioning
- **Quality of life**
 - Depression/anxiety/sleep disturbance
 - Lack of activity
 - Behavior problems





When to Do a Pain Assessment

- Admission/readmission
- Change in condition
- Minimum Data Set (MDS)
- At least quarterly
- At least daily for residents with a known painful condition
- Before and after administration of as-needed analgesic medication



Pain Management: Who is Responsible ?

- Nursing staff
- Rehabilitative staff
- Practitioners
- Dietician
- Social workers
- Pharmacists
- Administration
- Residents and responsible parties



Pain Assessment Tools

- Numeric Rating Scale (NRS),
- Faces Pain Scale-Revised (FPS-R)
- Verbal Descriptor Scale (VDS)
- Pain Assessment in Advanced Dementia (PAINAD)

Pain Management Care Plan

- Address and treat underlying cause or causes
- Develop treatment plan based on whether pain is episodic, continuous or both (prn vs standing orders)
- Treatment plan/interventions are based on:
 - Resident's needs and goals
 - The source, type of pain, severity, and potential for multiple sources
- A variety of treatments may need to be tried (multiple modalities may be needed)
- Develop care plan with specific goals (i.e. pain will be maintained at a level of 3 or less on the pain scale within 2 weeks over 75% of the time)
- Continue to reassess/evaluate if the residents pain level is controlled according to the plan and revise the care plan as needed

Non-Pharmacological Interventions

- Any intervention that is not pain medication
- May combine non-pharmacological with pharmacologic (might allow for lower potency/dosing)
- Research has shown that non-pharmacological treatments for pain can be very effective and can at times work so well that a pain medication will not be needed
- When deciding which non-pharmacological approaches to implement, take into account the source of the individual resident's pain and their preferences

Environmental-Based Interventions

- Lighting alterations
- Warm blanket
- Adjusting the bed/pillows
- Activities (crafts, puzzles, books)
- Music, art, drama therapy
- Cup of tea
- Encourage visitors



Physical Interventions

- Physical and occupational therapy
- Positioning (braces, splints, wedges)
- Neurostimulation (acupuncture, transcutaneous electrical nerve stimulation)
- Massage
- Chiropractic treatments (spinal manipulation)
- Exercise (walking)
- Yoga
- Warm bath
- Heat/cold/compression



Behavioral/Cognitive Interventions

- Meditation techniques with mindfulness-based stress reduction (MBSR)
- Progressive muscle relaxation
- Spiritual counseling
- Psychological counseling
- Relaxation techniques
- Aroma therapy
- Biofeedback
- Peer support groups



Education on Non-Pharmacological Interventions

- Provide adequate training on the interventions for members of the health care team
- Ensure that residents and their families receive sufficient education on the selected interventions
- The goals of resident education should be to understand:
 - The extent of pain relief expected
 - The frequency in which the treatment should be implemented
 - The potential side effects expected with each treatment
- Providing this knowledge will help to ensure ongoing treatment and reduce frustration from the potential over-expectation of treatment outcomes

Study: Noninvasive Nonpharmacological Treatment for Chronic Pain

- Agency for Healthcare Research and Quality (AHRQ)
- Systemic Review update conducted through June 2022



Study Findings

- Interventions that improved function and/or pain for ≥ 1 month:
 - **Low back pain:** Exercise, psychological therapy, spinal manipulation, low-level laser therapy, massage, mindfulness-based stress reduction, yoga, acupuncture, multidisciplinary rehabilitation (MDR)
 - **Neck pain:** Exercise, low-level laser, mind-body practices, massage, acupuncture
 - **Knee osteoarthritis:** Exercise, cognitive behavioral therapy (CBT)
 - **Hip osteoarthritis:** Exercise, manual therapies
 - **Fibromyalgia:** Exercise, CBT, myofascial release massage, mindfulness practices, tai chi, qigong, acupuncture, MDR
 - **Tension headache:** Spinal manipulation
- Serious harms were not observed with the interventions

In Conclusion

- Non-pharmacological pain interventions have been shown to help relieve pain in residents and may decrease the use of pain medication and unwanted side effects
- Important to do a Pain Assessment
- Pain Management Care Plan
- Incorporate non-pharmacological pain interventions
- Educate residents/staff on interventions
- Ongoing evaluation of pain and revise care plan as needed

Resources

- [Pain Assessment in Advanced Dementia \(PAINAD\) Tool](#)
- [Pain in Long-Term Stay Patients](#)

Downloads available at qualityinsights.org/qin/resources

Pain in Long-Term Stay Patients

Questions and tips to manage pain and reduce opioid use

Ask these questions . . .

MDS Coding Relating to Pain Management

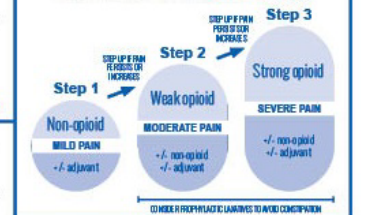
Section J

- Received scheduled pain medication regime
- Received PRN pain medications OR was offered and declined
- Received non-medication intervention for pain
- Pain assessment interview OR staff assessment for pain
- Remember that these questions are a 5-day lookback from your ARD

Section O

- Number of days received an opioid
- Remember that this is a 7-day lookback from your ARD

WHO Ladder of Analgesic Therapy



Pain Assessment in Advanced Dementia (PAINAD) Tool

Instructions: The PAINAD¹ scale is used to assess pain in patients with dementia. Use the PAINAD scale to rate each behavior from 0 to 2. Add the scores and record the total. The total score ranges from 0-10 points, with 0 being no pain and 10 being severe pain. You can use the chart below as a guide to the severity of pain.

Behavior	0	1	2	Score
Breathing Independent of Vocalization	Normal	Occasional labored breathing; short period of hyperventilation	Noisy, labored breathing; long period of hyperventilation; Cheyne-Stokes respirations	<input type="checkbox"/> 0
				<input type="checkbox"/> 1
				<input type="checkbox"/> 2
Negative Vocalization	None	Occasional moan or groan; low level speech with a negative or disapproving quality	Repeated troubled calling out; loud moaning or groaning; crying	<input type="checkbox"/> 0
				<input type="checkbox"/> 1
				<input type="checkbox"/> 2
Facial Expressions	Smiling or inexpressive	Sad; frightened; frowning	Facial grimacing	<input type="checkbox"/> 0
				<input type="checkbox"/> 1
				<input type="checkbox"/> 2
Body Language	Relaxed	Tense; distressed; pacing; fidgeting	Rigid; fists clenched; knees pulled up; pulling or pushing away; striking out	<input type="checkbox"/> 0
				<input type="checkbox"/> 1
				<input type="checkbox"/> 2
Consolability	No need to console	Distracted or reassured by voice or touch	Unable to console, distract, or reassure	<input type="checkbox"/> 0
				<input type="checkbox"/> 1
				<input type="checkbox"/> 2

Total Score: _____

Score	Level of Pain	Level of Pain by PAINAD Score
0	No Pain	0 – No pain
1-4	Mild Pain	1 – Pain is barely noticeable 2 – Pain is minor 3 – Pain is noticeable; possible to get used to it and adapt 4 – Pain can be ignored for a period of time but is distracting
5-9	Moderate to Severe Pain	5 – Strong pain that cannot be ignored for more than a few minutes; normal daily activities can be managed 6 – Strong pain that interferes with normal daily activities; difficult to concentrate 7 – Very strong pain that significantly limits the ability to perform normal daily activities and/or interferes with sleep 8 – Intense pain; physical activity is severely limited; conversing requires great effort 9 – Excruciating pain; unable to converse; uncontrolled crying out and/or moaning
10	Very Severe/ Horrible Pain	10 – Unbearable pain; worst pain that can be imagined (very few ever experience this level of pain).

¹ Victoria Warden, RN; Ann C. Hurley, RN, DNSC, FAAN; Ladislav Volicer, MD, PhD, FAAN. "Development and Psychometric Evaluation of the Pain Assessment in Advanced Dementia (PAINAD) Scale." *Journal of the American Medical Directors Association* 4, no. 1 (Jan-Feb 2003): 9-15. <https://www.sciencedirect.com/science/article/pii/S1525861004702583>



This material was originally prepared by IPRO, a Quality Innovation Network - Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). This material has been adapted by Quality Insights, also a QIN-QIO under contract with CMS. Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. Publication number 120209/QI-024-021023-00

pain at appro-
er a fall)
residents. De-
rely/never un-
ther method. If
then complete
entified, was a
eted? Did the
er, frequency.
ical function
Organization
wed?
ns tried first?
(not)
xercises
before weak
ropriate for the
y regularly oc-
sessions, or
pain manage-
arly scheduled
ped a change
to decrease or
that includes:
y the resident/

quality insights
This material was prepared by Quality Insights, a Quality Innovation Network - Quality Improvement Organization under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. Publication number 120209/QI-024-021023-00



Contact Us

- Shirley Sullivan, RN, BSN
Quality Improvement Specialist
Quality Insights
ssullivan@qualityinsights.org



Find us online: qualityinsights.org/qin



Quality
Insights

QIN-QIO

Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
IQUALITY IMPROVEMENT & INNOVATION GROUP

This material was prepared by Quality Insights, a Quality Innovation Network - Quality Improvement Organization under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. Publication number 12SOW-QI-GEN-053123-CC-B