Pain: Acute Postoperative; Patient Care

Site Applicability

SPH and MSJ Acute Care

Practice Level:

Basic: within the scope of practice of every nurse RN, RPN or LPN

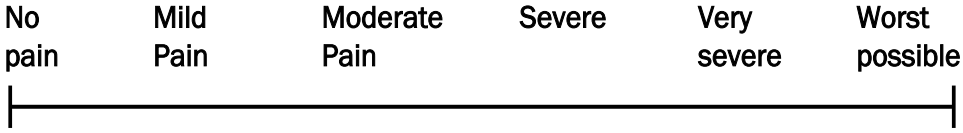
Need To Know:

- Postoperative pain is complex, multidimensional and is one of the major symptoms after surgery.
- Postoperative pain affects more than 80% of people who have surgical procedures, with many reporting this pain as moderate to severe. Less than half of patients who have surgery report adequate postoperative pain relief.
- Appropriate pain management for postoperative patients contributes to earlier mobilization, shortened hospital stay and reduced costs whereas inadequately controlled pain negatively affects quality of life, function and functional recovery, increases the risk of post-surgical complications and the risk of persistent post-surgical pain.
- Effective pain management should be a priority of postoperative care and it involves assessment, intervention, monitoring, prevention and minimizing risks.
- Pain assessment is the first step in assuring quality pain care; self-report of pain is the single most reliable indicator of pain.
- Postoperative pain management is a multimodal approach that includes the use of opioids, non-opioids and nonpharmacological techniques to achieve optimal postoperative pain control.

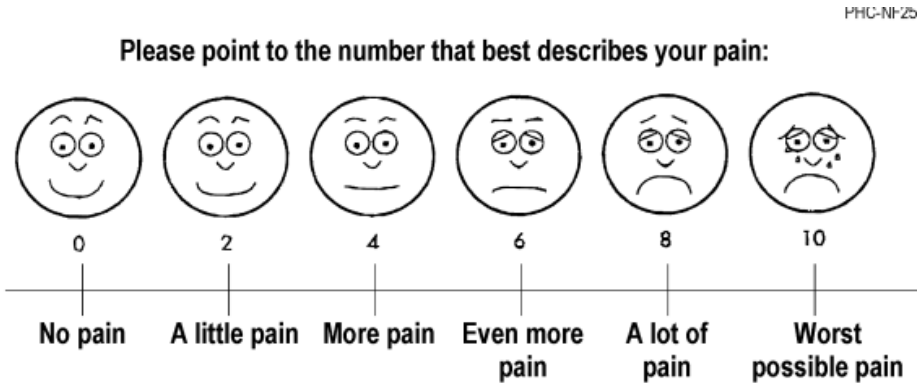
Principles of Assessment

- Accept and respect self-report as the single most reliable indicator of pain
- Screen for pain routinely: a comprehensive pain assessment at least once per shift and pain intensity with vital signs and post interventions for pain
- Use self-report when possible; people with mild to moderate dementia may still be able to answer simple questions about their pain. Use a standardized assessment tool appropriate for your patient
    - Numeric Pain Scale (NPS) is widely used at PHC
        - Reliable, easy to use, and understand.
        - Measures intensity only
        - Facilitates tracking over time and effectiveness of interventions

- Simple verbal descriptor scale
  - Can be used for patients that have difficulty quantifying pain using the Numeric Pain Scale
  - Shown to be valid and reliable in adults with mild cognitive impairment
  - Does requires understanding of simple English



- Faces Pain
  - A self-report measure of pain intensity only - developed for children
  - Has been used successfully for older adults with moderate to severe dementia
  - Available on Chart Scan Forms SCM in 22 languages (PHC-NF254) for use for patients who have limited English so they can use either the Wong-Baker faces scale or the numerical value assigned to the face (Numeric pain scale)



- A comprehensive pain assessment includes (use the OPQRSTUV mnemonic)

Onset**/O**ther symptoms	Is the onset gradual or sudden? Does the patient have other symptoms such as night sweats, fever, chills, weight loss, fatigue, weakness, paresthesia
Provoke or **P**alliate	What makes the pain worse (provoke) or better (palliate)?
Quality	Listen for patients' descriptors of pain to help identify the type of pain - **nociceptive** (acute) (throbbing, aching, dull, cramping, sharp) or **neuropathic** (burning, shooting, tingling, electric shocks, pins & needles)
Region/**R**adiation	**Where** is the pain? Examine the site to look for swelling, inflammation or deformity. Does the pain radiate to other areas
Severity	Use a pain scale to assess pain intensity at rest & moving
Timing**/T**reatment	Does pain occur at a specific time of day? How long does it last? Is the pain constant or intermittent? Treatment intervention(s) & how have they worked for you?
Understanding	What do you believe is causing the pain?
Values	What is acceptable comfort goal or acceptable level of pain? Beliefs about pain?

- If the patient is unable to provide a self-report pain consider using an alternative validated assessment tools such as PAINAD (PHC-NF383) (Pain Assessment in Advanced Dementia) See Appendix A.
  - Consider the Hierarchy of Pain Assessment Techniques
    - Attempt to obtain self-report of pain
    - Consider surgery, procedures or pathological conditions that usually have pain
    - Observe for pain related behaviours e.g. moaning, grimacing, restlessness, rocking, guarding, etc.
    - Consult with family or other close caregivers familiar with the patient
    - Attempt an analgesic trial of one dose and observe for changes in behaviour.

PROTOCOL

Assessment and Interventions:

Initial and Ongoing (PACU/HAU/Surgical units):

1. Obtain and review analgesic history and current status including prescription and non-prescription medications for pain
2. Perform a comprehensive pain assessment using the mnemonic OPQRST with initial assessment and at least Qshift and PRN
    a. Establish realistic comfort goal within the comprehensive pain assessment– this is an acceptable pain level on the NPS that allows the patient to take deep breathes, eat and perform required physical activities

    Note:This only needs to be assessed once and/or PRN. Number may be carried forward on subsequent flowsheets
3. Assess and document pain intensity with each vital signs and to determine effectiveness of interventions for pain using a standardized pain assessment tool appropriate for the patient
    a. If patient unable to self-report, use PAINAD tool (PHC-NG383) (Appendix A) in non-critical care areas or the Behavioural Pain Scale (BPS) (PHC NF408) for critical care

    Note: these non-verbal pain assessment tools are reference tools to obtain a pain score to document on the appropriate flow sheet.
4. Determine the need for analgesic with each assessment.
    a. Position the patient to promote comfort and provide other comfort measures as needed.
    b. Assess patient's pain intensity after analgesic administered timing based on pain intensity and route of analgesia administered for example:
        i. 15 minutes after IV administration
        ii. 30 minutes to 1 hour after subcutaneous or oral administration of analgesic
5. Assess and document sedation using the Pasero Opioid Sedation Scale (POSS) (see Appendix C) with consideration of route of opioid administered
        i. 15 to 30minutes after IV administration of opioid
        ii. 30 minutes to 1 hour after subcutaneous or PO administration of opioid
6. Assess for the presence of side effects from analgesics and if treatment of side effect is required (and effect if provided).

Interventions:

1. Assess pain regularly and assess systematically
2. Choose treatment options based on your comprehensive assessment
    a. **Administer** analgesic interventions in a coordinated, timely way

b. Use non-pharmacologic pain management interventions such as: positioning, deep breathing, relaxation, distraction, heat, cold in combination with pharmacological approaches to pain management.

3. Evaluate treatment effectiveness by reassessment
4. If complex pain problems are identified consult pain management experts as needed i.e. the Acute Pain Service/acute pain expert, Complex Pain Service/ chronic pain expert, Addictions Service/addictions physician, Palliative Outreach Team.

Patient/Family Education and Resources:

Refer to Brochure "Pain and Ways to Manage it" (FM.850.M311.PHC)

Provide information to the patient and family about the following:

- Pain intensity rating scales and how to use them
  - Realistic comfort goal
- When to contact your nurse (or member of the health care team) to talk to them about pain
  - Encourage open communication – pain can occur outside of routine assessment and your patient and family need to know to let their nurse or health care provider know what they are experiencing. Encourage patients to report any side effects to analgesics i.e. nausea, vomiting, itchiness, etc.
  - Provide information about managing pain with medications and non-pharmacological approaches
- Provide information about the importance of effective pain management to post-operative recovery
  - Uncontrolled pain can delay healing, increase stress, disrupt sleep, cause anxiety and slow recovery
  - Assess for and address any questions or concerns regarding analgesics

Documentation:

PACU/HAU:

PACU/HAU flow Sheet &/or *24-hour Pain Management Flow Sheet* *PACU/HAU Nursing Notes*	• Comprehensive pain assessment using OPQRSTUV, Pain intensity scale and POSS • If using BPS tool (document this tool being used to obtain a **pain score out of 12**) important to note on flowsheet pain intensity out of 12 • If using PAINAD to obtain pain intensity number out of 10 (/10) make sure to note on flowsheet how number was obtained
Interdisciplinary Progress Notes	• Indicate 'Pain' as key heading and chart any concerns or information on pain that the needs to be brought to the attention of the interdisciplinary team

Surgical Unit:

24-hour Patient Care Flow Sheet &/or 24-hour Pain Management Flow Sheet *In Pain Section* *In Clinical Record Section*	• Comprehensive pain assessment using OPQRSTUV, on the patient care flowsheet • Pain intensity scale and POSS on the 24 hour Pain management flowsheet and/or vital sign section of the patient care flowsheet • If using PAINAD tool (document this tool being used to obtain a pain score out of 10) • Comfort goal o This only needs to be assessed once and/or PRN if goal changes o May be carried forward on 24 hour Pain Management flowsheet o This is a realistic goal that allows patient to perform all the required physical activities that promote recovery ie deep breathing, walking etc.
Interdisciplinary Progress Notes	• Indicate 'Pain' as key heading and chart any concerns or information on pain that the needs to be brought to the attention of the interdisciplinary health care team

Related Standards and Resources:

1. B-00-13-10018 - General Anesthetic: Patient Care Following, protocol
2. B-00-13-10060 - Postoperative Care; protocol
3. Epidural, PCA and Regional Analgesia protocols on SHOP

References

1. Aubrun, F. (2005). Management of post-operative analgesia in elderly patients. Regional Analgesia & Pain Management, 30(4), 363-379.
2. American Geriatrics Society (2009). Guidelines for persistent pain. www.americageriatrics.org
3. British Columbia Provincial Pain Initiative Committee (2008). Acute care facilities recommendations pain assessment and management in acute care: minimum standards
4. Chou, R., Gordon, D., deLeon-Casalo, O et al. (2016). Guidelines on the management of postoperative pain. Management of postoperative pain: A clinical practice guideline from the American Pain Society, The American Society of Regional Anesthesia and Pain Medicine and the American Society of

Anesthesiologist Committee on Regional anesthesia, Executive Committee, and Administrative Council. *The Journal of Pain 17 (2),* 131-157 doi:.org/10.1016/j.pain.2015.12.008

5. Canadian Pain Society (2005). Accreditation pain standard: Making it Happen! http://www.canadianpainsociety.ca/accreditation_manual.pdf
6. Canadian Pain Society Fact Sheet (2014) https://cdn.ymaws.com/www.canadianpainsociety.ca/resource/resmgr/docs/pain_fact_sheet_en.pdf
7. El-Aqoul, a., Obaid, A., Yacoub, E., Al-Najar, Malek, Ramadan, M., Darawad, Muhammad. (2018). Factors associated with inadequate pain control among postoperative patients with cancer. *Pain Management Nursing 19, (2),* 130-138.
8. Haloszynski, T.M. (2013). Perioperative pain management in the elder surgical patient. Universal Journal of Medicine Science, 1(2), 36-49.
9. McCaffrey, M. & Pasero, C., (2011). Pain Assessment and Pharmacologic Management, St. Louis, MS: Elsevier Mosby.
10. Naqib, D., Purvin, M., Prasad, R., Hanna, I., Dimitri, S., Llufrio, A., Hanna, M. (2018). Quality improvement initiative to improve postoperative pain with a clinical pathway and nursing education program. *Pain Management Nursing 19, (5)* 447-455
11. RNAO (2013). Assessment and Management of Pain. 3rd Edition. Retrieved from: https://rnao.ca/sites/rnao-ca/files/AssessAndManagementOfPain_15_WEB-_FINAL_DEC_2.pdf
12. Layzell, M (2009) Exploring pain management in older people with hip fracture. Nursing Times, 105(2), pp20-3.
13. Pain Resource Nurse (PRN) Program Curriculum (2012). Module 1, Module 2 & Module 3. University of Wisconsin board of Regents
14. Tsai, I-Pei, Yeun-Sim Jeong, S., Hunter, S. (2018). Pain Assessment and management for older patients with dementia in hospitals: An integrative literature review. *Pain Management Nursing 19,(1) 54-71.* doi. org/10.1016/j.pmn.2017.10.001

Persons/Groups Consulted:

Nurse Educators, General Surgery, Urology, PACU (MSJ and SPH)

Clinical Nurse Specialist, Surgery

Revised By:

Clinical Nurse Specialist, Acute and Chronic Pain Program

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Approved By:	PHC
	Professional Practice Standards Committee
Owners:	PHC
	Clinical Nurse Specialist, Acute and Chronic Pain Program

Appendix A: PAINAD (Non-Critical Care Areas)

PAINAD:
PAIN ASSESSMENT IN ADVANCED DEMENTIA

	0	1	2	Score
Breathing	Normal breathing	Occasional labored breathing; short period of hyperventilation	Noisy labored breathing. Long period of hyperventilation. Cheyne-Stokes respiration	
Negative Vocalization	None	Occasional moan/groan, low level, speech with a negative or disapproving quality	Repeated troubled calling out. Loud moaning or groaning. Crying	
Facial Expression	Smiling or inexpressive	Sad, frightened, frown	Facial grimace	
Body Language	Relaxed	Tense, distressed, pacing, fidgeting	Rigid, fists clenched, knees pulled up, striking out, pulling or pushing away	
Consolability	No need to console	Distracted by voice or touch	Unable to console, distract or reassure	
			TOTAL SCORE:	

Warden, V., Hurley, a., Volicer, L (2003). Development and psychometric evaluation of the pain assessment in advanced dementia (PAINAD) scale. American Medical Directors Association, 4, 9-15

Instructions for Use

Purpose: This pain behavior tool is used to assess pain in older adults who have dementia or other cognitive impairment or adults / older adults that are non-verbal and are unable to reliably communicate their pain. This tool is intended for use on all medical and surgical units at PHC.

How to Use:

1. Observe for 3 to 5 minutes during activity/with movement (such as bathing, turning, transferring).
2. For each item included in the PAINAD, select the score (0, 1, 2) that reflects the current state of the behaviour. Item definitions are available on the reverse.
3. Add the score for each item to achieve a total score. **Total scores range from 0 to 10** (based on a scale of 0 to 2 for five items)**, with a higher score suggesting more severe pain.**
4. **After each use, compare the total score to the previous score received.** An increased score suggests an increase in pain, while a lower score suggests pain is decreased.
5. Intervene as appropriate

Documentation: Record score on the vital sign section under "pain score". Elaborate your findings and interventions in the 24 hour flowsheet (if applicable) and/or Interdisciplinary Notes.

PAINAD: ITEM DEFINITIONS

Breathing

- *Normal breathing* is characterized by effortless, quiet, rhythmic (smooth) respirations.
- *Occasional labored breathing* is characterized by episodic bursts of harsh, difficult, or wearing respirations.
- *Short period of hyperventilation* is characterized by intervals of rapid, deep breaths lasting a short period of time.
- *Noisy labored breathing* is characterized by negative-sounding respirations on inspiration or expiration. They may be loud, gurgling, wheezing. They appear strenuous or wearing.
- *Long period of hyperventilation* is characterized by an excessive rate and depth of respirations lasting a considerable time.
- *Cheyne-Stokes respirations* are characterized by rhythmic waxing and waning of breathing from very deep to shallow respirations with periods of apnea (cessation of breathing).

Negative Vocalization

- *None* is characterized by speech or vocalization that has a neutral or pleasant quality.
- *Occasional moan or groan* is characterized by mournful or murmuring sounds, wails, or laments.
- *Groaning* is characterized by louder than usual inarticulate involuntary sounds, often abruptly beginning and ending.
- *Low level speech with a negative or disapproving quality* is characterized by muttering, mumbling, whining, grumbling, or swearing in a low volume with a complaining, sarcastic, or caustic tone.
- *Repeated troubled calling out* is characterized by phrases or words being used over and over in a tone that suggests anxiety, uneasiness, or distress.
- *Loud moaning or groaning* is characterized by mournful or murmuring sounds, wails, or laments in much louder than usual volume. Loud groaning is characterized by louder than usual inarticulate involuntary sounds, often abruptly beginning and ending.
- *Crying* is characterized by an utterance of emotion accompanied by tears. There may be sobbing or quiet weeping.

Facial Expression

- *Smiling or inexpressive*. Smiling is characterized by upturned corners of the mouth, brightening of the eyes, and a look of pleasure or contentment. Inexpressive refers to a neutral, at ease, relaxed, or blank look.
- *Sad* is characterized by an unhappy, lonesome, sorrowful, or dejected look. There may be tears in the eyes.
- *Frightened* is characterized by a look of fear, alarm, or heightened anxiety. Eyes appear wide open.
- *Frown* is characterized by a downward turn of the corners of the mouth. Increased facial wrinkling in the forehead and around the mouth may appear.
- *Facial grimacing* is characterized by a distorted, distressed look. The brow is more wrinkled, as is the area around the mouth. Eyes may be squeezed shut.

Body Language

- *Relaxed* is characterized by a calm, restful, mellow appearance. The person seems to be taking it easy.
- *Tense* is characterized by a strained, apprehensive or worried appearance. The jaw may be clenched. (Exclude any contractures.)
- *Distressed pacing* is characterized by activity that seems unsettled. There may be a fearful, worried or disturbed element present. The rate may be faster or slower.
- *Fidgeting* is characterized by restless movement. Squirming about or wiggling in the chair may occur. The person might be hitching a chair across the room. Repetitive touching, tugging or rubbing body parts can also be observed.
- *Rigid* is characterized by stiffening of the body. The arms and/or legs are tight and inflexible. The trunk may appear straight and unyielding. (Exclude any contractures.)
- *Fists clenched* is characterized by tightly closed hands. They may be opened and closed repeatedly or held tightly shut.
- *Knees pulled up* is characterized by flexing the legs and drawing the knees up toward the chest. An overall troubled appearance. (Exclude any contractures.)
- *Pulling or pushing away* is characterized by resistiveness upon approach or to care. The person is trying to escape by yanking or wrenching him- or herself free or shoving you away.
- *Striking out* is characterized by hitting, kicking, grabbing, punching, biting, or other form of personal assault.

Consolability

- *No need to console* is characterized by a sense of well-being. The person appears content.
- *Distracted or reassured by voice or touch* is characterized by a disruption in the behavior when the person is spoken to or touched. The behavior stops during the period of interaction, with no indication that the person is at all distressed.
- *Unable to console, distract, or reassure* is characterized by the inability to soothe the person or stop a behavior with words or actions. No amount of comforting, verbal or physical, will alleviate the behavior.

Appendix B: Behavioural Pain Scale (Critical Care Areas)

BEHAVIOURAL PAIN SCALE (BPS)

Date: _____

Choose only one behaviour per category and add scores for a total out of 12.
Document total score on the Nursing Flowsheet, Nursing Notes and/or the Interdisciplinary Progress Notes.

	Description	Score
FACIAL EXPRESSION	Relaxed	1
	Partially tightened (e.g. brow lowering)	2
	Fully tightened (e.g. eyelid closing)	3
	Grimacing	4
UPPER LIMB MOVEMENTS	No movement	1
	Partially bent	2
	Fully bent with finger flexion	3
	Permanently retracted	4
COMPLIANCE WITH MECHANICAL VENTILATION	Tolerating movement	1
	Coughing but tolerating ventilation for most of the time	2
	Fighting ventilator	3
	Unable to control ventilation	4
	TOTAL SCORE:	/12

AhlersS, van der Veen A, van Dijk M, tibboel D, Knibbe C. The use of the Behavioura Pain Scale to assess pain in conscious sedated patients. Anesth Analg. 2010;110(1): 127-133.

Form No. PHC-NF408 (May 8-14) Page 1 of 1

Appendix C: Pasero Opioid Induced Sedation Scale

Pasero Opioid-Induced Sedation Scale (POSS)		
Score	**Meaning of Score**	
S	Sleep, easy to rouse	**Acceptable**; no action necessary; may increase opioid dose if needed
1	Awake and alert	**Acceptable**; no action necessary; may increase opioid dose if needed
2	Slightly drowsy, easily roused	**Acceptable**; no action necessary; may increase opioid dose if needed
3	Frequently drowsy, rousable, drifts off to sleep during conversation	**Unacceptable;** • remove PCA button if in use, hold next oral dose of opioid **and** NOTIFY prescriber /MD for adjustment of opioid orders • monitor respiratory status and sedation level closely until sedation level is stable at less than 3 and respiratory status is satisfactory • consider administering a non-sedating, non-opioid analgesic for pain i.e. acetaminophen or NSAID
4	Somnolent, minimal or no response to verbal and physical stimulation (use trapezius muscle squeeze for physical stimulation - do not use sternal rub)	**Unacceptable;** • stop opioid • oxygen by mask 10 L/min (if not COPD) and monitor vital signs • administer naloxone as per order • IMMEDIATELY page MD/ Prescribing Service physician STAT • **PROVIDE AIRWAY and BREATHING SUPPORT** • **DO NOT re-commence opioid therapy prior to patient being seen by the prescribing service physician**