1. Structured Website Search

A member of the RNAO guideline development team (project coordinator) searched an established list of websites for guidelines.

Guidelines were selected based on the following criteria:
- Focus on topic assessment and management of pain—in general (excluding condition specific entities e.g., musculoskeletal, cardiac or urology disease/disorders) for all types of pain (e.g., acute, persistent [chronic], nociceptive, neuropathic) which includes:
  - Assessment
  - Prevention & Management
  - Education/Training programs
  - Organizational Responsibilities
- Published between 2007 to 2012
- Published in English, national and international in scope
- Accessible for retrieval

Websites Searched:

AHRQ: Agency for Healthcare Research and Quality
AHFMR Health Technology Assessment Publications
Alberta Medical Association Clinical Practice Guidelines
American Society for Pain Management Nursing (ASPMN)
American Pain Society
Australian Government National Health and Medical Research Council (NHMRC)
Bandolier Journal
BC Office of Health Technology Assessment
British Columbia Council on Clinical Practice Guidelines
British Columbia Office of Health Technology Assessment
Canadian Cochrane Centre
Canadian Coordinating Office for Health Technology Assessment (CCOHTA)
Canadian Institute for Health Information (CIHI)
Canadian Medical Association Infobase: Clinical Practice Guidelines
Canadian Pain Coalition
Centers for Disease Control and Prevention
Centre for Evidence-Based Mental Health
Centre for Evidence-Based Pharmacotherapy
Centres for Reviews and Dissemination (York University)
Childkind International
City of Hope Pain & Palliative Care Resource Center
College of Nurses of Ontario: Standards:
CREST
Evidence-based On-Call
European Observatory on Health Care for Chronic Conditions World Health Organization
Geriatric Nursing Resource
Guidelines Advisory Committee
Guidelines International Network
Health Care Association of New Jersey
Institute for Clinical Evaluative Sciences
Institute for Clinical Systems Improvement:
Institute of Medicine Report on Pain (USA)
International Association for Hospice and Palliative Care
International Association for the Study of Pain (IASP)
Joanna Briggs Institute for Evidence Based Nursing & Midwifery (Australia)
Joint Commission on Accreditation of Health-care Organizations (JCAHO)
Medic8
Monash University Medicine, Nursing and Health Sciences
Nursing and Midwifery Practice Development Unit
National Institute for Health and Clinical Excellence (NICE)
National Center for Biotechnology Information (NCBI)
National Information Centre on Health Services Research and Health Care Technology (NICHSR) NLM Library
National Institute of Health (NIS) Consensus Development Program (U.S.A)
New Zealand Guidelines Group
Pain: The Welcome Trust
Registered Nurses’ Association of Ontario, Nursing Best Practice Guidelines
Royal College of Nursing
Royal College of Physicians
Sarah Cole Hirsh Institute for Best Nursing Practices Based on Evidence
The University of Toronto Centre for the Study of Pain
Scottish Intercollegiate Guidelines Network
The Canadian Pain Society
The Physiotherapy Evidence Database
The Royal Children’s Hospital Melbourne Clinical Practice Guideline
TRIP Database
United States Department of Veteran Affairs (VA/DoD Clinical Practice Guidelines)
United States Preventive Service Task Force  
University of Wisconsin Comprehensive Cancer Centre - Pain & Policy Studies Group  
Virginia Henderson International Nursing Library

2. Hand Search:

RNAO expert panel members were asked to review personal libraries to identify and submit potentially relevant guidelines. Guidelines submitted for consideration by RNAO expert panel members were integrated into the retrieved list of guidelines if they had not been identified by the on-line guideline search and met the inclusion criteria.

**Systematic Review Search Strategy**

Concurrent with the review of existing guidelines, a systematic review for recent literature relevant to the scope of the guideline was conducted by a health sciences librarian.

**Databases Searched:** Cumulative Index to Nursing and Allied Health (CINAHL), Cochrane Controlled Trials (CT), Cochrane Systematic Reviews (SR), Database of Abstracts of Reviews of Effectiveness (DARE), Embase and Medline.

**Inclusion Criteria:**
*(Initial):*

- Focus on topic assessment and management of pain—in general (excluding condition specific entities e.g., musculoskeletal, cardiac or urology disease/disorders) for all types of pain (e.g., acute, persistent [chronic], nociceptive, neuropathic) which includes:
  - Assessment
  - Prevention & Management
  - Education/Training programs
  - Organizational Responsibilities
- Any age
- Published in English
- Accessible for Retrieval
- Any health setting or sector
- Interdisciplinary relevance
- Systematic reviews, RCTs, meta-analysis, higher quality qualitative and quantitative research studies.
(Subsequent*):
- As per initial inclusion criteria with following exceptions:
  - Limited to meta-analysis, systematic reviews, integrative reviews, randomized controlled trials and qualitative evidence synthesis; and
  - Within scope of nursing practice (registered nurses and registered practical nurses).

* Note: Due to the volume of research based on the initial inclusion criteria and subsequent search inclusion criteria for study methodology was changed.

Exclusion Criteria:
- Dissertations, research protocols, commentaries / letters to the editor, narrative/descriptive papers, lab/pre-clinical studies, incidence/prevalence papers
- Unpublished (grey literature)

Search Terms

Below are condensed search strategies used for each research question in MEDLINE. Comparable terms were used in all other databases searched.

Question 1: What are the most effective nursing methods of assessment of pain in persons?

<table>
<thead>
<tr>
<th>Population</th>
<th>Intervention</th>
<th>Limits</th>
</tr>
</thead>
</table>
Question 2: What are the most effective nursing interventions to prevent and manage pain in persons (pharmacological; non-pharmacological, complementary/alternative)?

<table>
<thead>
<tr>
<th>Population</th>
<th>Intervention</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient, client, person, individual, consumer, with presence or risk of any type of pain</td>
<td>Pain Management/ Primary-Secondary-Tertiary Prevention/ Early Medical Intervention/Interventions/ Pharmacology<em>mp/ Drug Therapy/ Drug Therapy, Combination/ Drug Therapy, Computer-Assisted/ Polypharmacy/ Therapeutics/ Analgesics/ Analgesics - Non- Narcotic-, Opioid- Short-Acting- Epidural- Obstetrical/ Patient-Controlled/ Opiate/ Narcotic/ Antiinflammatory/ Antiinflammatory/ NSAID/ Treatment/ Complementary Therapies/ Pharmacognosy/ Plants, Medicinal/ Ethnopharmacology/ Ethnobotany/ Materia Medica/ Physical Therapy Modalities/ Exercise – therapy-movement techniques-stimulation/ Hydrotherapy/Hyperthermia therapy/ Psychotherapy/ Acupuncture/ holistic or wholistic; homeopathy</em>:mp/ mind-body/ meditation/ Yoga/ Tai Chi/ Acupressure/ Massage/ Reflex therapy<em>mp/ Naturopathy</em> / Phytotherapy/ Herb/ speleotherapy/ Spiritual/ Music/ Dance/ Play/ Aroma/ Physiotherapy/ Electric/ reflexology*. mp / Relaxation/ Hypnosis/ Non pharmacy*mp.</td>
<td>Humans, English Language and yr= “2007- May 2012” Nursing Nurses Nursing Staff Nursing, Practical Nurse’s Role Nurse-Patient Relations nurs*.mp. nurs*.jn. nu.fs. Pharmacological Nonpharmacological</td>
</tr>
</tbody>
</table>

Question 3: What education is needed for nursing students on effective pain care?

<table>
<thead>
<tr>
<th>Population</th>
<th>Intervention</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient, client, person, individual, consumer, with presence or risk of any type of pain</td>
<td>Pain/ Pain Measurement/ Pain Threshold/ &quot;Outcome and Process Assessment (Health Care)&quot;/ Needs Assessment/ Nursing – Risk-Geriatric Assessment/ Primary-Secondary-Tertiary Prevention/ Management/ Assessment / Prevention/ Evaluation/ Screen.</td>
<td>English Language and yr= “2007-May 2012” Students, Nursing Education, Nursing Education, Nursing Baccalaureate Education, Nursing, Diploma Programs Curriculum</td>
</tr>
</tbody>
</table>
Question 4. How do health-care organizations support optimal pain assessment and management practices?

<table>
<thead>
<tr>
<th>population</th>
<th>Intervention</th>
<th>Limits</th>
</tr>
</thead>
</table>

**Hand Search**

RNAO expert panel members were asked to review personal libraries to identify key articles not found through the above search strategies. Articles identified by RNAO expert panel members were included in the search results if two nursing research associates independently determined the articles had not been identified by the literature search and met the inclusion criteria.