# Resource 4: Assessment and Management of PeriAnesthesia Pain

Pain is the body's response to a stimulus which activates a defense mechanism that alerts the body that there has been harm and prevents it from secondary injury. The most common definition of pain is "*An unpleasant sensory and emotional experience arising from actual or potential tissue damage or described in terms of such damage"* (International Association for the Study of Pain, 2012). In 1968, Margo McCaffery, a well known pain management advocate, defined pain as "*whatever the experiencing person says it is, existing whenever the experiencing persons says it does".*

Pain is a subjective personal experience influenced by culture, experience, beliefs and values, family, coping skills, expectations and emotions (Pasero, & McCaffery, 2011, p. 2). Pain is considered the most common symptom for which clients will seek medical intervention (Jovey, 2008; Canadian Pain Coalition, 2014; Canadian Pain Society, 2013; Todd, Ducharme, Choiniere, Crandall, Fosnocht, Homel, Tanabe, & Pain and Emergency Medicine Initiative Study Group, 2007). Through all phases of the PeriAnesthesia system, the client should expect the best possible management of symptoms associated with pain from surgical intervention through a team based approach to care (Powell, Downing, Ddungu, & Mwangi-Powell, 2010). *"People have a right to access the best care possible for pain, whether this is acute pain, pain caused by cancer, or chronic non- cancer pain"* (Canadian Pain Society, 1999). Effective intervention starts in the PreOperative/PreAdmission phase and continues through to the Extended Observation phase and to home.

The goal of postoperative pain management is to be comfortable enough to participate in activities of recovery, and to prevent moderate to severe pain. Effective pain management should reduce the pain to an acceptable level as defined by the client. Seventy-five (75) % of postoperative clients report moderate to severe pain and as many as 58-91% of hospitalized clients report significant pain (Cadden, 2007).

The key to successful pain management is pain assessment. Pain is the "fifth vital sign" (Purser, Warfield, & Richardson, 2012), and should be given the same priority as all other vital signs. The pain assessment should be rapid, accurate and effective and requires a multimodal or balanced approach (Jovey, 2008; Pasero, & McCaffery, 2011, Chapter 2). This may result in complete freedom from pain for some, but often only results in a comfort level that is acceptable to the client (Buss, & Melderis, 2002).

It is also important for the PeriAnesthesia nurse to recognize the different types of pain and the most effective treatment modalities for each. There are two main types of pain. Nocioceptive pain, also known as acute pain can be somatic (bone, joints, muscle, skin or connective tissue described as aching, throbbing and is well localized) or visceral (pain arising from the visceral organs such as GI tract or pancreas, usually cramping, squeezing, can radiate and is poorly localized) (Pasero, &McCaffery, 2011, Chapter 1). Postoperative pain is one example of nocioceptive pain and can be either somatic or visceral.

Neuropathic pain is the "abnormal processing of sensory input by the central or peripheral nervous systems" (Pasero, & McCaffery, 2011, p. 2) which may result from previous surgery, prior injury or from an unknown etiology (See Glossary for complete definitions). Both nocioceptive (acute pain) and neuropathic pain can become chronic pain.

The challenge for the PeriAnesthesia nurse is to provide adequate, safe and appropriate pain management to clients throughout all of the perianesthesia phases.

## I. Management of Pain by PeriAnesthesia Phase

### 1. PreOperative/PreAdmission Phase

During the PreOperative/PreAdmission phase it is important for the PeriAnesthesia nurse to collect, interpret, report and develop a plan of care that follows the client throughout all phases, as identified in Resource 4: Client Assessment, Data Collection and Management in all Phases of the PeriAnesthesia Environment. This evaluation should take place in advance of the surgery to allow for integration of an appropriate assessment, consultation with the interprofessional team and client education.

The PeriAnesthesia nurse should:

**1.1** Complete a comprehensive pain assessment

1.1.1 Pain history

1.1.1.1 Baseline assessment using a validated pain scale

1.1.1.2 Descriptor of type, quality, intensity, location , time (duration, when does it occur) and effect

1.1.1.2 i. PQRST assessment (**P**rovocating/**P**recipitating/**P**alliation, **Q**uality/**Q**uantity, **R**adiation/**R**egion, **S**everity, **T**ime of onset/duration) (RNAO, 2013; Powell et al, 2010).

1.1.1.3 Current pain level if present

1.1.1.3 i. Chronic/persistent pain versus new/acute onset.

1.1.1.4 Analgesic medications if utilized.

1.2 Complete a medication history

1.2.1 Use of non-steroidal anti-inflammatory drugs (NSAIDs) as analgesic

1.2.2 Opioid use: Amount, dose, length of use and reason

1.2.3 Adjunct analgesics:

1.2.3.1 Complementary and alternative medicines

1.2.3.1i. Herbal

1.2.3.1 ii. Over-the-counter (OTC) medications.

1.2.3.2 Allergies, allergy relief medications

1.2.3.3 Substance use and/or abuse e.g., prescription, drugs of abuse, non-prescription, alcohol.

1.2.4 Best possible medication history (Accreditation Canada, the Canadian Institute for Health Information, the Canadian Patient Safety Institute, & the Institute for Safe Medication Practices Canada, 2012)

1.2.4.1 Use of anticoagulation therapy e.g., medications that may potentially affect modality of analgesic administration

1.2.4.1i. Platelet inhibitors e.g., Clopidogrel (Plavix), acetylsalicylic acid (ASA)

1.2.4.1ii. New oral anticoagulants (NOACs) e.g., dabigatran, rivaroxaban, apixaban.

1.2.5 Other medications affecting pain management e.g., anticonvulsive, antihypertensive, cardiac (beta blockers, ACEi, ARB, antiarrhythmics), diuretics (both loop and non-loop), oral/injected antihyperglycemics, antidepressants.

1.3 Complete or review a medical history

1.3.1 Chronic conditions in relation to history of pain
1.3.2 Acute conditions in relation to history of pain
1.3.3 Congenital, genetic conditions in relation to history of pain
1.3.4 History of coping strategies and effect of pain on quality of life.

1.4 Assess the client's emotional, psychosocial, family and support systems and the ability to recognize anxiety and stress using techniques to minimize them

1.4.1 Comfort history/stress relief techniques
1.4.1.1 Physical supports which include, but are not limited to positioning, special appliances, heat/cold packs
1.4.1.2 Psychosocial and spiritual e.g., religious symbols, spiritual beliefs
1.4.1.3 Environmental e.g., comfort objects, music, privacy
1.4.1.4 Cultural restrictions, preferences.

1.5 Assess the clients educational needs

1.5.1 Physical needs
1.5.1.1 Hearing, speech, visual deficits
1.5.1.1i. Need for sign language, interpreters
1.5.1.1ii. Hearing/visual aids.
1.5.2 Psychosocial needs
1.5.2.1 Cultural
1.5.2.2 Religious/spiritual.
1.5.3 Cognitive needs
1.5.3.1 Language
1.5.3.1 i. Translation, interpretation, teaching and support needs.
1.5.3.2 Learning barriers
1.5.3.2i. Age, growth and development and level of cognitive ability
1.5.3.2ii. Cognitive restrictions.

1.6 Provide opportunity and sufficient time for the client, family and/or substitute decision maker to discuss:

1.6.1 Client's goal for comfort and level of functioning (McCaffery, & Pasero, 1999, p. 74)
1.6.2 Comfort assessment and measures e.g., temperature, positioning, previous experiences, history of postoperative nausea and vomiting (PONV) and previous effective treatment (See Resource 11: Management of Postoperative Nausea and Vomiting)
1.6.3 Client, family and/or substitute decision maker teaching regarding reporting of pain intensity using a validated pain assessment scale related to individual cognitive ability (See Appendices Q and R)
1.6.3.1 Wong-Baker "FACES" pain rating scale (Wong & Baker, 2002)
1.6.3.2 Numerical rating scales
1.6.3.3 Visual analog scales
1.6.3.4 Verbal rating scales
1.6.3.5 Brief Pain Inventory scale.
1.6.4 Discuss barriers that would prevent pain management
1.6.4.1 Fears/myths around controlled substances' side effects, abuse, or addiction.
1.6.5 Pain and pain management strategies preoperatively for postoperative management such as short term opioid use, non-opioid use and non-pharmacological comfort measures (See Appendix S)

1.6.5.1 Options for pain management modalities
1.6.5.2 Neuraxial including epidural, spinal/intrathecal including patient controlled epidural analgesia
1.6.5.3 Regional e.g., single dose nerve blocks, transversus abdominis plane (TAP) block or continuous nerve block infusions
1.6.5.4 Intravenous modalities e.g., patient controlled analgesia in the postanesthesia phases.

1.6.6 Availability of alternative therapies that may be requested or utilized by clients e.g., music therapy, relaxation therapy. (See Appendix S)

1.7 Evaluate the need for consultations and referrals as appropriate, which include but are not limited to:

1.7.1 Anesthesiologist
1.7.2 Pharmacist
1.7.3 Occupational Therapist
1.7.4 Physical Therapist
1.7.5 Acute Pain Service provider
1.7.6 Internal Medicine physician or Nurse Practitioner
1.7.7 Home care/community care resource consultant.

1.8 Review discharge planning as identified in Resource 4 with emphasis on pain and comfort

1.8.1 PreAnesthesia teaching regarding immediate and long-term postoperative expectations and care related to the surgery
1.8.2 Smoking/alcohol cessation information
1.8.3 Administration or withholding of analgesics preoperatively
1.8.4 Client's rights and responsibilities regarding
1.8.4.1 Pain assessment and use of pain assessment rating scales
1.8.4.2 Pain management techniques
1.8.4.3 Acceptable level of pain
1.8.4.4 Education specific to the types and techniques of anesthesia agents or types of analgesia to be administered for pain management.
1.8.5 Postoperative instructions along with rationale are reviewed *prior* to surgery
1.8.5.1 Postoperative pain and anxiety can negatively impact attention and recall in the postoperative period (Carr, 2007)
1.8.5.2 Reassurance regarding the issue of opioid use and the misconception that they will cause addiction (Middleton, 2004)
1.8.5.3 Instructions should be written clearly and comprehensively so the client or substitute decision maker has a clear understanding of how the needs of the client may be met
1.8.5.4 Development of a plan of care to describe and coordinate care to reduce negative side effects and improve outcomes.

1.9 Standardized approach for documentation and communication of all relevant information as outlined by Accreditation Canada and in accordance with the institution's policies, procedures and protocols (Accreditation Canada et al, 2012; Safer Healthcare ***Now!*** 2011)

1.10 Use of a standardized approach for a comprehensive transfer of information regarding pain to other members of the intraprofessional and interprofessional team improves pain management (See Resource 6: Transportation and Communication for Safe Transfer of Care).

## 2. Day of Surgery

During the Day of Surgery phase, the PeriAnesthesia nurse continues to assess and manage the client's needs by reviewing, assessing and updating the plan of care including pain management before transfer to the next phase. This provides an opportunity for the nurse to reinforce teaching strategies with the client, identify gaps in knowledge and establish realistic goals for pain management.

The PeriAnesthesia nurse should:

**2.1** Review/update the pain and medication history

2.1.1 Using a validated pain scale assessment

2.1.2 Describe the current pain level, if present and descriptor of type, quality, intensity, location , time (duration, when does it occur) and effect

2.1.2.1 PQRST assessment (**P**rovocating/**P**recipitating/**P**alliation, **Q**uality/**Q**uantity, **R**adiation/**R**egion, **S**everity, **T**iming) (RNAO, 2013; Powell et al, 2010).

2.1.3 Present or past history of analgesic use

2.1.3.1 Use of non-steroidal anti-inflammatory drugs as analgesics

2.1.3.2 Opioid use: amount, dose, length of use and reason

2.1.3.3 Complementary and alternative medicines

2.1.3.3i. Herbal

2.1.3.3 ii. Over-the-counter medications.

2.1.3.4 Allergies, allergy relief medications

2.1.3.5 Substance use and/or abuse e.g., prescription, drugs of abuse, non-prescription, alcohol.

2.1.4 Best possible medication history (Accreditation Canada, 2013) including:

2.1.4.1 Use of anticoagulation therapy e.g., medications that may potentially affect modality of analgesic administration

2.1.4.1i. Platelet inhibitors e.g., Clopidogrel (Plavix), acetylsalicylic acid (ASA)

2.1.4.1ii. New oral anticoagulants (NOACs) e.g., dabigatran, rivaroxaban, apixaban.

2.1.5 Other medications affecting pain management e.g., anticonvulsive, antihypertensive, cardiac (beta blockers, ACEi, ARB, antiarrhythmics), diuretics (both loop and non-loop), oral/injected antihyperglycemics, antidepressants.

2.2 Review and update nursing medical history

2.2.1 Chronic conditions in relation to history of pain (Gordon, Dahl, Miaskowski, McCarberg, Todd, Paice, Lipman et al, 2005)

2.2.2 Acute conditions in relation to history of pain

2.2.3 Congenital, genetic conditions in relation to history of pain

2.2.4 History of coping strategies and effect of pain on quality of life.

2.3 Review/update the client's emotional, psychosocial, family and support systems, and the ability to recognize anxiety and stress using techniques to minimize them

2.3.1 Comfort history/stress relief techniques

2.3.1.1 Physical supports e.g., positioning, special appliances, heat/cold packs

2.3.1.2 Pyschosocial and spiritual e.g., religious symbols, spiritual beliefs

2.3.1.3 Environmental e.g., comfort objects, music, privacy
2.3.1.4 Cultural restrictions, preferences.
2.3.2 Integrates history of side effects of analgesia into plan for care, including previous effective treatment plan e.g., postoperative nausea and vomiting.

2.4 Reviewand update the clients educational requirements, providing necessary support

2.4.1 Physical needs
2.4.1.1 Hearing, speech, visual
2.4.1.1i. Need for sign language, interpreters
2.4.1.1ii. Hearing/visual aids.
2.4.2 Psychosocial needs
2.4.2.1 Cultural
2.4.2.2 Religious/spiritual.
2.4.3 Cognitive needs
2.4.3.1 Language
2.4.3.1 i. Translation, interpretation, teaching and support needs.
2.4.3.2 Learning barriers
2.4.3.2i. Age, growth and development and level of cognitive ability
2.4.3.2ii. Cognitive restrictions.
2.4.4 Review preoperative and preanesthesia immediate and long-term postoperative teaching related to anticipated pain from the surgery
2.4.5 Client's rights and responsibilities regarding
2.4.5.1 Reporting of pain intensity using a validated pain assessment scale related to individual cognitive ability (See Appendices Q and R)
2.4.5.1i. Wong-Baker "FACES" pain rating scale (Wong & Baker, 2002)
2.4.5.1 ii. Numerical rating scales 2.4.5.1iii. Visual analog scales 2.4.5.1iv. Verbal rating scales 2.4.5.1v. Brief Pain Inventory scale.
2.4.5.2 Pain management techniques
2.4.5.3 Acceptable level of pain
2.4.5.3i. Education specific to the types and techniques of anesthesia agents or types of analgesics to be administered for pain management.
2.4.6 Review/initiate appropriate alternative therapies that may be requested/used by clients e.g., music therapy, relaxation therapy, topical anesthesia for initiation of intravenous therapy
2.4.7 Use of pain management modalities
2.4.7.1 Neuraxial including epidural, spinal, intrathecal e.g., patient controlled epidural analgesia
2.4.7.2 Regional e.g., single dose nerve blocks, transversus abdominis plane block or continuous nerve block infusions
2.4.7.3 Intravenous modalities e.g., patient controlled analgesia in the postanesthesia phases
2.4.7.4 Understanding and correct use of equipment.
2.4.8 Report any abnormal laboratory findings e.g., INR, PT, platelet abnormalities
2.4.9 Administration of analgesia and other modalities for preemptive pain management (Gottschalk, & Ochroch, 2009).

2.5 Review discharge planning, as identified in Resource 4, with emphasis on pain management

2.5.1 Postoperative instructions along with rationale
- 2.5.1.1 Postoperative pain, anxiety and the effects of medications that can negatively impact attention and recall in the postoperative period (Carr, 2007)
- 2.5.1.2 Reassurance regarding the issue of opioid use and the misconception that they will cause addiction (Middleton, 2004)
- 2.5.1.3 Instructions should be written clearly and comprehensively so the client or substitute decision maker has a clear understanding of how the needs of the client may be met
- 2.5.1.4 Development of a care plan to describe and coordinate care to reduce negative side effects and improve outcomes.

2.6 Document and communicate of all relevant information as outlined by Accreditation Canada and in accordance with the institution's policies, procedures and protocols (Accreditation Canada et al, 2012; Safer Healthcare ***Now!*** 2011)

2.7 Use a standardized approach for a comprehensive transfer of information regarding pain to other members of the intraprofessional and interprofessional team. (See Resource 6: Transportation and Communication for Safe Transfer of Care)

## 3. Anesthesia Phase

During this phase the PeriAnesthesia nurse works in collaboration with the interprofessional team to provide the transition between the Day of Surgery phase and the Anesthesia phase. This may include such activities as assistance with initiation and/or support of neuraxial anesthesia, general anesthesia and/or peripheral/regional/sympathetic nerve blocks and/or local anesthesia infiltration.

At the time of transfer of information, the PeriAnesthesia nurse will:

**3.1** Integrate data received at transfer of care as identified in Resource 4 which includes, but is not limited to:

- 3.1.1 Relevant preoperative and preanesthesia status
- 3.1.2 Pain and comfort management including postoperative nausea and vomiting
- 3.1.3 Type of surgery
- 3.1.4 Review of the plan of care from the previous preanesthesia environments
- 3.1.5 Emotional status on arrival to the Anesthesia phase
- 3.1.6 Descriptor of type, quality, intensity, location , time (duration, when does it occur) and effect
  - 3.1.6.1 Pain level assessment using a validated pain scale
  - 3.1.6.2 Pre-procedural pain level if present
  - 3.1.6.3 Chronic/persistent versus new/acute onset
  - 3.1.6.4 Pre-procedure pain medications if utilized.
- 3.1.7 Integrates information regarding the pre-procedure medication history
  - 3.1.7.1 Use of non-steroid anti-inflammatory drugs as analgesics
  - 3.1.7.2 Opioid use: Amount, dose, length of use and reason
  - 3.1.7.3 Complementary and alternative medicines
    - 3.1.7.3i. Herbal
    - 3.1.7.3 ii. Over-the-counter medications.
  - 3.1.7.4 Allergies, allergy relief medications

3.1.7.5 Substance use and/or abuse e.g., prescription, drugs of abuse, non-prescription, alcohol.

3.1.8 Best possible medication history (Accreditation Canada et al, 2012)

3.1.8.1 Use of anticoagulation therapy e.g., medications that may potentially affect modality of analgesic administration

3.1.8.1i. Platelet inhibitors e.g., Clopidogrel (Plavix), acetylsalicylic acid (ASA)

3.1.8.1ii. New oral anticoagulants (NOACs) e.g., dabigatran, rivaroxaban, apixaban.

3.1.9 Integrates information from the pre-procedure nursing history

3.1.9.1 Chronic conditions in relation to history of pain (Gordon et al, 2005)

3.1.9.2 Acute conditions in relation to history of pain

3.1.9.3 Congenital, genetic conditions in relation to history of pain

3.1.9.4 History of coping strategies and effect of pain on quality of life

3.1.9.5 Integrates information regarding the comfort assessment including:

3.1.9.5i. Comfort history/stress relief techniques

3.1.9.5ii. Physical supports e.g., positioning, special appliances, heat/cold packs

3.1.9.5iii. Psychosocial and spiritual e.g., religious symbols, spiritual beliefs

3.1.9.5iv. Environmental e.g., comfort objects, music, privacy

3.1.9.5v. Cultural restrictions/preferences.

3.1.10 Integrates history of side effects of analgesia into plan of care, including previous effective treatment plan e.g., postoperative nausea and vomiting.

3.2 Support the client's use of the appropriate pain assessment scale for individual cognitive understanding

3.2.1 Pain assessment and use of pain reporting scales (See Appendices Q and R)

3.2.1.1 Wong-Baker "FACES" pain rating scale (Wong, & Baker, 2002)

3.2.1.2 Numerical rating scales

3.2.1.3 Visual analog scales

3.2.1.4 Verbal rating scales

3.2.1.5 Brief Pain Inventory scale.

3.3 Assist with the implementation of the appropriate multimodal pain management plan of care based on:

3.3.1 Client report

3.3.2 Use of objective and subjective descriptors for acceptable level of pain

3.3.3 A numerical pain score of four (4) or less (Buss, & Melderis, 2002)

3.3.3.1 Use of opioids, non-opioid, adjuvants

3.3.3.2 Initiation or continuation of epidural/intrathecal/PCA or intermittent intravenous therapies according to institutional policy

3.3.3.3 Bolus administration of intravenous "local anesthetic", lidocaine of 5mg/kg lean body weight over 45 minutes (Samosh, 2011)

3.3.3.4 Use of comfort measures

3.3.3.5 Psychosocial and spiritual supports

3.3.3.6 Continue alternative therapies that may be requested/used by clients e.g., music therapy, relaxation therapy.

3.4 Educates/supports the client's understanding of adequate pain management

3.4.1 Is able to deep breath and cough, and will know the importance of early mobilization
3.4.2 States adequate pain relief and comfort as per goal of care, by verbalizing pain levels according to appropriate assessment scale for cognitive understanding.

3.5 Provides a safe transfer of care communication report of all significant events related to pain in the Anesthesia Phase. A concise and comprehensive verbal transfer of care report is given to the PeriAnesthesia nurse in the next phase of care using the institution's accepted transfer of care communication template as a guide (Accreditation Canada et al, 2012).

## 4. PostAnesthesia Phase I

During Phase I, the PeriAnesthesia nurse will continue to integrate data received during the transfer of care from all previous phases. Pain is anticipated and assumed to be present following all surgical interventions unless ruled out through assessment. Acute surgical pain is considered acute nociceptive pain. When planning pain management, the PeriAnesthesia nurse must include the prior existence of chronic or neuropathic pain and the history of chronic opioid use in the plan of care. The goal of care is to reduce pain sufficiently to allow the client to deep breath, cough and to mobilize to prevent complications in Phase 2 and Extended Observation (Francis, & Fitzpatrick, 2012).

**4.1** Initial assessment and management criteria and documentation include, but are not limited to:

4.1.1 Integration of data received at transfer of care as identified in Resource 4
4.1.1.1 Relevant preoperative and preanesthesia pain status and history of analgesic use
4.1.1.2 Anesthesia types and technique(s) and types of analgesia used in the Anesthesia phase including response to each
4.1.1.3 Length of time during which analgesia and anesthesia were administered, and the time at which reversal agents were administered if relevant
4.1.1.4 Type of surgery related to degree, location and type of pain
4.1.1.5 Complications occurring during administration of analgesia or anesthesia, treatment initiated and client's response to treatment
4.1.1.5i. Intraoperative vital signs 4.1.1.5ii. Harmful incidents, outcomes.
4.1.1.6 Review of the plan of care for pain management from the previous phase (Anesthesia) and ongoing development of plan for Phase I
4.1.1.7 Emotional status on arrival to the operating room in relation to preoperative and preanesthesia state
4.1.1.8 Motor and sensory response and strength/mobility status in relation to preoperative and preanesthesia state related to neuraxial/regional anesthesia
4.1.1.9 Integrates pain-related information gathered on the PreAdmission/Day of Surgery assessments and plan of care
4.1.1.10 Pain scale assessment
4.1.1.10i. Descriptor of type, quality, intensity, location, time (duration, when does it occur) and effect
4.1.1.10ii. Pre-procedure pain level if present
4.1.1.10iii. Chronic/persistent versus new/acute onset
4.1.1.10iv. Pre-procedure pain medications if utilized.
4.1.2 Integrates information regarding the pre-procedure medication history
4.1.2.1 Use of non-steroidal anti-inflammatory drugs as analgesics

4.1.2.2 Opioid use: amount, dose, length of use and reason
4.1.2.3 Complementary and alternative medications
4.1.2.3i. Herbal
4.1.2.3 ii. Over-the-counter medications.
4.1.2.4 Allergies, allergy relief medications
4.1.2.5 Substance use and/or abuse e.g., prescription, drugs of abuse, non-prescription, alcohol
4.1.2.6 Best possible medication history (Accreditation Canada, 2013)
4.1.2.6i. Use of anticoagulation therapy e.g., medications that may potentially affect modality of analgesic administration
4.1.2.6ii. Platelet inhibitors e.g., Clopidogrel (Plavix), acetylsalicylic acid (ASA)
4.1.2.6iii. New oral anticoagulants (NOACs) e.g., dabigatran, rivaroxaban, apixaban.
4.1.3 Integrates information from the pre-procedure nursing history
4.1.3.1 Chronic conditions in relation to history of pain (Gordon et al, 2005)
4.1.3.2 Acute conditions in relation to history of pain
4.1.3.3 Congenital, genetic conditions in relation to history of pain
4.1.3.4 History of coping strategies and effect of pain on quality of life
4.1.3.5 Integrates information regarding the comfort assessment including:
4.1.3.5i. Comfort history/stress relief techniques
4.1.3.5ii. Physical supports e.g., positioning, special appliances, heat/cold packs
4.1.3.5iii. Psychosocial and spiritual e.g., religious symbols, spiritual beliefs
4.1.3.5iv. Environmental e.g., comfort objects, music, privacy
4.1.3.5v. Cultural restrictions/preferences.
4.1.4 Integrates history of side effects of analgesia into plan of care, including previous effective treatment plan e.g., postoperative nausea and vomiting.

4.2 Support the client's use of the appropriate pain assessment scale for individual cognitive understanding

4.2.1 Pain assessment and use of pain reporting scales (See Appendices Q and R)
4.2.1.1 Wong-Baker "FACES" pain rating scale (Wong, & Baker, 2002)
4.2.1.2 Numerical rating scales
4.2.1.3 Visual analog scales
4.2.1.4 Verbal rating scales
4.2.1.5 Brief Pain Inventory scale.

4.3 Implements appropriate multimodal pain management plan of care, using the World Health Organization's step-wise or analgesic ladder in relation to degree of pain (See Appendix T)

4.3.1 Based on client reporting and objective and subjective descriptors for acceptable level of pain
4.3.2 Until a numerical pain score of 4 or less is reached (Buss, & Melderis, 2002)
4.3.2.1 Mild: Step 1
4.3.2.1i. Non-opioid
4.3.2.1 ii. ± Adjuvant
4.3.2.2 Moderate: Step 2
4.3.2.2i. Opioid
4.3.2.2ii. + Non-opioid

4.3.2.2 iii. ± Adjuvant

4.3.2.3 Severe: Step 3

4.3.2.3i. Opioid

4.3.2.3ii. + Non-opioid

4.3.2.3iii. ± Adjuvant.

4.3.3 The use of analgesia should start at the step of the analgesic ladder appropriate for the severity of pain

4.3.3.1 It is not necessary to initiate therapy at Step 1 if the client is experiencing moderate to severe pain

4.3.3.2 Clients with severe pain should have therapy initiated at Step 3.

4.3.4 The use of the World Health Organization ladder is reversed in situations of acute pain, starting at Step 3 and moving to Step 1 as recovery occurs (World Health Organization, 2014).

4.4 Adjuvant Pharmacology in Acute Pain Management (See Appendix U)

4.4.1 Acetaminophen: first line for mild acute pain; adjunct with opioid for moderate and severe pain

4.4.2 NSAIDs: Mild to moderate pain, especially for acute nociceptive pain due to tissue damage or inflammation

4.4.3 IV Lidocaine: Moderate to severe postoperative pain related to surgical intervention can be improved with preoperative and intraoperative IV lidocaine which also reduces surgery-induced immune alterations (Yardeni, Beilin, Mayburd, Levinson, & Bessler, 2001)

4.4.4 Opioids: For severe acute pain, the mainstay of acute pain management (short acting opioids)

4.4.5 Anticonvulsants and tri-cyclic antidepressants (TCA) may be used in management of acute neuropathic pain

4.4.6 Triptans for headaches and calcium channel blockers for bone pain or post-transplant pain.

4.5 Initiates or continues pain management modalities, specific for surgical procedure and appropriate to client

4.5.1 Use of pain management modalities

4.5.1.1 Neuraxial including epidural, spinal/intrathecal e.g., patient controlled or continuous epidural analgesia

4.5.1.2 Regional e.g., single dose nerve blocks, transversus abdominis plane block or continuous nerve block infusions

4.5.1.3 Intravenous modalities e.g., patient controlled analgesia or intermittent dose analgesia or anesthesia (general or local) e.g., propofol, lidocaine, in Phase I.

4.5.2 Non-pharmacological modalities (See Appendix S)

4.5.2.1 Use of comfort measures

4.5.2.2 Psychosocial and spiritual supports

4.5.2.3 Continue alternative therapies that may be requested/used by clients

4.6 Continues ongoing assessment of the client's pain level throughout the Phase I level of care which includes indications of adequate pain management

4.6.1 The client is able to deep breath, cough and mobilize

4.6.2 The client states acceptable pain relief and comfort as per goal of care, by verbalizing pain levels according to appropriate tool for cognitive understanding

4.6.3 The client is not showing indication of severe pain e.g., moaning, tachycardia, hypertension

4.6.4 The client is hemodynamically stable

4.6.5 The client meets criteria for discharge to Phase II.

4.7 Sedation scales may be used along with clinical indicators to assess for effect of pain management or sedation as a side effect (See Appendix V)

4.7.1 Richmond Agitation Sedation Scale (RASS) for intubated clients for sedation from multiple sources

4.7.2 Pasero Opioid-induced Sedation Scale (POSS) for non-intubated, opioid-induced sedation in clients

4.7.3 INOVA Health System Sedation Scale (ISS) for sedation from all sources e.g., opioids, sedation, and anesthesia.

4.8 Provides a safe transfer of care communication report of all significant events related to pain management in the Anesthesia Phase and in Phase I to the next phase of care (Accreditation Canada, 2013).

## 5. PostAnesthesia Phase II

During Phase II level of care and in preparation for Extended Observation, the PeriAnesthesia nurse is responsible for the continuation of ongoing pain assessment as identified in Resource 4.

**5.1** Initial assessment of pain and pain management criteria and documentation include, but are not limited to:

5.1.1 Integration of data received at transfer of care

5.1.1.1 Relevant preoperative and preanesthesia pain status and history of analgesic use

5.1.1.2 Analgesia and anesthesia types and technique(s) used in Anesthesia phase including response to each

5.1.1.3 Length of time during which analgesia and anesthesia were administered, and the time at which reversal agents were administered if relevant

5.1.1.4 Type of surgery related to extent, location and type of pain

5.1.1.5 Complications occurring during administration of analgesia or anesthesia, treatment initiated and client's response to treatment

5.1.1.5 i. Intraoperative vital signs 5.1.1.5ii. Harmful incidents, outcomes.

5.1.1.6 Review of the plan of care for pain management from the previous phases (PreOperative/PreAdmission, Day of Surgery, Anesthesia, Phase I) and ongoing development for Phase II

5.1.1.7 Emotional status and relation to preoperative and preanesthesia status

5.1.1.8 Motor and sensory response and strength/mobility status and relation to preoperative and preanesthesia state

5.1.1.9 Integration of data at transfer of care from previous phases with emphasis on current pain status and all prior techniques of pain management.

5.2 Ongoing pain assessment and management criteria and documentation include, but are not limited to:

5.2.1 Implement and maintain effective pain management e.g., pharmacological, restful positioning, ice, relaxing music, positive affirmations regarding progress, involvement of family with care which increases comfort and decreases anxiety (See Appendix S)

5.2.2 Support the client's use of the appropriate pain assessment scale for individual cognitive understanding

5.2.2.1 Pain assessment and use of pain reporting scales (See Appendices Q and R)

5.2.2.1i. Wong-Baker "FACES" pain rating scale

5.2.2.1ii. Numerical rating scales

5.2.2.1iii. Visual analog scales

5.2.2.1iv. Verbal rating scales

5.2.2.1v. Brief Pain Inventory scale.

5.2.3 To maintain freedom from pain, analgesics should be administered regularly as scheduled rather than as rescue analgesia

5.2.4 According to the World Health Organization (2008), the "three-step approach" to pain management is inexpensive and is 80-90% effective

5.2.4.1 The three-step approach involves administering the right *drug* in the right *dose* at the right *time*.

5.2.5 Promote and maintain effective post operative nausea and vomiting management by decreasing movement, decreasing environmental stimulation such as noise and odors and by utilization of pharmacological and non pharmacological supports

5.2.6 Promote and maintain emotional comfort as required based on client self-reports and nonverbal indicators

5.2.7 Administer medications as ordered and document response (Accreditation Canada, 2013)

5.2.8 Review of both written and verbal discharge instructions with client, family, and escort may include but are not limited to:

5.2.8.1 Guidelines for specific surgery which include pain and postoperative nausea and vomiting assessment and medications including prescriptions

5.2.8.2 Driving is not recommended for 24 hours following anesthesia or while taking opioid analgesics

5.2.8.3 Role of the escort, which may be divided between two or more individuals includes, but is not limited to:

5.2.8.3i. Assuring compliance with postoperative instructions for taking analgesics or use of other modalities

5.2.8.3ii. Monitoring the client’s progress towards recovery from pain

5.2.8.3iii. Contacting physician or emergency care as required using the parameters included in the postoperative discharge instructions in the event that pain persists or increases (Yun, Ip, & Chung, 2009).

5.2.9 PostAnesthesia scoring system for Phase II is used to identify acceptable pain level in response to pain management e.g., Post Anesthetic Discharge Scoring System for ambulatory patients (PADSS) or modified Post Anesthetic Discharge Scoring System (mPADSS) (Chung, 1995). (See Resource 5: Discharge Criteria from all PostAnesthesia Phases)

## 6. Extended Observation

During the extended observation phase, the PeriAnesthesia nurse will:

**6.1** Continue ongoing pain assessment and management criteria and documentation which include, but are not limited to:

6.1.1 Implement and maintain effective pain management through pharmacological or non-pharmacological modalities e.g., analgesics including opioids and adjuvants, restful positioning, ice, relaxing music, positive affirmations regarding progress, involvement of family with care which increases comfort and decreases anxiety

6.1.2 Promote and maintain effective management of postoperative nausea and vomiting by decreasing movement, decreasing environmental stimulation such as noise and odors and by utilization of pharmacological (antiemetics) and non-pharmacological supports (See Resource 11: Management of Postoperative Nausea and Vomiting in all PeriAnesthesia Phases)

6.1.3 Promote and maintain emotional comfort as required based on client self-reports and nonverbal indicators

***6.1.4*** Administer medications as ordered and document response (Safer Healthcare ***Now!*** 2011)

6.1.5 Review of discharge instructions both written and verbal with client, family, escort, may include, but are not limited to:

6.1.5.1 Guidelines for specific surgery which include assessment of pain and postoperative nausea and vomiting, medications including prescriptions

6.1.5.1i. Understanding use of each medication, side effects and contraindications.

6.1.5.2 Driving is not recommended for 24 hours following anesthesia and/or while taking opioid analgesics

6.1.5.3 Role of the escort, which may be divided between two or more individuals includes, but is not limited to:

6.1.5.3i. Assuring compliance with postoperative instructions for taking analgesics or use of other modalities

6.1.5.3ii. Monitoring the client's progress towards recovery from pain

6.1.5.3iii. Contacting physician or emergency care as required using the parameters included in the postoperative discharge instructions in the event that pain persists or increases (Yun et al, 2009).

**References**


Accreditation Canada. (2013). *MedRec: Canadian national medication reconciliation strategy*. Retrieved from http://www.accreditation.ca/medrec-canadian-national-medication-reconciliation-strategy

Accreditation Canada, the Canadian Institute for Health Information, the Canadian Patient Safety Institute, & the Institute for Safe Medication Practices Canada. (2012). *Medication reconciliation in Canada: Raising the bar – Progress to date and the course ahead.* Ottawa, ON: Accreditation Canada.

Buss, H., & Melderis, K. (2002). PACU pain management algorithm. *Journal of Perianesthesia Nursing, 17*(1), 11-20.

Cadden, K. (2007). Better pain management. *Nursing Management*, *August,* 30 -37. Retrieved from http://www.nurseone.ca/docs/NurseOne/Private%20Documents/rural_and_remote/BetterPain.pdf

California Pacific Medical Centre. (2012). *Pain assessment scales*. Retrieved from http://www.cpmc.org/images/learning/painscale.gif

Canadian Pain Coalition. (2014). *Pain resource center.* Retrieved from http://prc.canadianpaincoalition.ca/en/about_pain.html

Canadian Pain Society. (1999). *Position statement on pain treatment as a human right*. Retrieved from http://www.canadianpainsociety.ca/en/about_policy.html

Canadian Pain Society. (2013). *Pain in Canada fact sheet*. Retrieved from http://www.canadianpainsociety.ca/pdf/pain_fact_sheet_en.pdf

Canadian Medical Association. (2010). *CMA Infobase: Clinical practice guidelines (CPGs).* Retrieved from http://www.cma.ca/index.php/ci_id/54316/la_id/1.htm

Carr, E. (2007). Barriers to effective pain management: Research and education, Bournemouth University. *Journal of Perioperative Practice, 17*(5), 200-203, 206-208.

College of Physicians and Surgeons of Ontario. (2000). *Evidence-based recommendations for medical management of chronic non-malignant pain*. Retrieved from http://www.cpso.on.ca/uploadedFiles/policies/guidelines/methadone/MedicalManagementPain.pdf

Cleeland, C. (1991). *Brief pain inventory*. Retrieved from http://prc.coh.org/pdf/BPI_Short_Version.pdf

Gottschalk, A., & Ochroch, A. (2009). Is preemptive analgesia clinically effective? In L. Fleisher (Ed.) *Evidence based practice of anesthesiology* (2nd ed.) (Chapter 73). Philadelphia, PA: Saunders Elsevier.

Francis, L., & Fitzpatrick, J. (2013). Postoperative pain: Nurses' knowledge and patients' experiences. *Pain Management Nursing, 14*(4), 351- 357. doi: 10.1016/j.pmn.2012.05.002

Gordon, D., Dahl, J., Miaskowski, C., McCarberg, B., Todd, K., Paice, J., Lipman, A., Bookbinder, M., Sanders, S., Turk, D., & Carr, D. (2005). American Pain Society recommendations for improving the quality of acute and cancer pain management: American Pain Society Quality of Care Task Force. *Arch Intern Med. 165*(14), 1574-1580. doi:10.1001/archinte.165.14.1574

Gray, J. (2007). *Therapeutic choices* (5th ed.). Ottawa: Canadian Pharmacists Association.

Hart, J. (2008). Complementary therapies for chronic pain management. *Alternative & Complementary Therapies, 4,* 64-68.

Institute for Clinical Systems Improvement (ICSI). (2009). *Assessment and management of chronic pain.* Retrieved from http://www.guideline.gov/content.aspx?id=36064&search=pain

International Association of Pain. (2012). *IASP Taxonomy: Definition of pain*. Retrieved from http://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1698&navItemNumber=576#Pain

Jovey, R. (2008). *Managing Pain: The Canadian healthcare professional's reference* (Chapters1, 2). Stittsville, ON: Baker Edwards Consulting Inc.

McCaffery, M. (1968). *Nursing practice theories related to cognition, bodily pain, and man-environment interactions*. Unknown publication. California, USA: UCLA Students' Store.

McCaffery, M., & Pasero, C. (1999). *Pain, clinical manual* (2nd ed.) (p. 74). St. Louis, MO: Mosby.

Middleton, C. (2004). Barriers to the provision of effective pain management. *Nursing Times, 100*(3), 42. Retrieved from http://www.nursingtimes.net/nursing-practice/clinical-zones/pain-management/barriers-to-the-provision-of-effective-pain-management/205002.article

Nisbet, A., & Mooney-Cotter, F. (2009). Comparison of selected sedation scales for reporting opioid–induced sedation assessment. *Pain Manag Nurs, 10*(3), 154-164.

Pasero, C., & McCaffery, M. (2011). *Pain assessment and pharmacologic management* (Chapter 1, 2, 3). St. Louis, MO: Mosby Elsevier.

Powell, R., Downing, J., Ddungu, H., & Mwangi-Powell, F. (2010). Pain history and pain assessment. In International Association for the Study of Pain, *Guide to pain management in low resource settings* (Chapter 10). Retrieved from http://www.iasp-

pain.org/AM/Template.cfm?Section=Guide_to_Pain_Management_in_Low_Resource_Settings&Template=/CM/ContentDisplay.cfm&ContentID=12172

Purser, L., Warfield, K., & Richardson, C. (2012). Making pain visible: An audit and review of documentation to improve the use of pain assessment by implanting pain as the fifth vital sign. *Pain Management Nursing, September, 137-142*. Retrieved from http://www.sciencedirect.com/science/article/pii/S1524904212001269

Registered Nurses Association of Ontario. (2007). *Nursing best practice guideline: Assessment and management of pain,* Revised 2007. Retrieved from http://rnao.ca/sites/rnao-ca/files/Assessment_and_Management_of_Pain.pdf

Registered Nurses Association of Ontario. (2013). *Nursing best practice guidelines: Assessment and management of pain: Questions to consider during assessment of a pain (PQRST)* (p. 23). Retrieved from http://pda.rnao.ca/content/assessment-pain-questions-consider-during-assessment-pain-pqrst

Safer Healthcare ***Now!*** (2011). *Medication reconciliation in acute care: Getting started kit.* Retrieved from http://www.saferhealthcarenow.ca/EN/Interventions/medrec/Documents/Acute_Care/MedRec_%28Acute_Care%29_Getting_Started_Ki t.pdf

Samosh, A., Moulin, D., Ower, K., & Watson, J. (2011). *Safety of IV lidocaine infusions for treatment of neuropathic pain*. Retrieved from http://www.canadianpainsociety.ca/congres/calgary2010/Presentations/HotTopics204_AdamSamosh.pdf

Schick, L., & Windle, P. (2010). *PeriAnesthesia nursing core curriculum: Preprocedure, phase I and phase II PACU nursing* (pp. 521-551). St. Louis, Missouri: Saunders Elsevier.

Todd, K., Ducharme, J., Choiniere, M., Crandall, C., Fosnocht, D., Homel, P., Tanabe, P., & Pain and Emergency Medicine Initiative Study Group. (2007). Pain in the Emergency department: Results of the Pain and Emergency Medicine Initiative (PEMI) multicentre study. *J Pain, 8*(6), 460-466.

Wong, D., & Baker, C. (2002). *FACES pain rating scale: Development of the Wong-Baker FACES pain rating scale*. Retrieved from http://www.mosbysdrugconsult.com/WOW/faces.html

World Health Organization. (2008). *Scoping document for who treatment guidelines on chronic non-malignant pain in adults.* Retrieved from http://www.who.int/medicines/areas/quality_safety/Scoping_WHOGuide_non-malignant_pain_adults.pdf World Health Organization (2014). *WHO's pain relief ladder* . Retrieved from http://www.who.int/cancer/palliative/painladder/en/

Yun, H., Ip, V., & Chung, F. (2009). Escort accompanying discharge after ambulatory surgery: A necessity or a luxury? *Ambulatory Anesthesia, 22*, 748-754.