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 Database of Systematic Reviews, Cochrane Central Register of Controlled Trials, Embase, Educational Resource Information Centre (ERIC) (used only for research question three), MEDLINE, MEDLINE In-Process, and PsychINFO.

**Inclusion Criteria:**
The following criteria were used to guide the literature search:

- A primary focus of the article is on the topic area: women with newborn or infant less than 12 months who are at risk for or have antenatal or postpartum depression. Women may have other mental health disorders during pregnancy or postpartum [e.g. anxiety] but primary focus must be on:
  - assessment and screening of antenatal or postpartum depression;
  - management approaches for antenatal or postpartum depression;
  - nursing education required for assessment and management of antenatal or postpartum depression; and
  - organizational policies and structures that enable assessment and management of antenatal or postpartum depression.
- Published between January 2006 and June 2015
- Published in English
- Accessible for retrieval
- Applicable across health settings/sectors where nurses provide direct clinical care to pregnant or postpartum women
- Primary focus on Nurses (RN, RPN, NP, CNS)
- Secondary focus on other health-care providers (whose scope of practice overlaps with nursing)
- Applicable to nurses in a Canadian context
- Study methodology limited to all types of primary studies: quantitative, qualitative, mixed methods, and reviews that address search terms.

**Exclusion Criteria:**
The following criteria were used to exclude literature from the search:

- Topic not related to antenatal or postpartum depression, or other mental illnesses beyond the topic area (e.g. eating disorders, bipolar disorder, postpartum psychosis, postpartum blues, etc.).
- Dissertations, commentaries, narrative, anecdotal articles, letters to the editor, editorials, expert reports, consensus documents, discussion papers, case studies, case series
- Studies without specified methodology
- Non-English studies
- Unpublished (grey literature)
• Studies involving animals
• Articles related to building or validating assessment/screening tools
• Articles with a specific focus on effectiveness of certain pharmacologic interventions
• Articles with a specific focus on effectiveness of particular clinical diagnostic tests

**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:** In the area of perinatal mental health, what are effective screening and assessment strategies for identifying symptoms of depression during pregnancy and postpartum up to one year after childbirth?

<table>
<thead>
<tr>
<th>Population (Target Users)</th>
<th>Condition</th>
<th>Assessment</th>
<th>Limits</th>
</tr>
</thead>
</table>
| Nurses and regulated health care professionals (Should include the RN as part of the health care team) | • Postpartum depression  
• Puerperal disorders  
• Puerperal depression  
• Postnatal depression  
• Antenatal depression  
• Prenatal depression  
• Antepartum depression | • Outcome and process assessment  
• Patient outcome assessment  
• Needs assessment  
• Nursing assessment  
• Self-assessment  
• Risk assessment  
• Symptom assessment  
• Assess  
• Screen  
• Evaluate  
• Measure  
• Nursing diagnosis  
• Risk factors  
• Mass screening  
• Primary prevention  
• Patient safety  
• Sensitivity  
• Prognosis | • Not case reports, comments, consensus development, conferences, duplicate publications, editorial, lectures, letters, newspaper, practice guidelines.  
• Not animals  
• English  
• 2006 - 2015 |

**Question 2:** In the area of perinatal mental health, what are effective management interventions for women experiencing depression during pregnancy and postpartum up to one year after childbirth?

<table>
<thead>
<tr>
<th>Population (Target Users)</th>
<th>Condition</th>
<th>Intervention</th>
<th>Limits</th>
</tr>
</thead>
</table>
| Nurses and regulated health care professionals (Should include the RN as part of the health care team) | • Postpartum depression  
• Puerperal disorders  
• Puerperal depression  
• Postnatal | • Patient care management  
• Patient care planning  
• Therapeutics  
• Safety | • Not case reports, comments, consensus development, conferences, duplicate publications, editorial, lectures, letters, |
<table>
<thead>
<tr>
<th>Population (Target Users)</th>
<th>Condition</th>
<th>Education</th>
<th>Limits</th>
</tr>
</thead>
</table>
| Nurses and regulated health care professionals (Should include the RN as part of the health care team) | • Postpartum depression  
• Puerperal disorders  
• Puerperal depression  
• Postnatal depression  
• Antenatal depression  
• Prenatal depression  
• Antepartum depression | • Education  
• Professional education  
• Continuing education  
• Nursing education  
• Professional retraining education  
• Distance education  
• Education department  
• Public health professional education  
• Teaching hospitals  
• Clinical clerkship  
• In-service training  
• Staff development  
• Preceptorship  
• Teaching  
• Curriculum | • Not case reports, comments, consensus development, conferences, duplicate publications, editorial, lectures, letters, newspaper, practice guidelines.  
• Not animals  
• English  
• 2006 - 2015 |
**Question 4:** How to health care organizations and the broader health care system ensure optimal health promotion and prevention, assessment and management of perinatal depression?

<table>
<thead>
<tr>
<th>Population (Target Users)</th>
<th>Condition</th>
<th>Organizational Intervention</th>
<th>Limits</th>
</tr>
</thead>
</table>
| Nurses and regulated health care professionals (Should include the RN as part of the health care team) at any or all settings. Care teams including collaborative, interprofessional or multidisciplinary. | • Postpartum depression  
• Puerperal disorders  
• Puerperal depression  
• Postnatal depression  
• Antenatal depression  
• Prenatal depression  
• Antepartum depression | • Policy  
• Health policy  
• Organizational culture  
• Organizational innovation  
• Organizational objectives  
• Theoretical models  
• Decision making  
• Health care economics and organizations  
• Health planning organizations  
• Health planning support  
• Legislation  
• Government programs  
• Cost-benefit analyses  
• Quality improvement  
• Funding  
• Economic  
• Finance | • Not case reports, comments, consensus development, conferences, duplicate publications, editorial, lectures, letters, newspaper, practice guidelines.  
• Not animals  
• English  
• 2006 - 2015 |

**Hand Search**

Panel members were asked to review personal libraries to identify key articles not found through the above search strategies. Articles identified by 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.
Prior to publication, the systematic review informing the practice recommendations for this guideline was updated. The purpose of the systematic review update was to ensure that any relevant research supporting or contesting the existing practice recommendations, published since the initial search was conducted in 2015, was incorporated into the guideline.

**Databases Searched:** Cumulative Index to Nursing and Allied Health (CINAHL), MEDLINE, and The Cochrane Library.

**Inclusion Criteria:**
The following criteria were used to guide the literature search:
- A primary focus of the article is on the topic area: women with newborn or infant less than 12 months who are at risk for or have antenatal or postpartum depression. Women may have other mental health disorders during pregnancy or postpartum [e.g. anxiety] but primary focus must be on:
  - assessment and screening of antenatal or postpartum depression;
  - management approaches for antenatal or postpartum depression;
- Published between May 2015 and July 2017
- Published in English
- Accessible for retrieval
- Applicable across health settings/sectors where nurses provide direct clinical care to pregnant or postpartum women
- Primary focus on Nurses (RN, RPN, NP, CNS)
- Secondary focus on other health-care providers (whose scope of practice overlaps with nursing)
- Applicable to nurses in a Canadian context
- Study methodology limited to all types of primary studies: quantitative, qualitative, mixed methods, and reviews that address search terms.

**Exclusion Criteria:**
The following criteria were used to exclude literature from the search:
- Topic not related to antenatal or postpartum depression, or other mental illnesses beyond the topic area (e.g. eating disorders, bipolar disorder, postpartum psychosis, postpartum blues, etc.).
- Dissertations, commentaries, narrative, anecdotal articles, letters to the editor, editorials, expert reports, consensus documents, discussion papers, case studies, case series
- Studies without specified methodology
- Non-English studies
- Unpublished (grey literature)
- Studies involving animals
- Articles related to building or validating assessment/screening tools
- Articles with a specific focus on effectiveness of certain pharmacologic interventions
- Articles with a specific focus on effectiveness of particular clinical diagnostic tests
**Search Terms**
Below are condensed search strategies used in MEDLINE. Comparable terms were used in all other databases searched.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Assessment/ Intervention</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postpartum Depression</td>
<td>Symptom Assessment</td>
<td>• Not case reports, comments, consensus development, conferences, duplicate publications, editorial, lectures, letters, newspaper, practice guidelines.</td>
</tr>
<tr>
<td>Puerperal Disorders</td>
<td>Needs Assessment</td>
<td>• Not animals</td>
</tr>
<tr>
<td>Perinatal Depression</td>
<td>Patient-Centered Care</td>
<td>• English</td>
</tr>
<tr>
<td>Antenatal Depression</td>
<td>Risk Assessment</td>
<td>• May 2015 – July 2017</td>
</tr>
<tr>
<td>Postnatal Depression</td>
<td>Self-Assessment</td>
<td></td>
</tr>
<tr>
<td>Pre-natal Depression</td>
<td>Nursing Assessment</td>
<td></td>
</tr>
<tr>
<td>Antepartum Depression</td>
<td>Disease Management</td>
<td></td>
</tr>
<tr>
<td>Antepartum Disorder</td>
<td>Patient Care Planning</td>
<td></td>
</tr>
<tr>
<td>Maternal Mental Health</td>
<td>Risk Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self Care</td>
<td></td>
</tr>
</tbody>
</table>
Updated Systematic Review Search Strategy (2013 – 2018)

Prior to publication, the systematic review informing the practice, education and organization and system policy recommendations for this guideline were updated. The purpose of the systematic review update was to ensure that any relevant research supporting or contesting the existing practice, education, and organization and system policy recommendations, published since the initial search was conducted, was incorporated into the guideline. The search for studies on perinatal depression (i.e., key words and subject headings) was expanded from the 2006 – 2015 searches. The search from 2015 – 2017 included all four research questions.

Databases Searched: Cumulative Index to Nursing and Allied Health (CINAHL), Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials, Embase, Educational Resource Information Centre (ERIC) (used only for research question three), MEDLINE, MEDLINE In-Process, and PsychINFO.

Inclusion Criteria:
The following criteria were used to guide the literature search:
- Screening and assessment strategies for identifying antenatal and/or postpartum depression
- Management interventions for women experiencing antenatal and/or postpartum depression
- Primarily focused on nurses (RN, RPN/LPN,NP) (can be in collaboration with other health-care providers)
- Outcomes as identified below
- Perinatal depression in adults (aged 18 years and older)
- Publication year 2013 to present
- Any study design (qualitative, quantitative, mixed methods, systematic reviews, and literature reviews)
- Published in English and accessible for retrieval

Exclusion Criteria:
The following criteria were used to exclude literature from the search:
- Studies not focused on assessment and screening strategies for perinatal depression
- Studies not focused on management interventions for perinatal depression
- Studies focused on postpartum blues, postpartum psychosis, anxiety
- Other mental illnesses beyond perinatal depression such as eating disorders or bipolar disorder in the postpartum period
- Studies not relevant to the identified outcomes
- Focused on population younger than 18 years of age
- Non-English research studies
- Studies published prior to 2013
- Unpublished literature (e.g. grey literature)
- Studies that are not primary research studies or reviews (i.e. expert reports, editorials, white papers, commentaries, consensus documents, narratives, discussion papers, case studies, case series, studies without a specific methodology)

Search Terms
The condensed search strategies used in MEDLINE are listed in the tables on the following pages. Comparable terms were used in all other databases searched.
1. **Does this article focus on effective screening and assessment strategies for identifying perinatal depression in pregnant or postpartum persons within one year of childbirth?** (Yes or No)  
   **AND/OR**  
2. **Does this article focus on management interventions for pregnant or postpartum persons within one year of childbirth, experiencing perinatal depression?**  

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Definitions/Examples/Comments</th>
<th>Exclusion</th>
</tr>
</thead>
</table>
| - Focuses on pregnant persons (prenatal period) OR persons with at least one newborn or infant less than 12 months of age (postpartum period) | **Assessment/Screening Components**  
  - Risk assessment  
  - Symptom assessment  
  - Prevention  
  - Risk factor(s) for perinatal depression  
  - Safety - assessing for risk of suicidal ideation, neonaticide or infanticide  
  - Use of validated assessment/screening tools  
  - Self screening, self assessment  
  - Targeted vs. universal screening (timing, considerations of screening for the nurse and the person)  
  - Impact of screening on symptoms severity  
  - Timing (when the screening/assessment is done)  
  - Frequency (how often is the screening/assessment done)  
  - Safety  
  - Cost-effectiveness  
  - Tool used readable/accessible | - assessment of psychometric properties of tools  
- PTSD or maternal distress  
- prevalence studies  
- biological factors as risk factors for depression  
- inflammation markers and depression  
- Impact of depression on child/infant  
- no abstract  
- associated factors and predictors of depression  
- low-income countries  
- study protocols |
| - Articles that address screening and assessment strategies for identifying perinatal depression | **Management Intervention Components**  
  - Reassessment  
  - Risk management (managing risk factors that can impact interventions)  
  - Therapeutic interventions  
  - Home visiting  
  - Psychological management  
  - Nurse-led psychotherapy [Interpersonal therapy (IPT) or Cognitive Behavioral therapy (CBT)]  
  - Pharmacology – related to informed decision making  
  - Support – peer support, partner support  
  - Couple  
  - Psycho-education, patient education  
  - Exercise  
  - Self-care  
  - Complementary and alternative medical therapies (e.g. acupuncture, massage, bright light therapy) |  

**Inclusion Definitions/Examples/Comments**  
- Articles that address management interventions for perinatal depression (are they effective & safe)  
- Screening, assessment, and management should include nurses and regulated health-care professionals (SHOULD include RN as part of the health-care team)  

**Exclusion**  
- Focuses on pregnant persons (prenatal period) OR persons with at least one newborn or infant less than 12 months of age (postpartum period)  
- Articles that address screening and assessment strategies for identifying perinatal depression  
- Articles that address management interventions for perinatal depression (are they effective & safe)  
- Screening, assessment, and management should include nurses and regulated health-care professionals (SHOULD include RN as part of the health-care team)
- Care plan, care pathway
- Community supports
- Mental health services
- Treatment plan and/or protocols
- Electroconvulsive therapy (ECT)
- In-patient, on-line social media, social network, telephone management
- Spirituality
- Collaborative approaches
- Non-directive counseling
- Active listening

### Outcomes:
- Effective
- Safe – is it safe for the person or their infant (breastfeeding implications - e.g., is the intervention safe or is it a teratogen?)
- Safety of newborn or infant
- Prompt
- Minimize or prevent complications / negative outcomes
- Decreased length of stay
- Decreased morbidity
- Decreased mortality
- Decreased emergency transfer
- Decreased suicidal ideation
- Positive parent-infant relationship or interactions or bonding
- Increased mental health of the person
- Improved parent and newborn or infant interactions
- Accessibility
- Barriers
- Cost-effectiveness, cost benefits analysis
- Newborn or infant bonding
### RQ3. Does this article focus on education and training strategies for nurses to ensure provision of effective perinatal depression screening, assessment, and management?

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Definitions/Examples/Comments</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focuses on education and training strategies for nurses to effectively screen, assess, and manage perinatal depression</td>
<td><strong>Education/Training Components</strong>&lt;br&gt;• Education&lt;br&gt;• Professional education&lt;br&gt;• Continuing education&lt;br&gt;• Distance education&lt;br&gt;• Orientation&lt;br&gt;• eLearning/online/modular&lt;br&gt;• Curriculum&lt;br&gt;• Teaching&lt;br&gt;• Teaching materials&lt;br&gt;• Education department&lt;br&gt;• In-service&lt;br&gt;• Training&lt;br&gt;• Mentorship&lt;br&gt;• Preceptorship&lt;br&gt;• Workshop&lt;br&gt;• Training strategies&lt;br&gt;• Knowledge&lt;br&gt;• Theory&lt;br&gt;• Concepts&lt;br&gt;• Skills&lt;br&gt;• Abilities&lt;br&gt;• Health care providers’ values, beliefs, attitudes&lt;br&gt;• Role and responsibilities&lt;br&gt;• Decision making&lt;br&gt;• Clinical guidelines&lt;br&gt;• Legal responsibilities&lt;br&gt;• Stigma, disclosure and education, awareness</td>
<td>• Anything other than perinatal depression (perinatal mood disorders, psychosis, anxiety, schizophrenia, bipolar, distress etc)</td>
</tr>
<tr>
<td>• Nurses include: RN, RPN/LPN, NP, nursing students (SHOULD include nurses OR nurses as part of the healthcare team)</td>
<td><strong>Outcomes</strong>&lt;br&gt;• Increased/improved knowledge and awareness amongst health-care providers and students&lt;br&gt;• Evidence-based care&lt;br&gt;• Foundational knowledge, skills attitudes&lt;br&gt;• Enhanced competence&lt;br&gt;• Better Confidence/ Self-efficacy&lt;br&gt;• Positive patient (mother) outcomes&lt;br&gt;• Decreased depressive symptoms&lt;br&gt;• Effective PPD assessment and management</td>
<td></td>
</tr>
</tbody>
</table>
RQ4. Does this article focus on strategies/policies by healthcare organizations and broader healthcare system to support, evaluate and promote the optimal assessment and management of perinatal depression?

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Definitions/Examples/Comments</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focuses on healthcare organizations’ and broader health system policies/strategies to support, evaluate and promote the optimal assessment and management of perinatal depression</td>
<td>Perinatal depression care (priority) &lt;br&gt; Process for referral or follow-up &lt;br&gt; Policy &lt;br&gt; Procedures &lt;br&gt; Resources &lt;br&gt; Model of care delivery &lt;br&gt; Accessibility and/or linkages to other health-care providers who provide perinatal depression support/care &lt;br&gt; Community supports &lt;br&gt; Cost effectiveness &lt;br&gt; Funding</td>
<td>Any other focus than perinatal depression &lt;br&gt; Studies focused on clinical care components at the person or individual level (i.e., not focused on the organization)</td>
</tr>
<tr>
<td>Nurses include: RN, RPN/LPN, NP, nursing students (SHOULD include nurses OR nurses as part of the healthcare team)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include any or all settings that include nurses or nurses in collaboration with interprofessional or multidisciplinary healthcare team.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Outcomes
- Organizational support
- Access
- Barriers
- Awareness
- Diversity of services (across health sectors/by different HCPs)
- Quality care
- Service efficiency (avoidance of lengthy delays and follow-up/referral in care)
- Resources to support health-care providers in the assessment and management of PPD (organizational level)
- Policy development/implementation
- Positive outcomes for mom and newborn or infant
- Minimize adverse outcomes
- Risk reduction
- Safety culture