Pain Management: Acute Mild to Moderate (Adult 17 years and older)

Quick Links:

- Algorithm: Decision Support Tool: Acute Mild-Moderate Pain in the Adult
- Appendix A: Definitions
- Appendix B: Summary Handout for Nurses

Site Applicability

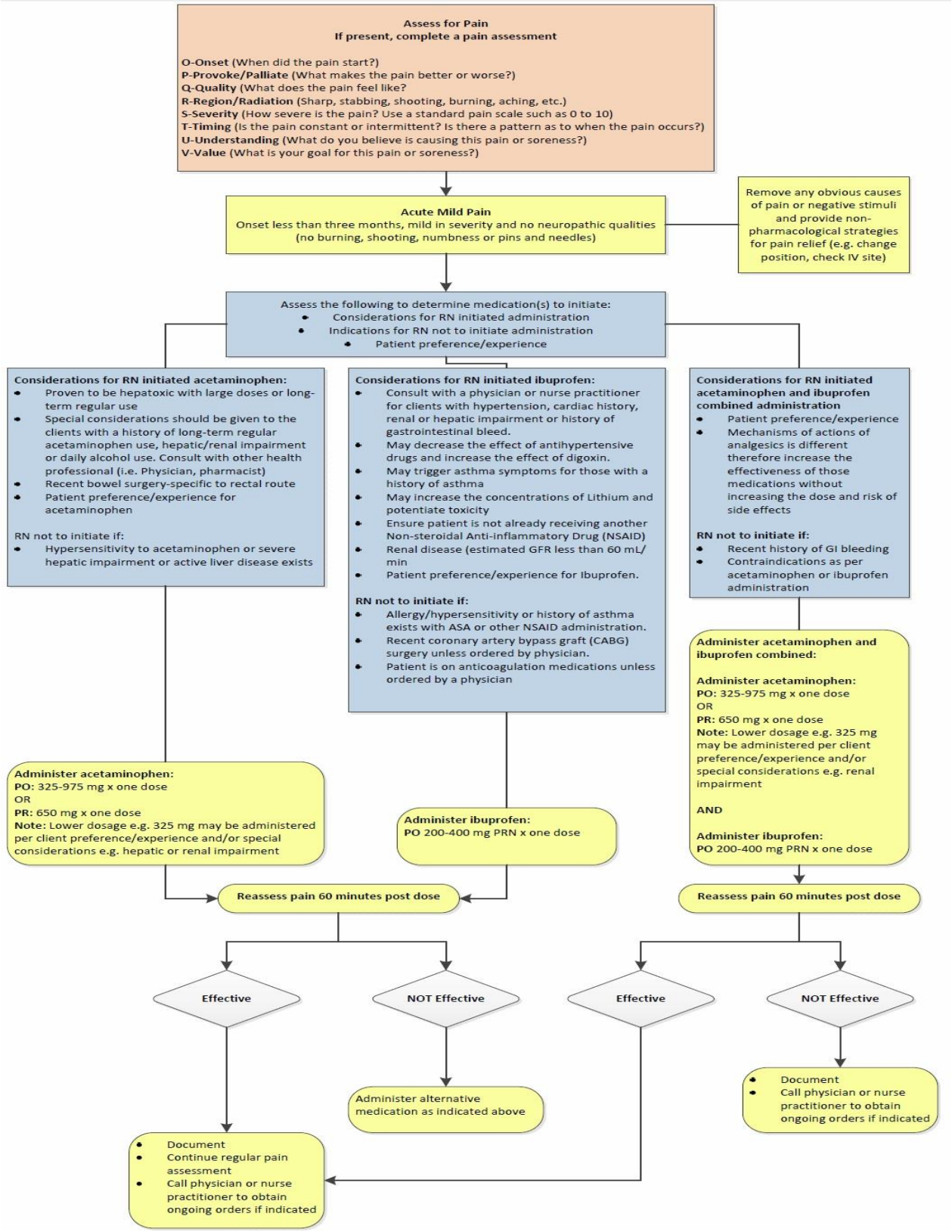
- All VCH & PHC Emergency Departments, Urgent Care Centres and Urgent Primary Care Centres.
  - UPCC RNs must also follow Appendix C.

Practice Level

Profession	Setting	Advanced Skill (requiring additional education and training)
RN	Emergency & Urgent Care	**Nurse Independent Activity:** • The following NIAs have been approved for use as noted in the site applicability above. Administration of medication: ▪ Acetaminophen (one dose only) ▪ Ibuprofen (one dose only)

Decision Support Tool: Acute Mild-Moderate Pain in the Adult

UPCC RNs, also see Appendix C



Goals

- To alleviate mild/moderate pain when there are significant delays in the treatment of patients when the physician/NP is not immediately available.
- **To initially assess and treat acute mild/moderate pain in adults (17 years or older)** using both non-pharmacological interventions and medications as appropriate.

Policy Statement

- This document does **not reflect the ongoing management of persistent pain or treatment of moderate to severe pain. Consultation with a physician or NP involved in the client's care is required.**
- The use of NIA is supported within VCH/PHC and is defined:
  - Policy: Nurse Independent Activities (NIA) and Nurse-Initiated Protocols (NIP)

  Education includes: LearningHub NIA Course
- Physician/NP orders override the use of NIA

Need to Know

Under-treated pain can lead to serious clinical consequences including delayed healing time, increased hospital stay and decreased quality of life. All clients have the right to adequate pain assessment and treatment.[3,4,5,6,7,8,9,10,11,12,13]

If a patient presents with abdominal pain, refer to BD-00-04-40074: Abdominal Pain (Acute Non-Traumatic): Management (Adult 17 years and older).

Definitions: see Appendix A

Practice Guideline

Assessment

Prior to administration of medication:

- Review medication history and current status; including prescription and non-prescription medications (be alert for drug interactions).
- Ensure that vital signs including temperature are assessed and documented.
- Ask patient if they have used any prescription or non-prescription medications recently and whether patient has taken either acetaminophen or NSAIDs for this current episode e.g. receipt of acetaminophen/ibuprofen before arriving to the hospital and what the response to it has been
- Review and confirm allergy status.
- Review health history, acute/chronic disease, and lab data if available.

Note: Pain is whatever the experiencing person says it is, existing when she/he says it does. A comprehensive pain assessment includes self-report (the most reliable indicator of pain), if available.

1. If the patient is unable to provide a self report, use the Hierarchy of Pain Assessment Techniques[4]
   a. Attempt first to elicit a self-report of pain from the patient.
   b. Identify conditions and common possible causes of pain.
   c. Observe for behaviours recognized as pain related, i.e. moaning, grimacing, restless, rocking, guarding, etc.
   d. Gather information from family members and caregivers familiar with the patient.
   e. Attempt an analgesic trial of one dose only (administer a pain medication as appropriate) and observe for changes in behaviour.

2. Assessment of pain should be completed using a standardized pain assessment tool appropriate for the client being assessed.

Ensure you choose a scale that is appropriate for the individual client and document which scale is used. Examples of pain assessment scales:

a. Visual Analogue Scale (VAS)
b. Numeric Rating Scale (NRS)
c. Wong–Baker FACES Pain Rating Scale
d. Use a Non-verbal Pain Assessment tool e.g. PAINAD (Pain Assessment in Advanced Dementia) tool to obtain a pain score if communication is impaired

3. Pain is the fifth vital sign and should be routinely assessed **as with all vital signs.**
4. Assess for pain using the mnemonic **OPQRSTUV** (see table below) or **LOTARP** (location, onset and origin (old/new), type/timing, aggravating factors, radiating factors, precipitating events).

Onset	Is the onset gradual or sudden? Does the patient have **other symptoms** such as night sweats, fever, chills, weight loss, fatigue, weakness, parasthesia?
Provoke or **Palliate**	What makes the pain worse (provoke), what makes it better (palliate)?
Quality	Listen for descriptors to help identify type of pain-nociceptive pain (somatic or visceral) or neuropathic pain.
Region or **Radiation**	**Where** is the pain? Examine the site to look for swelling, inflammation or deformity. Does the pain **radiate** to other areas?
Severity	Use a standardized pain scale, such as verbal rating scale (0 to 10) or faces pain scale.
Timing	Does it occur at a specific time of day? How long does it last? Is the pain constant or intermittent?
Understanding	What do you believe is causing this pain or soreness? How is this pain or soreness affecting you and your family?
Value	What is your goal for this pain or soreness? What is your comfort goal or acceptable level of pain or soreness (on scale of 0 to 10 with 0 being none and 10 being the worst possible pain)?

Diagnosis: Acute Mild or Moderate Pain (pain scale 0-7 out of 10)

Precautions / Special Considerations / Contraindications:

Pain may not be completely alleviated. The goal is to restore an optimal level of comfort and function. It is easier, however, to prevent pain than control it. The nurse must determine the type and level of pain and consult the appropriate health care professional in order to determine the underlying cause of pain and to develop an appropriate ongoing care plan.

Contraindications: patients presenting with abdominal pain.

UPCC RNs, also please see Appendix C.

Communication impairments related to language barriers, cognitive deficits, strokes, hearing difficulties, developmental and age related factors that may hamper the client's ability to express pain do not decrease the ability to feel pain. It is important that the nurse pay special attention to behavioural expressions of pain in order to adequately assess pain in these populations **(See "under Assessment": use Non-verbal pain assessment tool e.g. PAINAD).**

The older adult population is at an increased risk for toxic effects associated with administration of acetaminophen and ibuprofen, therefore the risks of treatment should be weighed against the benefits and dosages adjusted to meet these special considerations.

Medication	Decision Making Process to Determine which Medication to Initiate
UPCC RNs, also please see Appendix C.	**For more information:** **On-line:** LexiComp Online Drug Database[20] **Access via VCH/PHC Intranet:** https://online.lexi.com/lco/action/home
Acetaminophen[20]	**Indications:** Headache, fever and mild to moderate pain. **Considerations for RN initiated:** • Proven to be hepatotoxic with large doses or long-term regular use. • Special considerations should be given to the clients with a history of long-term regular acetaminophen use, hepatic or renal impairment or current history of daily alcohol use. Consult with other health professional (i.e. Physician, Nurse Practitioner, Pharmacist) as needed. • Recent bowel surgery – specific to administration via rectal route. **RN not to initiate if:** • Hypersensitivity to acetaminophen or severe hepatic impairment or active liver disease exists.
Ibuprofen[17]	**Indications:** Headache, osteoarthritis, pain, fever, primary dysmenorrhea and rheumatoid arthritis. **Considerations for RN initiated:** • Consult with a physician/NP for clients with hypertension, cardiac history, renal or hepatic impairment or history of gastrointestinal bleed. • May decrease the effect of antihypertensive drugs, and increase the effect of Digoxin. • Asthma • May increase the concentrations of Lithium and potentiate toxicity. • Ensure patient is not already receiving another Non-steroidal Anti-inflammatory Drug (NSAID). • Renal disease (estimated GFR less than 60 mL/min). **RN not to initiate if:** • Allergy/hypersensitivity or history of asthma exists with ASA or other NSAID administration. • Recent, coronary artery bypass graft (CABG) surgery unless ordered by physician/NP. • Patient has an epidural unless ordered by anesthesiology. • Patient is on anticoagulation medications unless ordered by a physician/NP during the current admission. • Patient has pre-existing renal disease or low GFR.

Intervention:

1. If possible, first remove any obvious cause of pain or negative stimuli which may decrease pain tolerance and employ non-pharmacological strategies for pain relief (e.g., position change, heat/cold, massage, and visualization).

2. Determine the appropriate medication for the client's condition from those listed in this CPD.
   a. **It is each RN's responsibility to assess and make a nursing diagnosis of the client's condition and determine if the preceding plan of care is still appropriate.**

      UPCC RNs, also please see Appendix C.

3. Recommended medication dosing:
   a. Unless contraindicated or if special considerations exist, administer **acetaminophen**.
      If acetaminophen inappropriate or ineffective for the client, go to (b) below:
      - **Acetaminophen recommended dosing[18] Adult:**
        - 650 to 975 mg ORALLY (PO) x one dose (depending on site inventory) **OR**
        - 650 mg RECTALLY (PR) x one dose
        - In special circumstances, dose can be reduced to 325 mg

        Note: Lower dosage (e.g. 325 mg) may be administered per client preference/experience and/or special considerations (e.g. history of hepatic or renal impairment).

b. Administer **ibuprofen** unless contraindicated or if special considerations exist.
   - **Ibuprofen recommended dosing**[18] **Adult:**
     - 200 to 400 mg ORALLY (PO) x one dose

c. Acetaminophen and ibuprofen can be administered concomitantly per client preference/ experience.

4. Reassessment:
   a. Observe for immediate side effects e.g. allergic response or anaphylactic reaction.
   b. Pain level, response to medications and any side effects should be re-evaluated with 30 to 60 minutes post medication administration. If pain has not resolved with the above interventions and/or is deemed moderate to severe, contact physician/NP or appropriate health care professional to obtain orders for ongoing pain management.

UPCC RNs, also please see Appendix C.

5. Collaborate with physician, nurse practitioner, pharmacy as necessary for ongoing management of patient's pain. If acetaminophen and/or ibuprofen not sufficient to manage the patients pain per patients perception, give verbal report to physician/NP re: chief complaint, medical history, analgesic history, and current medications received. Any further analgesics to be ordered by physician/NP.

Expected Client/Family Outcomes

Intended Outcomes:

- With the safe and effective treatment of acute mild to moderate pain, optimal comfort and function will be achieved.

Unintended Outcomes:

- Goal for pain relief is not reached or the pain becomes worse.
- Client experiences an adverse effect from medication.

Patient/Client/Resident Education

Inform client of the indications, outcomes and side-effects for acetaminophen and ibuprofen in relation to pain management i.e. how each works in different parts of the pain pathway to help with pain management.

Documentation

1. **On Emergency Department Nursing Assessment:**
   - Initial pain assessment, on-going nursing treatments and response to treatment
   - Any protocol or NIA followed
   - Pain assessment scale score per pain site for initial and ongoing pain assessment
   - Ongoing patient/family teaching
   - Discharge teaching/instructions provided as applicable
   - Follow up re: Discharge instructions/referrals with any HCP for ongoing pain management

2. **RN to complete nurse initiated activity/action (NIA) for mild to moderate pain for acetaminophen and/or ibuprofen on online order entry system or on written document:**
   - Date and time
   - Name of Drug, Dose & Route
   - Nurse first and last name printed (automatically present if online order entry)
   - Nurse signature and designation (automatically present if online order entry)

NIA Documentation (in the Orders section of the client chart) – should be in accordance with health authority NIA/NIP Policy:

- Nurse Independent Activities (NIA) and Nurse-Initiated Protocols (NIP)

UPCC RNs, also please see Appendix C.

Document medication administration as per site/unit practices.

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Developed by

CPD Developer Lead(s):
- Director, Regional Emergency/Trauma Services, VCH/PHC
- Regional Medical Director, Emergency Services, VCH/PHC
- Patient Services Manager, Emergency, VGH
- Regional Lead, Emergency and Trauma Services, VCH

Other members:
- Clinical Educator, Emergency, VGH
- Nurse Educator, Emergency, MSJ
- RN, Emergency, VGH
- Clinical Educator, Emergency, LGH
- Clinical Educator, Emergency, RH
- Program Manager, Emergency, RH
- Clinical Educator, SGH
- Acute Services Manager, PRGH
- Clinical Educator, SH
- Nurse Educator, SPH
- PCC/Educator, Urgent Care Centre, UBCH

Consultant:
- Clinical Nurse Specialist, Pain Management, PHC

Reviewed by

Health Authority Medication Advisory Council (HAMAC)

Endorsed by

VCH: *(Regional SharePoint 2nd Reading)*
- Health Authority Profession Specific Advisory Council Chairs (HAPSAC)
- Health Authority & Area Specific Interprofessional Advisory Council Chairs (HAIAC)
- Operations Directors
- Professional Practice Directors
- Regional Pharmacy & Therapeutics Committee

PHC Professional Practice Standards Committee

Final Sign-off & Approved for Posting by

Vice President Professional Practice and Chief Clinical Information Officer, VCH

Professional Practice Standards Committee, PHC

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Appendix A: Definitions

Pain - "An unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage."[14]

Pain Classification:

- **Acute Pain:** Pain of recent onset that is usually transient in nature, lasting from minutes to less than one month or within estimated healing time and is often associated with tissue damage and inflammation.[14]
- **Chronic Pain:** Pain that persists beyond the usual course of an acute illness or healing time of an injury (usually beyond 3 to 6 months), associated with a pattern of recurrence over months or years or associated with a chronic pathological process.[15]

Severity of Pain

- **Mild Pain:** Pain that is usually described by the individual experiencing the pain as "mild" or "minimal." For patients who are familiar with the 0 to 10 pain scale, this is typically 4/10 or less. Usually this level of pain responds to non-pharmacological treatment and non-opioid analgesics. It may be acute, persistent, or neuropathic.
- **Moderate to Severe Pain:** Pain that is usually described by the individual experiencing the pain as "moderate" or "severe". For patients who are familiar with the 0 to 10 pain scale this is typically 5/10 or greater. However the definition of moderate and severe pain is individual and unique to each patient, according to their own experience of their pain. Typically is not relieved solely with non-opioid medications or non-pharmacological measures.

Types of Pain[5]

- **Nociceptive Pain:** "normal" processing of stimuli that damages normal tissues or has the potential to damage tissues.[5] There are 2 types of nociceptive pain:
  - **Somatic Pain:** localized pain that can come from bone, joint, muscle, skin, or connective tissue (e.g., I.M. injections site / superficial laceration, simple fractures) with an aching, throbbing, and/or pounding quality that usually responds to non-opioid and opioid analgesics.[5]
  - **Visceral Pain:** poorly localized or generalized pain from organs such as the gastrointestinal tract and pancreas (e.g. Crohns's Disease, appendicitis Pancreatitis) that may have a cramping, aching quality and respond to non-opioid and non-opioid analgesics.[5]
- **Neuropathic Pain:** Results from damage to or dysfunction of the peripheral or central nervous system. It is an "abnormal" processing of sensory input in the peripheral or CNS that may or may not respond to opioids but may respond to adjuvant medications (i.e. limb amputation, diabetic neuropathy, nerve entrapment or complex regional pain syndrome).[5]

Initial Management: refers to short term interventions provided by an RN to resolve a condition they have diagnosed and/or to stabilize the client until another health care professional, e.g. physician/NP, can intervene or manage the ongoing care. This would include administering one dose of each medication to resolve the condition.

Appendix B: Summary Handout for Nurses

Change in Scope of Practice for Registered Nurses per the Health Professions Act:

- Diagnose and treat the condition of Acute Mild Pain.

Definition:

- **Acute Mild Pain:** acute nociceptive (somatic or visceral) pain often associated with new tissue injury or time limited illness (cause may not be known) lasting less than one month or within estimated healing time. Pain usually responds to non-pharmacological treatment or non-opioid analgesics.

Clinical Practice Guideline (CPG) includes:

- Recognizing the signs/symptoms of Acute Mild Pain.
- Clinical decision support for Registered Nurses (RNs) to assess, diagnose and treat Acute Mild Pain using non-invasive strategies and medications.
- Establishing, implementing and evaluating a plan of care.
- Following up with the appropriate health care professional (i.e. physician/NP) for special considerations and ongoing care and treatment.
- Documentation.

Clinical Indicators: "Pain is whatever the experiencing person says it is, existing when she/he says it does"

- Type of Pain.
- Expressions of Pain i.e. Pain behaviors can be assessed using non-verbal pain assessment tool e.g. PAINAD.
- Physical signs and symptoms of Pain.
- History/effect of Pain.

Assessment & Diagnosis (see Clinical Practice Guideline)

Treatment Options:

- **Non-pharmalogical**
  If possible, first remove any obvious cause of pain or negative stimuli which may decrease pain tolerance and employ non-pharmacological strategies for pain relief (e.g., position change, heat/cold, message, and visualization).
- **Medications: acetaminophen or ibuprofen**
  Recommended medication dosing:
  1) Unless contraindicated or if special considerations exist, administer **acetaminophen**.
     If acetaminophen is inappropriate for the client, see ibuprofen dosing.
     - **Acetaminophen recommended dosing: Adult**
       - 650 to 975 mg ORALLY (PO) x one dose **OR**
       - 650 mg RECTALLY (PR) x one dose
       - In special circumstances, dose can be reduced to 325 mg

     Note: Lower dosage e.g. 325 to 650 mg may be administered per client preference/experience and/or special considerations e.g. history of hepatic or renal impairment
  2) If acetaminophen evaluated to be inappropriate or ineffective, administer ibuprofen unless contraindicated or if special considerations exist.
     - **Ibuprofen recommended dosing: Adult**
       - 200 to 400 mg ORALLY (PO) x one dose
  3) Acetaminophen and ibuprofen can be administered concomitantly per client preference/experience.

Special Considerations:

The older adult population is at an increased risk for toxic effects associated with administration of acetaminophen and ibuprofen, therefore the risks of treatment should be weighed against the benefits and dosages adjusted to meet these special considerations.

Communication impairments related to language barriers, cognitive deficits, strokes, hearing difficulties, developmental and age-related factors that may hamper the client's ability to express pain does not decrease the ability to feel pain. It is important that the nurse pay special attention to behavioral expressions of pain in order to adequately assess pain in these populations.

For ongoing management or related orders, consult a Physician/NP as available to your practice area.

Appendix C: VCH UPCC sites only

UPCC RNs may follow guidance outlined in this document to provide **one (1) initial dose** of acetaminophen and/or ibuprofen as appropriate when a nursing diagnosis of acute mild to moderate pain in an adult client 17 years and older is made, prior to a client being seen by a UPCC provider. Considerations are outlined in the Decision Support Tool. Escalation criteria specific to UPCC sites are noted below.

Reassessment can be completed by any member of the clinical team 30 to 60 minutes after medication administration. If suboptimal pain control has been achieved, consider escalating care.

Escalation Criteria

Do not proceed with this NIA and refer to and/or consult with a provider (physician or Nurse Practitioner) if any of the following is applicable:

- Abdominal pain
- Severe pain
- Breast/chest-feeding
- Altered mental status and/or intoxication
- Mottled/ashen/blue skin and/or delayed capillary refill (less than 2 seconds)
- Hemodynamically unstable (Heart rate, Respiratory rate, Blood pressure, Oxygen Saturation)
- Traumatic injury caused by a high-risk mechanism of injury (MOI)

Contraindications	
Acetaminophen	**Ibuprofen**
○ Allergy or hypersensitivity to acetaminophen ○ Patient has taken acetaminophen within the last four (4) hours ○ Known liver disease and/or history of excessive alcohol intake ○ Recent bowel surgery – Rectal administration route specific	○ Allergy or hypersensitivity to ibuprofen or other nonsteroidal anti-inflammatory drugs (NSAIDs) ○ Active GI hemorrhage or ulcers ○ Pregnancy (first, second, or third trimesters) ○ Hypertension, cardiac history or recent heart surgery ○ Anticoagulant or lithium use ○ Pre-existing renal disease or low eGFR ○ Hepatic impairment

Documentation

In addition to documentation described in this document, UPCC RNs documents:

- Assessments, plan and actions in narrative notes or clinical comments.
- Where orders/directives are recorded, RNs ensure the NIA intervention is documented as per the VCH NIA/NIP Policy.
- Medication administration in the patient's Medication Administration Record (MAR)
- Patient's response to medication and follow-up assessment in narrative notes/clinical comments.

For CST Cerner: NIAs should be ordered utilizing the correct NIA-specific power plan, listed under nursing quick orders.