

## Evidence-Based Perioperative Care of Patients with Continuous Glucose Monitoring Devices

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### Introduction

Diabetes : Hyperglycemia  
Diabetes Management: CGM Devices  
Perioperative Nursing Education  
Patient Outcomes

### Background

Adults with DM are rising in epidemic proportions worldwide. Metabolic disorder characterized by persistent changes in blood glucose levels. Hyperglycemia is a serum glucose level higher than 140mg/dl Postoperative variability in blood glucose levels = relative immunodeficiency. DM complicates the patient's disease status. Detection of perioperative hyperglycemia is essential. CGMs provide real-time glucose monitoring. CGMs accuracy can be affected during surgery. Awareness of this inaccuracy is essential for making clinical decision.

### Purpose

#### Knowledge Level

CGM Care Postoperatively

#### Educational Presentation

Comparison of nurses who have and have not received presentation

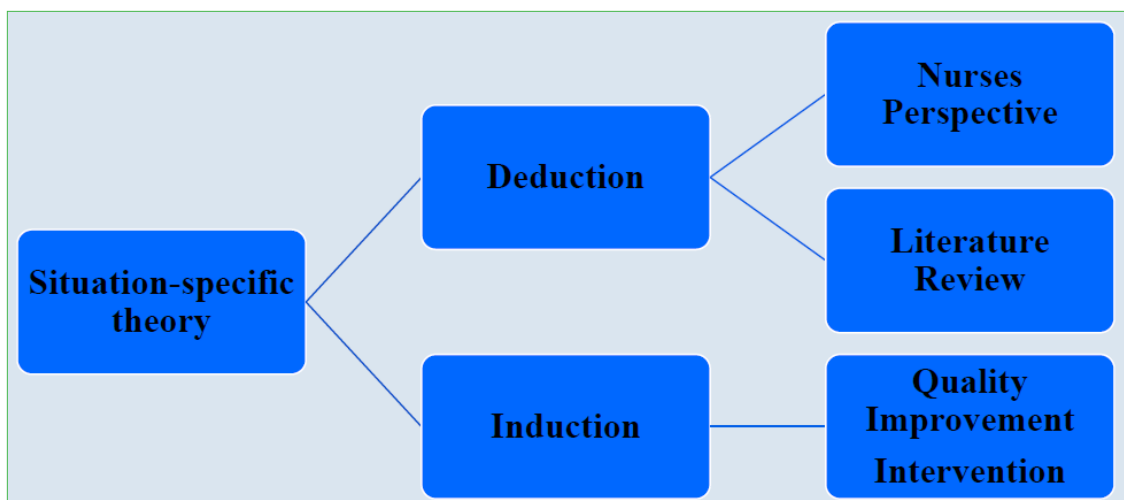
#### Guideline Development

Determine need for guideline development

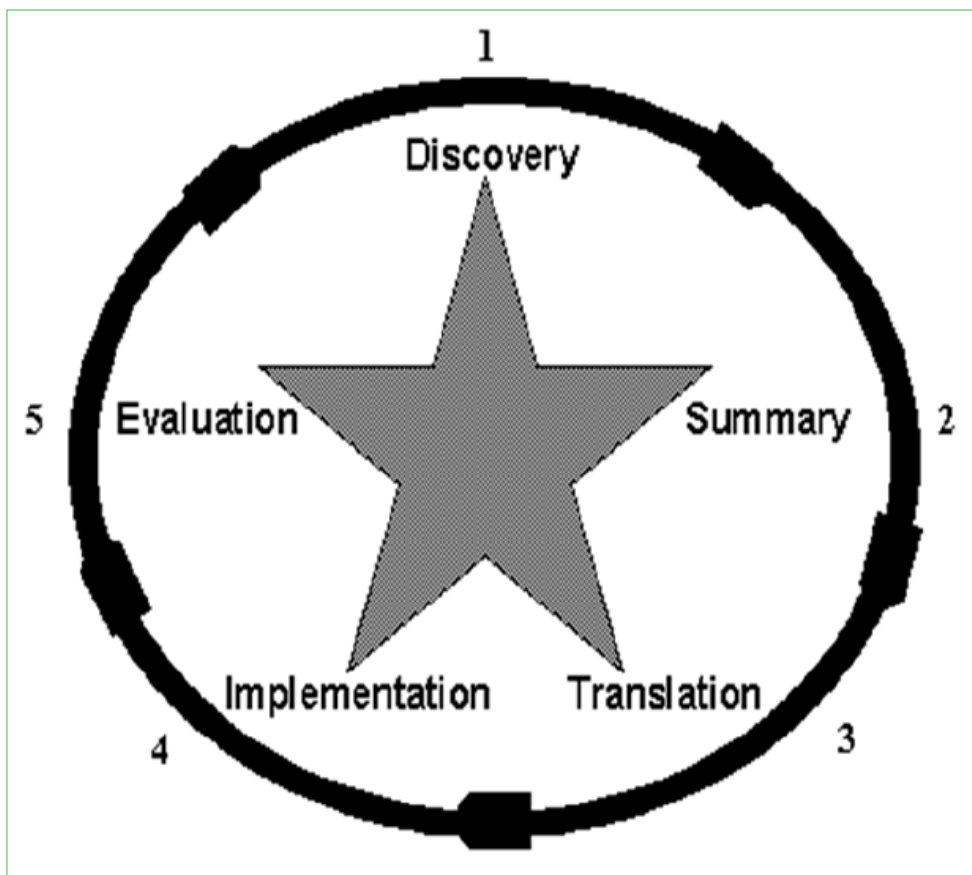
#### PICO Question

1. Population Diabetic Patient
2. Intervention Educational Presentation
3. Design Pre/Post Presentation Questionnaire
4. Strategy Knowledge Level Comparison
5. Outcome Development of Clinical Guidelines

### Theoretical Framework



## Change Model



ACE Model

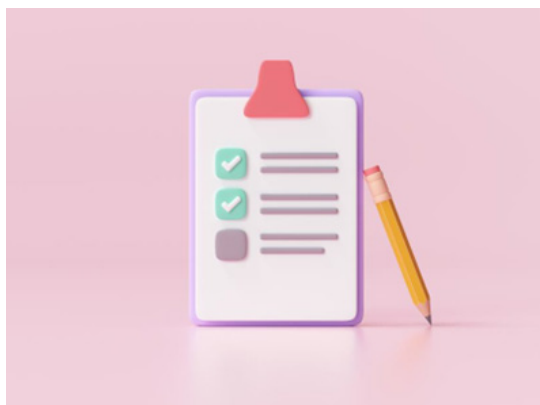
### Overview of the Evidence

- Terms from PICO Question
- Review of Current Studies
- Key words
- Questionnaires

### Project Design

- PCU Nurses
- Educational Presentation
- Questionnaire

### Instrumentation



Questionnaire Pre-presentation  
Questionnaire Post-presentation  
Sealed Return Box

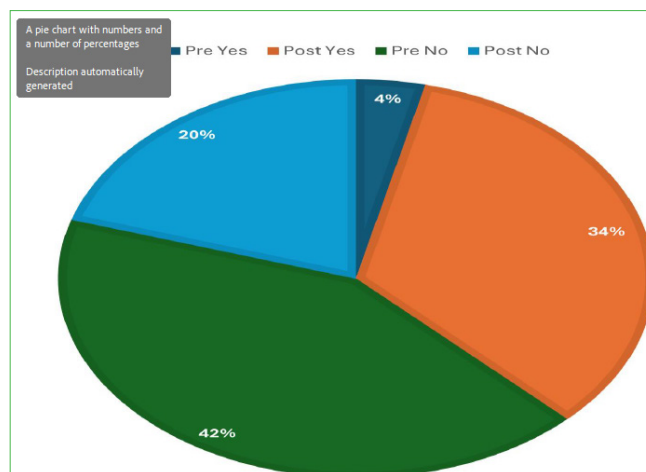
### Data Collection/Analysis/Management

- Questionnaire Distribution
- PCU Nurses working 0700-2030
- VA Medical Center
- Sealed Box
- Shredded

### Ethical Considerations

Voluntary Participation  
Results without Identifiable Information  
QI Project

### Results



## Discussion

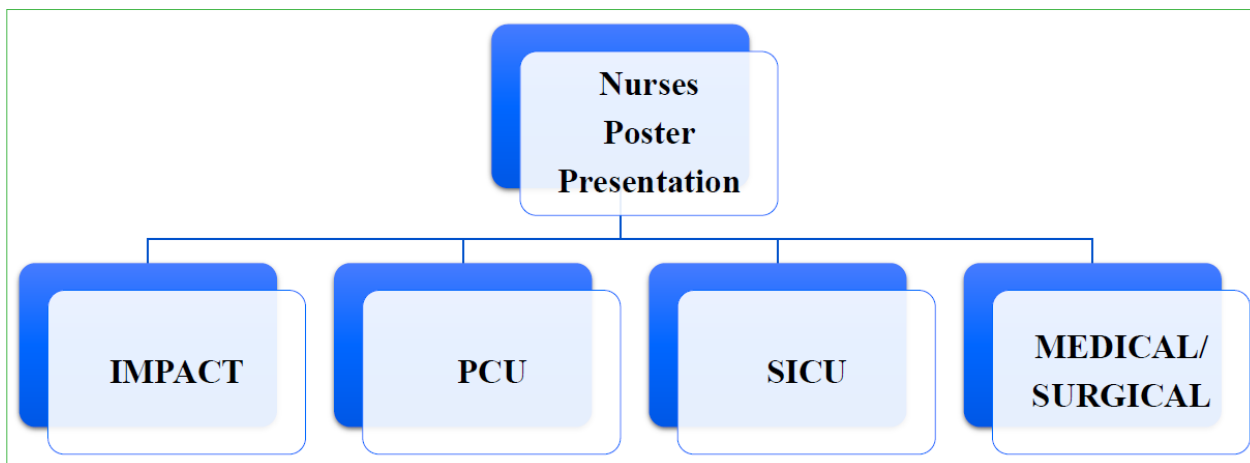
Questionnaire comparison  
Pre-presentation  
Post-presentation  
Paired t-test

		Responses	Percentage
Pre- presentation	Yes	10	4%
Post- presentation	Yes	90	34%
Pre -presentation	No	113	42%
Post- presentation	No	54	20%

## Implications for Nursing Practice

Clinical Scholarship  
Professional Collaboration  
Practice Advancement

## Plan for Dissemination



## Plan for Sustaining Change

Nurse Managers  
Facility Administration  
Accessibility  
Implementation Tools

## Recommendations for Future Projects

1. Policy Development
2. Patient Education
3. Nursing Requirements

## DNP Essentials Met

1. Scientific Underpinnings for Practice
2. Organizational and System Leadership
3. Clinical Scholarship
4. Technology
5. Interprofessional Collaboration
6. Advanced Nursing Practice

## Summary

- Providing Safe Quality Processes
- Patient Outcome Improvement
- Guideline Development

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