Practically Integrating Research into Practice:
How to do it and why it matters

Sarah Moore-Vasram NP, PhD
Academic Clinician
Nursing Research Lead
Adjunct Lecturer – School of Nursing, Queen's University
Co-chair Diabetes Canada Conference: Clinical Care & Education

Providence Care

more than healthcare.

Land Acknowledgment

Providence Care acknowledges that we are located on the ancestral territory of First Nations, Metis, Inuit, and all First Peoples of this region including the Haudenosaunee, Anishnaabe and other urban and rural Indigenous members in our region. We purposefully recognize past and present Indigenous Peoples and are committed to improving relationships among nations and promoting respect for the histories and cultures of Indigenous Peoples.

Providence Care

more than healthcare.

KNRC
Nursing Research Conference
Kingston

KNRC acknowledges the contributions of:

KGH Research Institute

Kingston Health Sciences Centre
Centre des sciences de la santé de Kingston

Providence Care

RNAO

Queen's University

St. Lawrence College

Thank you to our sponsor:

Abbott

FreeStyle Libre 2

Providence Care

more than healthcare.

Agenda

- Why
- How: Practical examples
- Supports

Disclosures

- Honoraria for accredited presentations: Novo Nordisk Canada
- Sponsor today: Abbott – no content influence

Why?

Headlines

NORTHEASTERN STATE UNIVERSITY

NURSING ONLINE PROGRAMS

ONLINE PROGRAMS GET

Home » Degrees » RN to BSN » Why Do Nurses Need Research?

WHY DO NURSES NEED RESEARCH?

Published On: *September 12, 2017*

Research helps nurses determine effective best practices and improve patient care.

AJN American Journal of Nursing
The Leading Voice of Nursing Since 1900

VIEWPOINT

Research in Nursing Practice

Yates, Morgan BScN, RN

Author Information

AJN, American Journal of Nursing 115(5):p 11, May 2015. | **DOI:** 10.1097/01.NAJ.0000465010.34824.62

Metrics

Research provides the foundation for high-quality, evidence-based nursing care. However, there isn't a direct flow of

WHY ARE RESEARCH SKILLS IMPORTANT IN THE NURSING FIELD?

Published On: *November 2, 2022*

Nurses occupy an influential position in the field of medicine. They spend about 70% of their time at the bedside, working directly with patients and observing treatment outcomes firsthand.

They also field questions from curious patients. In many cases, patients feel more comfortable confiding in or asking nurses questions instead physicians. This relationship allows nurses to address patient concerns while providing quality care.

How can nurses feel more confident and authoritative in addressing patient needs? One answer: research.

RESEARCH IN ACTION

Nursing research provides an opportunity for nurses to advance treatment techniques and improve patient outcomes. So, for example, one focus is on supporting the "evidence" equation of evidence-based care.

Research can also take the form of knowing how to oversee projects or interpreting cutting-edge research, which professionals can then apply directly to patient care. Ultimately, strong research skills contribute to nurses' ability to impact the current and future state of healthcare.

Research Benefits from Nursing Insight

The Johns Hopkins Clinical Research Network's nursing collaboration brings clinical nurses into the research realm.

"Nursing research is looking at ways to overcome barriers in health care, refine education, promote cultural sensitivity and achieve resilience in nursing," says Melissa Gerstenhaber, the JHCRN research

Providence Care

more than healthcare.

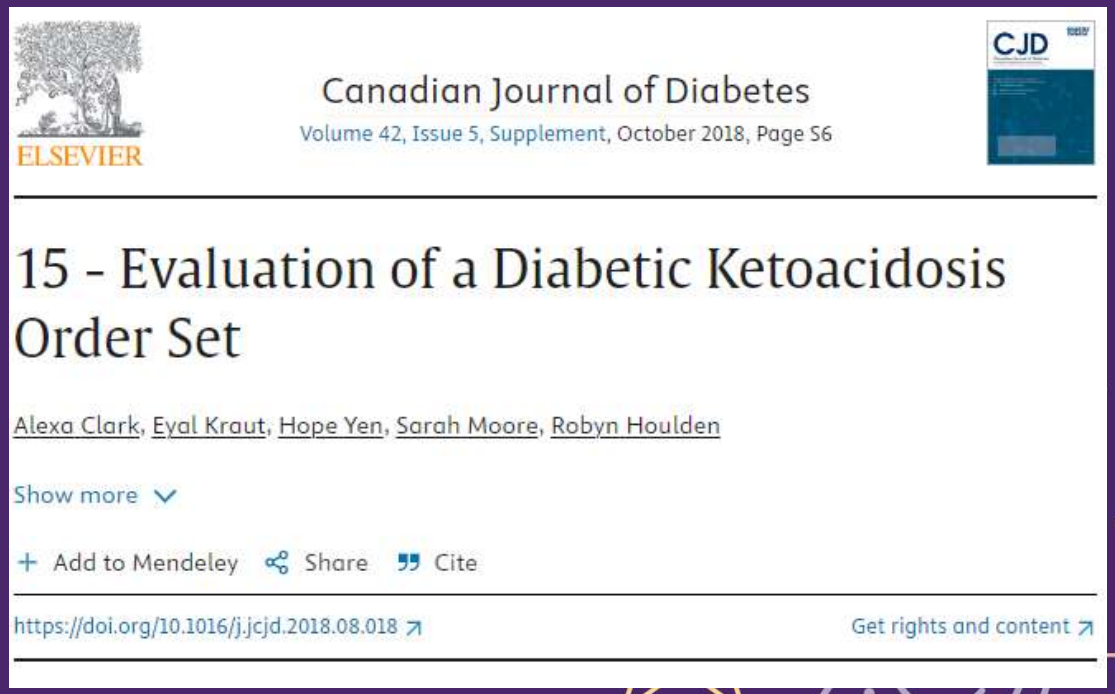
Informed decision making.

Providence Care

more than healthcare.

How?

Evaluating Ordersets/ Protocols



ELSEVIER

Canadian Journal of Diabetes
Volume 42, Issue 5, Supplement, October 2018, Page S6

15 - Evaluation of a Diabetic Ketoacidosis Order Set

Alexa Clark, Eyal Kraut, Hope Yen, Sarah Moore, Robyn Houlden

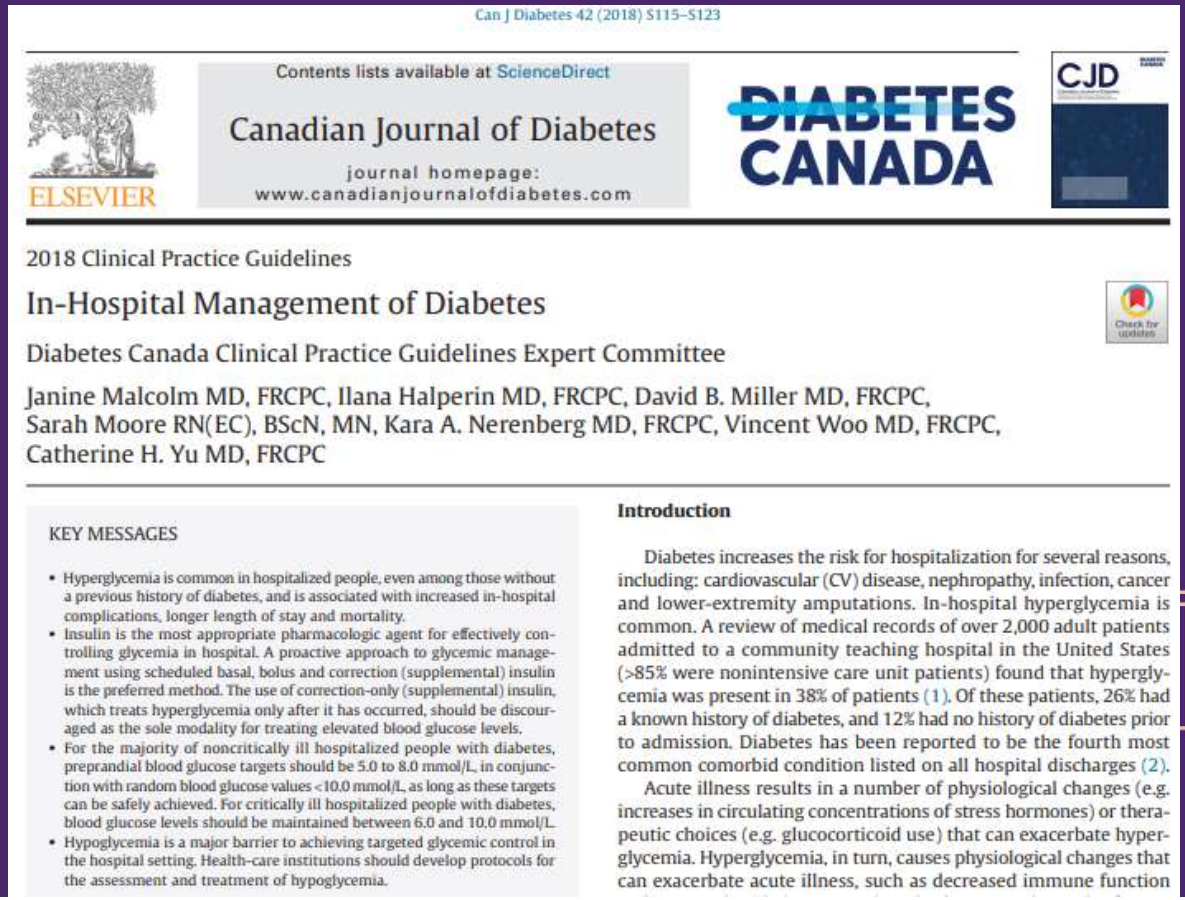
Show more

+ Add to Mendeley Share Cite

https://doi.org/10.1016/j.jcjd.2018.08.018

Get rights and content

National Guidelines



Can J Diabetes 42 (2018) S115–S123

Contents lists available at ScienceDirect

Canadian Journal of Diabetes

journal homepage: www.canadianjournalofdiabetes.com

2018 Clinical Practice Guidelines

In-Hospital Management of Diabetes

Diabetes Canada Clinical Practice Guidelines Expert Committee

Janine Malcolm MD, FRCPC, Ilana Halperin MD, FRCPC, David B. Miller MD, FRCPC, Sarah Moore RN(EC), BScN, MN, Kara A. Nerenberg MD, FRCPC, Vincent Woo MD, FRCPC, Catherine H. Yu MD, FRCPC

KEY MESSAGES

- Hyperglycemia is common in hospitalized people, even among those without a previous history of diabetes, and is associated with increased in-hospital complications, longer length of stay and mortality.
- Insulin is the most appropriate pharmacologic agent for effectively controlling glycemia in hospital. A proactive approach to glycemic management using scheduled basal, bolus and correction (supplemental) insulin is the preferred method. The use of correction-only (supplemental) insulin, which treats hyperglycemia only after it has occurred, should be discouraged as the sole modality for treating elevated blood glucose levels.
- For the majority of noncritically ill hospitalized people with diabetes, preprandial blood glucose targets should be 5.0 to 8.0 mmol/L, in conjunction with random blood glucose values <10.0 mmol/L, as long as these targets can be safely achieved. For critically ill hospitalized people with diabetes, blood glucose levels should be maintained between 6.0 and 10.0 mmol/L.
- Hypoglycemia is a major barrier to achieving targeted glycemic control in the hospital setting. Health-care institutions should develop protocols for the assessment and treatment of hypoglycemia.

Introduction

Diabetes increases the risk for hospitalization for several reasons, including: cardiovascular (CV) disease, nephropathy, infection, cancer and lower-extremity amputations. In-hospital hyperglycemia is common. A review of medical records of over 2,000 adult patients admitted to a community teaching hospital in the United States (>85% were nonintensive care unit patients) found that hyperglycemia was present in 38% of patients (1). Of these patients, 26% had a known history of diabetes, and 12% had no history of diabetes prior to admission. Diabetes has been reported to be the fourth most common comorbid condition listed on all hospital discharges (2).

Acute illness results in a number of physiological changes (e.g. increases in circulating concentrations of stress hormones) or therapeutic choices (e.g. glucocorticoid use) that can exacerbate hyperglycemia. Hyperglycemia, in turn, causes physiological changes that can exacerbate acute illness, such as decreased immune function

Describe the Gaps

ELSEVIER

Canadian Journal of Diabetes
Volume 45, Issue 6, August 2021, Pages 519-523.e2

Original Research

Variability of Clinical Practice Management of Type 1 and Type 2 Diabetes During Surgery Across Canada

Janine Malcolm MD [a], Ilana Halperin MD [b], Sarah Moore MN [c], Robyn L. Houlden MD [d], Canadian Standards for Perioperative/Periprocedure Glycemic Management Expert Consensus Panel

Show more

+ Add to Mendeley Share Cite

https://doi.org/10.1016/j.jcjd.2020.10.011 Get rights and content

Can J Diabetes 46 (2022) 99–107

Contents lists available at ScienceDirect

Canadian Journal of Diabetes

journal homepage:
www.canadianjournalofdiabetes.com

Review

Suggested Canadian Standards for Perioperative/Periprocedure Glycemic Management in Patients With Type 1 and Type 2 Diabetes

Ilana Halperin MD [a,*]; Janine Malcolm MD [b]; Sarah Moore MN, PhD candidate [c]; Robyn L. Houlden MD [d] on behalf of the Canadian Standards for Perioperative/Periprocedure Glycemic Management Expert Consensus Panel

[a] *Division of Endocrinology, Sunnybrook Health Sciences Centre, University of Toronto, Toronto, Ontario, Canada*
[b] *Division of Endocrinology and Metabolism, University of Ottawa, Ottawa, Ontario, Canada*
[c] *Department of Medicine, University of Ottawa and the Ottawa Hospital Research Institute, Ottawa, Ontario, Canada*
[d] *Division of Endocrinology, Queen's University, Kingston, Ontario, Canada*

Key Messages

- Perioperative hyperglycemia is associated with an increased risk of postoperative infections and increased length of hospital stay.
- The surgical pathway for patients with diabetes should be a seamless process with advanced planning and ongoing patient involvement.

Clir

ent

ELSEVIER

Review

Use of Sodiu
Patients Wit

Shirley Shuster
Sara Awad MBB

[a] Department of Medicine,
[b] Division of Nephrology, De
[c] Division of Endocrinology,

Key Messages

- Data regarding th
as transplant pat
- Our review dem
minimal adverse

ARTICLE IN

Article history:
Received 6 March 2021

JOURNAL ARTICLE

Efficacy and Safety of SGLT2 Inhibitors in Diabetic Kidney Transplant Patients: Review of the Current Literature

Shirley Shuster, MD, Zeyana Al-Hadhrami, MD, Sara Awad, MBBS FRCPC, Sarah Moore, MN NP, Khaled Shamseddin, MD MSc FRCPC

Journal of the Endocrine Society, Volume 5, Issue Supplement_1, April-May 2021, Pages A411–A412, https://doi.org/10.1210/jendso/bvab048.838
Published: 03 May 2021

PDF Split View Cite Permissions Share

s are scarce,

ive and has

lycemic agents

Abstract

Introduction: SGLT2 inhibitors are oral hypoglycemic medications used in type 2 diabetes mellitus (T2DM). They act by blocking glucose and sodium reabsorption in the proximal renal tubules. In patients with T2DM and cardiovascular disease, SGLT2 inhibitors have been shown to improve glycemic control, promote weight loss, and reduce major adverse cardiovascular events (MACE). They have also been shown to have favorable renal outcomes in patients with chronic kidney disease (CKD) reducing albuminuria and progression to end-stage renal disease; however, all studies have excluded kidney transplant patients. The objective of this review was to determine the

Can J Diabetes 44 (2020) S10–S12

Contents lists available at ScienceDirect

Canadian Journal of Diabetes

journal homepage: www.canadianjournalofdiabetes.com

Highlighted Poster Presentation Abstracts

21

Pilot Project to Assess Nurse Practitioner Clinic for Adults With Diabetes Without Access to Primary Care

SARAH MOORE, JENNIFER OLAJOS-CLOW, SARA SERVAGE, CASSANDRA HAWCO, BIKRAMPAL S. SIDHU†, ROBYN L. HOULDEN†*
Kingston, ON

Background: The majority (80%) of medical management for diabetes takes place in primary care. In Ontario, 8.8% of the population does not have a primary care provider (PCP), which can result in delays accessing guideline-recommended diabetes care.
Objective: A nurse practitioner (NP)-led ambulatory clinic located within a diabetes education and management centre (DEMC) was developed for adults with diabetes and no PCP to address these disparities.
Methods: Descriptive analyses were conducted over the initial 5 months of the clinic.
Results: Thirty-five patients (51% male; mean age 54.7 years) were Canadian cities (n=96). Transcripts were analyzed using thematic analysis.
Results: Three major themes emerged:

1. Competing priorities: The most often cited barrier was that patients were unable to appropriately manage their diabetes because they had too many other more pressing issues in their life. These ranged from seeking housing, to unsupportive/contentious relationships, to struggles with mental health and/or addictions, and more acute medical concerns.
2. Health-care system barriers: Providers also identified that patients face a number of barriers to engaging with the health-care system, including: difficulty with transportation; communication with patients (due to lack of stable phone or address); patients' reticence to engage due to previous experiences of stigma/prejudice in health care and a lack of continuity in clinical care.
3. Self-management barriers: Providers also identified that the expense and storage of both medications and healthy food was a

Journa

Determinin
chemothera
population-

Sarah Moo
MD, Patti A
Hay, MD, J

PII:

DOI:

Reference:

To appear

ARTICLE IN PRESS

Can J Diabetes xxx (2024) 1–9

Contents lists available at ScienceDirect

Canadian Journal of Diabetes

journal homepage:
www.canadianjournalofdiabetes.com

Original Research

Determining the Associations Between Glucocorticoid Use During Hematologic Chemotherapy Treatment and New-onset Diabetes and Hyperglycemia and Mortality: A Population-based Cohort Study

Sarah Moore-Vasram PhD NP [a,*]; Monakshi Sawhney PhD, NP [a]; Robyn L. Houlden MD [b]; Patti A. Groome PhD [c,d]; Catherine Goldie PhD, RN [a]; Wenbin Li MSc [d]; Annette E. Hay MD [e]; Joan Tranmer PhD, RN [a,d]

[a] School of Nursing, Queen's University, Kingston, Ontario, Canada
[b] Division of Endocrinology and Metabolism, Queen's University, Kingston Health Sciences Centre, Kingston, Ontario, Canada
[c] Division of Cancer Care and Epidemiology, Queen's Cancer Research Institute, Queen's University, Kingston, Ontario, Canada
[d] ICES, formerly the Institute for Clinical Evaluative Studies, Queen's University Site, Kingston, Ontario, Canada
[e] Division of Hematology, Queen's University, Kingston, Ontario, Canada

Key Messages

- Glucocorticoid administration is associated with a significant increased risk of new-onset diabetes and new-onset hyperglycemia in patients with leukemia.
- Patients with hyperglycemia during chemotherapy used acute care services more frequently.
- There is a modest increased risk of mortality in the presence of hyperglycemia, particularly for patients with non-Hodgkin lymphoma.

ARTICLE INFO

Article history:
Received 27 February 2023
Received in revised form
9 August 2023
Accepted 4 January 2024

ABSTRACT

Objectives: The aim of this study was to determine the associations between glucocorticoid administration during chemotherapy for hematologic malignancy and hyperglycemia, new-onset diabetes, and mortality in Ontario, Canada. Hospitalization and emergency room utilization during the chemotherapy treatment period were also described.
Methods: We conducted a retrospective cohort study using health administrative data from ICES, Ontario,

SUPPORTS

Re-envisioning Research






Providence Care

more than healthcare.

NURSING

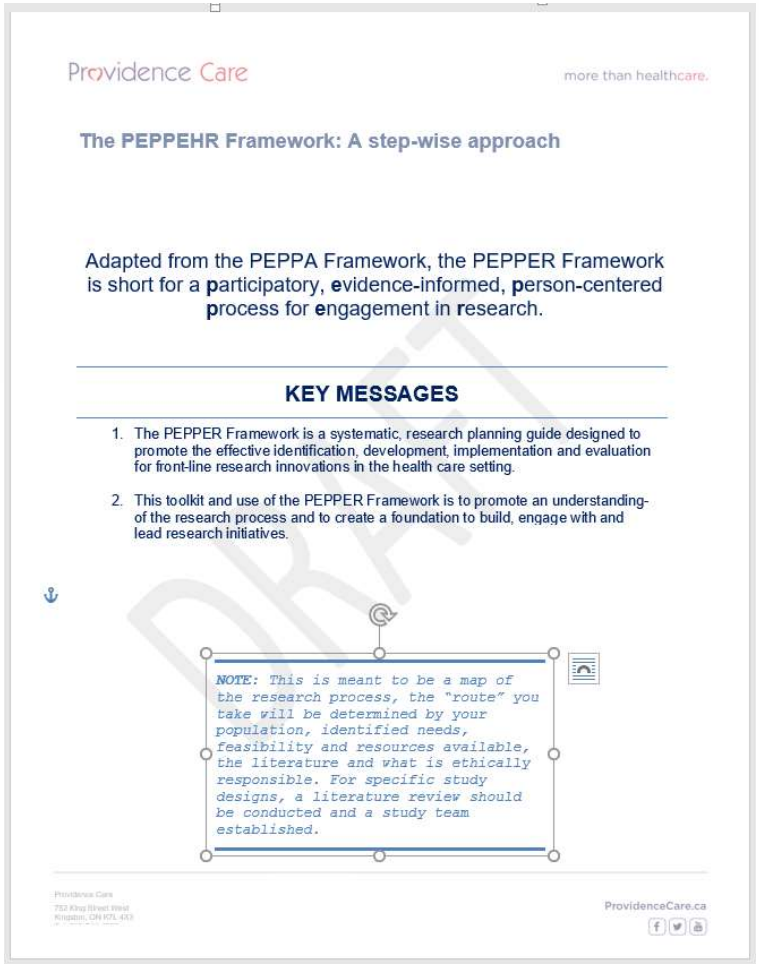
Sarah Moore-Vasram NP, PhD

613-544-4499 ext. 53540

moorevas@providencecare.ca

Katie Goldie RN, PhD

Research Framework



Providence Care

more than healthcare.

The PEPPEHR Framework: A step-wise approach

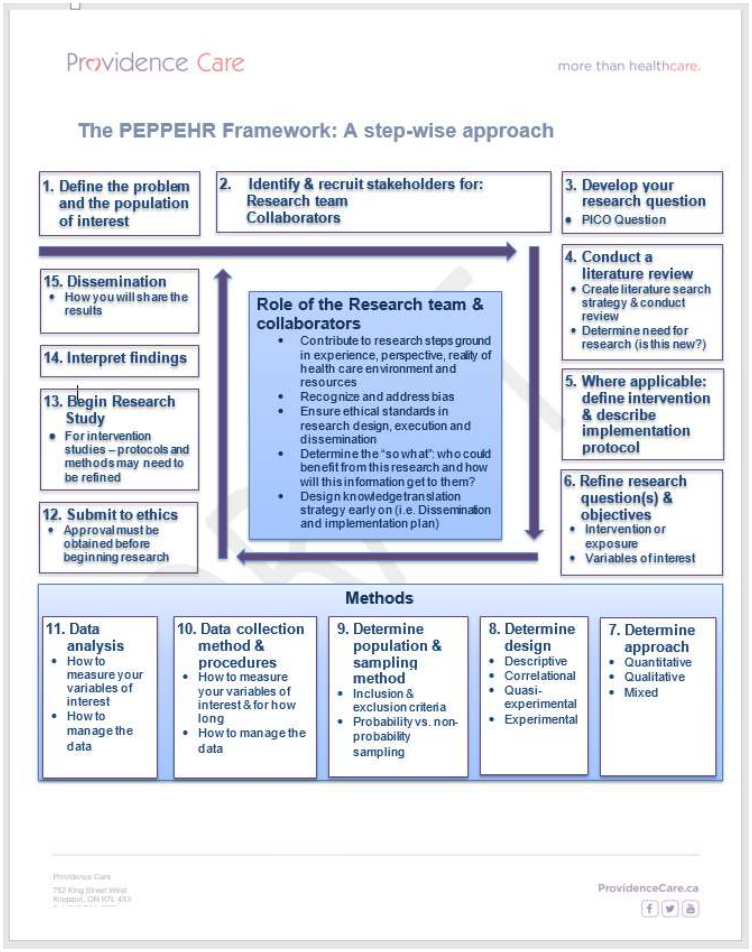
Adapted from the PEPPA Framework, the PEPPER Framework is short for a **p**articipatory, **e**vidence-informed, **p**erson-centered **p**rocess for **e**ngagement in **r**esearch.

KEY MESSAGES

1. The PEPPER Framework is a systematic, research planning guide designed to promote the effective identification, development, implementation and evaluation for front-line research innovations in the health care setting.
2. This toolkit and use of the PEPPER Framework is to promote an understanding of the research process and to create a foundation to build, engage with and lead research initiatives.

NOTE: *This is meant to be a map of the research process, the "route" you take will be determined by your population, identified needs, feasibility and resources available, the literature and what is ethically responsible. For specific study designs, a literature review should be conducted and a study team established.*

Research Framework



Capacity & Engagement

Providence Care

Providence Care Staff Team Survey

December, 29, 2023

Research: Optimizing Capacity (ROC) - Perceptions and Current-State (PC)
ROC PC Study

For survey creator/ distributor only:		
	Survey	Email, link, hard copy etc.
	To:	Clinical Educators, Professional Practice Leaders, managers, directors, volunteers
	Subject:	How does research fit into your practice?

Body of email:

Good afternoon everyone,

In recent conversations with many of our clinical staff and volunteers it has been made clear that there is an interest in learning more about opportunities to paticipate in or lead research initiatives. We are conducting a research study to understand more about the current state of research engagement for Providence Care staff. As we look to grow research programming within our organization, it is helpful for us to understand what supports, resources and opportunities you are aware of and are currently available to you. We would also like to know what programming, supports and resources might interest you in the future and where we can help to build capacity for you to engage in front-line driven research initiatives if you are interested. We know that we have many staff who have a lot of experience with research and we know that there are staff who may be new to research. We would like to hear as many perspectives as we can. You do not have to have any experience as a researcher to complete this survey.

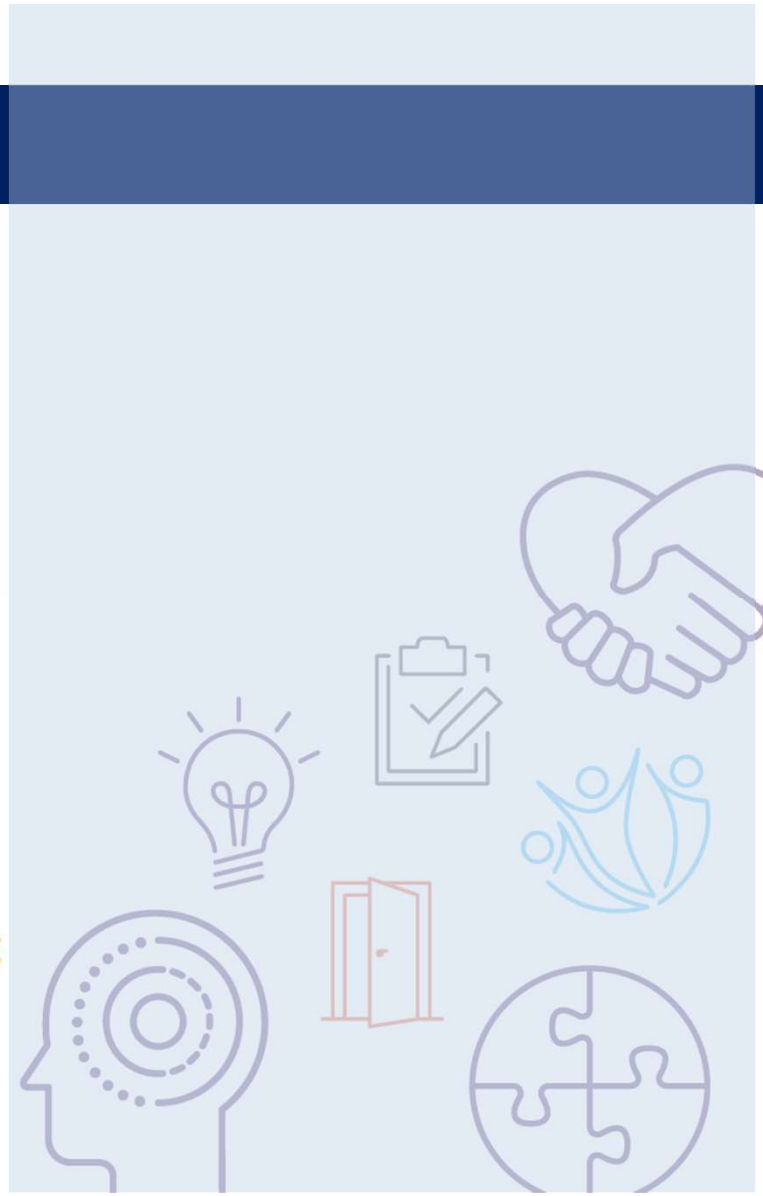
Your answers to this survey will remain confidential and will only be viewed by the research team.

If you have any questions about this survey please feel free to contact:

Sarah Moore-Vasram, Academic Clinican and co-principal investigator
moorevas@providencecare.ca
Tel: 613-544-4900 ext 53540

or
Chetan Phadke, Reseach Manager
phadke@providencecare.ca
Tel: 613-544-4900 52214

The survey will remain open until day, month, date, year.



Capacity & Engagement

Providence Care

Providence Care Staff Team Survey
Semi-structured Interview Questions

January 11, 2024

For interviewer only:	**Instructions**	
	Please use the below questions and the survey results from the area you are conducting the interview in to guide your questions. You may want to clarify some of the survey responses, or expand on the answers to the below questions. Please make sure **after** they have completed this focus group that they complete the demographics questionare so that we understand who is contributing to the conversation.	
	Interviewer	
	Transcriber	
	Area	
	Date	

	Questions	Responses
1	Is research currently supported in your area? Clarifying/ discussion questions if needed: How do you see research being done? Who do you see doing research? What types of research do you see?	
2	How do you see research being used in your area? Clarifying comments if needed: For example, evidence based-practice implimentation, knowledge translation.	

Resources

Research Department Providence Care
https://providencecare.ca/research/
https://providencecare.ca/education/library-services/

KGH Research Institute
https://kingstonhsc.ca/research

Queen's University Library
https://library.queensu.ca/

Queen's Faculty (including Adjunct)/ Students: Librarian Specialist
https://library.queensu.ca/help-services/ask-us/email-us?directed-email=7

St. Lawrence College (SLC) Library
https://stlawrencecollege.libguides.com/home

SLC Students Book a Library Appointment:
https://stlawrencecollege.libguides.com/library-appointment

EVALUATION