



# Using Qualitative Interviews and Deliberative Dialogue to Triangulate Systematic Review Findings about Clinicians Use of Patient-Reported Outcome Measures (PROMs) in Daily Practice

Angela Wolff, PhD, RN, Associate Professor, School of Nursing, Trinity Western University, Langley, BC, Canada   
Email: [angela.wolff@twu.ca](mailto:angela.wolff@twu.ca)

Oral Session 111: Methods for Different Health Conditions (# 111.7)  
ISOQOL 2021, 28<sup>th</sup> Annual Conference (Virtual)  
Twitter: #ISOQOL #ISOQOL\_SIGs ISOQOL\_CP @Angela\_Wolff

Funding  
Acknowledgements



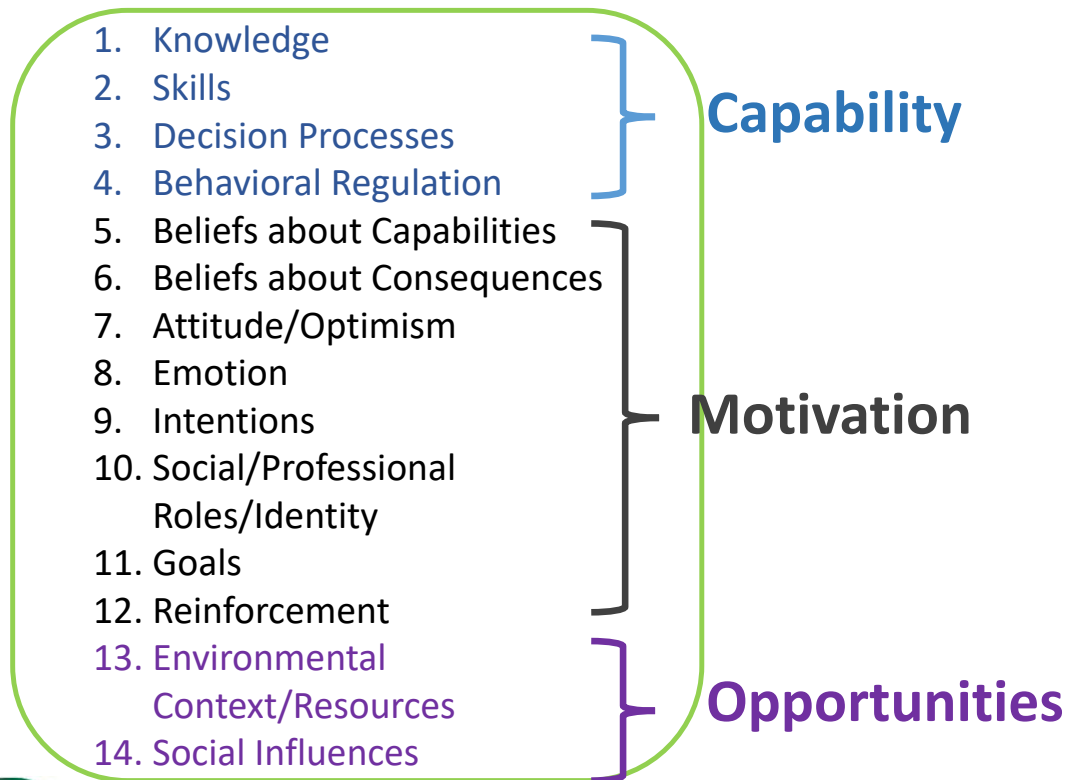
# Background & Method

- **Objective:** To create a resource guide to support clinical decision-making for healthcare providers that use PROM data.
- **Question:** *How do providers working with patients interpret and integrate data from patient-centered measurement assessments (experience and outcome tools) into routine clinical care?* (exemplars: oncology, mental health, rehab, maternal-child)
- **Theoretical foundations:** Consolidated Framework for Implementation Research (CFIR, Damschroder) and Theoretical Domains Framework (TDF, Cane)
- **Method, 3-phased study:** (triangulate)
  1. Mixed Method Systematic Review, protocol see Wolff et al, 2021 in *Systematic reviews*, 10(1), 1-12.; <https://doi.org/10.1186/s13643-021-01725-2>
  2. Qualitative Description with 1:1 interviews with 20 HCP and focus group PT students; inductive content analysis
  3. Deliberative Dialogue forum of 50 stakeholders including patient partners



# Characteristics of Individuals

Theoretical Domains Framework (14 domains)



# Phase 1: Systematic Review

(n=127)

1. Beliefs about Consequences
2. Skills
3. Environmental Context/Resources (Person x environment)
4. Decision Processes
5. Social/Professional Roles/Identity
6. Knowledge
7. Beliefs about Capabilities



# Phase 2: Qualitative Interviews

(1:1 n=20- + 2 focus groups)

1. Skills
2. Beliefs about Consequences
3. Knowledge
4. Decision Processes
5. Social/Professional Roles/Identity
6. Beliefs about Capabilities
7. Environmental Context/Resources (Person x environment)



Profession	#	%
Physiotherapist	6	30%
Registered Nurse	5	25%
Registered Clinical Counsellor	4	20%
Oncologist	3	15%
Registered Psychiatric Nurse	1	5%
Recreation Therapist	1	5%
	20	100%
Clinical Area		
Rehabilitation	6	30%
Community Mental Health	5	25%
Oncology	5	25%
Maternal Child	4	20%
	20	100%
Job/Role		
Staff/Clinical/Work at Bedside	13	65%
Coordinator/In Charge/Case Manager	3	15%
Other (clinical resource, project lead)	2	10%
Manager/Leader/Dept Head	2	10%
	20	100%
Length of Time Worked with PROMs		
Less than 1 year	0	0%
1 to 2 years	2	10%
3 to 5 years	6	30%
Greater than 5 years	12	60%
Missing	0	0%
	20	100%

# Evidence Brief

1. Knowledge – Practical and Procedural
2. Skills / Skill Development
3. Decision Processes
4. Behavioral Regulation
5. Beliefs about Capabilities
6. Beliefs and Attitudes about Consequences
7. Social/Professional Roles/Identity
8. Goals
9. Emotion
10. Intentions
11. Reinforcement
12. Environmental Context/Resources

## Evidence Brief

This brief summarizes a research project on healthcare providers (HCPs) use of patient-centred measurement (PCM). We describe individual factors influencing HCPs' practice and identify strategies by which providers incorporate the PCM data into patients care. The **goal** is to improve the implementation of PCM by HCP in their daily, routine practice. This brief provides the key findings from a systematic review (n=127 articles) and qualitative interviews (n=20 HCPs). Exemplars were used from four practice areas: rehabilitation, mental health, perinatal/child health, and oncology. For a detailed overview of the study methods see [Appendix A](#).

### Patient-reported outcomes and experience measures

There are a variety of standardized and validated patient-centred measures/assessment tools for clinicians to collect decision-aiding information from patients to better understand and address what matters to them. These tools are intended to make healthcare more person-centred, responsive, and efficient. There are two types of tools that assess either health status or experiences (video [here](#)):

1. health status (overall health; disease condition, symptoms, and its treatment; functional status; quality of life; or mental well-being) → also referred to as **patient-reported outcome measures** (PROMs), herein the term PROMs will be used
2. experiences (health care or illness experience) → also referred to as **patient-reported experience measures** (PREMs)

### Why are PROMs used?

These assessment tools can provide information that can enhance HCPs' interpretation of data obtained from clinician-based assessments such as health history, biological measures, and physical examination. This information might inspire conversations between patients and providers as they develop individualized care plans. As a result, such conversations might facilitate shared decision-making between patients and clinicians, improved patient-clinician communication, detection of overlooked problems, and tailored process monitoring.

### Assumptions

- Integration of PROMs in the routine practice of HCPs might have a positive impact on health outcomes
- PROM data can be used in combination with other data, such as clinician outcomes, to continually encourage shared decision-making
- Information collected from patients via PROMs be used within patient-provider encounters, rather than solely for quality and safety initiatives
- Implementation of PROMs into clinical practice is a "complex intervention." Initial and sustained adoption of the patient-centred assessment tools require consideration of the PROM assessment tool, context, HCPs, and implementation process (Damschroder et al., 2009)

### Research Evidence about the Factors Influencing Provider Behaviour

Ten factors emerged as significant from the systematic review and are reported under three overarching categories: Capability, Motivation, and Opportunity.

#### CAPABILITY

##### 1. Practical Knowledge

HCPs gained "new" knowledge about or familiarity with PROMs that was both **general** and **specific** within a clinical context/practice area. **General knowledge** about PROMs included the (a) purpose (e.g., patient-centred care and patient voice), (b) definition, (c) concept/area measured (e.g., quality of life), (d) benefits and relevance to practice for patients, HCPs, and healthcare, (e) explanation of PROMs to patients, and (f) team utility of PROMs.

# Phase 3: Deliberative Dialogue (DD)

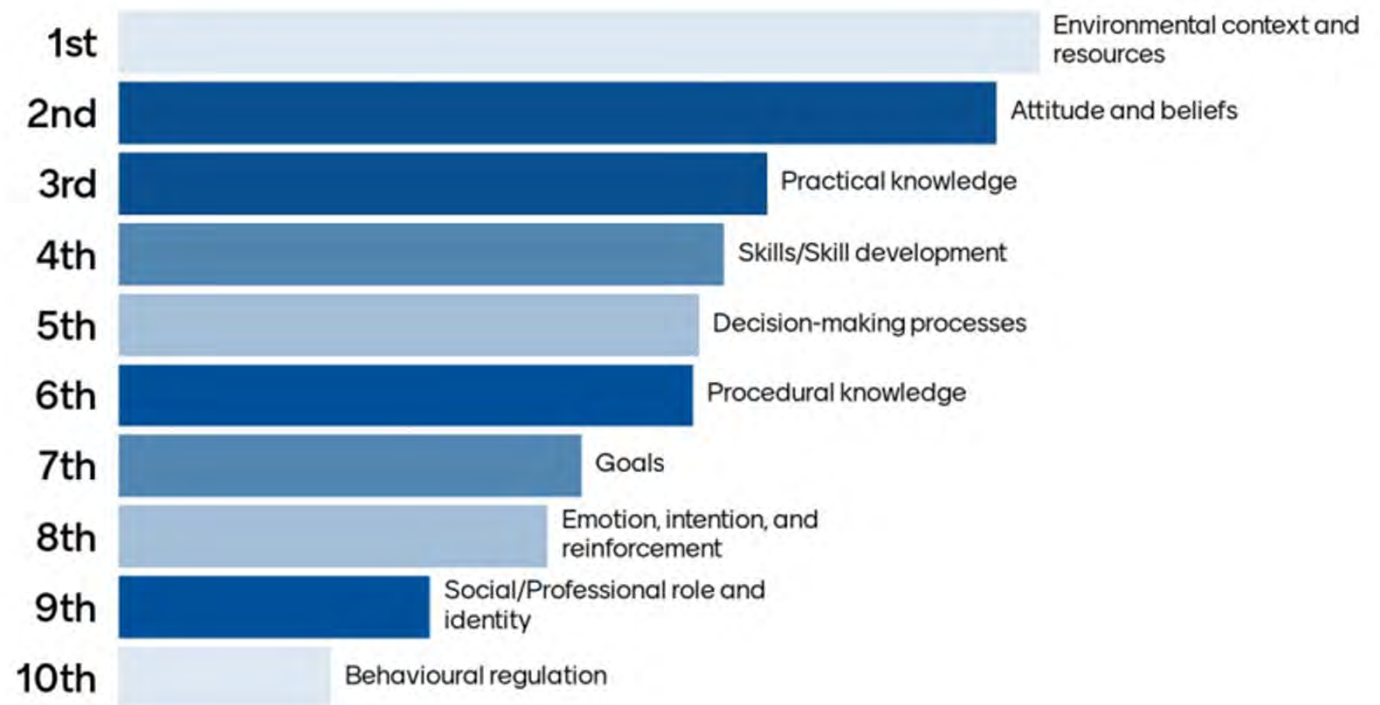
---

- Purposeful, facilitated discussions with a variety of perspectives for consensus building and co-creating action
- Key components:
  - Evidence synthesis
  - Stakeholder analysis
  - Facilitated discussions and activities
- Traditionally been completed face-to-face; now also being conducted virtually
  - Virtual DDs with appropriately developed activities (e.g., polls, breakout groups) have resulted in very rich discussions
  - Preparation is key, but especially for virtual dialogue, with various individuals involved (e.g., patients, decision-makers)



## Which factors are most important to change clinicians' behaviors to adopt patient-reported outcome measurement in daily practice?

Most important factors, as identified by stakeholders and patient partners

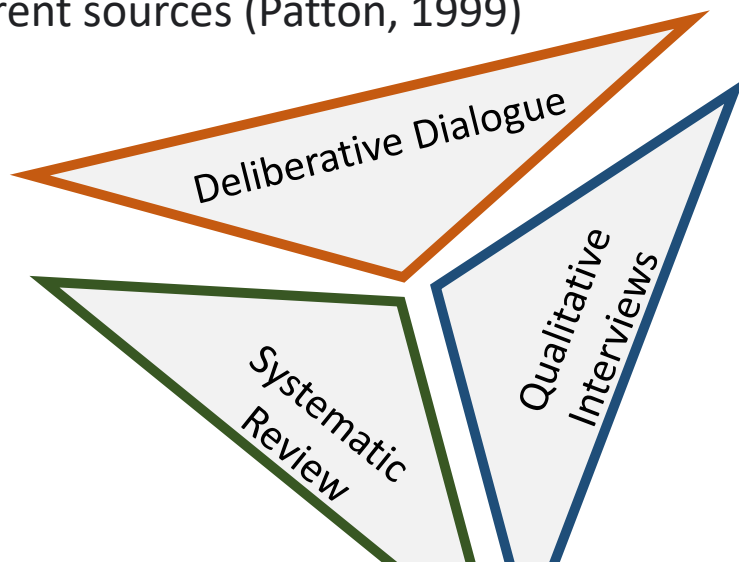




# Healthcare provider characteristics that influence the implementation of individual-level PROMs data across practice settings

## Triangulation

Use of multiple methods or data sources in research to develop a comprehensive understanding of phenomena; ascertain validity via convergence of information from different sources (Patton, 1999)



1. Knowledge (theoretical and procedural)
2. Skills (abilities, practice and skill dev't)
3. Decision Processes

**Capability**

4. Beliefs about Capabilities (self-confidence, perceived competence, behavioural control)
5. Beliefs about Consequences (beliefs and attitudes about expected outcomes and consequences)
6. Social/Professional Roles/Identity (roles, boundaries, teamwork)

**Motivation**

7. Environmental Context/Resources (clinician interacting with environment, salient events, material resources)

**Opportunities**





# Resource Guide on Clinician Needs and Influential Factors

## User's Guide to Implementing Patient-Reported Outcomes Assessment in Clinical Practice

Version 2: January 2015

*Produced on behalf of the  
International Society for Quality of Life Research by  
(in alphabetical order):*

Neil Aaronson, PhD  
Thomas Elliott, MD  
Joanne Greenhalgh, PhD  
Michele Halyard, MD  
Rachel Hess, MD  
Deborah Miller, PhD  
Bryce Reeve, PhD  
Maria Santana, PhD  
Claire Snyder, PhD



Source: <https://www.isoqol.org/wp-content/uploads/2019/09/2015UsersGuide-Version2.pdf>

## Implementing Patient-Reported Outcome Measures in Clinical Practice: A Companion Guide to the ISOQOL User's Guide

Version 1: January 2018

*Produced on behalf of the  
International Society for Quality of Life Research by  
(in alphabetical order):*

Eric K.H. Chan, PhD  
Todd C. Edwards, PhD  
Kirstie Haywood, PhD  
Sean Mikles, MPH  
Louise Newton, MSc



*International Society for Quality of Life  
Research*

Source: <https://www.isoqol.org/wp-content/uploads/2019/09/ISOQOL-Companion-Guide-FINAL.pdf>

**Implementing Patient-Reported Outcome Measures in Clinical Practice: A Companion Guide about the Clinicians' Needs and Factors that Influence their Adoption**

**Coming January 2021**

Source: <https://doi.org/10.1186/s13643-021-01725-2>



## TEAM ACKNOWLEDGEMENTS

### Principal Investigators:

[Dr. Angela Wolff, PhD, CHE, MSN, RN](#) Associate Professor, School of Nursing (SON), Trinity Western University (TWU), Langley, BC

### Co-Investigators:

[Barbara Astle, PhD, RN](#) MSN Program Director and Associate Professor, SON, TWU  
[Duncan Dixon MEd, MLIS \(\\*retired\)](#) Assistant Librarian, Alloway Library, TWU  
[Samar Hejazi, PhD](#) Research & Implementation Scientist, Department of Evaluation & Research Services, Fraser Health Authority (FHA), Surrey, BC  
[Nelly D. Oelke, PhD, RN](#) Associate Professor, SON, Faculty of Health and Social Development, University of British Columbia (UBC), Okanagan Campus, Kelowna, BC  
[Sheryl Reimer-Kirkham, PhD, RN](#) Dean and Professor, SON, TWU  
[Lisa Edwards, PhD, PT](#) Lecturer, Research Lead for Physiotherapy, School of Allied Health Professions and Midwifery, Faculty of Health Studies, University of Bradford, UK  
[Vanessa Noonan, PhD, MSc, PT](#) Director, Research and Best Practice Implementation, Praxis Spinal Cord Institute, Vancouver, BC  
[Deborah Gibson, MSN, RN](#) Assistant Professor, TWU SON  
[Sarah Liva, PhD, RN](#) Assistant Professor, TWU SON  
[Kathrin Stoll, PhD](#) Research Associate, Birth Place Lab, Midwifery, Faculty of Medicine, UBC, Vancouver, BC  
[Saraswathi Vedam, MSN Sci D\(hc\), RM](#) Principal, Birth Place Lab and Professor, Midwifery, Faculty of Medicine, UBC, Vancouver, BC  
[Lynn Musto, PhD, RN, RPN](#) Assistant Professor, SON, TWU  
[Anthony Neptune, MA, BA](#) Manager, Community Mental Health, Mental Health and Substance Use (MHSU), FHA, Surrey, BC  
[Shirin Abadi, PharmD, MBA, RPh](#) Clinical Specialist, Leader, Educator & Researcher, BC Cancer Agency, Vancouver, BC  
[Fuchsia Howard, PhD, RN](#) Assistant Professor, SON Faculty of Applied Sciences, UBC, Vancouver, BC

### Collaborators:

[Andrea Burrows, MScN, RN](#) Regional Practice Leader, Research and Knowledge Translation, IHA, Kamloops, BC  
[Colleen Butcher, MBA, CHE, RN](#) Clinical Nurse Specialist—Seniors, Vancouver Island Health Authority (VIHA), Ladysmith, BC  
[Angela Louie, MSc, OT](#) Coordinator, Rehabilitation & Recovery; Mental Health and Substance Use, FHA, Surrey, BC  
[Seyi \(Oluseyi\) Oyedele, PhD, CE, MPH](#) Evaluation Specialist – Health System Evaluation, Interior Health Authority (IHA), Kelowna, BC. Collaborator  
[Marie Tarrant, PhD, MPH, MN, RN](#) Professor and Director, SON, UBC, Okanagan Campus, Kelowna, BC

[Michelle Urbina-Beggs, MN, CCHN\(C\), RN](#) Clinical Nurse Specialist, Maternal, Child and Early Childhood, Population and Public Health, FHA  
[Scott McNeil, MSc, RPN \(temp on leave\)](#) Clinical Nurse Educator, Community Mental Health, MHSU, FHA, Surrey, BC  
[Ivy \(Ivylina\) Williams, MSW, RSW](#) Social Work Clinical Lead, Community Mental Health, MHSU, FHA, Surrey, BC  
[Zohreh Zadeh, PhD](#) Evaluation Leader, Community Mental Health, MHSU, FHA, Surrey, BC

### Advisor:

[Annie Smith](#) Independent Consultant. Principal Advisor  
[Ruby Gidda, MEd, BScN, RN](#) Executive Director, BC Cancer – Abbotsford & Provincial Professional Practice (Nursing & Allied Health)

### Patient Partners:

[Brenda Jones](#) Mental Health, Surrey, BC  
[Gus Butow \(on leave\)](#) Oncology, Surrey, BC  
[Dennis McKintuck](#) Oncology, Kelowna, BC  
[Vikram Bubber](#) Oncology, Surrey, BC  
[Karen Hodge](#) Maternal-child & Rehabilitation, Vancouver, BC

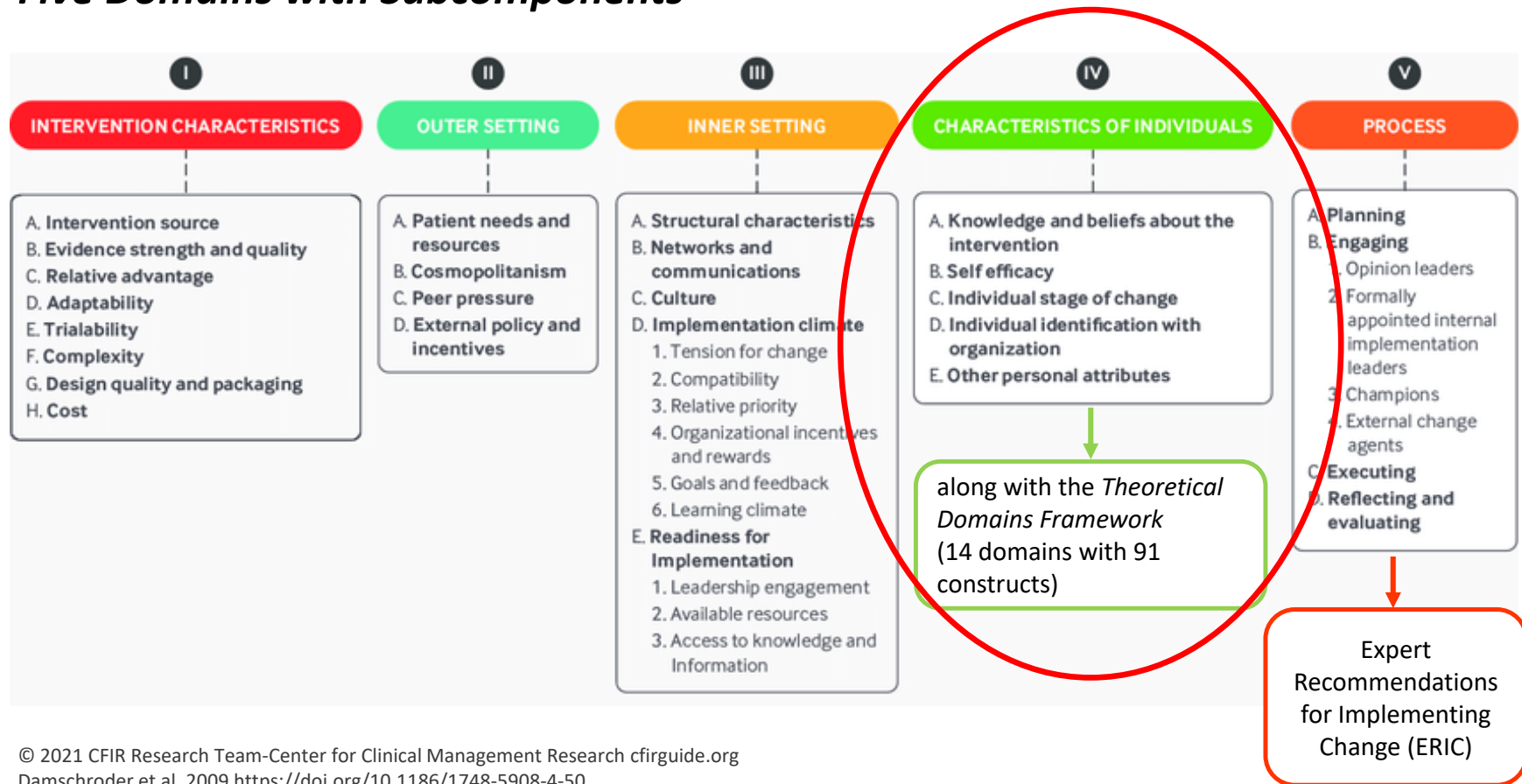
### Research Staff:

[Andrea Dresselhuus, MSN, RN](#) Research Coordinator, TWU SON, Langley, BC  
[Rachel Jerome, BSN student](#) Research Assistant, TWU SON, Langley, BC  
[Vidhi Thakkar, PhD](#) Postdoctoral Fellow, TWU SON, Langley, BC  
[Lillian Li, BSN student](#) Undergraduate Student Research Assistant Staff, TWU SON, Langley, BC  
[Gabiella Collins, BSN student](#) Undergraduate Student Research Assistant Staff, TWU SON, Langley, BC  
[Abner Kooner, BSN student](#) Undergraduate Student Research Assistant Staff, TWU SON, Langley, BC



# Consolidated Framework for Implementation Research (CFIR)

## Five Domains with Subcomponents



© 2021 CFIR Research Team-Center for Clinical Management Research [cfirguide.org](https://cfirguide.org)  
 Damschroder et al, 2009 <https://doi.org/10.1186/1748-5908-4-50>

TDF: Cane et al. 2012, <https://doi.org/10.1186/1748-5908-7-37>  
 ERIC: Powell et al (2015) DOI 10.1186/s13012-015-0209-1 and Perry et al., 2019  
<https://doi.org/10.1186/s13012-019-0876-4>



## Phase 1: Systematic Review

1. Knowledge (3 items)
2. Skills (7 items)
3. Decision Processes, Attention, Memory (5 items)
4. Behavioral Regulation (5 items)
5. Beliefs about Capabilities (8 items)
6. Beliefs about Consequences (8 items)
7. Attitude/Optimism (5 items)
8. Emotion (7 items)
9. Intentions (5 items)
10. Social/Professional Roles and Identity (9 items)
11. Goals (6 items)
12. Reinforcement (7 items)
13. Environmental Context and Resources (7 items)
14. Social Influences (11 items)

## Characteristics of Individuals

Theoretical Domains Framework (14 domains)

- Focuses on underlying needs and factors influencing HCP behaviors for initial uptake and sustained practice change
    - Factors include individual (beliefs and motivations), social and environmental
  - 14 domains represents 33 behavior change theories and 128 key theoretical constructs
  - Useful for both planning and evaluation
  - Does not explain or offer causality about the determinants of a behaviour in a given context. It could be theory
- Capability**
- Motivation**
- Opportunities**

