

Addressing Anti-Black Racism in Nursing Methodology Feb. 2026

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Introduction

This document presents an overview of the Registered Nurses’ Association of Ontario’s (RNAO) guideline development methods for the *Addressing Anti-Black Racism in Nursing* best practice guideline (BPG). RNAO is unwavering in its commitment that every BPG be based on the best available evidence. When developing guidelines, RNAO aims to meet international reporting standards for clinical and healthy work environment guidelines, including the standards outlined in the Appraisal of Guidelines for Research and Evaluation (AGREE II) Instrument and the Reporting Items for practice Guidelines in Healthcare (RIGHT) statement (1,2). For more information about RNAO’s BPG development methods, please see our published methodology (3).

This guideline was developed using elements of the Grading of Recommendations Assessment, Development and Evaluation (GRADE) (4) and the Confidence in the Evidence from Reviews of Qualitative Research (CERQual) methods (5). In addition, the expert panel integrated several theoretical frameworks to guide the development process through an equity-focused lens.

This document begins with a high-level summary of the unique methodological considerations taken during the development of the guideline, before providing a detailed description of the guideline development process from start to finish.

Background

Early in the development process, the RNAO best practice guideline development and research team, along with the expert panel, recognized the limited available quantitative evidence focused on strategies to address anti-Black racism in nursing. A scoping review was conducted that confirmed this gap; however, it also illuminated a rich body of qualitative literature focused on this topic. Given the research landscape, and the nature of the research questions posed by the panel, unique methodological considerations were made when developing this guideline as outlined below in **Table 1**.

Table 1: Summary methodological considerations unique to this guideline

Guideline development component	Typical RNAO process	Guideline-specific considerations
Research questions	<p>Focused questions are developed to determine whether an intervention should be recommended. These are then translated into PICO research questions—Population, Intervention, Comparator, and Outcomes. A systematic review is conducted to assess the effectiveness of each intervention on the relevant outcomes.</p>	<p>The expert panel was interested in determining which education strategies and mentorship components should be recommended to address anti-Black racism in nursing, as well as people’s values and preferences related to these education strategies and mentorship components. Their focus was not on deciding whether education or mentorship should be recommended at all. Broader questions were developed to identify quantitative and qualitative evidence addressing these aims. The intent was to extract themes from the literature that could inform the recommendations.</p>
Outcomes	<p>The expert panel identifies outcomes that can be studied to understand the effectiveness of an intervention. They rate the relative importance of each outcome on a scale of 1-9. The top 5 outcomes most critical for decision-making are selected and searched for during the systematic review.</p>	<p>Because there was uncertainty about the amount of evidence directly addressing the guideline topic, the expert panel brainstormed broad outcome categories important for decision-making. They also agreed that additional outcome categories could be added if identified during the systematic review. Outcomes found through the review were then organized into these categories. The panel did not rate the importance of individual outcomes but acknowledged that all outcome categories were important for informing decision-making. They also agreed</p>

		that additional outcome categories could be added if identified during the systematic review. Outcomes found through the review were then organized into these categories. The panel did not rate the importance of individual outcomes but acknowledged that all outcome categories were important for informing decisions.
Study types	During the systematic review process, the best available evidence is selected that provides information about the effectiveness of the intervention on each outcome. Quantitative studies are selected to provide information about the benefits and harms of an intervention, and this forms the basis of the recommendations.	While all study designs were eligible for inclusion, the majority of studies found on the research topic were non-randomized single-arm (pre-post) studies and qualitative studies. These studies informed the quantitative and qualitative research questions.
Theoretical Frameworks	Theoretical frameworks are not routinely embedded in the guideline development process but may be added based on expert panel consensus.	The panel identified four theoretical frameworks to shape the guideline development process: critical race theory, intersectionality, Black Feminist Thought and the social-ecological model.
Recommendations	Recommendations are primarily formulated by considering quantitative evidence about the benefits and harms of an intervention and the certainty of this evidence using the GRADE methodology. When considering the strength of	Due to the limited amount of quantitative research available on the topic, and the significance of the qualitative literature available, some recommendations were developed based purely on quantitative evidence, while others were developed based solely on qualitative evidence. The certainty in the evidence associated with

	<p>the recommendation, additional factors are considered such as values and preferences (typically derived from qualitative evidence).</p>	<p>recommendations based on quantitative evidence was assessed using GRADE, and the confidence in the qualitative review findings supporting recommendations was assessed using GRADE CERQual. RNAO recognizes that the development of recommendations based solely on qualitative evidence represents a departure from traditional GRADE approaches.</p>
<p>Indirect evidence</p>	<p>Direct evidence (that directly examines the population, intervention, comparator and outcomes) is identified and used to inform the recommendations. Indirect evidence is relied upon when needed.</p>	<p>Limited direct evidence exists on how to address anti-Black racism in nursing, particularly quantitative evidence. The panel recognized that this gap may reflect systemic racism within health care, education, and academic publishing. Given the lack of direct evidence, the population was broadened to include other health and social service providers and health profession students in related fields of study (e.g. medicine, occupational therapy, social work). The panel judged this evidence to be sufficiently direct and relevant and therefore did not significantly downgrade it for indirectness.</p>

Pre-development work

The scope defines what a RNAO BPG will and will not cover (see **Purpose and scope** in the BPG). To determine the purpose and scope of this BPG, the RNAO best practice guideline development and research team conducted the following steps during the pre-development phase:

1. **A review of previous RNAO BPGs and reports.** There were no previous edition RNAO BPGs focused specifically on this topic. While RNAO's BPG *Embracing Cultural Diversity in Health Care: Developing Cultural Competence* (6) is related, it does not specifically address anti-Black racism in nursing. The work of the RNAO Black Nurses Task Force preceded this guideline and played a foundational role. Insights from the *Black Nurses Task Force Report: Acknowledging, Addressing and Tackling Anti-Black Racism and Discrimination Within the Nursing Profession* (7) were reviewed to inform the purpose and scope of this BPG.
2. **An environmental scan of guidelines.** Two guideline development methodologists searched an established list of websites for guidelines published between January 2012 and May 2022. RNAO expert panel members were also asked to suggest additional guidelines. The purpose of the environmental scan was to gain an understanding of existing guidelines on addressing anti-Black racism in nursing to identify opportunities to develop the purpose and scope of this BPG. No existing guidelines were identified through the environmental scan. For more detailed information, please see the search strategy for existing guidelines, including the list of websites searched and the inclusion criteria used.
3. **A scoping review of the literature.** A scoping review of the literature was undertaken to identify strategies to address racism in health care more broadly and address anti-Black racism in nursing more specifically (see **Scoping review to support the guideline**).
4. **Key informant interviews.** 10 interviews were conducted virtually with Black nurse researchers, professors and leaders to understand challenges experienced in their workplaces, and their perspectives on strategies to address anti-Black racism in nursing.
5. **Discussion groups were convened.** Eight discussion groups were held virtually with Black nursing students and Black nurses working in clinical practice, administration, education and research to understand their experiences of racism and strategies to confront racism. The discussion groups were facilitated by the expert panel co-chairs and a total of 23 participants attended the eight sessions.

Assembly of the expert panel

RNAO aims for diversity in membership of an expert panel; this is in alignment with RNAO's Mission and Values (8). RNAO also aims for people impacted by BPG recommendations, especially people with lived experience, to be included as expert panel members.

There are numerous ways in which RNAO finds and selects members of an expert panel. These include the following:

- searching the literature for researchers knowledgeable the topic;
- soliciting recommendations from key informant interviews;
- drawing from established professional networks, such as [RNAO Interest Groups](#), the [Best Practice Champions Network](#)[®] and [Best Practice Spotlight Organizations](#)[®] ([BPSO](#)[®]); and
- contacting other nursing and health provider associations, topic-relevant technical associations or organizations, and advocacy bodies.

For this BPG, RNAO assembled an expert panel 18 early to late career Black nurses and nursing students with knowledge and experience in all domains of nursing practice: administration, clinical care, education, research and policy. Expert panel members represented a range of diverse health and social service organizations and academic institutions (see **Centering Black expertise: Positionality of the RNAO best practice guideline expert panel** in the BPG).

The expert panel engaged in the following activities:

- developed and approved the purpose and scope of this BPG
- determined theoretical frameworks and guiding principles for this BPG
- determined the research questions and outcomes to be addressed
- participated in a development process to finalize recommendation statements
- determined good practice statements
- provided feedback on the BPG draft
- participated in the development of evaluation indicators
- identified appropriate external reviewers to review the draft BPG prior to publication

In addition to the above, the expert panel co-chairs also participated in the following activities:

- engaged in monthly meetings (or as needed) with the guideline development methodologists and guideline development project coordinator
- facilitated expert panel meetings
- provided in-depth subject matter expertise on the topic, and/or research issues
- moderated consensus processes

Declaration of conflict of interest

In the context of RNAO best practice guideline development, the term “conflict of interest” (COI) refers to situations in which an RNAO staff member or expert panel member’s

financial, professional, intellectual, personal, organizational or other relationships may compromise their ability to conduct panel work independently. Declarations of COI that might be construed as constituting a perceived and/or actual conflict were made by all members of the RNAO expert panel prior to their participation in guideline development work using a standard form. Expert panel members also updated their COI at the orientation meeting, the recommendation build meetings and prior to guideline publication. Any COI declared by an expert panel member was reviewed by the RNAO best practice guideline development and research team and expert panel co-chairs. No limiting conflicts were identified by members of the expert panel. See “Declarations of Conflicts of Interest Summary” under the “methodology documents” tab on the [BPG webpage](#).

Identifying and applying theoretical frameworks and guiding principles

In the context of BPG development, theoretical frameworks are conceptual frameworks that guide the guideline development process. In contrast, guiding principles are philosophies, beliefs, values and/or standards of behaviour that are considered foundational when implementing recommendations and good practice statements. During the initial expert panel meetings, the expert panel identified four theoretical frameworks to be integrated alongside the GRADE and GRADE CERQual methodologies and seven guiding principles applicable to this BPG.

The theoretical frameworks identified are:

- Critical race theory
- Intersectionality
- Black Feminist Thought
- The social-ecological model

The seven guiding principles are:

- Anti-oppression
- Culturally responsive pedagogy
- Trauma-informed approaches
- Black race consciousness
- Empowerment
- Advocacy
- Accountability

The theoretical frameworks were instrumental in shaping how evidence was interpreted, and the guiding principles can serve as foundational pillars, offering a comprehensive lens through which health and social service providers can navigate and combat systemic

inequities within health-care systems when implementing the recommendations and good practice statements in guideline.

Applying theoretical frameworks

While conducting the systematic reviews and drafting recommendations, the RNAO best practice guideline development and research team applied principles from critical race theory, intersectionality, Black Feminist Thought, and the social-ecological model. These frameworks supported deeper reflexivity and expanded the team's thinking beyond conventional guideline methodologies. Given the limited availability of quantitative studies, such as randomized controlled trials, on this topic, the team relied heavily on qualitative research that amplified the voices and lived experiences of Black and racialized health and social service providers. Although qualitative evidence is not typically used as the primary basis for recommendations in traditional guideline development methodologies, it provided essential insights for this BPG and helped shape recommendations aimed at advancing racial equity in nursing.

The application of critical race theory (CRT) during the systematic review process provided a critical lens to more effectively interpret the findings and to uncover the subtle influences of systemic racism that may have gone unnoticed, particularly racial bias.

Intersectionality prompted meaningful discussions during expert panel meetings about how the proposed recommendations might affect different groups (e.g., Black disabled nurses) in diverse and intersecting ways due to overlapping systems of power and oppression.

Black Feminist Thought enabled the team to interrogate established knowledge systems and highlight the diversity of lived experiences documented in the qualitative literature. These experiences, capturing both systemic and individual racism, directly informed three qualitative recommendations and shaped the evidence discussion. Black Feminist Thought elevated the voices of Black nurses and nursing students, including those on the expert panel and those represented in the qualitative literature.

The social-ecological model provided a structured way to consider how racism operates across individual, interpersonal, organizational, and societal levels, reinforcing the need for multilevel recommendations. This framework helped the panel consider how recommended strategies and interventions must address not only individual behaviours but also broader structural and institutional factors that influence experiences of Black nurses and nursing students.

Scoping review to support the guideline

A scoping review was conducted during the guideline's predevelopment phase following the Arksey and O'Malley framework (9). Its purpose was to identify evidence on addressing racism in health care broadly and anti-Black racism in nursing specifically. The search strategy, developed by RNAO's guideline development and research team in collaboration with a health sciences librarian, targeted English language articles published between January 2018 and April 2023 in MEDLINE ALL, APA PsycInfo, and CINAHL, capturing the most current evidence. All study designs were eligible. The review was registered in the Open Science Framework (<https://osf.io/8ebqv/>).

Two guideline development methodologists independently screened studies for relevance, resolving any disagreements by consensus. For data extraction, studies were divided between the methodologists, with each extraction cross-checked for accuracy. The methodologists then analyzed and organized the evidence into thematic groupings and summarized findings for presentation to the expert panel.

Findings from the review highlight a notable scarcity of Canadian and international research focused specifically on anti-Black racism in nursing. Of the 174 included studies, 35 examined racism in nursing broadly, and only five directly addressed anti-Black racism in nursing. Key themes included the importance of interactive education, mentorship, advocacy, anti-Black racism policies, and supports for career progression into leadership roles. Black racism in nursing. Of the 174 included studies, 35 examined racism in nursing broadly, and only five directly addressed anti-Black racism in nursing. Key themes included the importance of interactive education, mentorship, advocacy, anti-Black racism policies, and supports for career progression into leadership roles.

Identifying priority research questions and outcomes

Research questions are priority areas of practice identified by the expert panel that require a systematic review of evidence to answer. These questions inform quantitative PICO research questions (population, intervention, comparison, outcomes) and qualitative PPC research questions (population, phenomenon, context) that guide the systematic reviews and subsequently inform recommendations.

Between October 2023 – January 2024, four expert panel meetings were held to determine the priority research questions and outcomes for this BPG. A comprehensive list of topics the BPG could potentially address was shared during the initial expert panel meeting. This list was informed by the priorities outlined in the Black Nurses Task Force report (7), the scoping review of the literature and key informant interviews and discussion groups.

Following the first meeting, expert panel members were asked to complete a survey. The survey invited them to reflect on the list of topics and provide feedback on the priority areas that should be addressed in the guideline. To inform the systematic reviews, they were also asked to prioritize what questions nurses need answered to guide their practice and address anti-Black racism in nursing.

After the final questions were prioritized that would inform the systematic reviews, outcomes were identified and prioritized for PICO research questions in alignment with GRADE methods for assessing and presenting the evidence (4). A comprehensive list of outcomes per research question was developed, informed by the scoping review of the literature, key informant interviews, discussion groups and expert panel discussion. Through discussion, the panel determined which broad outcome categories were important for decision-making. During the systematic review, the RNAO best practice guideline development and research team included studies whose outcomes aligned with the broader outcome categories. **Table 2** outlines how the outcomes described in the included studies align with the broader outcome categories identified by the expert panel.

The following are the priority research questions and their respective PICO and PPC research questions that informed the development of the recommendations in the BPG.

Research Question #1a: What type of education should be recommended to address anti-Black racism in nursing?

PICO Research Question #1a

Population: Nurses and nursing students

Intervention: Education strategies focused on addressing anti-Black racism in nursing

Comparison: No education, or education that is not focused on addressing anti-Black racism in nursing

Outcomes: Outcomes related to psychological safety, representation, competency/education, and patient outcomes.

Research question #1b: What are the values, preferences, barriers and facilitators associated with delivering education to address anti-Black racism in nursing?

PPC Research Question #1b

Population: Nurses and nursing students

Phenomenon: Values placed on the outcomes of receiving education to address anti-Black racism in nursing, preferences for how the education is delivered, barriers and facilitators to the uptake and sustainability of delivering education

Context: When delivering or receiving education related to addressing anti-Black racism in nursing

Research Question #2a: What are the components of mentorship programs for Black nurses, Black nursing students, as well as allies, that can help address anti-Black racism in nursing?

PICO Research Question #2a

Population: Black nurses, Black nursing students and allies

Intervention: Components of mentorship programs for Black nursing students, Black nurses and allies that can help address anti-Black racism in nursing

Comparison: No mentorship programs

Outcomes: Outcomes related to psychological safety, human resources, representation, education, escalation of grievances, satisfaction and patient outcomes.

Research question #2b: What are the values, preferences, barriers and facilitators associated with mentorship programs developed to address anti-Black racism in nursing?

PPC Research Question #1b

Population: Black nurses, Black nursing students and allies

Phenomenon: Values placed on the outcomes of receiving mentorship to address anti-Black racism in nursing, preferences for how the mentorship is delivered, and barriers and facilitators to the uptake and sustainability of mentorship programs

Context: When delivering mentorship programs or receiving mentorship to address anti-Black racism in nursing

Table 2: Outcome Alignment for PICO 1a and 2a

Outcome category	Outcomes identified during the systematic review
PICO Question 1a	
Psychological safety outcomes	<ul style="list-style-type: none"> • Workplace climate
Representation outcomes	<ul style="list-style-type: none"> • Diversity in hiring
Competency/ educational outcomes	<ul style="list-style-type: none"> • Behaviour change • Knowledge/awareness • Confidence/ self-efficacy speaking up or taking action • Satisfaction with education
Patient outcomes	<ul style="list-style-type: none"> • Not measured
PICO Question 2a	
Psychological safety outcomes	<ul style="list-style-type: none"> • Self-confidence • Feeling supported
Human resource outcomes	<ul style="list-style-type: none"> • Not measured
Representation outcomes	<ul style="list-style-type: none"> • Matching to residency

	<ul style="list-style-type: none"> • Awareness of people in the field who look like me • Readiness for career advancement • Leadership efficacy
Education outcomes	<ul style="list-style-type: none"> • Understanding of career pathway • Mentor cross-cultural skills • Confidence being a peer mentor
Escalation of grievances	<ul style="list-style-type: none"> • Not measured
Patient outcomes	<ul style="list-style-type: none"> • Not measured
Satisfaction	<ul style="list-style-type: none"> • Mentor satisfaction • Mentee satisfaction

Developing good practice statements

During the initial expert panel meetings, five good practice statements were developed by the expert panel. Good practice statements are actionable statements that should be done in practice and the benefits of the action clearly outweigh the harms (10). The five good practice statements focused on:

1. Providing education to nursing students, faculty and staff to address anti-Black racism in nursing
2. Developing, implementing and evaluating zero-tolerance policies to address anti-Black racism in nursing
2. Recognizing Black History Month, African Heritage Month and Caribbean Heritage Month
3. Actively promoting recruitment, retention and succession of Black nursing students and Black nurses to increase representation of Black nurse leaders
5. Establishing anti-racism, diversity, equity, inclusion and belonging committees that include Black representation from all levels of the organization

To ensure the appropriate use of good practice statements, the following five criteria must be met for each statement:

1. The message was necessary to communicate.
2. After considering all relevant outcomes and potential downstream consequences, implementing the good practice statement would result in large benefits and very small harms (this includes considering acceptability and feasibility of the practice and health equity considerations).
3. Conducting a systematic review to collect and summarize the evidence would be a poor use of time and energy.
4. There was a clear rationale for the action.
5. The statement was clear and actionable (10).

Through discussion, the expert panel determined that each of the five criteria had been met for each statement, so these areas became good practice statements.

Systematic retrieval of the evidence

Strong and conditional recommendations are based on a comprehensive and systematic review of the literature.

For this BPG, a search strategy was developed by RNAO's best practice guideline development and research team and a health sciences librarian for each of the PICO and PPC research questions. A search was conducted for relevant research studies published in English between January 2019 and April 2024 for questions 1a and 1b and January 2019 and June 2024 for questions 2a and 2b. Given the similar focus of questions 1a and 1b, a combined search was conducted. This same approach was applied to questions 2a and 2b. The following databases were searched: Cumulative Index to Nursing and Allied Health (CINAHL), Medline All, Cochrane Central, Cochrane Database of Systematic Reviews, Embase, ERIC, APA PsychInfo and Emcare. In addition, the following journals - suggested by the expert panel but not included in the listed database - were hand searched :1) Association of Black nursing faculty, 2) Discourse, Context and Media, 3) DuBois Review. The systematic reviews were registered in PROSPERO (CRD42024599494).

Expert panel members were asked to review their personal libraries for key studies not identified through the primary search strategies (see **PRISMA diagrams** under the "methodology documents" tab of the [BPG webpage](#)). Detailed information on the systematic review search strategy—including inclusion and exclusion criteria and full search terms—is also available in the supplementary materials under the same "methodology documents" tab of the website.

Systematic review search dates were limited to the last five years to capture the most up-to-date evidence. All study designs were included in the search.

All studies were independently assessed for relevance and eligibility by two guideline development methodologists based on the inclusion and exclusion criteria. Any disagreements were resolved through consensus.

Included studies were independently assessed for risk of bias by study design using validated and reliable tools. Randomized controlled trials were assessed using the Risk of Bias 2.0 tool (11), non-randomized controlled trials were assessed using the ROBINS-I tool (12), single-arm pre/post studies were assessed using the tool developed by Murad et al. (13) and qualitative research studies were assessed using the CASP qualitative checklist (14). The two guideline development methodologists reached consensus on all scores through discussion.

For data extraction, the included studies were divided equally between the guideline development methodologists who each extracted information from their assigned studies; each reviewed the other's work for accuracy. Qualitative studies were imported into NVivo 12, where they were systematically coded and themes were generated through an iterative, inductive analytic process.

Please note that for research questions 1a and 2a, studies addressing both values and preferences, as well as barriers and facilitators, were included. However, only the studies on values and preferences were quality appraised and assessed using GRADE-CERQual. Data from studies on barriers and facilitators were extracted and narratively summarized under **Implementation strategies** to support the recommendations.

Indirect evidence

There is a lack of direct research on the topic of anti-Black racism in nursing (7,15–18), and Black nurses and Black nursing students are often grouped with other racialized populations in research (e.g., Indigenous, Asian, Latino). This scarcity of direct research reflects the fact that systemic racism remains embedded within health and social service organizations, research, academia and publishing. Given the scarcity of direct research, indirect evidence was included in the systematic reviews to answer the guideline's research questions. For example, the population of interest was broadened to include other health providers when limited or no evidence was available on nurses, and the intervention of interest was broadened to include studies that examined racism more broadly when limited or no evidence was available that examined anti-Black racism. The expert panel considered this evidence sufficient to help answer the research questions. However, they accounted for the directness and relevance of the evidence when grading its overall quality.

Update searches

In Sept. 2025, the health science librarian conducted an update search for literature published in English between January 2024 and September 2025 that answered research questions 1 and 2. The search was applied to the following databases: CINAHL and Medline. Only direct research specifically focused on addressing anti-Black racism in nursing was included. Results from 1 study were incorporated into the discussions of evidence for Recommendation 1.0. See the **PRISMA diagrams** on the [BPG webpage](#) for information about the study included in the update search.

Determining certainty and confidence of evidence

Certainty of evidence

The certainty of quantitative evidence (i.e., the extent to which one can be confident that an estimate of an effect is true) is determined using GRADE methods (4). First, the certainty

of the evidence is rated for each prioritized outcome across studies (i.e., for a body of evidence) per recommendation (4). This process begins with the study design and then requires an examination of five domains—risks of bias, inconsistency, imprecision, indirectness and publication bias—to potentially downgrade the certainty of evidence for each outcome. For example, a body of quantitative evidence for one priority outcome may begin with high certainty, but due to serious limitations in one or more of the five GRADE criteria, it will be rated down by one or two levels (4). See **Table 3** for a definition of each of these certainty criteria.

Table 3. GRADE certainty criteria

Certainty criteria	Definition
Risk of bias	Limitations in the study design and execution that may bias study results. Valid and reliable quality appraisal tools are used to assess the risk of bias. First, risk of bias is examined for each individual study and then examined across all studies per defined outcome.
Inconsistency	Unexplained differences (heterogeneity) of results across studies. Inconsistency is assessed by exploring the magnitude of difference, and possible explanations in the direction and size of effects reported across studies for a defined outcome.
Indirectness	Variability between the research and review question and context within which the recommendations would be applied (applicability). Four sources of indirectness are assessed: <ul style="list-style-type: none"> • differences in population • differences in interventions • differences in outcomes measured • differences in comparators.
Imprecision	The degree of uncertainty around the estimate of effect. This is usually related to sample size and number of events. Studies are examined for sample size, number of events and confidence intervals.
Publication bias	Selective publication of studies based on study results. If publication bias is strongly suspected, downgrading is considered.

Source: Adapted with permission from: Schünemann H, Brozek J, Guyatt G, Oxman A , editors. Handbook for grading the quality of evidence and the strength of recommendations using the GRADE approach [Internet]. [place unknown: publisher unknown]; 2013 Oct. Available from:

<https://gdt.grade.pro.org/app/handbook/handbook.html#h.svwngs6pm0f2>.

Following the initial consideration for downgrading the certainty of quantitative evidence, three factors are assessed that can potentially enable rating up the certainty of evidence for non-randomized studies:

1. **Large magnitude of effect:** If the body of evidence has not been downgraded for any criteria other than risk of bias and a large estimate of the magnitude of intervention effect is present, there is consideration for rating up.
2. **Dose–response gradient:** If the body of evidence has not been downgraded for any criteria other than risk of bias and a dose–response gradient is present, there is consideration for rating up.
3. **Effect of plausible confounding:** If the body of evidence has not been downgraded for any criteria other than risk of bias and all residual confounders would result in an underestimation of treatment effect, there is consideration for rating up (4).

GRADE categorizes the overall certainty of evidence as high, moderate, low or very low. See **Table 4** for the definitions of these categories.

For this BPG, the five GRADE quality criteria for potentially downgrading quantitative evidence—and the three GRADE quality criteria for potentially rating up evidence—were independently assessed by the two guideline development methodologists. Any disagreements were resolved through consensus. An overall certainty of evidence per recommendation was assigned based on these assessments. The certainty of evidence assigned to each recommendation was based on the certainty of prioritized outcomes in the studies that informed the recommendation.

Table 4: Certainty of evidence

Overall certainty of evidence	Definition
High	We are very confident that the true effect lies close to that of the estimate of the effect.
Moderate	We are moderately confident in the effect estimate: the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low	Our confidence in the effect estimate is limited: the true effect may be substantially different from the estimate of the effect.
Very low	We have very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of effect.

Source: Reprinted with permission from: Schünemann H, Brozek J, Guyatt G, Oxman A., editors. Handbook for grading the quality of evidence and the strength of recommendations using the GRADE approach [Internet]. [place unknown: publisher

unknown]; 2013 Oct [cited 2018 Aug 31]. Table 5.1, Quality of evidence grades.
Available from: <https://gdt.gradepro.org/app/handbook/handbook.html#h.9rdbelsnu4iy>

Confidence in evidence

Similar to GRADE, there are four CERQual criteria to assess the confidence in qualitative findings related to a phenomenon of interest:

1. Methodological limitations
2. Relevance
3. Coherence
4. Adequacy of data.

See **Table 5** for a definition of each of these criteria.

Table 5: CERQual quality criteria

Criteria	Definition
Methodological limitations	The extent to which there are concerns about the design or conduct of the primary studies that contributed evidence to an individual review finding.
Coherence	An assessment of how clear and cogent the fit is between the data from the primary studies and a review finding that synthesises that data. By “cogent,” we mean well supported or compelling.
Adequacy of data	An overall determination of the degree of richness and quantity of data supporting a review finding.
Relevance	The extent to which the body of evidence from the primary studies supporting a review finding is applicable to the context (perspective or population, phenomenon of interest, setting) specified in the review question.

Source: Reprinted with permission from: Lewin S, Booth A, Glenton C, et al. Applying GRADE-CERQUAL to qualitative evidence synthesis findings: introduction to the series. *Implement Sci.* 2018;13(Suppl 1):1-10. Table 2, Definitions of the components of the CERQual approach; p. 5.

These four criteria were independently assessed by two guideline development methodologists. Discrepancies were resolved through consensus. An overall judgment of the confidence in each review finding was made based on these assessments. (See **Table 6** for the confidence of evidence judgments).

Table 6: Confidence in evidence

Overall Confidence of Evidence	Definition
High	It is highly likely that the finding is a reasonable representation of the phenomenon of interest.
Moderate	It is likely that the finding is a reasonable representation of the phenomenon of interest.
Low	It is possible that the review finding is a reasonable representation of the phenomenon of interest.
Very low	It is not clear whether the review finding is a reasonable representation of the phenomenon of interest.

Source: Reprinted with permission from: Lewin S, Booth A, Glenton C, et al. Applying GRADE-CERQUAL to qualitative evidence synthesis findings: introduction to the series. *Implement Sci.* 2018;13(Suppl 1):1-10. Table 3, Description of level of confidence in a review finding in the CERQual approach; p. 6.

Formulating recommendations

Summarizing the evidence

The guideline development methodologists analyzed all studies pertaining to each research question and drafted recommendations that answer the research questions accordingly. Draft recommendation statements were developed based on themes from the literature. For each draft recommendation, the two guideline development methodologists constructed GRADE evidence profiles. GRADE evidence profiles are used to present decisions on determining the certainty and/or confidence of evidence and to present general information about the body of research evidence, including key statistical or narrative results (4).

The evidence profiles for the body of quantitative studies presented the decisions made by the two guideline development methodologists on the five key GRADE certainty criteria for downgrading the population included in the studies, the countries where the studies were conducted, the key results and the transparent judgments about the certainty underlying the evidence for each outcome (4). For this BPG, meta-analyses were not performed.

CERQual evidence profiles were created for the body of qualitative evidence when applicable. The CERQual evidence profiles presented the body of evidence supporting each theme. These evidence profiles presented the decisions made by the two guideline development methodologists on the four key CERQual criteria and the transparent judgements about the confidence underlying the evidence for each theme.

For more detail, please see the GRADE evidence profiles for each recommendation under the “methodology documents” tab of the [BPG webpage](#).

Evidence-to-Decision frameworks

Evidence-to-Decision (EtD) frameworks outline proposed recommendations and summarize all necessary factors and considerations based on available evidence and expert panel judgements for formulating the recommendation statements. EtD frameworks are used to help ensure that all important factors (i.e., certainty or confidence of the evidence, benefits/harms, values and preferences) required to formulate recommendation statements are considered by the expert panel (4). The guideline development methodologists draft the EtD frameworks with available evidence from the systematic reviews.

For this BPG, the EtD frameworks included the following areas of consideration for each drafted recommendation statement (see **Table 7**):

- background information on the magnitude of the problem
 - includes the PICO or PPC question and general context related to the research question
- the balance of benefits and harms of an intervention (for recommendations formulated based on quantitative studies)
- values and preferences derived from qualitative evidence (for recommendations based on qualitative evidence)
- certainty or confidence of the evidence

In line with GRADE methods (15), RNAO guidelines typically include a health equity section within the discussion of evidence for each recommendation. This section outlines the potential impact on health equity across different populations and settings and identifies barriers to implementation in specific contexts. For this guideline, however, a separate health equity section was not included within the discussion of evidence. Instead, equity considerations were integrated throughout all stages of guideline development, from defining the guideline’s purpose, to drafting research questions, to identifying barriers to implementation across diverse settings. This approach ensured that equity remained a foundational element in the development process.

Decision making: Determining the direction and strength of recommendations

Expert panel members were provided with the EtD frameworks to review prior to the recommendation build meetings to determine the direction (i.e., a recommendation for or against an intervention) and the strength (i.e., strong or conditional) of a BPG’s recommendations. Expert panel members were also given access to the complete evidence profiles and full-text articles.

The expert panel co-chairs and the two guideline development methodologists facilitated the meeting to allow for adequate discussion for each proposed recommendation.

The decision on the direction and strength of each recommendation statement was determined by discussion of the judgments made for each of the factors in the EtD frameworks and a consensus-building process facilitated by the co-chairs and the RNAO best practice guideline development and research team (19). Since the recommendations are explicitly linked to the body of evidence, agreement was reached (19).

In determining the strength of a recommendation statement, the following was considered (see **Table 7**):

- the balance of benefits and harms of an intervention
- certainty and/or confidence of the evidence
- values and preferences

Table 7: Key considerations for determining the strength of recommendations

Factor	Definition	Sources
Benefits and harms	<p>Potential desirable and undesirable outcomes reported in the literature when the recommended practice or intervention is used.</p> <p>“The larger the difference between the desirable and undesirable effects, the higher the likelihood that a strong recommendation is warranted. The narrower the gradient, the higher the likelihood that a conditional recommendation is warranted” (20).</p>	Includes quantitative research exclusively from the systematic review.
Certainty and confidence of evidence	<p>The extent of confidence that the estimates of an effect are adequate to support a recommendation. The extent of confidence that a review finding is a reasonable representation of the phenomenon of interest (21).</p> <p>Recommendations are made with different levels of certainty or confidence; the higher the certainty or confidence, the higher the likelihood that a strong recommendation is warranted (20).</p>	Includes research exclusively from the systematic review.

Values and preferences	<p>The relative importance or worth of the health outcomes of following a particular clinical action from a people-centred perspective.</p> <p>“The more values and preferences vary or the greater the uncertainty in values and preferences, the higher the likelihood that a conditional recommendation is warranted” (20).</p>	<p>Includes qualitative evidence from the systematic review (when available) and other sources, such as insights from the expert panel.</p>
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Source: Adapted by the RNAO expert panel with permission from: Schünemann H, Brozek J, Guyatt G, Oxman A, editors. Handbook for grading the quality of evidence and the strength of recommendations using the GRADE approach [Internet]. [place unknown: publisher unknown]; 2013. Available from: <https://gdt.gradeapro.org/app/handbook/handbook.html#h.svwngs6pm0f2>

Supporting resources and appendices

Content for the supporting resources and appendices was submitted throughout the guideline development process by expert panel members and external reviewers. The two guideline development methodologists reviewed the content based on the following six criteria:

1. **Relevance:** Supporting resources and appendices should be related to the subject of the BPG or recommendation. In other words, the resource or appendix should be suitable and appropriate in relation to the purpose and scope of the BPG or the specific recommendation(s).
2. **Timeliness:** Resources should be timely and current. Resources should be published within the last 10 years or in line with current evidence.
3. **Credibility:** When assessing credibility, the trustworthiness and expertise of the source material’s author or authoring organization is considered. Potential biases are also assessed, such as the presence of advertising or the affiliation of the authors with a private company selling health-care products.
4. **Quality:** This criterion assesses the accuracy of the information and the degree to which the source is evidence-informed. The assessment of quality is in relation to the subject of the resource. For example, if a tool is being suggested, is that tool reliable and/or valid?
5. **Accessibility:** This criterion considers whether the resource is freely available and accessible online.

- 6. Engagement of people with lived experience:** This criterion considers whether the resource was created or co-created in collaboration with or by people with lived experience.

Drafting the guideline

The guideline development methodologists wrote the draft of this BPG. The expert panel reviewed the draft and provided written feedback. The BPG then proceeded to obtain external reviews.

Quality assurance

RNAO staff carry out quality assurance of the guideline, including reviews of the evidence profiles, evidence-to-decision frameworks and drafts of the BPG. The associate director of guideline development is responsible for ensuring that the guideline is produced in accordance with the RNAO BPG development handbook, methods outlined in the BPG, GRADE methods, and international guideline standards such as AGREE II and the RIGHT reporting standards (1,2,4). One senior manager and the associate director review the evidence profiles, evidence-to-decision frameworks and BPG drafts to ensure adherence to the established methodology. An external review of an early draft of the BPG, along with the evidence profiles, is conducted to ensure adherence to GRADE methodology.

External review

As part of the guideline development process, RNAO is committed to obtaining feedback from: (a) nurses and other health providers from a wide range of practice settings and roles; (b) people with lived experience; and (c) knowledgeable educators and administrators, throughout Canada and around the world.

External reviewers for RNAO BPGs are identified in two ways. First, external reviewers are recruited through a public call issued on the RNAO website. Second, individuals and organizations with expertise in the guideline topic area are identified by the RNAO best practice guideline development and research team and the expert panel, and they are directly invited to participate in the review.

External reviewers are individuals with subject matter expertise in the guideline topic or those who may be affected by its implementation. Reviewers may be nurses, members of the interprofessional team, nurse executives, administrators, research experts, educators, nursing students, or people with lived experience and their family members.

External reviewers are asked to read a full draft of the BPG and participate in its review prior to its publication. External review feedback is submitted online by completing a survey questionnaire.

The external reviewers are asked the following questions about each good practice statement. Responses are provided using the following scale: *Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree.*

- Is this statement clear?
- Do you agree with this statement?
- Is there a clear and explicit rationale to support this good practice statement?

The external reviewers are asked the following questions about each recommendation. Responses are provided using the following scale: *Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree.*

- Is this recommendation clear?
- Do you agree with this recommendation?
- Is there a clear and explicit rationale to support this recommendation?

In addition, external reviewers are asked to indicate their response to these questions by selecting one of the following: *Yes, No, or No opinion.*

- Do you have any additional comments/suggestions about the note on terminology section of this guideline?
- Do you have any additional comments/suggestions about the background context section of this guideline?
- Do you agree with the wording of the theoretical frameworks and guiding principles?
- Are the appendices included in this guideline appropriate? Are there any gaps in the content provided?
- Do you think the draft guideline title appropriate? Is the title clear? Do you have other comments or suggestions for an alternative title?

Survey submissions are compiled, and feedback is summarized by the RNAO best practice guideline development and research team. The RNAO best practice guideline research and development team reviews the feedback received, consults the expert panel where necessary, and modifies the BPG content.

For this BPG, the external review process was completed between Oct.14, 2025 to Nov.4, 2025. External reviewers with diverse perspectives provided feedback (see **External reviewers** in the full BPG online).

Limitations

- Due to feasibility, only four systematic review questions were prioritized
- The systematic review searches were conducted from 2019-2024 with update search conducted in 2025, only in the English language.

Procedure for updating the guideline

The RNAO commits to updating all BPGs, as follows:

1. Each BPG will be reviewed by the RNAO every five years following publication of the previous edition.
2. Whether it is a new BPG topic or an update an existing BPG, careful consideration needs to be made regarding selection of the BPG for development. For new editions, an assessment of the uptake of the existing BPG is conducted, such as asking:
 - Is this a mandatory guideline that BPSOs need to implement?
 - How many BPSOs are actively implementing this BPG?
 - How many times has the BPG been downloaded?
3. Further, an assessment of existing, recent and/or in-production high quality guidelines of the same topic by other organizations is completed. If the uptake of a BPG is high and there are no existing high quality BPGs on the same topic, this may indicate a higher priority for the next edition to be completed. However, if the uptake is low and/or there is another high-quality guideline on the same topic, the BPG may be retired.
4. New BPG topics are determined by a set of criteria to guide the systematic assessment of a selected list of suggested topics and feedback from a range of external reviewers, partners or others impacted by the topic area. Any group or individual may propose a BPG topic to RNAO through a variety of methods such as the following:
 - [“Suggest a guideline topic”](#) on the RNAO website;
 - writing to RNAO’s CEO or director/associate directors of the International Affairs and Best Practice Guidelines (IABPG) Centre;
 - a rapid review or environmental scan (i.e., scoping search for trends, hot topics, practice concerns);
 - a survey requesting that individuals rank identified topics on a five-point Likert scale; and
 - report sources (e.g., coroner’s inquest, government or related agency).
5. RNAO selects topics for BPG development annually. All topics submitted are identified, and priority topics are chosen based on the following systematic assessment criteria:
 - key priority areas identified by the Government of Ontario, request from major public health agency, Coroner’s inquest;
 - within the scope of nursing practice (RN, NP, RPN/LPN), and applicable in a range of practice settings;
 - based on a multidisciplinary approach;
 - builds on previously developed BPGs or general topic areas;

- potential for partnerships in BPG development with other agencies;
 - perceived need for the guideline, as identified by those submitting a topic for consideration;
 - evidence to support the guideline recommendations is available; and
 - no other high-quality guideline exists on the topic area.
6. Upon reviewing all submissions based on the above criteria, the results are shared with the RNAO best practice guideline development and research team, the Director of the IABPG Centre, and the CEO of RNAO, who reports the selected topics to Government of Ontario.

References

1. Brouwers MC, Kho ME, Browman GP, Burgers JS, Cluzeau F, Feder G, et al. AGREE II: advancing guideline development, reporting and evaluation in health care. *Can Med Assoc J.* 2010 Dec 14;182(18):E839–42.
2. Chen Y, Yang K, Marušić A, Qaseem A, Meerpohl JJ, Flottorp S, et al. A Reporting Tool for Practice Guidelines in Health Care: The RIGHT Statement. *Ann Intern Med.* 2017 Jan 17;166(2):128.
3. Howitt L, Burt A, Nizum N, Buchanan C, Rey M, Grinspun D. Best practice guideline development methods: an integrated approach based on the registered nurses' association of ontario's methods. *Clin Public Health Guidel.* 2026;3(1):e70052.
4. Schunemann HJ, Brozek J, Guyatt G, Oxman A, editors. Handbook for grading the quality of evidence and the strength of recommendations using the GRADE approach [Internet]. unknown: unknown; 2013. Available from: <https://gdt.gradepro.org/app/handbook/handbook.html>
5. Lewin S, Booth A, Glenton C, Munthe-Kaas H, Rashidian A, Wainwright M, et al. Applying GRADE-CERQual to qualitative evidence synthesis findings: introduction to the series. *Implement Sci.* 2018;13(Suppl 1):2.
6. Registered Nurses' Association of Ontario (RNAO). *Embracing Cultural Diversity in Health Care: Developing Cultural Competence.* Toronto (ON): RNAO; 2007.
7. Registered Nurses' Association of Ontario. *Black Nurses Task Force Report: Acknowledging, Addressing and Tackling Anti-Black Racism and Discrimination Within the Nursing Profession* [Internet]. Toronto (ON); 2022. Available from: <https://rnao.ca/policy/black-nurses-task-force-bntf-report-2022>
8. Registered Nurses' Association of Ontario. *About RNAO* [Internet]. Available from: <https://rnao.ca/about>
9. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol.* 2005 Feb 1;8(1):19–32.
10. Dewidar O, Lotfi T, Langendam MW, Parmelli E, Saz Parkinson Z, Solo K, et al. Good or best practice statements: proposal for the operationalisation and implementation of GRADE guidance. *BMJ Evid-Based Med.* 2022 Apr 15;bmjebm-2022-111962.
11. The Cochrane Collaboration. *RoB 2: A revised Cochrane risk-of-bias tool for randomized trials* [Internet]. 2020. Available from:

<https://methods.cochrane.org/bias/resources/rob-2-revised-cochrane-risk-bias-tool-randomized-trials>

12. Sterne J, Hernán M, Reeves B, Savović J, Berkman N, Viswanathan M, et al. ROBINS-I: a tool for assessing risk of bias in non-randomized studies of interventions. *BMJ*. 2016;355:i4919.
13. Murad MH, Sultan S, Haffar S, Bazerbachi F. Methodological quality and synthesis of case series and case reports. *BMJ Evid-Based Med*. 2018 Apr;23(2):60–3.
14. Critical Appraisal Skills Programme. CASP checklists [Internet]. 2018. Available from: <https://casp-uk.net/casp-tools-checklists/>
15. Jefferies K, States C, MacLennan V, Helwig M, Gahagan J, Bernard WT, et al. Black nurses in the nursing profession in Canada: a scoping review. *Int J Equity Health* [Internet]. 2022;21(102). Available from: <https://doi.org/10.1186/s12939-022-01673-w>
16. Cooper Brathwaite A, Versailles D, Juüdi-Hope D, Coppin M, Jefferies K, Bradley R, et al. Tackling discrimination and systemic racism in academic and workplace settings. *Nurs Inq*. 2022;29(4):e12485.
17. Prendergast N, Boakye P, Bailey A, Igwenagu H, Burnett-Ffrench T. Anti-Black racism: Gaining insight into the experiences of Black nurses in Canada. *Nurs Inq*. 2024;31(2):e12604.
18. Cooper Brathwaite A, Versailles D, Juüdi-Hope DA, Coppin M, Jefferies K, Bradley R, et al. Black nurses in action: A social movement to end racism and discrimination. *Nurs Inq*. 2022 Jan;29(1):e12482.
19. Scottish Intercollegiate Guidelines Network (SIGN). A guideline developer's handbook [Internet]. 2019. Available from: <http://www.sign.ac.uk>
20. Guyatt GH, Oxman AD, Kunz R, Falck-Ytter Y, Vist GE, Liberati A, et al. Going from evidence to recommendations. *BMJ*. 2008;336(7652):1049–51.
21. Balshem H, Helfand M, Schünemann HJ, Oxman AD, Kunz R, Brozek J, et al. GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol*. 2011;64(4):401–6.