



## Complete Summary

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### GUIDELINE TITLE

Assessment and management of pain.

### BIBLIOGRAPHIC SOURCE(S)

Registered Nurses Association of Ontario (RNAO). Assessment and management of pain. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2002 Nov. 142 p. [109 references]

## COMPLETE SUMMARY CONTENT

### SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis

### RECOMMENDATIONS

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IMPLEMENTATION OF THE GUIDELINE

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT

### CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

## SCOPE

### DISEASE/CONDITION(S)

Acute and chronic pain

### GUIDELINE CATEGORY

Evaluation  
Management  
Prevention  
Screening

### CLINICAL SPECIALTY

Family Practice  
Geriatrics  
Nursing  
Pediatrics

### INTENDED USERS

Nurses

#### GUIDELINE OBJECTIVE(S)

- To present nursing best practice guidelines on the assessment and management of pain, including prevention of pain wherever possible
- To provide specific recommendations for specialized populations such as the elderly and children

#### TARGET POPULATION

Patients of all ages and in all care settings with or at risk of acute or chronic pain

#### INTERVENTIONS AND PRACTICES CONSIDERED

##### Evaluation/Screening

1. Screening persons at risk for pain
2. Pain assessment, including: eliciting patients' self-report, use of pain assessment tools (Visual Analogue Scale [VAS], Numeric Rating Scale [NRS], Verbal Scale, Faces Scale, Behavioural Scale); and assessment for physiological and behavioural indicators of pain
3. Comprehensive pain assessment (physical examination, relevant laboratory and diagnostic tests, effect and understanding of current illness, meaning of pain and distress caused by pain; coping responses to stress and pain, effects on activities of daily living; psychosocial and spiritual effects, psychological effects; situational factors, person's preferences and expectations/beliefs/myths)
4. Reassessment and ongoing assessment of pain
5. Documentation of pain assessment
6. Communicating findings of a pain assessment

##### Management

1. Establishing a plan for pain management
2. Pharmacological management of pain:
  - Selecting appropriate analgesics (step-wise approach for selection of analgesics; use of the World Health Organization [WHO] Analgesic Ladder for the treatment of chronic cancer pain)
  - Analgesics, such as acetaminophen or nonsteroidal anti-inflammatory drugs (NSAIDs), meperidine, and opioids
  - Consultation with pain management expert for complex situations
  - Adjuvant drugs, such as anticonvulsants and antidepressants for specific types of pain
  - Measures to optimize pain relief with opioids
  - Monitoring for safety, efficacy, side effects, and toxicities of medications
  - Referral to pain specialist as appropriate
  - Anticipation and prevention of common side effects of opioids
  - Anticipation and prevention of procedural pain

- Patient and family education regarding pain and prevention and treatment of medication side effects
  - Effective documentation
3. Non-pharmacological management of pain (e.g. superficial heat and cold, massage, relaxation, imagery, pressure or vibration, psychosocial interventions, cognitive-behavioral strategies combined with a multidisciplinary rehabilitative approach)
  4. Education, organization and policy strategies and approaches

#### MAJOR OUTCOMES CONSIDERED

- Effectiveness of pain relief strategies
- Safety and side effects of medications used to manage pain

### METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A systematic literature search in addition to a structured Internet search yielded a set of ten clinical practice guidelines related to the assessment and management of pain. After a quality appraisal was completed (see "Methods Used to Assess Quality and Strength of the Evidence" and "Rating Scheme for the Strength of the Evidence" fields), four documents were identified as high quality, relevant guidelines appropriate for use in the development of this best practice guideline. Specifically, they were strong in rigour and context/content which the panel identified as being important in terms of the data they required. These guidelines included:

- Agency for Health Care Policy and Research (AHCPR) (1992). Acute pain management: Operative or medical procedures and trauma. Clinical Practice Guideline, Number 1. AHCPR Publication Number 92-0032. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services.
- Agency for Health Care Policy and Research (AHCPR) (1994). Management of cancer pain. Clinical Practice Guideline, Number 9. AHCPR Publication Number 94-0592. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services.
- American Pain Society, Quality of Care Committee (1995). Quality improvement guidelines for the treatment of acute and cancer pain. Journal of the American Medical Association, 274(23), 1874-1880.
- Royal College of Nursing (1999). Clinical practice guidelines – The recognition and assessment of acute pain in children, Technical report. London: Royal College of Nursing.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

## METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

## RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

### Guideline Appraisal

A quality appraisal was conducted on ten identified clinical practice guidelines using a tool identified in the original guideline document. This tool provides a framework for assessing the quality of clinical practice guidelines and facilitates the decision-making process. Refer to the original guideline document for details.

## METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

## DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

## DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

In June of 2000, a panel of nurses with expertise in clinical practice and research in pain assessment and management in the acute, chronic, palliative and pediatric pain population, from both institutional and community settings, convened under the auspices of the Registered Nurses Association of Ontario (RNAO).

The first task of the panel was to identify and review existing clinical practice guidelines in order to build on the current understanding of pain management and assessment, and to reach consensus on the scope of the guideline. A decision was made by the panel to incorporate existing guidelines with applicability for nurses in the development of this best practice guideline and to create a document that would have clinical utility for practicing nurses. After a systematic evaluation, four documents were identified as high quality, relevant guidelines appropriate for use in the development of this best practice guideline. Specifically, they were strong in rigour and context/content which the panel identified as being important in terms of the data they required.

The development panel proceeded to develop a synthesis table of the recommendations from the four selected clinical practice guidelines. Practice recommendations were extracted or adapted from those guidelines that ranked the highest in rigour, context and content, and application (first round). A second round of practice recommendations were extracted from those guidelines which had high ratings for content or where content was relevant and could be

supported by existing literature. The panel adapted practice recommendations within these guidelines in order to ensure their applicability to best nursing practice. Systematic and narrative reviews of the literature were used in the development of practice recommendations that could not be extracted from existing guidelines. Panel consensus was obtained for each recommendation.

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

### Grades of Recommendations

The grading system used in this guideline has been adapted from the Scottish Intercollegiate Guideline Network (2000).

- A. Requires at least one randomized controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendations. This grade may include systematic review and/or meta-analysis of randomized controlled trials.
- B. Requires the availability of well conducted clinical studies, but no randomized clinical trials on the topic of the recommendation. This includes evidence from well-designed controlled studies without randomization, quasi-experimental studies, and non-experimental studies such as comparative studies, correlational studies, and case studies. The Registered Nurses Association of Ontario (RNAO) guideline development panel strongly supports the inclusion of well-designed qualitative studies in this category.
- C. Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates an absence of directly applicable clinical studies of good quality.

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing  
External Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

A draft guideline was submitted to a set of external stakeholders for review. The feedback received was reviewed and incorporated into the final draft guideline. This draft guideline was pilot implemented in selected practice settings in Ontario. Pilot implementation practice settings were identified through a "request for proposal" process conducted by the Registered Nurses Association of Ontario (RNAO). The implementation phase was evaluated, and the guideline was further refined and prepared for publication after the results of the evaluation were reported, and reviewed by the development panel.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

Definitions for the grades of recommendation (Grades A-C) are repeated at the end of the Major Recommendations.

#### Practice Recommendations - PART A: Assessment

##### Screening for Pain

##### Recommendation 1

Screen all persons at risk for pain at least once a day by asking the person or family/care provider about the presence of pain, ache or discomfort.

- For children, consider the following:
  - Ask parents the words a child might use to describe pain or observe the child for signs/behaviours indicative of pain.
  - Screen for pain when undertaking other routine assessments.
- For the frail elderly, non-verbal or non-cognizant person, screen to assess if the following markers are present:
  - States he/she has pain
  - Experiences change in condition
  - Diagnosed with chronic painful disease
  - Has history of chronic unexpressed pain
  - Taking pain-related medication for >72 hours
  - Has distress related behaviour or facial grimace
  - Indicates that pain is present through family/staff/volunteer observation

(Grade of Recommendation = C)

##### Parameters of Pain Assessment

##### Recommendation 2

Self-report is the primary source of assessment for verbal, cognitively intact persons. Family/care provider reports of pain are included for children and adults unable to give self-report.

(Grade of Recommendation = C)

##### Recommendation 3

A systematic, validated pain assessment tool is selected to assess the parameters of pain, which include:

- Location of pain

- Effect of pain on function and activities of daily living (ie. work, interference with usual activities, etc.)
- Level of pain at rest and during activity
- Medication usage
- P - provoking or precipitating factors
- Q - quality of pain (what words does the person use to describe pain? - aching, throbbing)
- R - radiation of pain (does the pain extend from the site?)
- S - severity of pain (intensity, 0-10 scale)
- T - timing (occasional, intermittent, constant)

(Grade of Recommendation = C)

#### Recommendation 4

A standardized tool with established validity is used to assess the intensity of pain.

- Visual Analogue Scale (VAS)
- Numeric Rating Scale (NRS)
- Verbal Scale
- Faces Scale
- Behavioural Scale

(Grade of Recommendation = C)

#### Recommendation 5

Pain assessment also includes physiological and behavioural indicators of pain, and should be included in populations such as infants, children, the cognitively impaired and in persons with acute pain.

(Grade of Recommendation = C)

#### Comprehensive Pain Assessment

#### Recommendation 6

The following parameters are part of a comprehensive pain assessment:

- Physical examination, relevant laboratory and diagnostic tests
- Effect and understanding of current illness
- Meaning of pain and distress caused by the pain
- Coping responses to stress and pain
- Effects on activities of daily living (especially in the frail elderly and non-cognizant person)
- Psychosocial and spiritual effects
- Psychological - social variables (anxiety, depression)
- Situational factors – culture, language, ethnic factors, economic effects of pain and treatment

- Person's preferences and expectations/beliefs/myths about pain management methods; and person's preferences and response to receiving information related to his/her condition and pain

(Grade of Recommendation = C)

## Reassessment and Ongoing Assessment of Pain

### Recommendation 7

Pain is reassessed on a regular basis according to the type and intensity of pain and the treatment plan.

- Pain is reassessed at each new report of pain and new procedure, when intensity increases, and when pain is not relieved by previously effective strategies.
- Pain is reassessed after the intervention has reached peak effect (15-30 minutes after parenteral drug therapy, 1 hour after immediate release analgesic, 4 hours after sustained release analgesic or transdermal patch, 30 minutes after non-pharmacological intervention).
- Acute post-operative pain should be regularly assessed as determined by the operation and severity of pain, with each new report of pain or instance of unexpected pain, and after each analgesic, according to peak effect time.

(Grade of Recommendation = C)

### Recommendation 8

The following parameters are included in the regular re-assessment of pain:

- Current pain intensity, quality and location
- Intensity of pain at its worst in past 24 hours, at rest and on movement
- Extent of pain relief achieved – response (reduction on pain intensity scale)
- Barriers to implementing the treatment plan
- Effects of pain on activities of daily living (ADL's), sleep and mood
- Side effects of medications for pain treatment (nausea, constipation)
- Level of sedation
- Strategies used to relieve pain, for example:
  - Analgesic doses taken regularly and for breakthrough pain
  - Non-pharmacological interventions:
    - Physical modalities
    - Cognitive/behavioural strategies
    - Rehabilitative strategies
  - Environmental changes
  - Reduction in anxiety

(Grade of Recommendation = C)

### Recommendation 9

Unexpected intense pain, particularly if sudden or associated with altered vital signs such as hypotension, tachycardia, or fever, should be immediately evaluated.

(Grade of Recommendation = C)

#### Documentation of Pain Assessment

##### Recommendation 10

Document on a standardized form that captures the person's pain experience specific to the population and setting of care. Documentation tools will include:

- Initial assessment, comprehensive assessment and re-assessment
- Monitoring tools that track efficacy of intervention (0-10 scale)

(Grade of Recommendation = C)

##### Recommendation 11

Document pain assessment regularly and routinely on standardized forms that are accessible to all clinicians involved in care.

(Grade of Recommendation = C)

##### Recommendation 12

Teach individuals and families (as proxy recorders) to document pain assessment on the appropriate tools when care is provided. This will facilitate their contributions to the treatment plan and will promote continuity of effective pain management across all settings.

(Grade of Recommendation = C)

#### Communicating Findings of a Pain Assessment

##### Recommendation 13

Validate with persons/care providers that the findings of the pain assessment (health care provider's and person's/care provider's) reflect the individual's experience of pain.

(Grade of Recommendation = C)

##### Recommendation 14

Communicate to members of the inter-disciplinary team pain assessment findings by describing parameters of pain obtained through the use of a structured assessment tool, the relief or lack of relief obtained from treatment methods, person's goals for pain treatment and the effect of pain on the person.

(Grade of Recommendation = C)

#### Recommendation 15

Advocate on behalf of the person for changes to the treatment plan if pain is not being relieved. The nurse will engage in discussion with the interdisciplinary health care team regarding identified need for change in the treatment plan. The nurse supports his/her recommendations with appropriate evidence, providing a clear rationale for the need for change, including:

- Intensity of pain using a validated scale
- Change in severity pain scores in last 24 hours
- Change in severity and quality of pain following administration of analgesic and length of time analgesic is effective
- Amount of regular and breakthrough pain medication taken in last 24 hours
- Person's goals for pain relief
- Effect of unrelieved pain on the person
- Absence/presence of side effects or toxicity
- Suggestions for specific changes to the treatment plan that are supported by evidence

(Grade of Recommendation = C)

#### Recommendation 16

Provide instruction to the person/care provider on:

- The use of a pain log or diary (provide a tool)
- Communicating unrelieved pain to their physician and supporting them in advocating on their own behalf

(Grade of Recommendation = C)

#### Recommendation 17

Report situations of unrelieved pain as an ethical responsibility using all appropriate channels of communication in the organization, including individual/care provider documentation.

(Grade of Recommendation = C)

#### Recommendation 18

Refer persons with chronic pain whose pain is not relieved after following standard principles of pain management to:

- A specialist skilled in dealing with the particular type of pain
- A multidisciplinary team to address the complex emotional, psycho/social, spiritual and concomitant medical factors involved

(Grade of Recommendation = C)

## Practice Recommendations - PART B: Management

### Establishing a Plan for Pain Management

#### Recommendation 19

Establish a plan for management in collaboration with interdisciplinary team members that is consistent with individual and family goals for pain relief, taking into consideration the following factors:

- Assessment findings
- Baseline characteristics of pain
- Physical, psychological, and sociocultural factors shaping the experience of pain
- Etiology
- Most effective pharmacological and non-pharmacological strategies
- Management interventions
- Current and future primary treatment plans

(Grade of Recommendation = C)

#### Recommendation 20

Provide individuals and families/care providers with a written copy of the treatment plan to promote their decision-making and active involvement in the management of pain. The plan will be adjusted according to the results of assessment and reassessment. Changes to the treatment plan will be documented and communicated to everyone involved in the implementation of the plan.

(Grade of Recommendation = A)

### Pharmacological Management of Pain: Selecting Appropriate Analgesics

#### Recommendation 21

Ensure that the selection of analgesics is individualized to the person, taking into account:

- The type of pain (acute or chronic, nociceptive and/or neuropathic)
- Intensity of pain
- Potential for analgesic toxicity (age, renal impairment, peptic ulcer disease, thrombocytopenia)
- General condition of the person
- Concurrent medical conditions
- Response to prior or present medications
- Cost to the person and family
- The setting of care

(Grade of Recommendation = A)

#### Recommendation 22

Advocate for use of the simplest analgesic dosage schedules and least invasive pain management modalities:

- The oral route is the preferred route for chronic pain and for acute pain as healing occurs.
- Tailor the route to the individual pain situation and the care setting.
- Intravenous administration is the parenteral route of choice after major surgery, usually via bolus and continuous infusion.

(Grade of Recommendation = C)

- The intramuscular route is not recommended for adults or infants/children because it is painful and not reliable.

(Grade of Recommendation = B)

### Recommendation 23

Use a step-wise approach in making recommendations for the selection of analgesics which are appropriate to match the intensity of pain:

- The use of the World Health Organization (WHO) Analgesic Ladder is recommended for the treatment of chronic cancer pain.
- Pharmacological management of mild to moderate postoperative pain begins with acetaminophen or nonsteroidal anti-inflammatory drugs (NSAIDs). However, moderate to severe pain should be treated initially with an opioid analgesic.

(Grade of Recommendation = B)

### Recommendation 24

Advocate for consultation with a pain management expert for complex pain situations which include, but are not limited to:

- Pain unresponsive to standard treatment
- Multiple sources of pain
- Mix of neuropathic and nociceptive pain
- History of substance abuse

(Grade of Recommendation = C)

### Recommendation 25

Recognize that acetaminophen or non-steroidal, anti-inflammatory drugs (NSAIDs) are used for the treatment of mild pain and for specific types of pain as adjuvant analgesics unless contraindicated.

(Grade of Recommendation = A)

#### Recommendation 26

Recognize that adjuvant drugs are important adjuncts in the treatment of specific types of pain.

- Adjuvant drugs such as anticonvulsants and antidepressants provide independent analgesia for specific types of pain.
- Extra caution is needed in administering antidepressant and anticonvulsant drugs to the elderly who may experience significant anticholinergic and sedative side effects.

(Grade of Recommendation = B)

#### Recommendation 27

Recognize that opioids are used for the treatment of moderate to severe pain, unless contraindicated, taking into consideration:

- Previous dose of analgesics
- Prior opioid history
- Frequency of administration
- Route of administration
- Incidence and severity of side effects
- Potential for age related adverse effects
- Renal function

(Grade of Recommendation = A)

#### Recommendation 28

Consider the following pharmacological principles in the use of opioids for the treatment of severe pain:

- Mixed agonist-antagonists (e.g., pentazocine) are not administered with opioids because the combination may precipitate a withdrawal syndrome and increase pain.
- The elderly generally receive greater peak and longer duration of action from analgesics than younger individuals, thus dosing should be initiated at lower doses and increased more slowly ("careful titration").
- Special precautions are needed in the use of opioids with neonates and infants under the age of six months. Drug doses, including those for local anaesthetics, should be calculated carefully based on the current or most appropriate weight of the neonate. Initial doses should not exceed maximum recommended amounts.

(Grade of Recommendation = B)

#### Recommendation 29

Recognize that meperidine is contraindicated for the treatment of chronic pain.

- Meperidine is not recommended for the treatment of chronic pain due to the build-up of the toxic metabolite normeperidene, which can cause seizures and dysphoria.
- Meperidine may be used in acute pain situations for very brief courses in otherwise healthy individuals who have not demonstrated an unusual reaction (ie. local histamine release at the infusion site) or allergic response to other opioids such as morphine or hydromorphone.
- Meperidine is contraindicated in patients with impaired renal function.

(Grade of Recommendation = A)

## Optimizing Pain Relief with Opioids

### Recommendation 30

Ensure that the timing of analgesics is appropriate according to personal characteristics of the individual, pharmacology (i.e., duration of action, peak-effect and half-life) and route of the drug.

(Grade of Recommendation = B)

### Recommendation 31

Recognize that opioids should be administered on a regular time schedule according to the duration of action and depending on the expectation regarding the duration of severe pain.

- If severe pain is expected for 48 hours post-operatively, routine administration may be needed for that period of time. Late in the post-operative course, analgesics may be effective given on an "as needed" basis.
- In chronic cancer pain, opioids are administered on an "around-the-clock" basis, according to their duration of action.
- Long-acting opioids are more appropriate when dose requirements are stable.

(Grade of Recommendation = A)

### Recommendation 32

Use principles of dose titration specific to the type of pain to reach the analgesic dose that relieves pain with a minimum of side effects, according to:

- Cause of the pain
- Individual's response to therapy
- Clinical condition
- Concomitant drug use
- Onset and peak effect
- Duration of the analgesic effect
- Age
- Known pharmacokinetics and pharmacodynamics of the drugs administered. Doses are usually increased every 24 hours for persons with chronic pain on immediate release preparations, and every 48 hours for persons on controlled

release opioids. The exception to this is transdermal fentanyl, which can be adjusted every 3 days.

(Grade of Recommendation = B)

#### Recommendation 33

Promptly treat pain that occurs between regular doses of analgesic (breakthrough pain) using the following principles:

- Breakthrough doses of analgesic in the post-operative situation are dependent on the routine dose of analgesic, the individual's respiratory rate, and the type of surgery, and are usually administered as bolus medications through patient-controlled analgesia (PCA) pumps.
- Breakthrough doses of analgesic should be administered to the person on an "as needed" basis according to the peak effect of the drug (orally or rectally [po/pr] = q1h; subcutaneously intramuscularly [SC/IM] = q30 min; intravenously [IV] = q10-15 min).
- It is most effective to use the same opioid for breakthrough pain as that being given for "around-the-clock" dosing.
- Individuals with chronic pain should have:
  - An immediate release opioid available for pain (breakthrough pain) that occurs between the regular administration times of the "around-the-clock" medication.
  - Breakthrough doses of analgesic for continuous cancer pain should be calculated as 10-15 per cent of the total 24-hour dose of the routine "around-the-clock" analgesic.
  - Breakthrough analgesic doses should be adjusted when the regular "around-the-clock" medication is increased.
  - Adjustment to the "around-the-clock" dose is necessary if more than 2-3 doses of breakthrough analgesic are required in a 24-hour period, and pain is not controlled.

(Grade of Recommendation = C)

#### Recommendation 34

Use an equianalgesic table to ensure equivalency between analgesics when switching analgesics. Recognize that the safest method when switching from one analgesic to another is to reduce the dose of the new analgesic by one-half in a stable pain situation.

(Grade of Recommendation = C)

#### Recommendation 35

Ensure that alternate routes of administration are prescribed when medications cannot be taken orally, taking into consideration individual preferences and the most efficacious and least invasive route.

- The indications for transdermal routes of medication include allergy to morphine, refractory nausea and vomiting, and difficulty swallowing.
- Consider using continuous subcutaneous infusion of opioids in individuals with cancer who are experiencing refractory nausea and vomiting, inability to swallow, or require this route to avoid continuous peaks and valleys in pain control.
- The cost of medications and the technology necessary for delivery (e.g. pain pumps) should be taken into consideration in selecting certain alternative routes of administration.
- Consider using a butterfly injection system to administer intermittent subcutaneous analgesics.
- Epidural access must be managed by clinicians with appropriate resources and expertise.

(Grade of Recommendation = C)

#### Recommendation 36

Recognize the difference between drug addiction, tolerance and dependency to prevent these from becoming barriers to optimal pain relief.

(Grade of Recommendation = A)

#### Monitoring for Safety and Efficacy

#### Recommendation 37

Monitor persons taking opioids who are at risk for respiratory depression recognizing that opioids used for people not in pain, or in doses larger than necessary to control the pain, can slow or stop breathing.

- Respiratory depression develops less frequently in individuals who have their opioid doses titrated appropriately. Those who have been taking opioids for a period of time to control chronic or cancer pain are unlikely to develop this symptom.
- The risk of respiratory depression increases with intravenous or epidural administration of opioids, rapid dose escalation, or renal impairment.

(Grade of Recommendation = A)

#### Recommendation 38

Monitor persons taking analgesic medications for side effects and toxicity. Recommend a change in opioid if pain relief is inadequate following appropriate dose titration and if the person has side effects refractory to prophylactic treatment such as myoclonus or confusion. Particular caution should be used when administering analgesics to children and the elderly.

(Grade of Recommendation = C)

#### Recommendation 39

Evaluate the efficacy of pain relief with analgesics at regular intervals and following a change in dose, route or timing of administration. Advocate for changes in analgesics when inadequate pain relief is observed.

(Grade of Recommendation = C)

#### Recommendation 40

Seek referral to a pain specialist for individuals who require increasing doses of opioids that are ineffective in controlling pain. Evaluation should include assessment for residual pathology and other pain causes, such as neuropathic pain.

(Grade of Recommendation = C)

#### Anticipate and Prevent Common Side Effects of Opioids

##### Recommendation 41

Anticipate and monitor individuals taking opioids for common side effects such as nausea and vomiting, constipation and drowsiness, and institute prophylactic treatment as appropriate.

(Grade of Recommendation = B)

##### Recommendation 42

Counsel patients that side effects to opioids can be controlled to ensure adherence with the medication regime.

(Grade of Recommendation = C)

##### Recommendation 43

Recognize and treat all potential causes of side effects taking into consideration medications that potentiate opioid side effects:

- Sedation – sedatives, tranquilizers, antiemetics
- Postural hypotension – antihypertensives, tricyclics
- Confusion – phenothiazines, tricyclics, antihistamines and other anticholinergics

(Grade of Recommendation = A)

#### Nausea and Vomiting

##### Recommendation 44

Assess all persons taking opioids for the presence of nausea and/or vomiting, paying particular attention to the relationship of the symptom to the timing of analgesic administration.

(Grade of Recommendation = C)

#### Recommendation 45

Ensure that persons taking opioid analgesics are prescribed an antiemetic for use on an "as needed" basis with routine administration if nausea/vomiting persists.

(Grade of Recommendation = C)

#### Recommendation 46

Recognize that antiemetics have different mechanisms of action and selection of the right antiemetic is based on this understanding and etiology of the symptom.

(Grade of Recommendation = C)

#### Recommendation 47

Assess the effect of the antiemetic on a regular basis to determine relief of nausea/vomiting and advocate for further evaluation if the symptom persists in spite of adequate treatment.

(Grade of Recommendation = C)

#### Recommendation 48

Consult with physician regarding switching to a different antiemetic if nausea/vomiting is determined to be related to the opioid, and does not improve with adequate doses of antiemetic.

(Grade of Recommendation = C)

### Constipation

#### Recommendation 49

Institute prophylactic measures for the treatment of constipation unless contraindicated, and monitor constantly for this side-effect.

- Laxatives should be prescribed and increased as needed to achieve the desired effect as a preventative measure for individuals receiving routine administration of opioids.

(Grade of Recommendation = B)

- Osmotic laxatives soften stool and promote peristalsis and may be an effective alternative for individuals who find it difficult to manage an increasing volume of pills.

(Grade of Recommendation = B)

- Stimulant laxatives may be contraindicated if there is impaction of stool. Enemas and suppositories may be needed to clear the impaction before resuming oral stimulants.

(Grade of Recommendation = C)

#### Recommendation 50

Counsel individuals on dietary adjustments that enhance bowel peristalsis recognizing personal circumstances (seriously ill individuals may not tolerate) and preferences.

(Grade of Recommendation = C)

#### Recommendation 51

Urgently refer persons with refractory constipation accompanied by abdominal pain and/or vomiting to the physician.

(Grade of Recommendation = C)

#### Drowsiness/Sedation

#### Recommendation 52

Recognize that transitory sedation is common and counsel the person and family/care provider that drowsiness is common upon initiation of opioid analgesics and with subsequent dosage increases.

(Grade of Recommendation = C)

#### Recommendation 53

Evaluate drowsiness which continues beyond 72 hours to determine the underlying cause and notify the physician of confusion or hallucinations that accompany drowsiness.

(Grade of Recommendation = C)

#### Anticipate and Prevent Procedural Pain

#### Recommendation 54

Anticipate pain that may occur during procedures such as medical tests and dressing changes, and combine pharmacologic and non-pharmacologic options for prevention.

(Grade of Recommendation = C)

#### Recommendation 55

Recognize that analgesics and/or local anaesthetics are the foundation for pharmacological management of painful procedures. Anxiolytics and sedatives are specifically for the reduction of associated anxiety. If used alone, anxiolytics and sedatives blunt behavioural responses without relieving pain.

(Grade of Recommendation = C)

#### Recommendation 56

Ensure that skilled supervision and appropriate monitoring procedures are instituted when conscious sedation is used.

(Grade of Recommendation = C)

#### Patient and Family Education

#### Recommendation 57

Provide the person and their family/care providers with information about their pain and the measures used to treat it, with particular attention focused on correction of myths and strategies for the prevention and treatment of side effects.

(Grade of Recommendation = A)

#### Recommendation 58

Ensure that individuals understand the importance of promptly reporting unrelieved pain, changes in their pain, new sources or types of pain and side effects from analgesics.

(Grade of Recommendation = C)

#### Recommendation 59

Clarify the differences between addiction, tolerance, and physical dependence to alleviate misbeliefs that can prevent optimal use of pharmacological methods for pain management.

- Addiction (psychological dependence) is not physical dependence or tolerance and is rare with persons taking opioids for chronic pain.

- Persons using opioids on a chronic basis for pain control can exhibit signs of tolerance requiring upward adjustments of dosage. However, tolerance is usually not a problem and people can be on the same dose for years.
- Persons who no longer need an opioid after long-term use need to reduce their dose slowly over several weeks to prevent withdrawal symptoms because of physical dependence.

(Grade of Recommendation = A)

#### Effective Documentation

##### Recommendation 60

Document all pharmacological interventions on a systematic pain record that clearly identifies the effect of analgesic on pain relief. Utilize this record to communicate with interdisciplinary colleagues in the titration of analgesic. The date, time, severity, location and type of pain should all be documented.

(Grade of Recommendation = C)

##### Recommendation 61

Provide the individual and family in the home setting with a simple strategy for documenting the effect of analgesics.

(Grade of Recommendation = C)

#### Non-Pharmacological Management of Pain

##### Recommendation 62

Combine pharmacological methods with non-pharmacological methods to achieve effective pain management.

- Non-pharmacological methods of treatment should not be used to substitute for adequate pharmacological management.
- The selection of non-pharmacological methods of treatment should be based on individual preference and the goal of treatment.
- Any potential contraindications to non-pharmacological methods should be considered prior to application.

(Grade of Recommendation = C)

##### Recommendation 63

Institute specific strategies known to be effective for specific types of pain, such as superficial heat and cold, massage, relaxation, imagery and pressure or vibration, unless contraindicated.

(Grade of Recommendation = C)

#### Recommendation 64

Implement psychosocial interventions that facilitate coping of the individual and family early in the course of treatment.

(Grade of Recommendation = B)

#### Recommendation 65

Institute psycho-educational interventions as part of the overall plan of treatment for pain management.

(Grade of Recommendation = A)

#### Recommendation 66

Recognize that cognitive-behavioural strategies combined with a multidisciplinary rehabilitative approach are important strategies for treatment of chronic non-malignant pain.

Grade of Recommendation = A)

### Education Recommendations

#### Recommendation 67

Nurses prepared at the entry to practice level must have knowledge of the principles of pain assessment and management.

(Grade of Recommendation = C)

#### Recommendation 68

The principles of pain assessment and management should be included in orientation programs and be made available through professional development opportunities in the organization.

(Grade of Recommendation = C)

#### Recommendation 69

Educational programs should be designed to facilitate change in nurses' knowledge, skills, attitudes and beliefs about pain assessment and management in order to ensure support for new practices.

(Grade of Recommendation = C)

#### Recommendation 70

Educational programs must provide opportunities for the nurse to demonstrate effective practices in pain assessment and management, and must address the resources necessary to support practice (eg. practice modifications, reminder systems, removal of barriers etc).

(Grade of Recommendation = C)

### Organization and Policy Recommendations

#### Recommendation 71

Nursing regulatory bodies should ensure that Standards of Nursing Practice include the adoption of standards for accountability for pain management.

(Grade of Recommendation = C)

#### Recommendation 72

Health care organizations must have documentation systems in place to support and reinforce standardized pain assessment and management approaches.

(Grade of Recommendation = C)

#### Recommendation 73

Health care organizations must have educational resources available to individuals and families/care providers regarding their participation in achieving adequate pain relief.

(Grade of Recommendation = C)

#### Recommendation 74

Health care organizations must demonstrate their commitment to recognizing pain as a priority problem. Policies must clearly support or direct expectations of staff that satisfactory pain relief is a priority.

(Grade of Recommendation = C)

#### Recommendation 75

Health care organizations must ensure that resources are available to individuals, family/care providers and staff to provide effective pain assessment and management, such as access to experts in pain management.

(Grade of Recommendation = C)

#### Recommendation 76

Health care organizations need to demonstrate support for an interdisciplinary approach to pain care.

(Grade of Recommendation = C)

#### Recommendation 77

Health care organizations must have quality improvement systems in place to monitor the quality of pain management across the continuum of care.

(Grade of Recommendation = C)

#### Recommendation 78

In planning educational strategies, consider the most effective methods for dissemination and implementation of guideline recommendations. These methods include, but are not limited to:

- The use of a model of behaviour change to guide the development of strategies for implementation
- The use of a combination of strategies to influence practice change
- Designing implementation strategies that take into consideration the influence of the organizational environment

(Grade of Recommendation = A)

#### Recommendation 79

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as the appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:

- An assessment of organizational readiness and barriers to education
- Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process
- Dedication of a qualified individual to provide the support needed for the education and implementation process
- Ongoing opportunities for discussion and education to reinforce the importance of best practices
- Opportunities for reflection on personal and organizational experience in implementing guidelines

In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the Toolkit: Implementation of clinical practice guidelines based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of the RNAO nursing best practice guideline "Assessment and Management of Pain."

(Grade of Recommendation = C)

## Definitions:

### Grades of Recommendations

- A. Requires at least one randomized controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendations. This grade may include systematic review and/or meta-analysis of randomized controlled trials.
- B. Requires the availability of well conducted clinical studies, but no randomized clinical trials on the topic of the recommendation. This includes evidence from well-designed controlled studies without randomization, quasi-experimental studies, and non-experimental studies such as comparative studies, correlational studies, and case studies. The Registered Nurses Association of Ontario (RNAO) guideline development panel strongly supports the inclusion of well-designed qualitative studies in this category.
- C. Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates an absence of directly applicable clinical studies of good quality.

### CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

- This best practice guideline is intended to provide direction to practicing nurses in all care settings, both institutional and community, in the assessment and management of pain, including prevention of pain wherever possible.
- Guideline implementation is intended to help relieve patients' pain, increase patient satisfaction and improve quality of life.
- Nurses, other health care professionals and administrators who are leading and facilitating practice changes will find this document valuable for the development of policies, procedures, protocols, educational programs, assessment and documentation tools, etc.

### POTENTIAL HARMS

Side Effects and Toxicities of Medications Used to Manage Pain

- Common side effects of opioids include nausea and vomiting, constipation and drowsiness. Persons with acute pain, particularly children, may be at particular risk for respiratory depression depending on the dose of opioid prescribed. Caution should be taken with children and the elderly as drug interactions occur more frequently.
- Extra caution is needed in administering antidepressant and anticonvulsant drugs to the elderly who may experience significant anticholinergic and sedative side effects.
- Non-steroidal anti-inflammatory drugs should be used with caution for persons with a history of peptic ulcer disease, bleeding disorders, abnormal and/or diminished renal function and concomitant use of steroids, and anticoagulants. Extra precautions are required in the long-term use of nonsteroidal anti-inflammatory drugs in the elderly.

## CONTRAINDICATIONS

### CONTRAINDICATIONS

- Meperidine is contraindicated for the treatment of chronic pain.
- Meperidine is contraindicated in patients with impaired renal function.

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

- Nurses working in specialty areas such as pediatrics, gerontology, chronic non-malignant pain, malignant pain, acute trauma and surgical areas will require further practice direction from clinical practice guidelines in their unique area of focus.
- These best practice guidelines are related only to nursing practice and not intended to take into account fiscal efficiencies. These guidelines are not binding for nurses and their use should be flexible to accommodate client/family wishes and local circumstances. They neither constitute a liability or discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor Registered Nurses Association of Ontario (RNAO) give any guarantee as to the accuracy of the information contained in them nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omission in the contents of this work. Any reference throughout the document to specific pharmaceutical products as examples does not imply endorsement of any of these products.
- The guideline contains recommendations for best nursing practices in the assessment and management of pain for Registered Nurses (RNs) and Registered Practical Nurses (RPNs). It is acknowledged that the individual competency of nurses varies between nurses and across categories of nursing professionals (RNs and RPNs) and is based on knowledge, skills, attitudes, critical analysis and decision making which is enhanced over time by experience and education. It is anticipated that individual nurses will perform only those aspects of pain assessment and management for which they have received appropriate education and experience, and which are within the scope of their practice.

- It is expected that nurses, both registered nurses (RNs) and registered practical nurses (RPNs), will seek appropriate consultation in instances where the patient's care needs surpass the ability of the individual nurse to act independently. It is acknowledged that effective patient care depends on a coordinated interdisciplinary approach incorporating ongoing communication between health professionals and patients, ever mindful of the personal preferences and unique needs of each individual patient.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

Toolkit:

#### Implementing Clinical Practice Guidelines

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as the appropriate facilitation. In this regard, Registered Nurses Association of Ontario (RNAO) (through a panel of nurses, researchers and administrators) has developed The Toolkit for Implementing Clinical Practice Guidelines, based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of any clinical practice guideline in a health care organization.

The "Toolkit" provides step by step directions to individuals and groups involved in planning, coordinating, and facilitating the guideline implementation. Specifically, the "Toolkit" addresses the following key steps:

1. Identifying a well-developed, evidence-based clinical practice guideline
2. Identification, assessment and engagement of stakeholders
3. Assessment of environmental readiness for guideline implementation
4. Identifying and planning evidence-based implementation strategies
5. Planning and implementing evaluation
6. Identifying and securing required resources for implementation

Implementing guidelines in practice that result in successful practice changes and positive clinical impact is a complex undertaking. The "Toolkit" is one key resource for managing this process.

For specific recommendations regarding implementation of this guideline, refer to the "Major Recommendations" field.

#### Evaluation and Monitoring of Guideline

Evaluating and monitoring the quality of pain care can focus on one or all of three areas of quality, namely, structure, process and outcome components depending on the purpose of measurement. Refer to the original guideline document for a discussion of these three areas of quality.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

End of Life Care  
Getting Better  
Living with Illness  
Staying Healthy

### IOM DOMAIN

Effectiveness  
Patient-centeredness  
Safety

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Registered Nurses Association of Ontario (RNAO). Assessment and management of pain. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2002 Nov. 142 p. [109 references]

### ADAPTATION

This guideline is a synthesis of source guidelines:

- Agency for Health Care Policy and Research (AHCPR) (1992). Acute pain management: Operative or medical procedures and trauma. Clinical Practice Guideline, Number 1. AHCPR Publication Number 92-0032. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services.
- Agency for Health Care Policy and Research (AHCPR) (1994). Management of cancer pain. Clinical Practice Guideline, Number 9. AHCPR Publication Number 94-0592. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services.
- American Pain Society, Quality of Care Committee (1995). Quality improvement guidelines for the treatment of acute and cancer pain. Journal of the American Medical Association, 274(23), 1874-1880.
- Royal College of Nursing (1999). Clinical practice guidelines – The recognition and assessment of acute pain in children, Technical report. London: Royal College of Nursing.

### DATE RELEASED

2002 Nov

### GUIDELINE DEVELOPER(S)

Registered Nurses Association of Ontario - Professional Association

#### SOURCE(S) OF FUNDING

Funding was provided by the Ontario Ministry of Health and Long Term Care.

#### GUIDELINE COMMITTEE

Not stated

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#### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The Registered Nurses Association of Ontario (RNAO) received funding from the Ministry of Health and Long-Term Care (MOHLTC). This guideline was developed by a panel of nurses and researchers convened by the RNAO and conducting its work independent of any bias or influence from the MOHLTC.

#### GUIDELINE STATUS

This is the current release of the guideline.

#### GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the [Registered Nurses Association of Ontario \(RNAO\) Web site](#).

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines, 438 University Avenue, Suite 1600, Toronto, Ontario, M5G 2K8; Fax: (416) 599-1926; Order forms available on the [RNAO Web site](#).

#### AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Toolkit: implementation of clinical practice guidelines. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2002 Jan. 91 p.

Electronic copies: Available in Portable Document Format (PDF) from the [RNAO Web site](#)

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines, 438 University Avenue, Suite 1600, Toronto, Ontario, M5G 2K8; Fax: (416) 599-1926; Order forms available on the [RNAO Web site](#).

## PATIENT RESOURCES

The following is available:

- Health information fact sheet. Gaining control of your pain. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2003 Nov. 2 p.

Electronic copies: Available in Portable Document Format (PDF) from the [Registered Nurses Association of Ontario \(RNAO\) Web site](#).

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines, 438 University Avenue, Suite 1600, Toronto, Ontario, M5G 2K8; Fax: (416) 599-1926; Order forms available on the [RNAO Web site](#).

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

## NGC STATUS

This NGC summary was completed by ECRI on December 17, 2003. The information was verified by the guideline developer on January 16, 2004.

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