



Improving Oral Health Care in the Underserved Population: A Quality Improvement Initiative

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Proposal Defense

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April 11, 2025



Introduction

This DNP project will focus on providing oral healthcare kits and education to the underserved population in a rehabilitation facility to improve the oral health care of the participants.

Key Words:

- **Oral Health**
- **Substance Misuse**
- **Oral Health Education**
- **Barrier's & Barrier Reduction**
- **Oral Health Improvement & Outcomes**
- **Quality of Life**



The Problem that drives this DNP project

Oral Health Care in the Underserved Population in Rehabilitation Facilities may experience:

- poor oral health
 - oral health is not addressed in rehab
- (Paisi, M., Witton, R., & Plessas, A. 2021)

Consequences include:

- Pain and infection
 - Poor nutrition
 - Low self-esteem
 - Reduced quality of life
 - Potential negative impact on recovery outcomes
- (Yoshimura, Y., Shiraishi, A., Tsuji, Y., & Momosaki, R. 2022)



Mission

The mission of this project is to improve oral health outcomes for underserved populations in a rehabilitation facility by providing essential oral care resources and education. This initiative seeks to empower individuals to take charge of their oral hygiene, reduce health disparities, and enhance overall well-being during the recovery process.

Vision

The vision of this project is to create a sustainable model for oral health care in rehabilitation settings, fostering a culture of prevention and self-care. By addressing oral health disparities, the project aims to promote equitable health outcomes and inspire broader systemic change in how underserved populations receive holistic care.



The Purpose of this DNP Project

Improve Oral Health in the Underserved Population

- Address Disparities
- Enhance Outcomes
- Promote Education
- Build Sustainability
- Integrate Evidence-Based Practices



Needs Assessment Process

1. Rehabilitation site
2. Poor oral health
3. Limited access to oral supplies
4. Education to staff and participants
5. Oral hygiene practices



Strengths

- Evidenced based practice supporting the integration of oral health in rehab
- Cost – effective intervention with relatively low resource requirements
- Potential to increase patient self-esteem and recovery outcomes
- Prevents long-term oral health problems, improving overall health
- Provides empowerment and self-care opportunities for patients

Weaknesses

- Limited access to dental care professionals in rehab facilities
- Participants resistance or lack of prioritization of oral health in recovery
- Lack of proper patient education and engagement around oral health
- Difficulty ensuring long-term sustainability of the program
- Challenges with monitoring patient compliance to oral health routines
- Potential lack of dental hygiene infrastructure or support for patients



Opportunities

- Increased awareness of health disparities and oral health needs in rehab
- Potential partnerships with dental clinics
- Positive impact on recovery rates and participants' satisfaction
- Possible expansion to other rehab centers and communities
- Can serve as a model for other rehabilitation programs nationally

Threats

- Competing healthcare priorities in rehab centers (mental health, addiction)
- Stigma or misinformation around the importance of oral health in recovery
- Resource limitations in providing follow-up care
- Potential for inconsistent patient compliance with oral health habits
- Limited resources to replenish oral health kits consistently



PICOT Question:

In adults residing in a substance misuse rehabilitation facility (P), how does the implementation of oral health kits care and education (I), compared to the current practice of participants (C), affect self-reported oral hygiene practices and perceived oral health (O) over 8-weeks (T)?

- **Population:** Underserved individuals in a rehabilitation facility in southern Arizona.
- **Intervention:** Distribution of oral health care kits and education on oral hygiene practices.
- **Comparison:** Compared to the current practice of participants
- **Outcome:** Improved oral hygiene practices, reduction in oral health issues, and increased knowledge of oral hygiene.
- **Time:** Eight weeks



Clinical Questions

Q1: In adults with substance misuse in a rehabilitation facility, does the distribution of oral health care kits, compared to no intervention, **improve daily oral hygiene practices** over 8 weeks?

Q2: Does providing oral health care kits and educational materials **increase knowledge and awareness of oral health** in individuals with substance misuse in a rehabilitation facility within an 8-week intervention period?

Q3: In adults with substance misuse in a rehabilitation facility, does caring for their oral health **increase their self esteem**?

- **Primary Independent Variable**

- Participants' distribution of oral health care kits
- Kits are designed to provide the necessary tools for oral health and education



Dependent Variables



Oral Hygiene Knowledge



Self-reported oral hygiene behaviors



Satisfaction with Oral Healthcare Kits

VARIABLE	UNIT of MEASUREMENT	MEASUREMENT TOOL
Independent Variables		
Provision of Oral Health Care Kits	Number of kits distributed	Count of kits given to participants
Educational Component	Knowledge assessment	Pre- mid, and post-education self-reported survey/questionnaire on health knowledge
Dependent Variables		
Oral Hygiene Practices	Frequency of behaviors (e.g., brushing, flossing)	Self-reported survey/questionnaire (Likert scale)
Knowledge of oral health	Knowledge score	Pre- mid, and post-education survey/questionnaire on oral health knowledge
Quality of life/self esteem	Self reported survey	Oral Health Impact Profile- Rosenberg Self-Esteem Scale (RSES),
Oral health outcomes	Self reported survey	Impact or improvement of kit



Evidence-Based Literature Review

Oral Health Disparities in Underserved Groups

- Substance misuse creates higher rates of dental decay, periodontal disease, and oral pain
- Oral health is often not addressed in rehabilitation facilities

(Paisi, M., Witton, R., & Plessas, A. 2021)

Effectiveness of Oral Health Kits & Education

- Providing oral health care kits along with education improves oral hygiene behaviors

(Hanson, G. R., & Hanson, D. 2021)

- Self-care empowers individuals

(Mohammadpour, M., & Gholami, M. 2021)



Social Cognitive Theory

- Personal factors
- Behavior
- Environment

(Torre, D., & Durning, S. J. 2022)



Change Model in a QI Methodology

- **Plan**
- **Do**
- **Study**
- **Act**

(Chen, Y., VanderLaan, P. A., & Heher, Y. K. 2021)



Methodology

- A quantitative methodology with a quasi-experimental quality improvement project design will be used
- Pre, mid, and post-intervention (Self-report survey/questionnaire)
- **Variables:**
 - Independent: Distribution of kits and education
 - Dependent:
 1. Improvement in oral hygiene practices or behaviors
 2. Improvement in oral health care
 3. Increase in knowledge
 4. Increase in self-esteem
 - Population
 - Geographic location

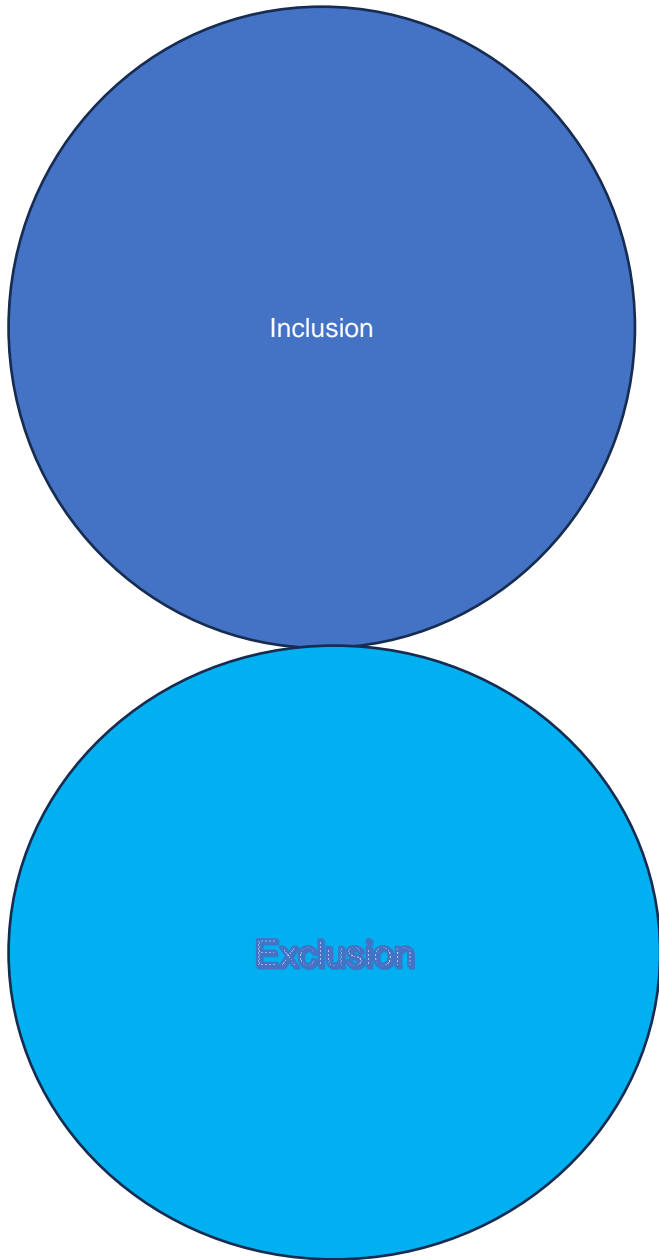
Inclusion and Exclusion Criteria


Inclusion Criteria:

- Adults aged 18 and older
- Currently enrolled in a substance use rehabilitation program
- Diagnosed with a substance use disorder (SUD)
- Willing and able to participate in oral health intervention
- Able to communicate in English (or the language used for study materials)

Exclusion Criteria:

- Individuals under 18 years old
- Patients not currently in a rehab facility
- Presence of severe cognitive impairment or untreated psychiatric illness
- Currently receiving specialized dental care outside of the program





IT ALWAYS
SEEMS
IMPOSSIBLE
UNTIL IT'S
DONE

Feasibility & Strategies

Feasibility of the project and strategies to overcome any barriers:

- Funding
- Participants Engagement
- Staff Buy-In
- Sustainability Challenges
- Cultural or Socioeconomic Barriers
- Resource Availability



Projected Timeframe

- Change Process-2 months
- Implementation – 2 months
- Data Collection and Analysis – 2 months
- Dissemination – 1 month



Ethical Concerns

- Informed Consent
- Confidentiality
- Equity and Access
- Power Dynamics
- Predicted Risk/Harm
- Bias and Mitigation



Limitations

- Generalizability
- Resource Constraint
- Participant Retention
- Short-Term Evaluation



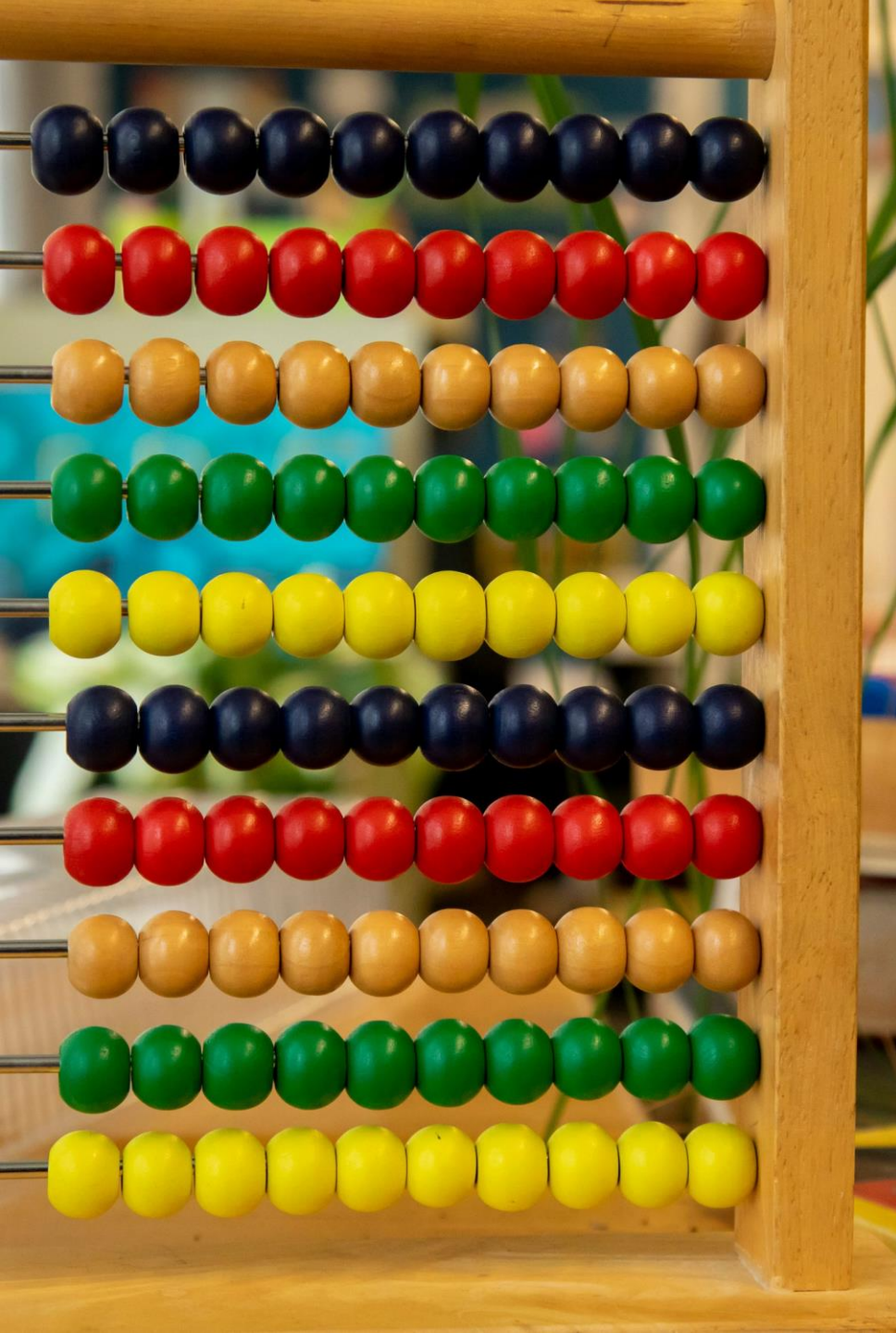
Evaluation Plan and Data Analysis

Evaluation Plan:

- Collect participant's self-reported survey/questionnaire data
- Measure oral health behaviors
- Measure oral health improvement
- Measure changes in self-esteem

Data Analysis:

- Quantitative
- Descriptive statistics
- Paired t-tests
- Qualitative
- Demographic data
- Power Analysis
- Sample Size



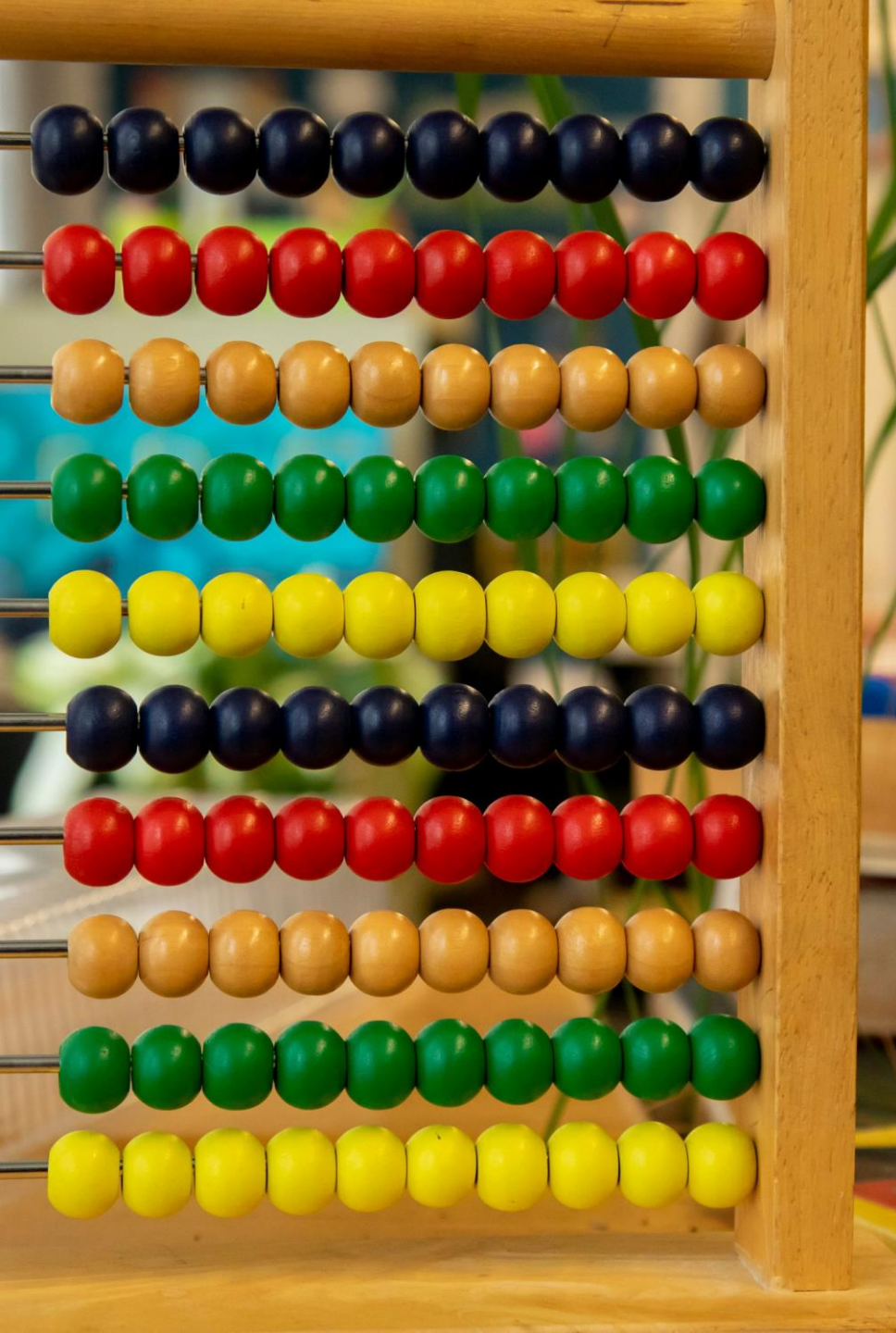
Project Summary

Goal:

- Improve oral health among individuals in a rehabilitation facility for substance misuse by distributing oral health kits and education

Key Elements:

- Target Population: Underserved individuals in recovery from substance misuse.
- Theoretical Framework: Social Cognitive Theory (SCT) to promote self-efficacy and behavior change
- Change Model: PDSA-plan, do, study, act



Project Summary (cont'd)

Evaluation:

Process

- Monitor kit distribution, staff training, and participant engagement

Outcomes

- Measure oral health behaviors, participant satisfaction, and overall improvements in well-being

Significance

- Enhances recovery outcomes, improves quality of life, and promotes health equity
- Establishes lasting oral health practices for long-term recovery success

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