

Implementation and Sustainability Indicators Pertaining to Nursing Best Practice Guideline Implementation: A Mixed-Methods Analysis

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INTRODUCTION

The Registered Nurses' Association of Ontario (RNAO) launched the Best Practice Spotlight Organization® (BPSO) program in 1999 to support healthcare and academic organizations implement, sustain, and evaluate the use of RNAO best practice guidelines (BPGs). The program counts with greater than 1,300 BPSOs worldwide and its impact on clinical and health outcomes is robust.

The use of BPGs can help decrease the gap between research evidence and clinical practice, thus improving patient and system outcomes.

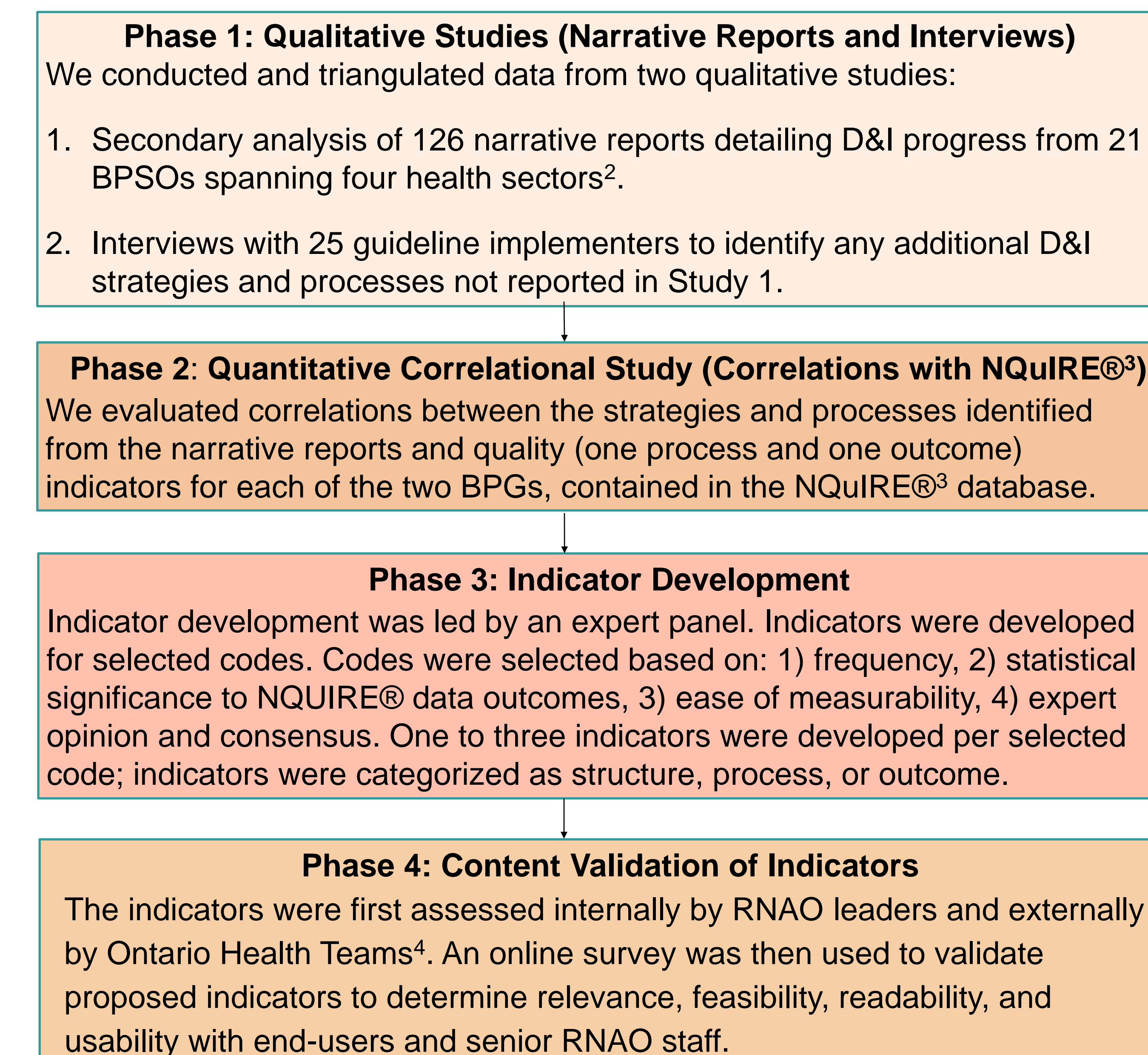
Understanding the strategies, processes, and indicators that are important for implementation and sustainability of BPGs is important for health care organizations.

OBJECTIVES

- To identify the strategies and processes relevant to dissemination and implementation (D&I) and sustainability of two RNAO BPGs¹ at BPSOs.
- To develop and validate quantitative D&I and sustainability indicators based on the identified strategies and processes.

METHODS

We conducted a four-phased exploratory mixed method study.



¹Two BPGs: (1) Preventing Falls and Reducing Injuries from Falls; (2) Person- and Family-Centred Care (PFCC)
²Health Sectors: (1) Acute Care, (2) Home Care, (3) Long-Term Care, (4) Public Health
³NQuIRE® - Nursing Quality Indicators for Reporting and Evaluation® database, a seminal quality improvement initiative that hosts a database of nursing-sensitive quality indicators derived from recommendations in the RNAO's BPGs
⁴Ontario Health Teams - A group of healthcare providers and organizations that are responsible, clinically and fiscally, for delivering a fully coordinated continuum of care to a defined geographic population

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FINDINGS AND IMPLICATIONS FOR DISSEMINATION & IMPLEMENTATION (D&I) RESEARCH

Phase 1: Qualitative Studies (Narrative Reports and Interviews)

The sample consisted of 21 BPSOs which were distributed across four health sectors: acute care ($n = 6$, 29%), home care ($n = 3$, 14%), long-term care ($n = 8$, 38%), and public health units ($n = 4$, 19%).

In total, 14 organizations (67%) implemented the Falls guideline, 12 organizations (57%) implemented the Person- and Family-Centred Care guideline, and 8 organizations (38%) implemented both guidelines.

In total, 47 codes of D&I and sustainability were identified, and then classified into eight overarching themes. The number of codes in each theme varied from 2 (in Governance) up to 11 (in Stakeholder Engagement).

Codes and Themes Identified	
Theme	Definition
Building Capacity	Process by which individuals and/or organizations obtain or improve skills, knowledge, resources, etc. to meet performance expectations required to implement and sustain BPGs.
Communication	Transfer of information related to BPG implementation and sustainability.
Evaluation/Monitoring	Processes by which the progress of implementation and sustainability of BPGs are observed, tracked and/or measured over time.
Evidence-Based Culture	Collective identity which is grounded in the principles of use of best available research evidence to guide clinical decision making.
Governance	Mechanisms by which the governing body of an organization provides a framework of rules and/or monitors practice of its stakeholders, including BPG implementation and sustainability.
Leadership	Individuals or groups of individuals within an organization who provide direction, oversight of BPG implementation and sustainability or inspires, encourages, and motivates others to engage in BPG implementation and sustainability.
Practice Interventions	Any modifications to structures or process that impact the practice of front-line staff related to the implementation or sustainability of BPGs.
Stakeholder Engagement	Processes by which individuals are involved in and influenced to buy-in to implementation or sustainability of BPGs.

Phase 2: Quantitative Correlational Study (Correlations with NQuIRE® Outcomes)

In total, 40% (19 of 47) of the Phase 1 codes had statistically significant ($p \leq .05$) correlations with quality indicators for at least one of the two guidelines. Sixteen of the codes were statistically correlated with quality indicators for both guidelines, and five codes were uniquely correlated to only one of the two guidelines.

Communication was the only theme that did not have a code that was statistically significantly correlated with quality indicators for either guideline.

Codes Uniquely Correlated to One Guideline		
Theme	Code	Unique to Guideline on:
Evidenced-Based Culture	Culture Change	Falls
Governance	Policy Changes	Falls
Evaluation and Monitoring	Monitoring Progress	Falls
Stakeholder Engagement	Collaborating Committees	Falls
Leadership	Senior Leadership Engagement	Person- and Family-Centred Care

Phase 3: Indicator Development

Following expert panel discussion, eight codes were selected for indicator development (one code per each of the eight themes). A total of 28 structure, process, or outcome indicators were developed for the eight codes. See [handout](#).

To develop the indicators, the expert panel considered whether the codes were:

- measurable
- statistically significantly correlated with NQuIRE® quality data
- frequently mentioned in the qualitative studies (narrative reports and interviews)
- suitable and feasible as indicators (based on their expert opinion and consensus)

Theme	Codes Selected for Indicator Development	P<.05		Interviews (N=8)	Reports (N=21)
		Falls	PFCC		
Building Capacity	Building Capacity of Staff & Education of Councils	✓	✓	6	21
Communication	External Dissemination	-	-	5	19
Evaluation/Monitoring	Monitoring Progress	✓	-	7	20
Evidence-Based Culture	Interprofessional Collaboration	-	-	8	15
Governance	Policy Changes	✓	-	1	19
Leadership	Champions	-	-	7	17
Practice Interventions	Practice Changes	✓	✓	7	19
Stakeholder Engagement	Staff Engagement	-	-	6	-

Phase 4: Content Validation of Indicators

Indicators (N=28) were ranked from strongly disagree (1) to strongly agree (6) on four validation criteria using an online survey by end-users and senior RNAO staff.

Validation Criteria	Mean Range (1-6 Scale)	
	End Users (N=12)	RNAO (N=4)
Relevance	4.92 - 5.75	4.08 - 5.25
Feasibility	4.17 - 5.17	3.75 - 5.75
Readability	4.08 - 5.33	5.50 - 5.75
Usability	3.75 - 4.83	3.25 - 5.75

Implications for D&I Research

The D&I indicators developed will allow for frequent monitoring of the dissemination, implementation, and sustainability of guidelines to allow organizations to see what strategies work and when, and to assist them with early identification of deviations and any new problems that arise during implementation and sustainability.

The indicators have been implemented into the RNAO NQuIRE® database and are now being used by participating organizations to document and monitor their implementation and sustainability of guidelines, and tailor their future D&I efforts.