

Clinical Practice in a Digital Health Environment: New Best Practice Guideline

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1. Registered Nurses' Association of Ontario 2. Humber River Hospital (Retired) 3. Bayshore HealthCare

RNAO Best Practice Guideline Program

The Registered Nurses' Association of Ontario (RNAO) launched the **Best Practice Guidelines** Program in 1999 with funding from the Government of Ontario. The **50 best practice guidelines (BPG)** developed to date have made a substantial contribution towards building excellence in Ontario's health system and internationally. The BPG Program has helped advance government priorities, as well as patient, provider, organizational, and health system outcomes.

The BPG program at RNAO is founded on an **integrated model** composed of three pillars (Figure 1):

- 1) Guideline Development;
- 2) Dissemination, Implementation and Sustainability; and
- 3) Monitoring and Evaluation.

Best Practice Spotlight Organizations® (BPSOs®) are health-care and academic organizations that implement and evaluate BPGs. There are currently **144 BPSOs in Ontario** and **over 1000 BPSO sites around the globe**. To learn more about RNAO's guidelines, visit [RNAO.ca/bpg](https://rnao.ca/bpg).

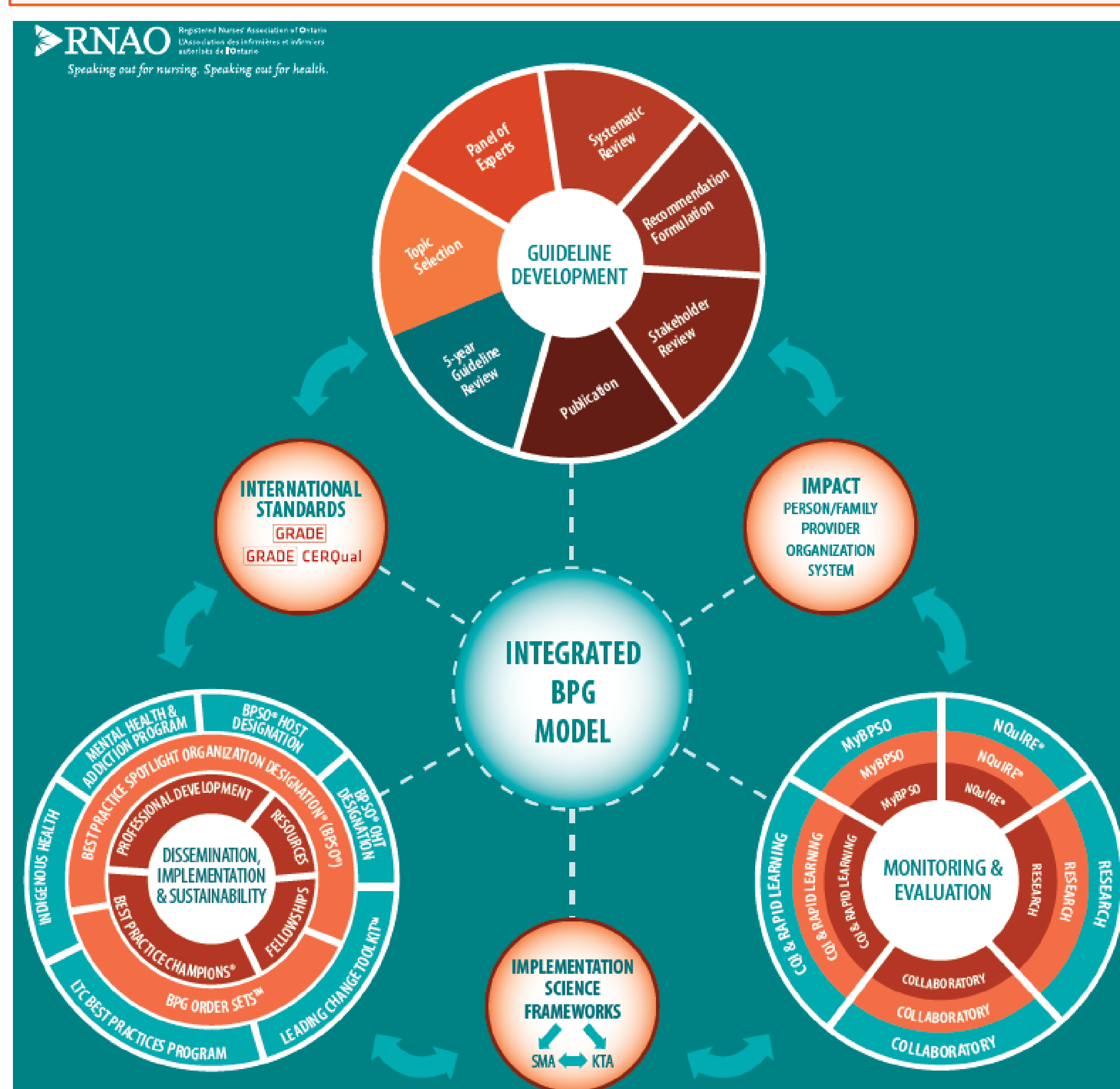


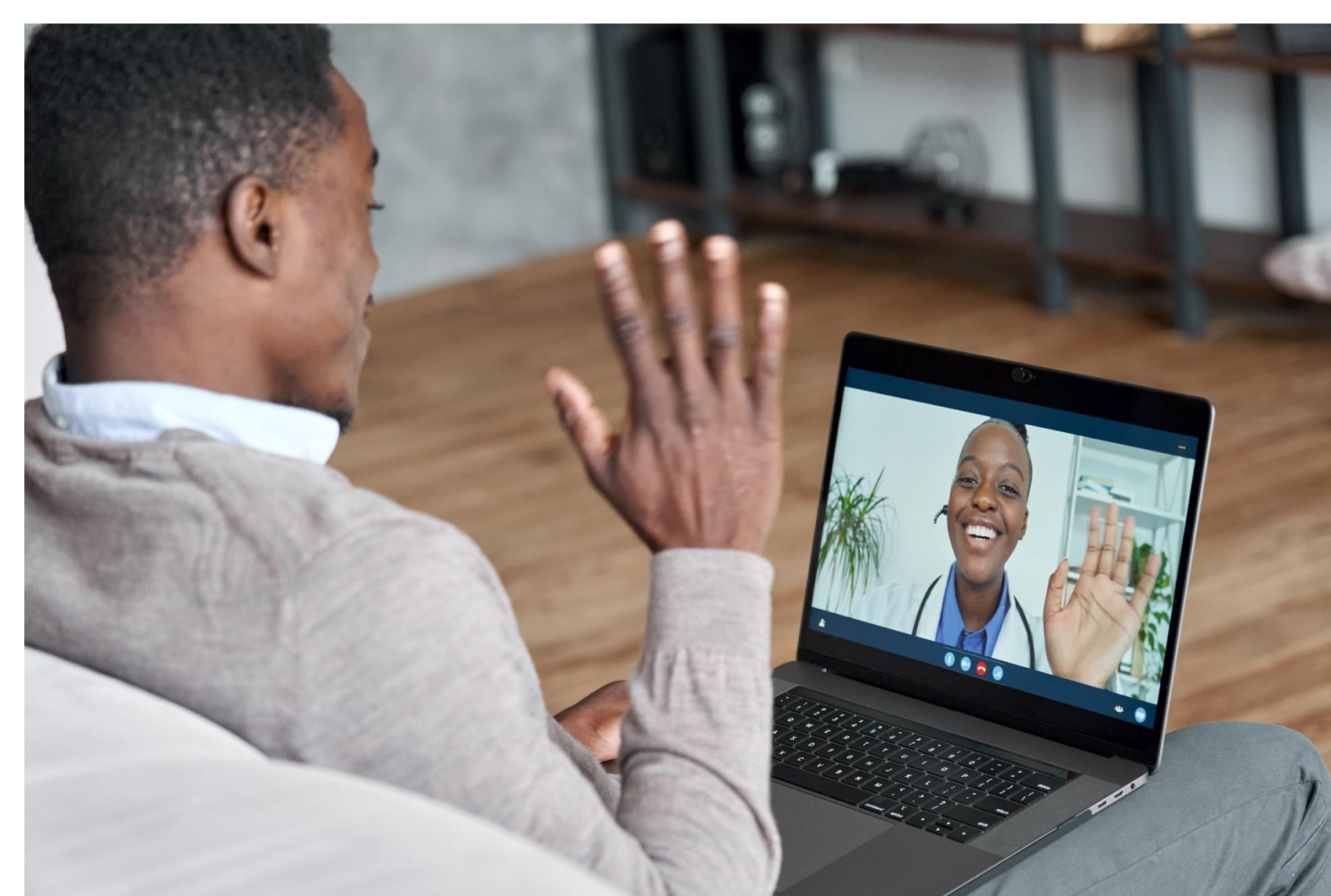
Fig. 1 Integrated BPG Model

Objective

In partnership with **Humber River Hospital**, this BPG is being developed to include evidence-based recommendations for nurses, organizations and health systems to foster nurses' ability to maintain, advance and strengthen professional practice in the context of a digital health environment. Broadly, this guideline will cover:

- (1) the skills and competencies required by front-line clinical nurses to ensure safe, quality, person-centred and compassionate clinical care through therapeutic relationships in a digital health environment;
- (2) the skills and competencies of nurses to engage in the design, development and evaluation of the digital health environment; and
- (3) the skills and competencies of nurse leaders in all domains (clinical practice, administration, education, policy and research) to support the interface between nursing clinical practice and technology.

This BPG will be relevant to nurses practicing in all clinical settings, including primary care.



Methods

A 6-step process is being followed to develop the guideline. GRADE & GRADE CERQual methodologies are being used to conduct the systematic reviews and develop the recommendations (Figure 2).

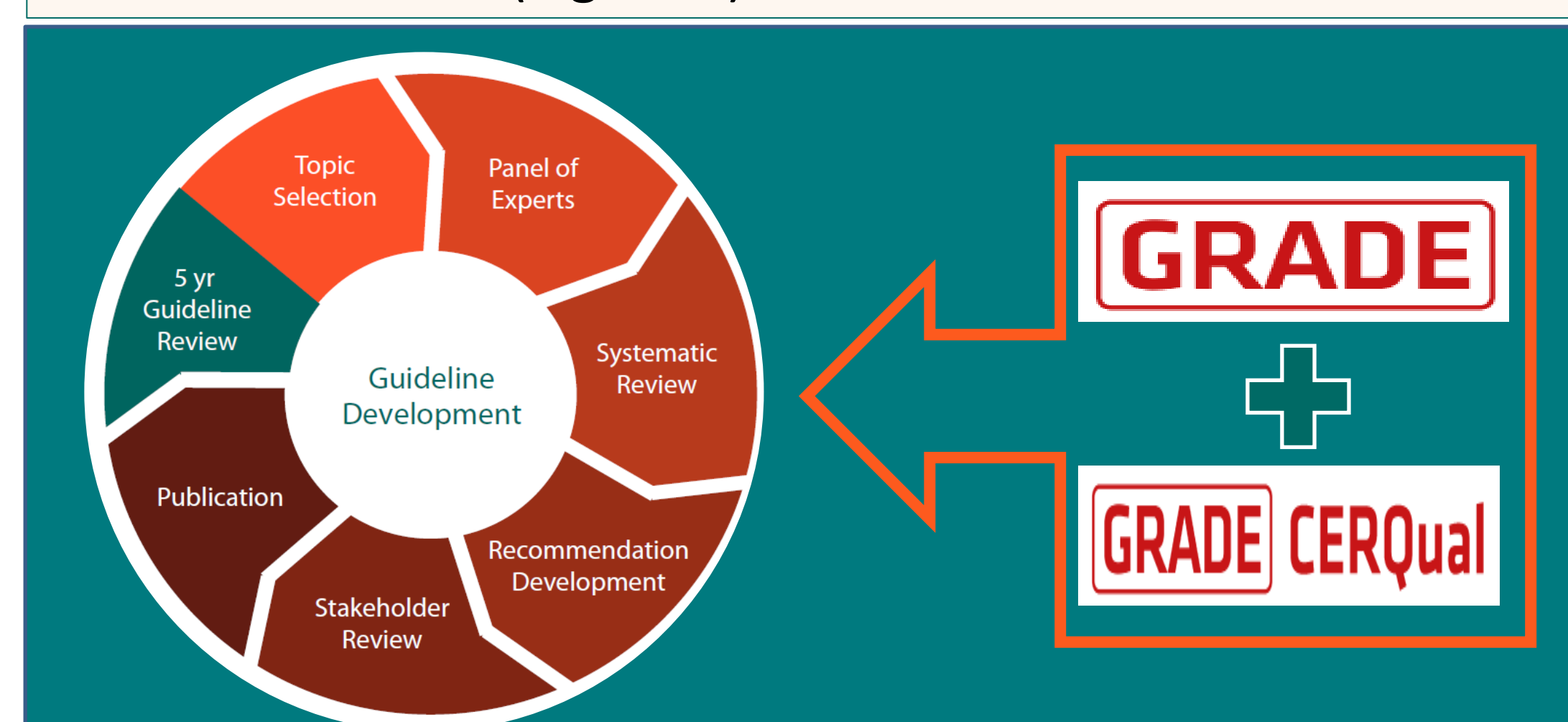


Fig. 2 Guideline Development Process

Methods (continued)

RNAO convened a panel of experts that included broad representation from persons with lived experience, nursing practice and members of the interprofessional team, to inform the development of this BPG.

Seven recommendation areas were prioritized by the panel:

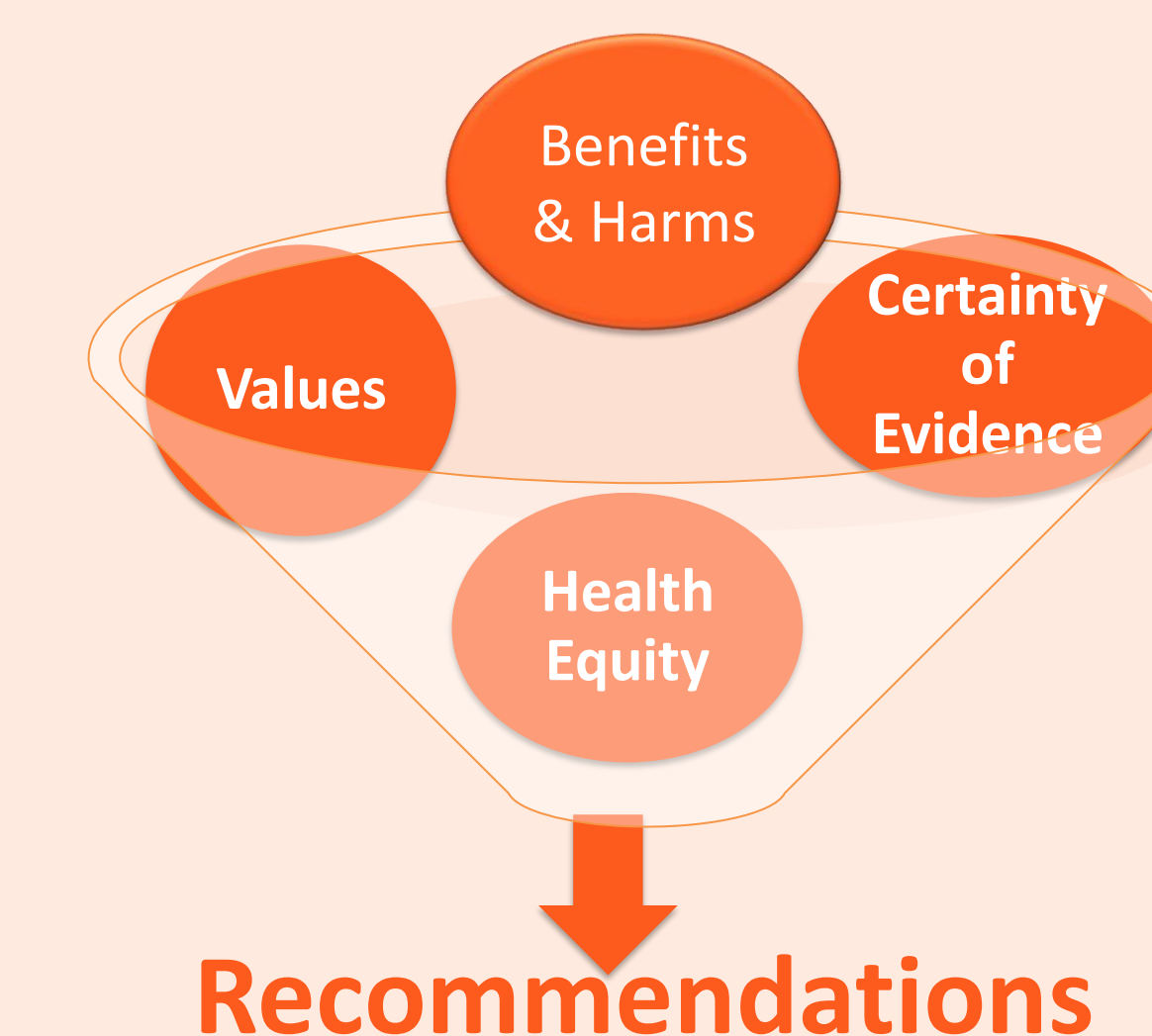
1. **A distributive model to integrate digital health competencies into professional practice roles and responsibilities of nurses**
2. **Leveraging predictive analytics**
3. **Practical or hands-on professional development education**
4. **Education about relational care and interpersonal communication skills**
5. **Active involvement of nurses in all stages in the technology lifecycle**
6. **Embedding digital health competencies into nursing entry-to-practice exams**
7. **Interdisciplinary peer champion models**

Primary care nursing roles of the future would give nurses the ability to leverage digital health technologies to advance health equity by mitigating challenges with access to care that are often experienced by marginalized populations.

Registered Nurses' Association of Ontario (RNAO), Associated Medical Services (AMS). Nursing and compassionate care in the age of artificial intelligence: Engaging the emerging future [Internet]. Toronto (ON): RNAO, AMS; 2020.

Methods (continued)

For each recommendation area, a systematic review is being conducted. RNAO integrates both qualitative and quantitative evidence to develop BPGs. The expert panel will determine the strength of recommendations based on the **certainty of evidence (GRADE)**, **confidence in evidence (CERQual)**, **benefits & harms, values & preferences**, and **health equity**.



Next Steps



Stakeholder Review

- RNAO will be seeking stakeholder feedback on the BPG prior to publication. You can sign up here: <https://rnao.ca/bpg/get-involved/become-stakeholder-reviewer>

Publication

- The guideline is expected to be published online in **2023**.

Tools to Support Guideline Implementation

Following each recommendation, a list of **supporting resources** to support implementation of the recommendations will be included such as **tools or checklists**. These will be relevant to nurses practicing in all settings, including primary care.

Evaluation and Monitoring

RNAO supports organizations to evaluate the **impact of BPG implementation** on nursing practice, health and organizational, as well as health system outcomes to demonstrate value. BPG-based **indicators** will be developed and included within the RNAO BPG.