

Implementation and Evaluation of an Evidence-Based Postpartum Discharge Education Video App

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PROBLEM INTRODUCTION

- Lack of standardized education continues to impact patient outcomes across the country exacerbating

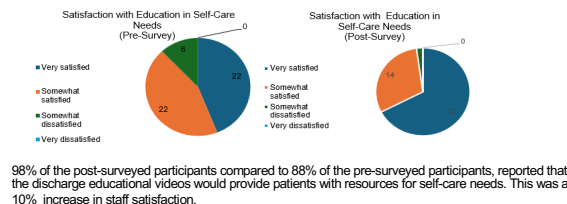
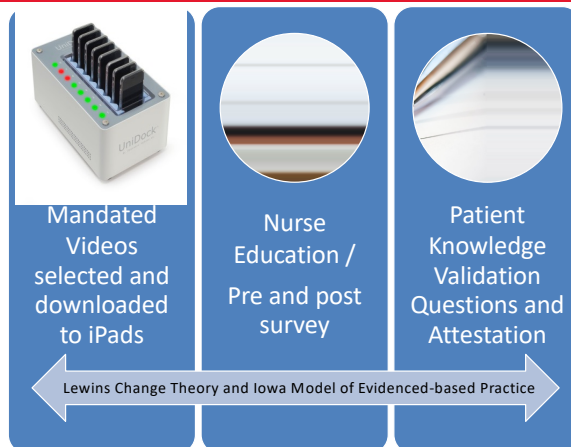
Maternal Mortality and Morbidity Rates:

- 60% of deaths occur in the postpartum period.
- 80% of the deaths may be preventable with evidence-based education.
- Sudden unexpected infant deaths continues to be a challenge with 11 cases reported from 2019-2021 at the project site.

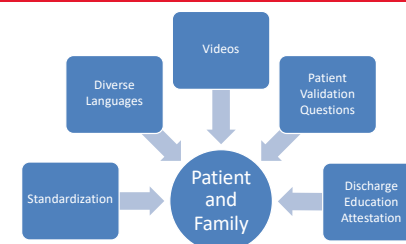
Education Challenges at the Organization site

- Patient experience survey revealed some patients reported they did not receive discharge education.
- Inconsistent and incomplete discharge education.
- Lack of standardization.
- Short hospital stay.
- Variations in nurses' knowledge and experience.
- Limited discharge educational resources for diverse population (multiple languages).
- Non availability of digital resources.

PROJECT METHODS

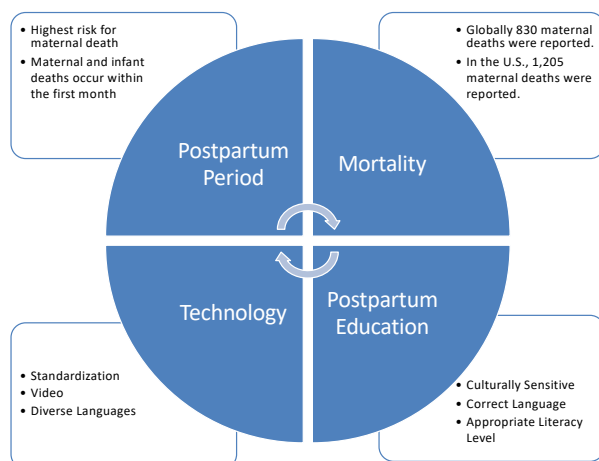


IMPACT ON PRACTICE

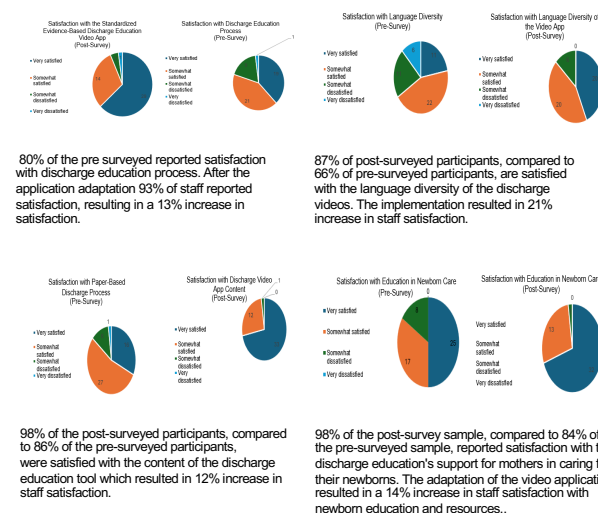


- Standardized evidence-based discharge education supports safe postpartum transitions.
- The digital video app enhances accessibility with over 50 postpartum topics in 18 languages, allowing patients to review key content anytime.
- Nurses provide patients with discharge education attestation to validate or decline mandated video education.
- Nurses verify patients' understanding through knowledge check questions.

LITERATURE REVIEW



EVALUATION



CONCLUSIONS

The successful implementation of the evidence-based video application was part of the organization's goal to standardize patient education. The organization adopted the video application to provide consistent patient education throughout the perinatal period. The video application improved staff satisfaction with the discharge process. The video's language diversity equipped team members with the tool to facilitate discharge information for the diverse population they serve. Further research is needed to ascertain patient satisfaction and mortality outcomes.

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Intraoperative Hypotension: Strategies for Prevention and Treatment

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PROBLEM INTRODUCTION

- i** Intraoperative hypotension (IOH) is a significant concern in anesthesia practice due to its association with complications such as myocardial injury, acute kidney injury (AKI), and cognitive dysfunction, arising from even brief episodes of low mean arterial pressure (MAP).
- i** Variability in MAP management and a lack of standardized education among anesthesia providers necessitated the development of a quality improvement (QI) initiative to enhance the management of IOH.
- i** An educational initiative focused on best practices for IOH management was a necessary step in reducing complications and ensuring compliance with national quality measures.
- i** The QI initiative was designed to improve providers' knowledge of IOH management, enhance adherence to Merit-based Incentive Payment System (MIPS) guidelines, and ultimately reduce the incidence of IOH-related complications.

**Participants: 37 Total Anesthesia Providers
employed by a national anesthesia provider**



LITERATURE REVIEW

01

IOH is widely studied due to its impact on perioperative outcomes, though management practices vary substantially.

02

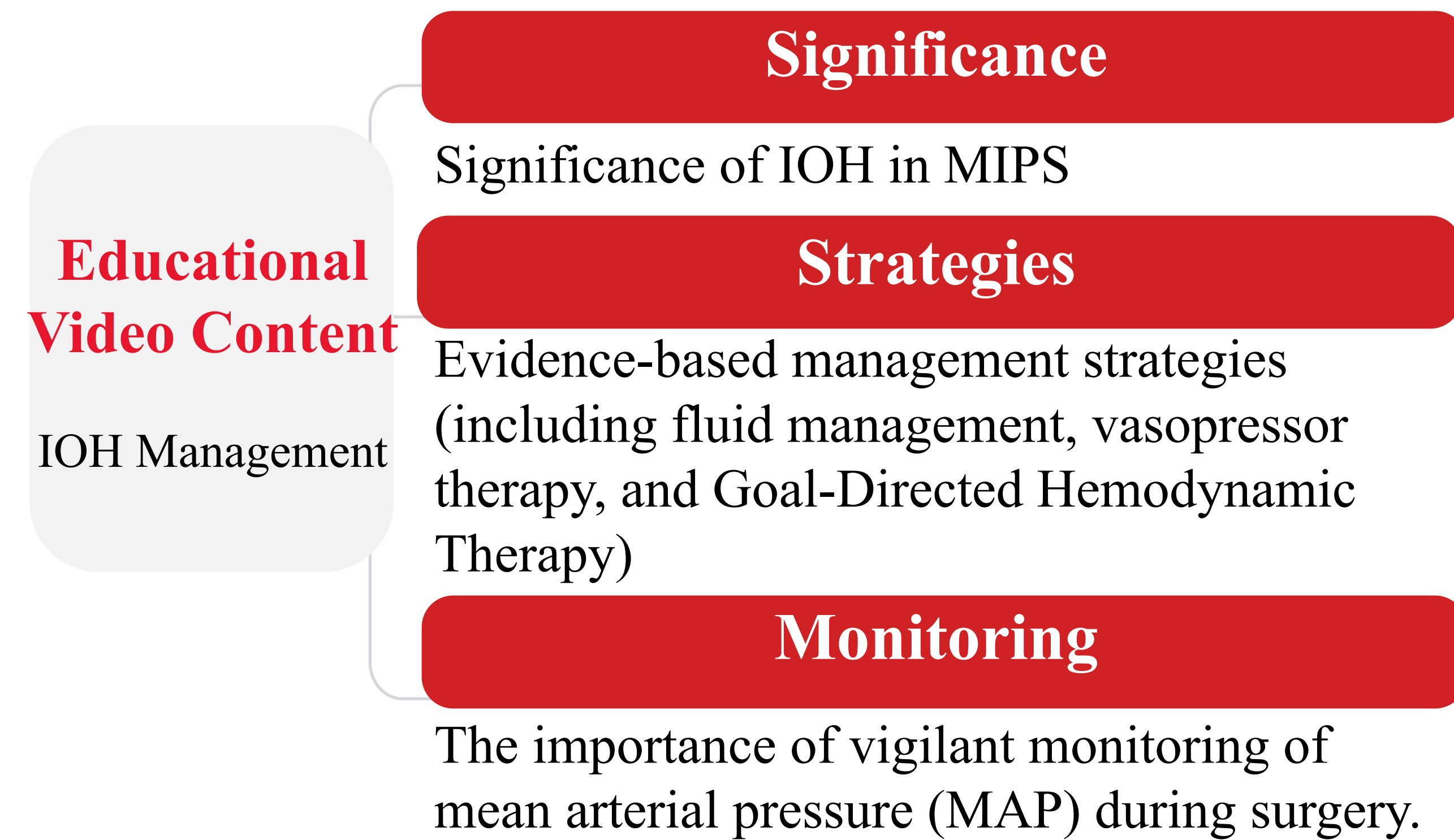
The introduction of IOH as a reportable measure under MIPS underscores its significance in clinical practice and provider accountability.

03

Structured educational programs have been shown to enhance provider adherence to clinical guidelines, ultimately improving patient outcomes.

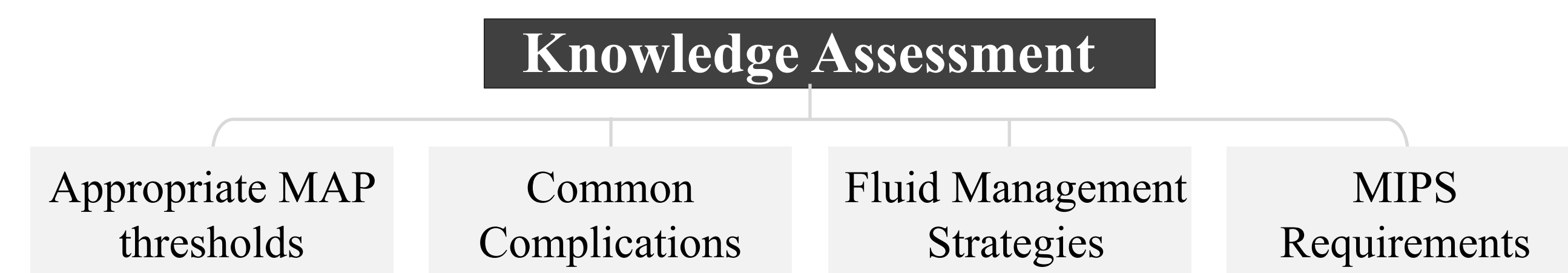
PROJECT METHODS

An educational video was emailed to all Certified Registered Nurse Anesthetists (CRNAs) and Physician Anesthesiologists (MDAs) employed by a national anesthesia provider.



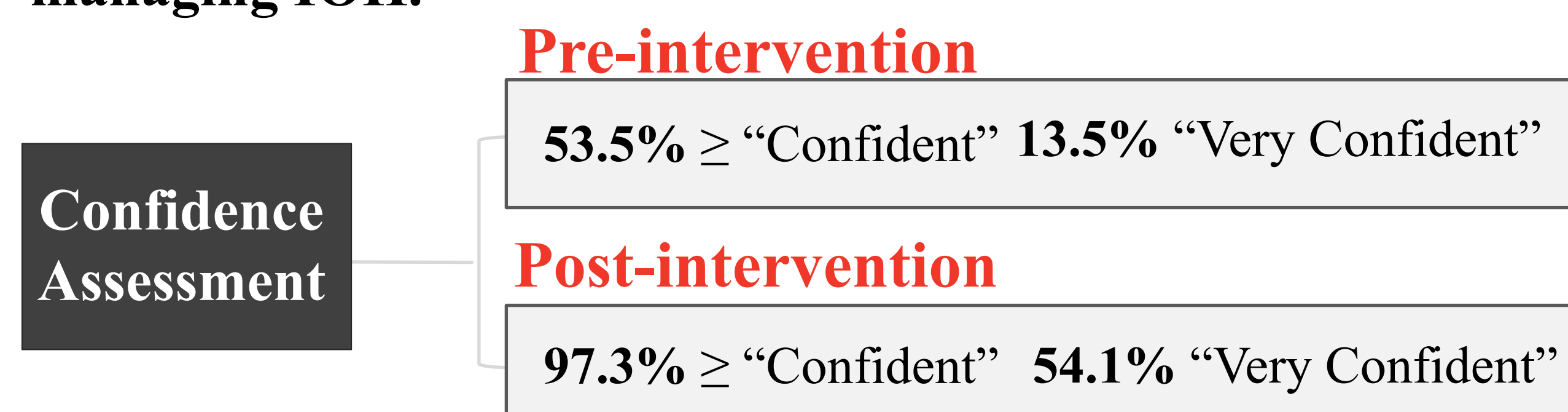
Data Collection: Voluntary pre- and post-intervention assessments measured provider knowledge and confidence

EVALUATION



Post-intervention, the average number of correct answers increased from 10.1 (± 1.3) pre-intervention to 12.5 (± 1.0), with a statistically significant mean difference of 2.4 (± 0.2), confirmed by a paired samples t-test ($t = 9.7$; $p < 0.001$).

Participants were assessed on their confidence level of managing IOH.



*The mean difference in confidence levels was 0.87 (± 1.2), which was statistically significant ($t = 7.4$; $p < 0.001$).

IMPACT ON PRACTICE

- The QI project resulted in significant improvement in anesthesia providers' knowledge and confidence that could lead to a reduction in postoperative complications.
- Evidence-based strategies for managing IOH fosters a more consistent approach to maintaining MAP during surgery.
- Adherence to MIPS guidelines can improve not only patient outcomes but also organizational performance metrics, impacting reimbursement and public reporting.

CONCLUSIONS

- Through a focused educational intervention, the project achieved statistically significant improvements in both the understanding of IOH management strategies and confidence in managing IOH.
- The results demonstrated the intervention better equips providers to maintain appropriate MAP during surgery, recognize common complications, and apply goal-directed fluid management strategies, which has immediate and long-term potential to improve patient outcomes by reducing the incidence of IOH-related complications.
- Overall, this project highlights the critical role of ongoing education in enhancing anesthesia practice and improving patient safety through the better management of intraoperative hypotension.

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Sepsis: Early Identification and Bundled Care

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PROBLEM INTRODUCTION

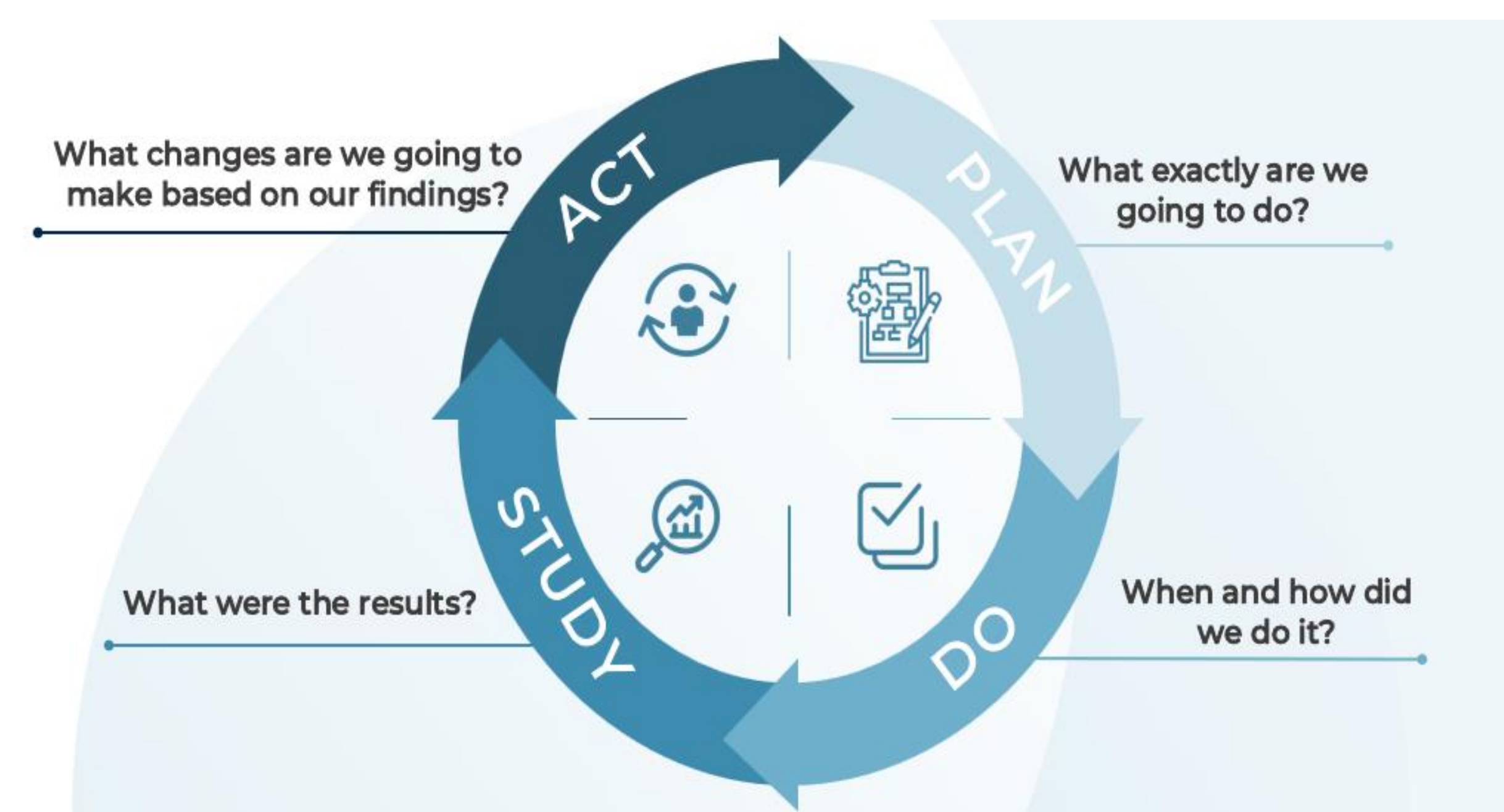
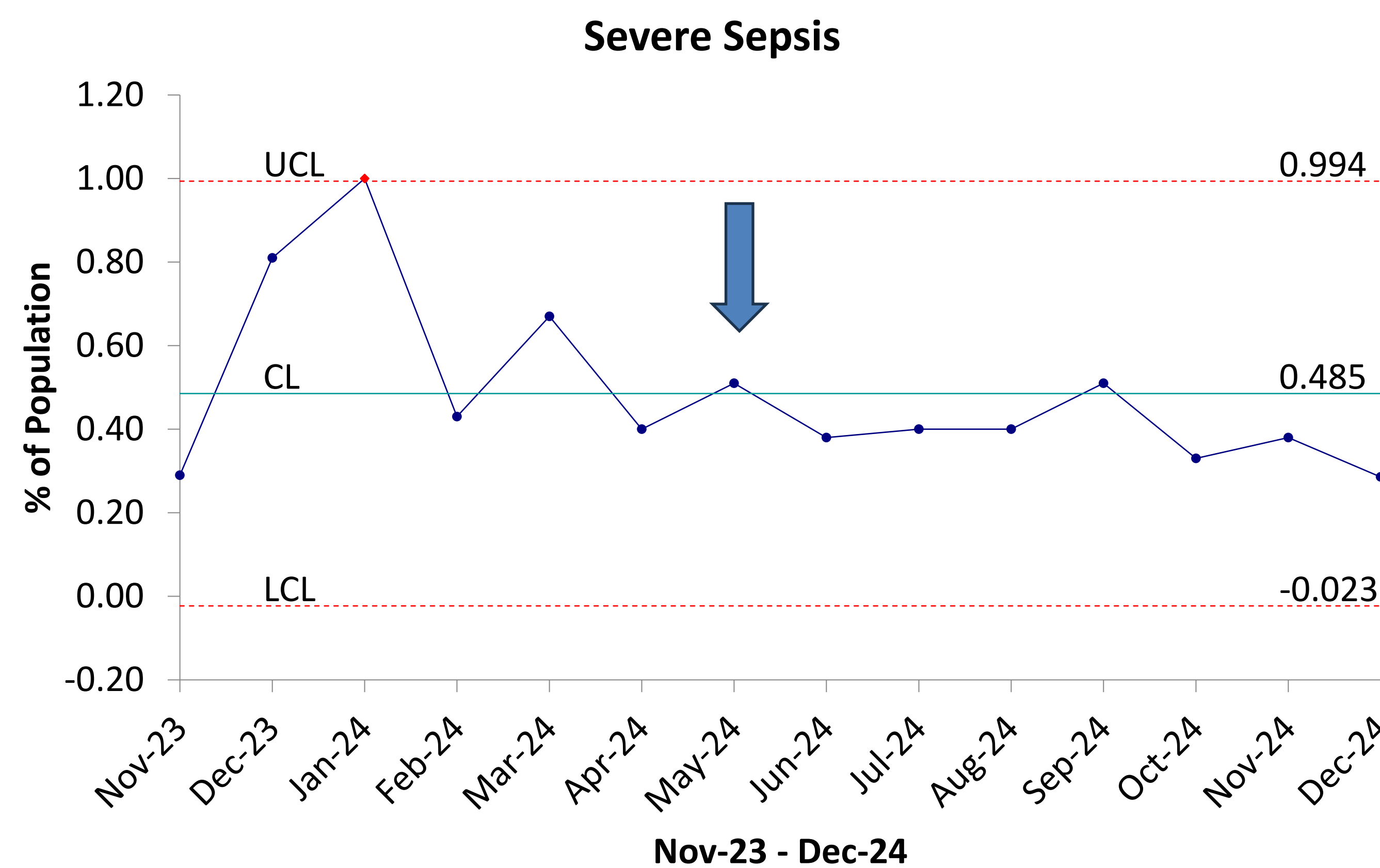
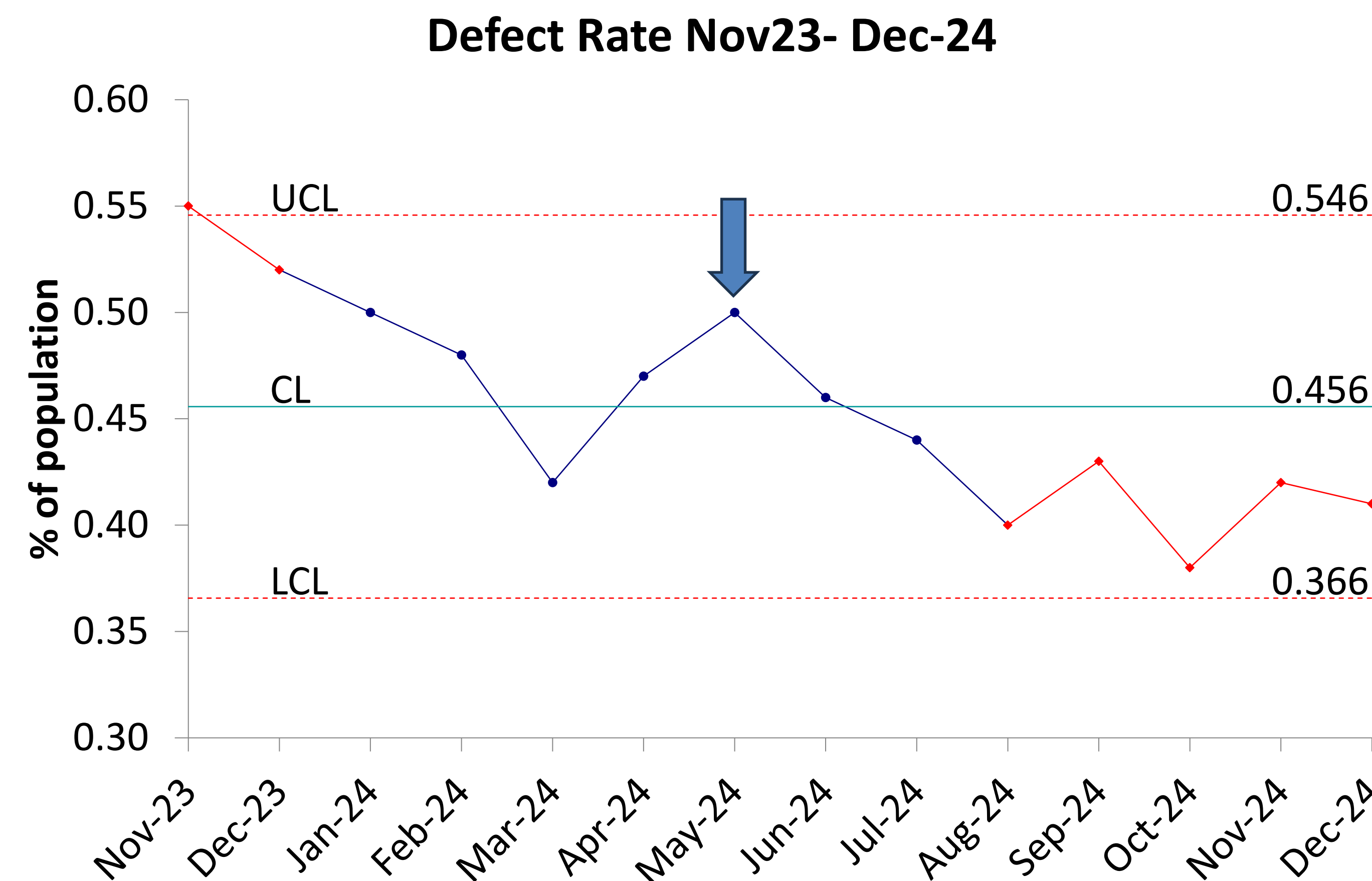
- According to Lin (2021), and Seymour et al. (2017), over one million cases of sepsis occur per year while approximately 25% of patients die during hospitalization or are discharged to hospice.
- Timely interventions are essential for effective management of sepsis and to address the critical, physiological response.
- Early identification of sepsis continues to be a barrier to appropriate clinical action to treat sepsis or prevent patient decline to more severe forms of sepsis (Amland & Han-Cover, 2019).
- Components of bundled sepsis care need to be addressed to ensure compliance with treatment goals.

LITERATURE REVIEW

- Early identification and bundled care is crucial to successful treatment of patient suffering from sepsis with organizations focusing on each component . (O’Keefe et al., 2015).
- In patients with sepsis, a bundled care approach saw a 22.65% overall decrease in mortality rates (Taj et al., 2022). Successful implementation of a bundled care approach includes early identification, administration of a broad-spectrum antibiotic, pertinent labs, vasopressors, and fluid management within one hour of sepsis diagnosis (Taj et al., 2022).
- While sensitivity of tests to identify sepsis may be high, better tests are needed with a high specificity to improve identification and reduce alert fatigue (Ling et al., 2019).
- Clear communication and addressing cultural issues by focusing on education for critical items and care protocols alleviated barriers and addressed needs of the patient and staff (Guiris et al., 2017).
- Antibiotic therapy should be initiated within one hour of sepsis and the first blood draw (Taj et al., 2022).

PROJECT METHODS

- The design used for this project was plan, do, study, act (PDSA), supporting change through a structured cycle to test improvement theories.
- The purpose/aim of the project was to improve the delivery of sepsis bundle care, specifically the administration of antibiotic therapy within one hour of blood draws for patients with suspected sepsis.
- Implementation of the project from May 2024 through December 2024.
- Data compiled from the patient electronic health record (EHR) was placed on an excel spread sheet and QI macros used to interpret the results.
- Participants in this project included adult patients 18 years of age or older on inpatient units who were coded with sepsis diagnosis after discharge from the facility.



EVALUATION

- Measure the time to administration of antibiotic therapy after blood draw.
- Compare the time to antibiotic therapy before and after implementation of EHR alert.
- Goal was 30% improvement, the project saw 18% through implementation of tests of change including:
 - Implementation of electronic health record alert system to assist identification of patients with sepsis.
 - Education developed and directed towards staff and providers for identification and treatment of sepsis, including the new process for the EHR alerts.
 - Providing additional support to the care teams with rapid response team to assist with physician engagement, confirmation, and treatment.
 - Alerts were modified to include only SIRS + Organ dysfunction criteria.

IMPACT ON PRACTICE

- Clinical practice improved as new protocols for patient care provided more efficient, patient-centered care.
- Interventions potentially reduced sepsis complications.
- Potential long-term impacts as improved delivery of antibiotic therapy may lower the incidence of sepsis complications and death.
- Project work continues under the sepsis committee and is branching out to the affiliates within the system.

LIMITATIONS

- Participants limited to single demographic region.
- Length of the project.
- Using one hospital to collect data.
- Influence without authority.

CONCLUSIONS

- Improved clinical practice
- Encourages use of evidence-based treatment plans for patients with known/suspected sepsis.
- Assists with early identification of sepsis.
- Better patient outcomes.
- Potential long-term impact on sepsis related morbidity and mortality.

Bridging the Gap: Integrating Cultural Humility Simulations to Strengthen Nursing Communication and Equity in Care

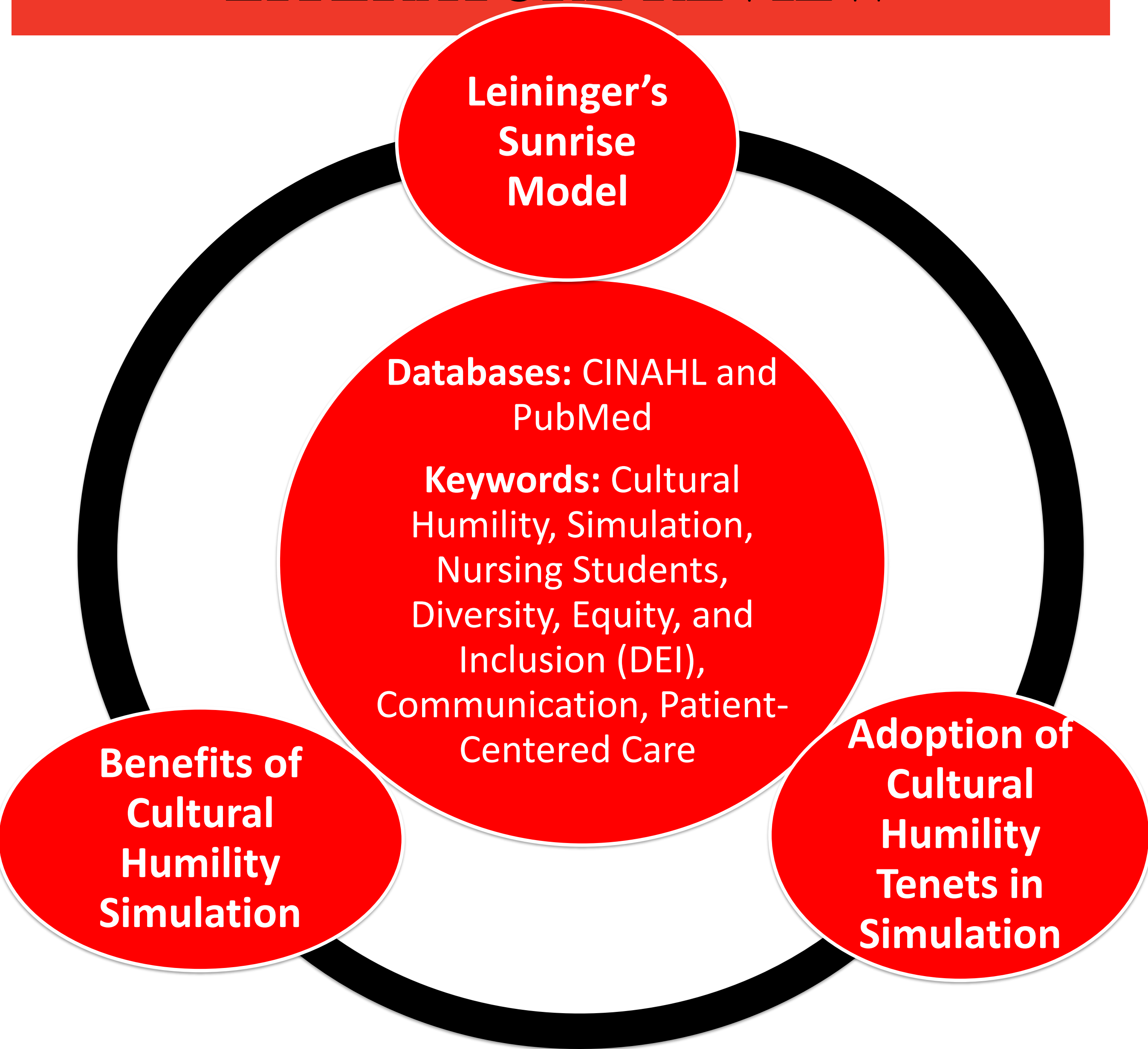
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PROBLEM INTRODUCTION

- ❑ Significant knowledge gap among undergraduate nursing students in caring for a multicultural and diverse population (Compton-McBride, Andrews & Reed, 2023).
- ❑ Cultural humility is less frequently integrated in nursing education
- ❑ Transition from assuming complete understanding to fostering an openness to seeking understanding

LITERATURE REVIEW



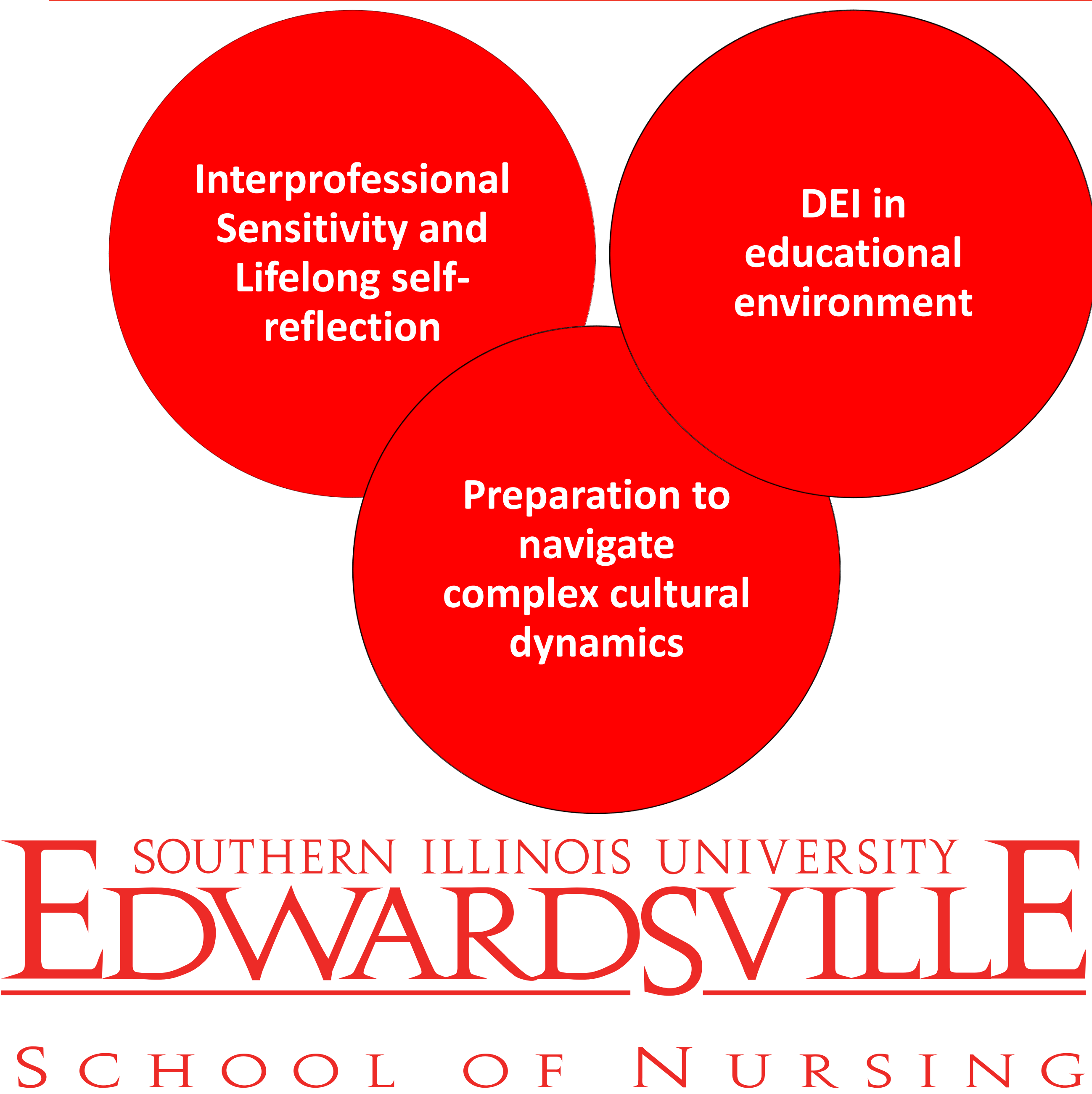
PROJECT METHODS

- ❑ SE-12 Clinical Communication Scale Questionnaire was completed as a pre and post simulation survey
- ❑ Presentation of the Tenets of Cultural of Cultural Humility and patient communication
- ❑ 29 undergraduate nursing student participated in the Cultural Humility Simulation.

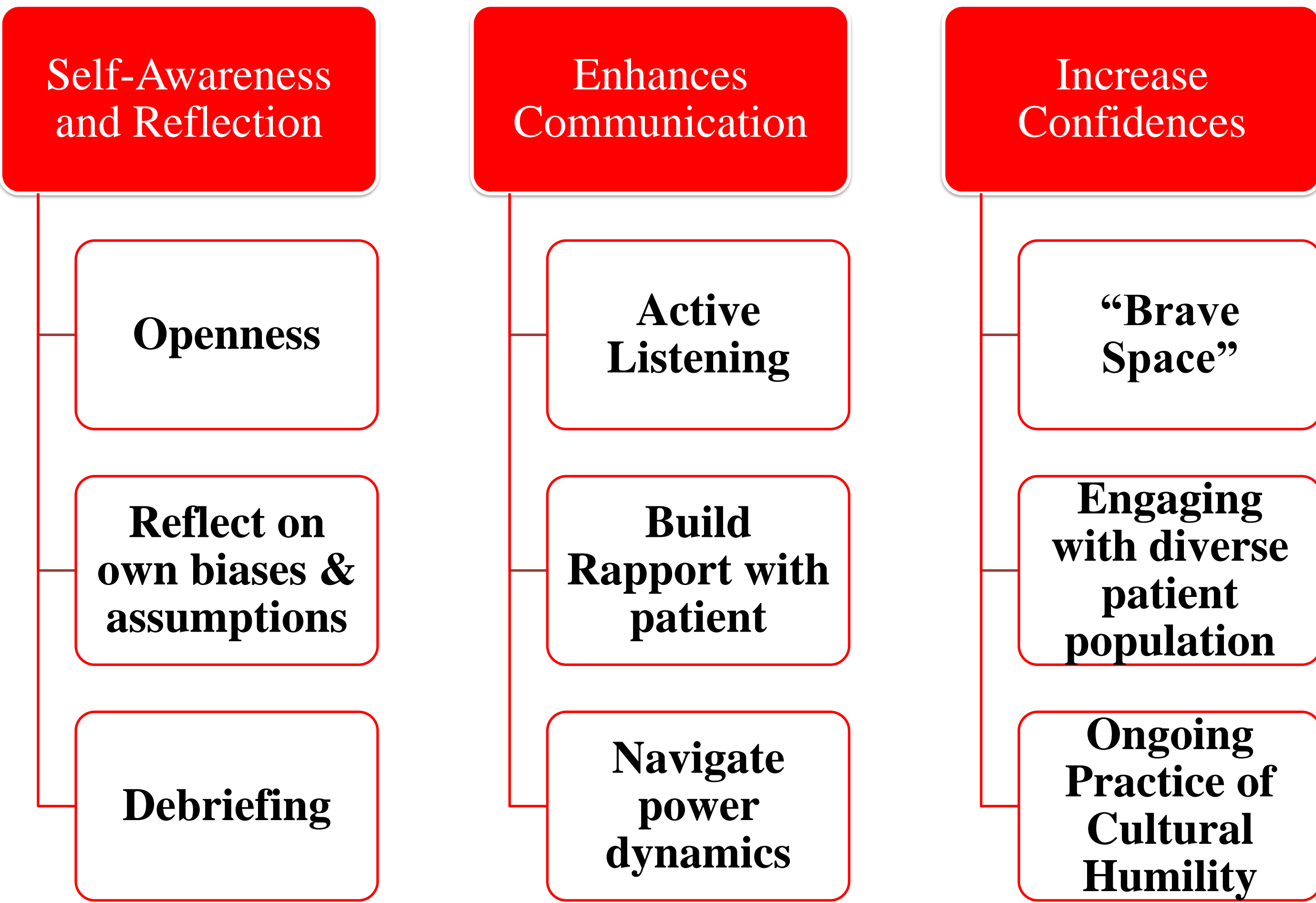
EVALUATION

Most Confident *Pre Survey*	<ul style="list-style-type: none">• Demonstrating empathy• Using appropriate non-verbal behaviors• Encouraging patient to express thoughts and feelings• Active Listening
Lower Confidences *Pre Survey*	<ul style="list-style-type: none">• Identifying key concerns the patient wished to address• Structuring conversations• Creating an agenda or plan for the conversation
Largest Improvement *Post Survey*	<ul style="list-style-type: none">• Identify key concerns the patient wished to address• Structure Conversations• Creating an agenda or plan for the conversation
Limitations	<ul style="list-style-type: none">• Small Sample Size• Lack of scenarios related to LGBTQ+ individuals

IMPACT ON PRACTICE



CONCLUSIONS



Enhancing Clinical Excellence: Mock Code Training in a New Graduate Residency Programs

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PROBLEM INTRODUCTION

- Lack of critical thinking and self-confidence amongst new graduate nurses during their first 12 months in practice limited their ability to identify patient deterioration symptoms early (Morton, 2019).
- Without frequent deliberate practice, basic life support (BLS) skills decline rapidly (Knipe, Fox, & Donatello, 2020).
- An individual’s survival rate for cardiac arrest where Cardiopulmonary resuscitation (CPR) is administered within 3-5 minutes is said to be 50% (Cheema et. al., 2019).
- Global standards set by the American Nurses Credentialing Center (2024) allow nurses with less than 12 months of experience to be inducted into transition programs, such as nurse residencies, to allow them to acquire the needed skills, knowledge, and behaviors.

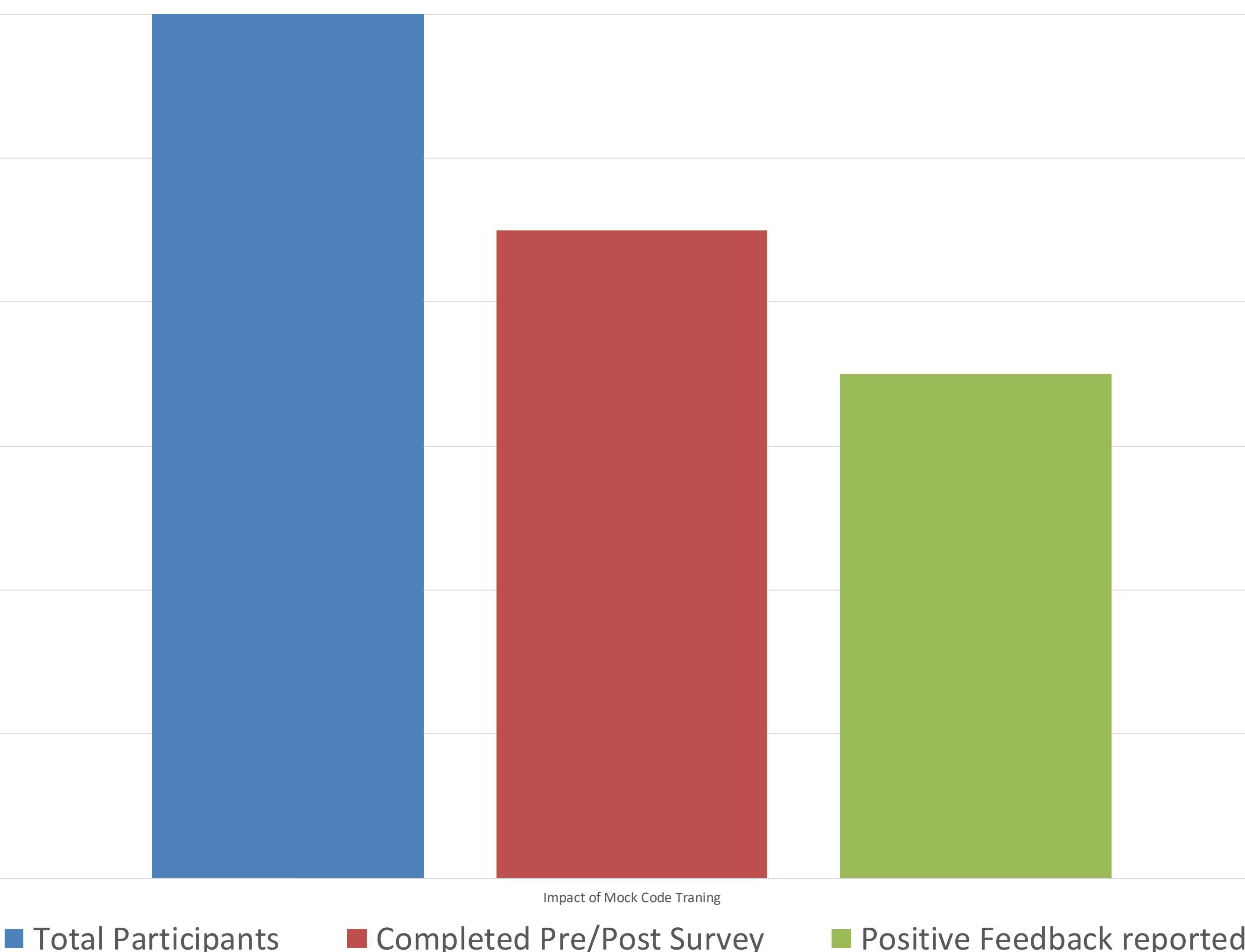
LITERATURE REVIEW

- Registered Nurse Transition-to-Practice (RNTTP) Residency Programs strengthen competencies and support nurses during transition from novice to advanced beginner (Barrett et al., 2024).
- New graduate nurse transition programs, such as residency programs, build on teamwork, communication, interpersonal skills, and confidence (Miller et al., 2023).
- Nurse residency programs allow new graduate nurses to participate in mock code trainings to gain hands on experience in a simulated environment to capture events that may precipitate patient deterioration (Miller et al., 2023)
- Simulation-based learning provides education and training for nursing staff to improve their CPR knowledge and skills (Paddock, 2021).
- Mock codes build upon the competence and confidence of the nurses who participate in providing resuscitative care to rapidly deteriorating patients (Morton, 2019).

PROJECT METHODS

- IRB and stakeholder board approval obtained.
- Five-question pre- and post- survey with rating scale focused on confidence when assessing a deteriorating patient during a life-threatening emergency
- Data collected from a five-question survey and rating scale (Likert scale).

EVALUATION



- Total of 60 participants present during mock code training
- 45 individuals completed the pre- and post-survey
- 20 participants in the pre-survey indicating a lack of confidence during emergencies, such as initiation of a rapid response.
- 35 participants responded with positive feedback during the post-survey. Key achievements included: growth, increased confidence to participate in a code, and life-saving measures

LIMITATIONS

- Limited participation of nursing staff
- Time constraints and attendance of new graduate nurses
- Lack of generalization to other nursing populations

IMPACT ON PRACTICE

- Incorporation of mock code training into the new graduate nurse residency program led to newer nurses with less than 12 months of experience to become well equipped with their clinical skills, self-confidence, and knowledge.
- Ensuring the delivery of safe, high-quality care in a dynamic and challenging clinical environment leading to:



CONCLUSIONS

- Fostered self-confidence and competence
- Allowed new nurses better ways to manage stress, improve teamwork, and respond effectively during actual resuscitation events.
- With consistent practice of life-saving techniques, such as CPR through the mock codes, new graduates can maintain proficiency, leading to confident, capable, and resilient nurses (Barrett et al., 2024).
- Improved successful integration of new graduate nurses into the hospital setting, preparing them for their practice
- Created an atmosphere for success, where new graduate nurses could be assertive with their clinical skills.

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