DEVELOPMENT AND EVALUATION OF A SUICIDE RATING SCALE AMONG HOMELESS ADULTS IN A NONPROFIT COMMUNITY ORGANIZATION.

An Evidence-Based Scholarly Project

Submitted to the College of Health Professions and Natural Sciences

in Partial Fulfillment of the Requirements for the Degree Doctor of Nursing Practice

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July, 2024

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This manuscript describes a Doctor of Nursing (DNP) practice quality improvement project (QIP) that aimed to investigate the impact of using the Columbia Suicide Severity Rating Scale (C-SSRS) as a screening and referral tool for homeless adults at a non-profit organization. The lack of a structured screening tool has resulted in an increase in the number of reported suicides among the target population. Therefore, this initiative focused on assessing the effectiveness of targeted suicide screening by collecting numerical data through pre- and post-intervention assessments over 6 weeks using quantitative approaches. The project aimed to determine the number of screenings conducted using C-SSRS and identify individuals at risk of suicide. A statistical analysis was conducted to compare the data collected pre- and post-intervention, providing measurable insights into the impact of the C-SSRS intervention on the identification of suicide risk and referral rates among homeless adults. The project provided valuable insights into the efficacy of C-SSRS as a targeted intervention measure and its utility in preventing suicide. The results helped identify and resolve at least three organizational barriers. The suicide risk screening rates increased, as evidenced by three of 39 screened homeless adults being referred for crisis intervention after C-SSRS implementation. Mental health intervention referral rates improved within 6 weeks. Based on the results, the project concluded that C-SSRS was an effective and efficient suicide screening tool for identifying at-risk individuals and referring them

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to appropriate support services. These results have significant implications for reducing preventable deaths and enhancing mental health and quality of life among homeless adults.

Keywords: homelessness, suicide risk assessment, Columbia Suicide Severity Rating Scale, mental health intervention, patient safety plan.

DEDICATION

I dedicate this project to my late brother, Kelechukwu "K.C." Robert Nwanesidu. His memory has given me the strength to persevere through challenges, pursue my dreams, and achieve great heights despite obstacles.

ACKNOWLEDGMENTS

I want to express my gratitude to God, who made all this possible despite the obstacles I face and have faced. Through this journey, I focused on Romans 12:12, focusing on joy, hope, patience, and faithfulness in prayer. Reaching this point in my life is beyond my wildest imaginations. With unwavering determination, I can now celebrate the outcome of hard work and effort throughout this journey.

Next, my gratitude goes to my family, who supported me along my journey. To my beloved husband, Dr. Chijioke Henry Osuagwu, your presence has been an immense source of strength in my journey to success, and I will forever remember the impact you have had on me. To my wonderful children, Chidinma Osuagwu, Uzoma Osuagwu, Kelechukwu Osuagwu, and Chigo Osuagwu, you have been the driving force behind my completion of this degree. My dear children, your patience and understanding sustained me during my struggles. Now that this journey has concluded, I look forward to making up for lost time with you all. To my parents, Nze Andesy Nwanesidu and Lolo Cordelia Nwanesidu, thank you for giving me life and the nourishment to see this day. I also want to express my gratitude to my extended family and friends who have supported and encouraged me along the way. Your encouragement has been a driving force for me.

I want to express my heartfelt gratitude to my mentor and team lead, Dr. Amica Onyemeh-Sea, my academic advisor, Dr. Margarita David, and all the faculty at Wilmington University, for their unwavering support in helping me complete this journey. Lastly, I extend my thanks to all the staff and participants who were involved in my DNP project.

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AACN – American Association of Colleges of Nursing
APN – Advanced practice nurse
ARCC – Advancing Research and Clinical Practice via Close Collaboration
C-SSRS – Columbia Suicide Severity Rating Scale
DNP – Doctor of Nursing Practice
EBP – Evidence-based practice EHR
- Electronic health record
PICOT – Population, Intervention, Comparison, Outcome, and Time
PMHNP – Psychiatric Mental Health Nurse Practitioner
QIP – Quality improvement project

CHAPTER ONE

INTRODUCTION

Addressing the issue of suicide among homeless individuals requires targeted intervention, including the use of standardized screening tools. To effectively address this challenge, key components, including addressing the vulnerability of the homeless population, increasing staff and community awareness, ensuring adherence to privacy and legal requirements, advocating for homeless adults, and garnering community trust and support must be considered and planned for. Chapter One outlines the problem statement which is centered around understanding the health challenge of suicide among homeless individuals and the lack of adequate screening tools. By examining the context of clinical settings in which the problem is prevalent, this chapter offers insights into the unique challenge faced by the studied population, as informed by Maslow's Hierarchy of Needs and the Change Theory, a transtheoretical model. The chapter concludes by presenting a clinical question using the Population, Intervention, Comparison, Outcome, and Time (PICOT) format, project aims, specific objectives, and a definition of relevant terminologies and concepts.

Problem Description

Homelessness is characterized by difficult living conditions, social isolation, and economic hardship, and each of these make this state of existence fertile ground for suicidal ideations and ultimately suicides (Gentil et al., 2020). Suicide among the homeless is a rising global public health issue, with the Centers for Disease Control reporting 12.2 million cases of suicidal ideation, 1.2 million suicide attempts, and 45,979 deaths from suicide (Salon, 2024). Increased suicide rate among homeless adults and the lack of suicide screening tools in mental healthcare facilities are pervasive concerns highlighted in the empirical literature (Ayano et al., 2019; Murray et al., 2021). Homelessness exacerbates the risk of mental health concerns and suicidal ideation, with homeless adults experiencing very high rates of suicide (Armoon et al., 2023; Ayano et al., 2019; Culatto et al., 2021; Holliday et al., 2021). Also, a recent study conducted by Eynan et al. (2022) revealed that 61% of 330 homeless adults who participated disclosed having experienced thoughts of suicide while 34% had attempted suicide. Furthermore, the research findings indicate a significant connection between suicidal thoughts and homelessness (Kim et al., 2019). Ayano et al. (2019) highlighted the fact that suicide and suicidal ideation are above the national average in the homeless population and lamented the general lack of preventative measures addressing this particular health challenge. Preventative measures include implementing sound, structured, and systematic suicide screening tools in mental health facilities working with homeless individuals (Goldstein & Boudreaux, 2023).

Screenings help identify at-risk individuals who otherwise would not be identified (Goldstein & Boudreaux, 2023). Also, Belsher et al. (2019) noted that in a healthcare setting working with adults, suicide screening improved suicide detection twofold, preventing many deaths. Despite the evidence, homeless shelters and service providers have been hampered by the absence of standardized suicide screening tools and subsequent referral processes (Lee et al., 2017). This deficiency in infrastructure has left a significant gap in the identification of at-risk individuals and connecting them to the appropriate mental health care resources.

The clinical setting in which the quality improvement program was scheduled was a nonprofit organization that provided integrated services to homeless individuals. The non-profit organization was instrumental in supporting this population locally to enhance the quality of life. Daily, 8-10 individuals come into the facility. The organization provided services for homeless adults every Monday and Wednesday, and on Tuesday and Thursday, the organization focused on community outreach services. The organization provided meals, showers, access to food, employment assistance programs, help with transportation, housing assistance, and other support

services. As a Psychiatric Mental Health Nurse Practitioner (PMHNP) (Psychiatric et al.), this author noticed that mental health issues and suicide were significant problems for the homeless individuals visiting the organization.

A discussion with one of the organization's leaders indicated that reports showed an increase in suicides amongst homeless adults living in Harris County, Houston, Texas. Such raised concerns for mental health intervention and suicide screening. In contrast with women, men comprised more suicides among reported cases. Harris & DeSantis (2021) emphasized that suicide-related deaths in the United States resulted in 944,693 years of potential life lost in 2019, with a decade-long trend of increasing suicide counts and rates nationwide.

The increasing number of unreported suicides among homeless adults, causing persons to fear of going unnoticed and being unaccounted for, has raised significant national concerns among organizational leaders (Holleran & Poon, 2018). Screening for mental health issues and suicide is a largely unrealized intervention that could help address the issue. The lack of utilization of mental health and suicide screening as an intervention remains a significant challenge that could greatly help address this issue.

Regardless, the non-profit organization has no protocol to screen clients for suicidal ideation (A. Archer, personal communication, 2023). Such a screening tool would aid in the identification of clients at risk of suicidal thoughts, enabling them to complete a safety plan form and facilitating the facility's ongoing efforts in mental health advocacy and referrals to appropriate care services. The Columbia Suicide Severity Screening Scale (C-SSRS) can be utilized as a proper screening tool to meet such needs. The existing empirical evidence supports the adoption of C-SSRS as a reliable tool to mitigate the risk of suicide in this vulnerable population (Katz et al., 2020). The C-SSRS is one of the most used tools for assessing suicide risk in adults (Yershova et al., 2016). This tool is comprised of six questions to explore suicidal

thoughts, intentions, plans, and history of suicide attempts or preparatory behaviors (Tembleque et al., 2022). The set of questions are then rated low, moderate, and high. Once at-risk patients have been identified, they can be promptly scheduled for help, assigned to an integrated safety plan, and immediately referred to appropriate care (Yershova et al., 2016). Implementing CSSRS and associated referral processes represents a well-supported strategy to address the dire challenges homeless individuals face with mental health and suicide ideation (Yershova et al., 2016). This Doctor of Nursing Practice (DNP) project aims to implement the C-SSRS and improve the identification of homeless individuals at high-risk suicide, enhance referrals, reduce suicide rates, and increase the quality of life for this vulnerable population.

Rationale

Homelessness exposes individuals to socioeconomic and psychological challenges that exacerbate the risk of suicidal ideation and suicide (Nichter et al., 2023). Evidence from empirical literature implicates factors such as social isolation, profound loneliness, and abandonment (Bommersbach et al., 2020; Nichter et al., 2023). Such feelings are then associated with hopelessness, contributing to the heightened risk of mental health concerns, such as depression, anxiety, and post-traumatic stress disorder, which have been implicated in suicide and suicidal ideation (Genuchi, 2019; Hossain et al., 2020; Murray et al., 2021). Lack of stable housing exposes individuals to harassment, abuse, and unimaginable struggles that may lead to hopelessness (Li et al., 2020). Economic hardship is not an occasional occurrence but rather an ongoing, predictable, and vengeful companion in the lives of homeless individuals, leaving them mired in a persistent state of despair (Li et al., 2020). Finally, these individuals are often marginalized, stigmatized, and invisible to society, a state of being which breeds a sense of despair and disappointment in life (Nichter et al., 2023). The non-profit organization reviewed in this research attended to individuals experiencing these feelings and difficulties. However, the

organization has not fully considered how to address these challenges in the context of suicide prevention, which is concerning for organizational leaders considering the prevalence of reported suicides among clients.

A focus on early interventions to address the issues of suicide and suicidal ideation had been discussed, but no visible progress had been made in the year prior to the study. Early interventions are critical in addressing the mental health and suicide challenges (Franco-Martín et al., 2018; Gaur et al., 2019). The benefits of early identification and intervention for all individuals with suicidal ideation can be expanded to homeless people, a population which experiences high suicide rates and associated mental health challenges (Culhane et al., 2019; Tinland et al., 2018). Early intervention programs that include screening for suicide can help save lives and improve the overall well-being of homeless adults (Pinals, 2020). In the case of the non-profit organization reviewed here, minimal effort was been put in place to prevent suicide among the clients. The organization had not instituted any measure or interventions other than providing financial and social support, which, though they are considered essential for individuals with mental health and suicidal ideation issues, are not adequate considering the complexity of these conditions (Winetrobe et al., 2017). Instituting additional targeted measures, such as screening for suicide, could harness the identification and reduction of preventable deaths among the population.

The need to implement ethical and patient-centered interventions informed the consideration of C-SSRS as a preferred early intervention measure. The early intervention measure of screening through C-SSRS is a source of hope for homeless individuals. It creates awareness, enhances advocacy, adheres to ethical standards, and builds community trust. Awareness is a primary foundation for preventing suicide (Austria-Corrales et al., 2023). Evidence has demonstrated that implementing C-SSRS identifies at-risk individuals and creates a

heightened awareness among staff, volunteers, and community members (Austria-Corrales et al., 2023). The benefits of this awareness are multifaceted, including fostering a more informed and empathetic approach to the challenges faced by homeless individuals. It helps equip staff with the knowledge and competencies necessary for recognizing suicide and suicidal ideation presentations from a compassionate and culturally humble perspective.

Scholars have also noted that screening for suicide is a primary gateway for preventing suicides, for it serves as a beacon for advocacy. With screening, those at-risk are proactively identified, and appropriate referrals are made (O'Rourke et al., 2022). This referral process aligns with ethical and compassionate care standards, ensuring those in need receive the proper support and assistance. Besides this, the advocacy is well informed by ethical standards, which guarantees that in the process of addressing those with suicidal ideations at the organization, privacy, and confidentiality are guaranteed (O'Rourke et al., 2022). The C-SSRS tool is a structured framework designed to identify individuals at risk of suicide, and it offers guidelines for ensuring ethical practice (Interian et al., 2016). In essence, with an ethical screening practice, a heightened guarantee of trust in the homeless community exists. The organization can gain the trust and confidence of homeless individuals, fostering rapport and facilitating discussions about mental health and suicide, thereby reinforcing the supportive environment essential for the program's success.

Theoretical Support

Nursing Theory

The chosen nursing theory is Maslow's Hierarchy of Needs, developed by Abraham Maslow. Maslow conceived this theory as a foundation for understanding human motivation and well-being (Yurdakul & Arar, 2023). The theory is a pyramid-like model that encompasses five essential human needs, including physiology, safety, love and belonging, esteem, and

selfactualization (Fleury et al., 2021). Physiological needs include the bare necessities, such as food, shelter, and clothing. People with unmet basic needs cannot fret over safety needs, which include physical safety, such as protection from harm or danger, as well as emotional safety, which pertains to the absence of fear, anxiety, or threat (Fleury et al., 2021). Only when one achieves stability in their living environment can they aspire to less foundational needs. The third need, love and belonging, encompasses forming relationships, experiencing love and affection, and being part of a community or group. Social connections are an imperative desire of human beings. When these needs are met, people aspire for self-esteem, which encompasses recognition, respect, and appreciation for their accomplishments (Fleury et al., 2021). Individuals who have met self-esteem needs should aspire to reach self-actualization, including a desire for personal growth, creativity, self-fulfillment, and pursuing individual goals and aspirations.

Fleury et al. (2021) emphasized the relationship between homelessness and mental health issues defined by Maslow's hierarchy of needs pyramid. For homeless individuals, the struggle to fulfill their physiological needs, such as access to food and shelter, is a daily battle. The absence of these physiological necessities makes it exceedingly challenging for them to ascend the hierarchy toward self-actualization, the pinnacle of human potential. Unmet physiological needs create a significant barrier to achieving mental well-being, ultimately increasing the risk of mental health issues and suicide (Fleury et al., 2021). Therefore, it's important to address the risk of suicide in the homeless adult population to avoid the increased risk of death due to the mounting challenges of maintaining psychological and environmental stability.

Change Theory

The framework that guided the execution of this quality improvement process was Kurk Lewin's Change Theory, which emphasizes that individuals go through distinct stages when

making behavioral changes (Barrow et al., 2022). When considering homelessness and suicide, understanding the different levels of readiness and the needs of homeless individuals who are at risk of suicide is important. The first stage of the theory, Unfreezing, involves homeless individuals who may be unaware of or may not recognize their risk factors for suicide (Barrow et al., 2019). They might be unaware of available resources or may not consider help-seeking. Effective interventions could involve awareness campaigns to reach this group and highlight available support (Barrow et al., 2019). At the Changing or Moving stage, individuals are aware of their risk and are considering or are beginning to make changes (Barrow et al., 2019). They may start seeking assistance or addressing their homelessness and mental health concerns. Interventions might involve providing information, offering a safe space for discussion, and actively supporting their steps toward change. At the Refreezing stage, individuals have successfully addressed their immediate needs and are working to maintain their progress. In the context of suicide prevention, this could involve ongoing support, ensuring access to affordable housing, and continued mental health care to sustain their progress and reduce the risk of relapse.

Clinical Question

The PICOT question that will guide this quality improvement project (QIP) was as follows: In homeless adults in contact with a non-profit organization, how does implementing the C-SSRS as a screening and referral tool affect the number of screenings and identification of those at-risk, compared to current practice without screening over 6 weeks?

Population (P): Homeless individuals in contact with a non-profit organization
Intervention (I): Implementation of C-SSRS as a screening and referral tool
Comparison (C): Current practice without screening
Outcome (O): Improvement in the identification of individuals at risk for suicide
Timeframe (T): 6 -weeks

Purpose Statement

The DNP QIP addressed the escalating problem of increased suicide rates among homeless adults, emphasizing the urgent need for intervention. However, at the practicum site, a noticeable absence of structured suicide risk assessment mechanisms existed, potentially leaving vulnerable individuals underserved. The DNP QIP aimed to enhance the identification and support of homeless individuals at risk of suicide by implementing the C-SSRS within a 6-week timeframe.

Specific Aim/Objectives

The specific aim or objective of this study was: To reduce the risk of suicide and improve mental health among homeless individuals by implementing C-SSRS.

Objectives

- Improve staff's knowledge of suicide risk assessment tools and achieve a utilization rate of the C-SSRS of at least 50% within 6 weeks.
- Identify and address at least three organizational barriers and achieve a 10% increase in reported suicide risk screening rates and a 25% increase in mental health intervention referral rates within 6 weeks.
- The aim is to enhance awareness and support for suicide prevention among staff, volunteers, and community members.

Definition of Terms

• Suicide Ideation: Suicide ideation refers to the contemplation or persistent thoughts about engaging in self-destructive or suicidal behaviors. It encompasses a spectrum of thoughts, from fleeting considerations of suicide to more elaborate and structured plans for self-harm (Zalsman et al., 2016)

- Suicide Risk Assessment: Suicide risk assessment is a structured and systematic evaluation process conducted by mental health professionals to gauge an individual's likelihood of attempting or completing suicide. It involves assessing various risk factors, including mental health history, current psychological state, and social circumstances (Jobes, 2016).
- C-SSRS: A standardized tool for assessing an individual's risk of suicide, which includes questions about suicidal thoughts, plans, and behaviors (Austria-Corrales et al., 2023; Matarazzo et al., 2019).
- Safety Planning: A structured process for identifying coping strategies and support systems to manage an individual's suicidal thoughts or behaviors (Moscardini et al., 2020).
- Safety Plan Template: A template developed in 2008 by Barbra Stanley and Gregory Brown. This template compiles information the patient and healthcare provider share, outlining essential safety measures (Moscardini et al., 2020). These measures include coping strategies, a list of emergency contacts, and safe locations for individuals at risk of suicide and are approved for public use.
- Mental Health Intervention: The referral of at risk patients to appropriate mental health care services, including therapy or psychiatric treatment, to address an individual's mental health needs and reduce the risk of suicide (Austria-Corrales et al., 2023).

Chapter Summary

The chapter first presented the problem in the clinical settings, situating it as a clinical challenge deserving urgent attention. The problem of suicide among homeless individuals is a significant issue that needs targeted intervention, such as screening using a standardized

screening tool. Key components encompass addressing the vulnerability of the homeless population, enhancing staff and community awareness, ensuring privacy and legality adherence, advocating for homeless adults, and garnering community trust and support. The chapter then offered a rationale that drew on extant literature highlighting the elevated risk of mental health concerns and suicidal ideation among homeless individuals. Then, a comprehensive and detailed understanding of the theory that guided the project's implementation, namely Maslow and Change theory, was presented. The chapter culminated by iterating the PICOT question, project aims, specific objectives, and goals, providing a vivid framework for the project's progression.

CHAPTER TWO

AVAILABLE KNOWLEDGE

Search Strategy

A thorough electronic database search was conducted to examine suicide screening using C-SSRS, among homeless adults. The DNP student searched multiple electronic databases for empirical studies to develop a comprehensive search strategy. Several credible sources were consulted, including the Medical Literature Analysis and Retrieval System Online with Full Text, Health Source: Nursing Academic, ProQuest Nursing and Allied Health Source, Cumulative Index to Nursing and Allied Health Literature Plus with Full Text, and the Cochrane Database of Systematic Reviews. Key terms were selected based on relevance to the PICOT question and are as follows: homeless, suicide, CSSRS, suicide screening, mental health, safety plan, poverty, poor, homeless shelters, mental health advocacy, health promotion, and health interventions. Additionally, the study applied a set of secondary search terms to refine further the search strategy, covering homelessness, adults, health promotion for suicide, unhoused, high risk, treatment plans, and mental health referrals. The time frame for this investigation spanned 2018 to 2023.

Further review of the References of identified studies brought additional relevant articles and ensured a comprehensive search strategy. Criteria to be met for inclusion were current (2018-2023), peer-reviewed, complete text studies that addressed the PICOT question. Other pertinent criteria included consistent, high-quality research that addressed the clinical question and was aligned with the research objectives. Full-text sources were included because they were highquality and relevant to the research topic. Search-limiting phrases included currency, peerreview, and full-text sources published in the English Language, and seeds were eliminated if they offered low-quality evidence. Finally, the search study yielded 28 seminal, high-quality, consistent, and relevant studies (see Appendix F). This systematic approach to constructing the study's search strategy ensured a comprehensive and rigorous exploration of high-quality clinical evidence integral to the research question.

Literature Review

Introduction

Homelessness in the adult population is a complex and multifaceted issue that profoundly impacts the well-being of individuals, leading to increased rates of mental health concerns and suicide (Padgett, 2020). This portion of the study explores the available relevant extant literature identified through a systematic search strategy to inform the study concerning available evidence surrounding homelessness in the adult population, mental health, and suicide, as well as the need for early intervention strategies, specifically suicide screening, in the context of the homeless population.

Homelessness, Mental Health, and Suicide

Prevalence of Mental Health Issues Among the Homeless

The relationship between homelessness and mental health issues is well-documented in the literature. According to Murray et al. (2021), homelessness is a significant social problem implicated in a wide range of socioeconomic and psychological challenges that lead to a heightened risk of mental health problems. These challenges include social isolation, economic hardship, a sense of abandonment, stigmatization, and precarious living conditions, all with notable association with susceptibility to conditions like depression, suicidal ideation, anxiety, and post-traumatic stress disorder (Ayano et al., 2019; Murray et al., 2021; Tinland et al., 2018). Ayano et al. (2019) found significantly higher prevalence rates of depressive symptoms (46.72%), dysthymia (8.25%), and MDDs (26.24%) among homeless people. The prevalence rates are notably higher than those reported in the general population. Subgroup analyses suggest that younger homeless individuals might have higher rates of depressive symptoms compared to adults. Mental health issues are significant predictors of suicide and suicidal ideation. Gentil et al. (2020) conducted a cross-sectional observational study and recruited 455 participants to document the prevalence of suicide and suicidal ideation among homeless individuals. The results indicated that suicidal ideation and suicide attempts among currently or recently homeless individuals were strongly associated with clinical variables, particularly generalized anxiety disorder and substance use disorders. Individuals with higher functional disability and a history of hospitalization have long been observed to be at an increased risk of attempting suicide. Furthermore, those with schizophrenia spectrum and other psychotic disorders who were placed in foster care during childhood and those with higher stigma scores are more likely to experience suicidal ideation.

Ayano et al. (2019) underscored the alarming prevalence of suicidal thoughts and behaviors among homeless adults, a rate that surpasses the national average for suicide risk. Even in local contexts, suicide rates among homeless populations tend to be markedly higher compared to the general population (Ayano et al., 2019; Tsai & Cao, 2019; Yohannes et al., 2023).

A study by Panadero et al. (2018) found that 30.3% of the homeless people interviewed had attempted suicide, and among these, 57.9% had their first suicide attempt after becoming homeless. The study found that a combination of seven stressful life events was the best way to distinguish between homeless people who attempted suicide and those who did not. These statistics have also been corroborated by the startling revelation that suicide rates among the vulnerable population are nine times above the national average, and the fear of dying in the shadows because of suicide is a pertinent reality to this population (Holleran & Poon,2018).

Although the etiology of this problem is complex, studies such as Nitcher et al. (2023) have implicated feelings of hopelessness, a widely recognized precursor to suicidal ideation, economic hardship, and social marginalization (Nichter et al., 2023). Armoon et al. (2023) found a significant correlation between chronic physical illnesses, violent behaviors, mood, psychotic disorders, substance use disorders, suicidal ideation, and suicide attempts. In addition, older individuals with a history of physical abuse and who suffer from mood and post-traumatic stress disorders are more likely to attempt suicide. Furthermore, various societal expectations related to masculinity can also play a role in the development of suicidal thoughts. Perceived burdensomeness was predictive of both the presence and severity of suicidal ideation (Genuchi, 2018). Involvement in the justice system was also identified as a predictor of suicidal ideation among the population. For example, Holliday et al. (2021), in their review of cross-sectional studies, inferred that homelessness and justice involvement were independently associated with

more severe mental health symptoms and increased rates of suicidal ideation and attempts. Those with a history of both showed the most severe signs evidencing the most risks.

The available means of suicide have also been documented in the literature. Kleinman & Morris (2022) found that among 122,113 violent deaths in 31 states during 2016-2018, 1.4% occurred among homeless people and 3.2% occurred among individuals for whom homelessness status was unknown or missing. Of the violent deaths among homeless people, 1.1% were suicides, 1.6% were homicides, 2.8% were of undetermined intent, and 3.8% were the result of legal interventions. The most common mechanisms of suicide among homeless people were hanging/suffocation/strangulation (44.4%) and firearms (21.6%).

These findings underscore the problematic precursors of suicide and suicidal ideation among the adult homeless population that multiple studies have acknowledged. Alarming levels of suicide noted in the homeless adult populations, as cited by the above empirical literature, are well supported by national statistics (National Health Care for the Homeless Council Fact Sheet, 2023). This body has documented the rates of suicide among homeless adults in the country and lamented the alarmingly high numbers compared to the national averages. The statistics are corroborated by further empirical studies such as Bommersbach et al. (2020), who found that 21.0% of adults with a history of homelessness in the past year reported a past-year suicide attempt, which was substantially higher than those who had been homeless before the past year (5.8%) or had never been homeless (6.3%). The timing of suicide attempts did not necessarily coincide with the current episode of homelessness, as they often occurred years before the survey. The study also identified shared risk factors between homelessness and suicidality, making it challenging to determine an independent causal relationship. Brackets (2020), in their systematic review, also found that housing insecurity and homelessness are associated with increased suicidal behavior. It also suggests that interventions addressing housing insecurity

while providing appropriate, secure, and affordable housing integrated with mental health and other supports may help to prevent suicide (Brackertz, 2020, p. 5).

Challenges Faced by Homeless Service Providers

Among the most cited measures in the literature was the implementation of sound, structured, and systematic suicide screening tools in mental health facilities working with homeless individuals (Goldstein & Boudreaux, 2023). Screening helps identify at-risk individuals who would otherwise have not been determined (Goldstein & Boudreaux, 2023). Belsher et al. (2019) noted in their study that in a healthcare setting working with adults, suicide screening improved suicide detection twofold, leading to the prevention of deaths. Despite the evidence, homeless shelters and service providers have been hampered by the absence of standardized suicide screening tools and subsequent issues with referral processes (Murray et al., 2021). While non-profit organizations and homeless shelters play a crucial role in providing support to homeless individuals, they often face significant challenges in addressing mental health and suicide issues. Compelling literature asserts that most of the facilities engaged in the care of homeless adults lack standardized suicide screening tools and referral processes (Murray et al., 2021). This deficiency leaves a substantial gap in the identification of individuals at risk and connecting them to essential mental health resources. The absence of such tools and protocols poses significant obstacles to effective early intervention.

It may no longer be suitable to rely on a standardized approach to address the complex issues surrounding suicide and suicidal thoughts among the homeless population. For instance, Hossain et al. (2020) found significant differences in the prevalence of various mental disorders among homeless individuals. Prevalence varied widely depending on the specific condition, the studied population, and the geographic context. The study highlights the high burden of mental disorders among homeless individuals, including depression, anxiety, schizophrenia, substance

abuse, neurocognitive impairments, bipolar disorders, and others. Co-occurrence of multiple mental disorders and other clinical conditions was also noted. Adopting a comprehensive approach to preventing suicide behavior would require the utilization of a process that considers the multidimensionality of the issue.

The Urgency of Early Interventions

Benefits of Early Intervention Programs

The need for early interventions when addressing mental health and suicide challenges among homeless populations cannot be overstated Documenting the urgency of the issue, Culhane et al. (2019) noted that treatment for suicidality peaked just before the onset of homelessness among newly homeless veterans. About 13% of homeless veterans had evidence of suicidality, and 29% of veterans with proof of suicidality appeared to have concurrent homelessness (Culhane et al.,2019). In essence, a substantial proportion of suicides among homeless patients took place outside of healthcare facilities, emphasizing the need for comprehensive suicide prevention measures tailored to this highly vulnerable population.

Studies have consistently shown that early intervention is critical to prevent the deterioration of mental health issues and suicidal ideation (Franco-Martín et al., 2018; Gaur et al., 2019). Early intervention programs, including suicide screening, can significantly contribute to saving lives and improving the overall well-being of homeless adults (Pinals, 2020). The nonprofit organization discussed in this study provided valuable support to homeless individuals. However, limited focus on early interventions and suicide prevention existed. Efforts specifically targeted at preventing suicide among clients had been minimal. The organization had not instituted measures or interventions besides financial and social support (Winetrobe et al., 2017). These supports, while important, do not adequately address the complexity of mental health and suicidal ideation issues among homeless individuals.

Importance of Suicide Screening

Since suicide screening techniques make it possible to identify at-risk persons early on, they do play a critical role in the prevention of suicides. Shepard et al. (2023) underscore the significance of these technologies in enabling suitable referrals, guaranteeing that those experiencing difficulties have the necessary care. The adherence to ethical and compassionate care standards is demonstrated by this referral procedure, which highlights the dedication to offering complete support to those experiencing suicidal thoughts. Considering suggested practice guidelines for the use of suicide screening instruments in addition to the advantages of early diagnosis and referral is crucial. The extensive body of research reviewed for this study emphasized the need for standardized, evidence-based screening techniques. Organizations such as the Substance Abuse and Mental Health Services Administration and the American Association of Suicidology, for example, give critical information on how to utilize suicide screening instruments in a range of circumstances, including with homeless individuals.

Furthermore, Campello et al. (2016) describe how suicide screening devices may help professionals, volunteers, and the community become more aware of suicide. By integrating these resources into training initiatives, institutions will cultivate a more knowledgeable and compassionate perspective toward the obstacles encountered by the homeless population. In addition to helping identify those at risk, such compassion fosters a supportive atmosphere that welcomes candid discussions about mental health issues. Incorporating suicide screening involves a complex process beyond identification (Campello et al., 2016). Guaranteeing these instruments' efficiency and moral application entails the following suggested practice recommendations. Furthermore, increasing community awareness more broadly effects and helps foster a more understanding and knowledgeable response to the mental health issues that homeless people experience.

C-SSRS as the Targeted Screening Protocol

Instituting targeted measures such as screening for suicide, like the C-SSRS, could harness the identification and reduction of preventable deaths among the population (Yershova et al., 2016). The absence of such tools and protocols posed significant obstacles to effective early intervention. Such a screening tool aided in the identification of clients at risk of suicidal thoughts, enabling them to complete a safety plan form and facilitating the facility's ongoing efforts in mental health advocacy and referral to appropriate care services. The protocol introduced was the C-SSRS. The existing empirical evidence supports the adoption of C-SSRS as a reliable tool to mitigate the risk of suicide in this vulnerable population. The C-SSRS, widely employed and highly effective, is among the most used tools for assessing suicide risk in adults (Yershova et al., 2016). It comprises eight questions to explore suicidal thoughts, intentions, plans, and prior history of suicide attempts or preparatory behaviors (Tembleque et al., 2022). Once at-risk patients have been identified, they can be promptly scheduled for help, c to address the dire challenges faced by homeless individuals with mental health issues and suicide ideation (Yershova et al., 2016). The study by Katz et al. (2019) found strong associations between C-SSRS self-reports and attempts documented in Veterans Health Administration records, indicating concurrent validity. However, substantial discordant responses existed, with selfreports higher than documented attempts. The study showed that while C-SSRS responses were predictive of future suicide attempts, a significant proportion of attempts occurred among patients who denied suicidal ideation or behavior. The predictive value of the C-SSRS varied across Veterans Health Administration mental health programs, with lower predictive validity in patients discharged from inpatient mental health units. Another study which established the concurrent validity of the instrument was Matarazzo et al. (2019), who noted that C-SSRS severity and intensity subscale scores were significantly and moderately correlated with suicidal

ideation scores, demonstrating good convergent validity. The severity and intensity subscale scores were not significantly associated with Attitudes Toward Seeking Professional Psychological Help (ATSPPH) total scores, indicating good divergent validity. Baseline C-SSRS severity and intensity subscale scores predicted future suicidal behavior (actual attempts, interrupted attempts, aborted attempts, preparatory behavior, and any of the first four behaviors) during the 6month follow-up.

The Advancing Research and Clinical Practice via Close Collaboration (ARCC) Evidence-Based Practice (EBP) Model and its Relationship to the DNP Project

A comprehensive framework called the ARCC Model of EBP was created to help healthcare professionals apply evidence-based practices in clinical settings. The model has three main components: creating a targeted clinical question based on identified issues known as the "Ask" phase (Augustino et al., 2020). The process of "Retrieve" involves systematically reviewing and assessing pertinent literature. The "Critically Appraise" phase is the next step, in which the quality and applicability of the evidence are assessed (Augustino et al., 2020). Finally, the evidence is integrated into clinical practice during the "Apply" phase. This paradigm emphasizes cooperation to bridge the gap between researchers and clinicians and enable the practical application of research results in healthcare.

The ARCC EBP Model guides the creation and use of evidence-based treatments within the scope of the DNP project. The "Ask" step is crucial at the beginning of the project since it assists the DNP student in developing a precise clinical inquiry that targets a particular healthcare issue (Augustino et al., 2020). The literature review, critical appraisal, and application of evidence provide a systematic framework for integrating the latest research findings into the design and implementation of the DNP project. The ARCC EBP Model supports DNP projects, encouraging collaboration between clinical practice and academia while translating research into

improved patient care outcomes (Augustino et al., 2020). As a result, this model links theory and practice, encouraging the DNP project to apply evidence-based practices and advance healthcare.

Chapter Summary

Chapter Two provided a comprehensive review of the literature on suicide among homeless individuals, emphasizing the increased risk factors, the absence of practical screening tools, and the critical need for early interventions. Homelessness exposes individuals to a range of challenges, making them highly susceptible to mental health concerns and suicidal ideation. Suicide screening tools can bridge the gap in care by identifying those at risk and facilitating early interventions. The ARCC EBP Model is essential for DNP initiatives because it guarantees the systematic integration of evidence into practice. Research and practice partnership improves the quality of interventions, leading to better clinical results and advances in healthcare. Chapter Three will develop the context of the DNP project, including the steps taken and the ethical considerations that informed the project's implementation. The next chapter will focus on intervention measures to ensure the safety and well-being of the homeless population and the project's financial budget.

CHAPTER THREE

METHODS

Context

The DNP project involved a non-profit organization with which the DNP student had previously been involved. This organization provided a range of services to homeless adults and their families, including meals, showers, access to food, employment assistance programs, and help with transportation, housing assistance, and various other support services. The organization had no screening protocol to screen clients for suicidal ideation. The project aimed to enhance

the identification of clients at risk of suicidal thoughts, enabling them to complete a safety plan form and facilitating the facility's ongoing efforts in mental health advocacy and referral to appropriate care services. Two ethical considerations guided the project during this project: patient advocacy and safety.

The project involved 50 individuals, comprising homeless clients who frequented the facility, two to three staff members, and two to three volunteers. The number of participants is estimated based on the facility's daily attendance of approximately 8-10 clients who come in for meals and showers twice a week over 6 weeks. The chosen screening tool for the project was the C-SSRS. This screening tool comprises eight questions to explore suicidal thoughts, intentions, plans, and prior history of suicide attempts or preparatory behaviors (Temblique et al., 2022).

The clinical setting in which the quality improvement program was implemented was a non-profit organization that provided integrated services to homeless individuals. The population reviewed was characterized by difficult living conditions, social isolation, and economic hardship, making it a fertile ground for developing suicidal ideation and suicide (Gentil et al., 2020). Non-profit organizations were instrumental in supporting this population locally to enhance the quality of life. Daily, 10 individuals come into the facility. The organization provided services for homeless adults every Monday and Wednesday in the facility, and then on Tuesday and Thursday, it focused on community outreach services. The organization offered various services, including meals, showers, access to food, employment assistance programs, help with transportation, housing assistance, and various other support services.

The key stakeholders that facilitated this project included the Executive Director, Branch Manager, Development Associate, volunteers, health care providers, homeless clients receiving resources, their families, mental health advocates, outreach workers, community leaders, and other community organizations.

The Executive Director, Development Associate, and Branch Managers were some of the stakeholders in this project. Considering that they held leadership positions within the organization, they understood its strategic vision, a strength able to be used to inform the project. The professionals were consulted to ensure that the project aligned with the organization's overall mission, vision, and strategic goals aligns with that of the organization. Such alignment contributed to the long-term success and sustainability of the project within the organization.

The volunteers played a critical role in ensuring the project's success. The DNP student, who is a mental health professional, provided expertise for the project, particularly in using rating scales to assess the homeless population for suicide risk.

Anticipated Project Barriers

Despite the expected positive impact of this project on the homeless population, there were various anticipated barriers. The most significant barrier was that homeless adults often decline screening or provide inaccurate responses due to fear that the information will lead to their placement in a psychiatric hospital. Some might not trust the health care professionals, thus providing inaccurate responses. Therefore, the homeless individuals assessed could wrongfully answer some of the questions to avoid any chances of being held in the facility.

Another significant barrier was insufficient staff or volunteers to carry out the screening and post-screening processes effectively. Being a non-profit organization, unpaid volunteers were integral to offering a full complement of services. Fewer volunteers available for screening or an increased workload for staff may cause the screening and post-screening processes to be hindered.

Facilitator

The primary facilitators for this project include the Branch Manager, Director,

Receptionist, and volunteers. In particular, the manager and the director helped by providing the needed resources for the project implementation. They also regularly were consulted to ensure the project implemented the organization's strategies, regulations, or policies. The receptionist's primary role was directing the clients and their families concerning the processes of the given project. On the other hand, the volunteers were essential in implementing the project. The volunteers were expected to carry out the needed patient assessment and determine their needs to aid in suicide prevention. Organizational support was expected to come from donations and volunteers.

Project Benefits

The main goal was to reduce the rate of unreported suicidal ideation among homeless adults and to prevent suicide. To achieve this, the initial step taken was to offer every homeless client the chance to undergo an assessment. The professionals utilized the C-SSRS in assessing sociality among the homeless population. For individuals identified as high-risk, an opportunity to create a safety plan was presented, and those individuals were connected with local mental health services and resources.

Another benefit was that through this project, an enhanced rate of homeless adults receiving screening for suicidal ideation occurred. Scholars estimate that nearly 30% of the homeless population demonstrates suicidal ideation, as outlined by Wu et al. (2020). Through this project, this number was expected to be significantly reduced.

Adopting this project expanded the available mental health referrals and resource choices. Limited access to screening due to a limited number of used assessments was available to the homeless population at the time of this study. However, this project gave people experiencing homelessness easier access to the needed screening services.

This project established a comprehensive safety plan to ensure high-risk individuals knew whom to contact and where to seek help in an emergency. The high-risk individuals were educated and made to understand the contacts they had in cases of an emergency.

Implementing a suicide screening of homeless adults led to better outcomes for individuals in need, increased community support, enhanced funding opportunities, and improved overall effectiveness of the community resource organization's efforts. All of this was build on the understanding that screening for suicide, targeted at homeless adults, a high risk population, and providing them with options for care was a necessary step of growth.

Interventions

For this DNP initiative, a well-thought-out plan was devised to involve 50 participants, carefully chosen based on the functional capacity of the homeless resource center and the realistic possibility of conducting thorough assessments and interventions within the specified project timeframe. This figure was based on building a comprehensive dataset that could provide valuable insights while maintaining a scale that permits individualized care and thorough followup, aligning with the rigorous standards of academic research.

A cooperative strategy was embraced to reach this predetermined number, fostering tight collaboration with committed personnel and benevolent volunteers at the homeless resource center (Althubaiti, 2022). Their firsthand knowledge and practical experiences was vital in the pinpointing of potential participants who fulfilled the established criteria and were poised to reap the maximum benefits from the intervention. The enlistment plan utilized a purposive sampling technique, explicitly targeting adults who availed themselves of the services provided at the center and demonstrated a readiness to engage in this critical project (Althubaiti, 2022). This approach guaranteed a concentrated and pertinent group of participants, augmenting the prospective influence and efficacy of the suicide intervention strategies being examined. By

adhering to this scholarly methodology in selecting participants, the project was anchored by a bedrock of methodological soundness, promising that the conclusions drawn would be noteworthy and rooted in a rich, context-sensitive dataset boosting the trustworthiness and relevance of the research findings.

The project thus involved conducting a thorough needs assessment to understand the specific challenges and needs of the homeless population in the target area. It will also identified existing resources, support systems, and potential gaps in mental health services for this population. The screening services provided onsite to the individuals included in the project. In addition, necessary referrals were provided to the individual determined to be at high risk of suicide.

Inclusion Criteria

The following criteria guided the inclusion of individuals in the project:

- Individuals aged 18 years and older
- Individuals who self-identified as homeless
- Individuals who received services from the organization
- Individuals who consent to undergo screening.

Exclusion Criteria

The following criteria guided the exclusion of individuals in the project:

- Individuals under the age of 18.
- Individuals who do not identify as homeless.
- Individuals not receiving services from the organization.
- Individuals who decline to be screened.

Study of the Interventions

This project was guided by five critical steps described below.

Step 1: Invitation of the clients

Homeless adult clients seeking assistance from the non-profit community organization were invited to undergo a screening for suicidal thoughts using the C-SSRS tool.

Step 2: Screening

After completing the screening form, staff members or volunteers assessed the results and provided individualized feedback to each participant in a private area.

Step 3: Guiding Clients with Suicidal Ideation

Clients who reported having thoughts of suicide were asked to collaborate with staff and volunteers to create a personalized suicide safety plan. Those who did not report suicidal risk continued their regular activities at the facility. For clients who scored high on the suicide screening scale or displayed indicators of elevated suicide risk, the Branch Manager and Program Director activated their standard mental health support advocacy and alerted the Mobile Crisis

Outreach Team for a crisis intervention.

Step 4: Patient Data

Once the safety plan form was completed by staff and clients, the client kept the original document, while the facility maintained a copy for reference.

Step 5: Referrals

The facility offered additional referrals for mental health services and mental health advocacy to all clients who reported having suicidal ideation. The patients were referred to a specialty practice based on their needs.

Role of the Project Leader

The responsibility of the DNP student as project leader involved supervising the educating staff and volunteers regarding the utilization of the suicide screening scale for

identifying at-risk homeless adults and promoting mental health advocacy measures. Additionally, the DNP student ensured the correct utilization and accurate interpretation of screening tools and the safety plan.

DNP Project Team

The team was comprised of the DNP student (project leader), DNP advisor, DNP team member, the organization's director, Branch Manager, Development Associate, and volunteers. The selection of this team by the DNP student was guided by the project's topic, goals, and objectives, ensuring a successful project implementation. Each team member played a key role, as assigned, to ensure the project's success.

Measures

Addressing the urgent issue of insufficient suicide interventions at the homeless resource center required the introduction of the C-SSRS as a crucial screening tool. The tool was considered reliable and valid to be used in determining suicide severity. The reliability of the CSSRS was generally considered to be high. The scale demonstrated good internal consistency, indicating that the scale's items measure the same underlying construct. This was determined by the scale's score of Cronbach's alpha of 0.814, as noted by Austria-Corrales et al. (2023). Further, the instrument was deemed to be valid and capable of being used to complete this project. The C-SSRS has been shown to have useful content validity, as its items were developed based on expert input and a comprehensive literature review on suicide. According to AustriaCorrales et al. (2023), concurrent validity has been supported by studies comparing the C-SSRS to other established measures of suicidal ideation and behavior. Predictive validity has also been demonstrated, as the scale has been able to predict future suicide attempts. The tool, thus, was

coupled with developing individualized safety plans and referrals to mental health services. The chosen analytical method for this initiative was the Chi-Square Test, well-known for its effectiveness in examining the connections between categorical variables.

Analysis

Analysis of the collected data was an essential step when developing the recommendations for the project. The collected data was split into different categories. The collected data included suicidal ideation and severity obtained during the assessment. The data amassed encompassed the following components:

- Suicidal Ideation (Nominal): Ascertain if the respondents harbor suicidal thoughts, delineated as yes or no. The analysis was executed by calculating frequencies and percentages.
- The severity of Suicidal Ideation (Ordinal): Evaluating the extent of suicidal thoughts harbored by an individual, segmented into low, medium, or high categories. The analytical approach involved determining modes and medians.
- Age (Interval/Ratio): The age demographics underwent analysis through mean and standard deviation computations to gauge the cohort's central tendency and age dispersion.
- Marital Status (Interval/Ratio): Analysis of the marital status demographic involved calculating the mean and standard deviation to assess the central tendency and dispersion of marital status within the cohort.
- Gender (Nominal): The gender breakdown was analyzed utilizing frequencies and percentages to depict the gender composition in the cohort.

- Race (Nominal): Analysis through frequencies and percentages facilitated an understanding of the racial composition in the cohort.
- Educational Attainment (Ordinal): The research team determined the prevailing educational level within the group by examining modes and medians.
- Insurance Category (Nominal): In analyzing the insurance coverage among the participants, the team used frequencies and percentages.
- Employment Status (Nominal): To understand the cohort's occupational composition, the team employed frequencies and percentages in the analysis.

Evaluation Method

Employing the Chi-Square Test as the primary statistical analysis method was crucial to the examination of the connections between various categorical variables and the incidence of suicidal thoughts among the homeless population receiving services at the resource center. (Schober & Vetter, 2019). This technique was favored due to its adeptness in managing categorical data, a prominent feature in this research, considering the nature of the variables under study, including suicidal ideation, gender, race, and insurance type.

The significance of this approach in a clinical context lies in its capacity to uncover possible connections between demographic factors and tendencies toward suicidal thoughts. This, in turn, guides the creation of tailored intervention plans (Schober & Vetter, 2019). By unraveling the intricate relationships among these variables, the center formulated safety measures that considered each person's unique circumstances, potentially significantly enhancing the effectiveness of the suicide prevention program.

Furthermore, Nihan (2020) noted that the insights garnered from this methodology significantly influenced alterations in clinical practices rooted in verifiable evidence. It

encouraged data-centric methods for suicide prevention, a crucial necessity in this delicate and vital facet of mental healthcare. The ramifications extended to creating policies and tactics that are flexible and attuned to the demographic fluctuations discerned in the study demographic (Nihan, 2020). Additionally, the benchmark data, encapsulating the rates of suicidal ideation reporting before implementation, functioned as a vital gauge in the assessment of advancements post-implementation. This dataset quantified the triumphs of the interventions and spotlighted sectors necessitating enhanced focus, thus encouraging a cycle of perpetual enhancement in the facility's suicide prevention strategy (Nihan, 2020).

The Chi-square test has emerged as a pivotal tool in revolutionizing clinical practice, focusing on evidence and tailored to the specific needs and characteristics of the homeless demographic. The test was used in the project to compare findings and determine if the data has any relationship with the variables or if it could be due to chance.

Budget

Budgeting is one of the most important aspects of any project. Effective budgeting ensured that time and resources were effectively accorded to every task that led to the completion of the project. The overall budget cost for implementing the suicide screening was low. Hiring a PMHNP in Texas cost approximately \$90.00 per hour. The PMHNP only required 2 hours to train staff one the effective use of the CSSR-S, a one-page, six-question assessment form with yes or no answers.

Once the PMHNP taught the organization's Director and the Branch Manager how to use the screening tool, they passed this knowledge to other staff members. The organization had volunteers willing to carry out the free screening procedure. Clients completed the Safety Plan form on their own. Additional expenses involved in carrying out this project were the costs of supplies, such as printing paper, ink, and printing. The estimated yearly cost was \$600.00 for

black ink and \$660.00 for printing paper. The organization already had a printer. No additional fee was needed to conduct this project. Participants' information was kept in a locked cabinet in the Branch Manager's office.

Ethical Consideration

The University's Human Subject Review Committee approved and exempted this project, ensuring it met the rules and regulations protecting participants' privacy and confidentiality. The DNP student completed a CITI certificate course to further understand the ethical considerations needed in research.

Privacy and client confidentiality are the primary ethical considerations when implementing the project. Currently, no available data existed concerning suicide screening within this organization. Therefore, a lack of pre-intervention data existed, or zero. The Branch Manager stated that previous mental health referrals were not documented, but that the branch was developing software to store referrals in the future. To respect participants' autonomy, the screening were offered voluntarily to all individuals. No participant was demanded to undergo screening to continue using the organization's services. Participants' information was recorded on the suicide screening and safety forms using the initials of their names. The facility was not utilizing electronic medical records; paper forms were in use at the time of the study. For clients who shared a similar first name and last initial, their date of birth was included on the forms to differentiate.

The DNP student, Branch Manager, and Director worked together to gather all the necessary forms, assess the client's risk status, and provide counts for each risk category. They kept track of the number of cases referred to the Crisis team. Once completed, the Branch Manager collected all forms and placed them in each client's file. The files were securely stored in a locked cabinet. All screening forms and other project-related data will be disposed of within

5 years by the project site guidelines.

Chapter Summary

Chapter Three presented the execution of the DNP project, focusing on screening homeless adults for suicide severity using the CSSR-S tool, facilitating referrals to mental healthcare, and completing safety plan forms. Furthermore, the chapter delved into the process of data collection and analysis. It outlined the project intervention, which included inclusion and exclusion criteria, project budget, and ethical considerations crucial for effectively implementing screening measures. The following chapter highlights the project's results and presents data using graphs and tables to display the project's descriptive statistics, comparing them with national statistics for analysis.

CHAPTER FOUR

RESULTS

This study aimed to evaluate the effectiveness of a suicide prevention intervention tailored to the homeless population. Homelessness presents unique challenges that increase vulnerability to suicidal ideation and behaviors. The intervention involved conducting screening of the homeless population living in Houston, Texas, for suicidal ideations using the C-SSRS. The individuals identified as at risk of suicide were referred to a crisis team for specialized care and linked to other resources to help them.

Sample Characteristics

The project involved 42 individuals who consented to participate in the screening exercise out of the anticipated 50. The mean age of the homeless clients was 43, with a range from 21 to 69. Figure 1 presents the demographic characteristics of the 50 participants enrolled in the study. Most participants were male (62%), with a mean age of 46. The racial distribution was diverse, with 11.9% identifying as White, 9% Hispanic American, and 66.67% African American. The results were consistent with the Houston, Texas, homeless statistics, which indicated that more than 55% of the homeless population are African Americans, as outlined by the City of Houston (2022). Many participants reported experiencing homelessness for over a year (83.3%), with 7.1% reporting previous suicide attempts. Additionally, a significant percentage of the participants, 57.14%, indicated a lack of health insurance coverage, while 42.86% reported being insured. On top of this, out of the 42 participants screened, 90.5% reported being single, 2.4% reported being divorced, and 7.1% reported that they were married.

The table in this section provides a summary of the results.

Table 1

Characteristics	Frequency	Percentage
Gender		
- Male	36	85.7%
- Female	6	14.3%
Age (years)		
- Mean	46	
Race/Ethnicity		
- White	5	11.9%
- Black/African American	28	66.67%
- Asian American	9	21.4%
Homelessness Duration in		
Houston, Texas		
- <1 year	7	16.67%
- 1-5 years	6	14.3%
->5 years	29	69%
Suicide ideation		
- Yes	3	7.1%
- No	39	92.9%
Health insurance coverage		
-Yes	18	42.86%

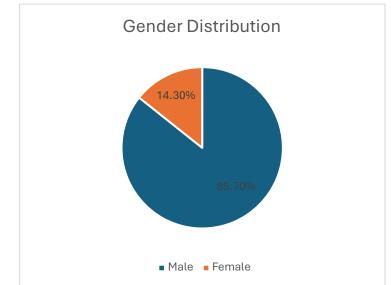
Population Demographic Characteristics

-No	24	57.14%
Marital Status		
Divorced	1	2.4%
Married	3	7.1%
Single	38	90.5%

Gender Distribution

Figure 2 summarizes the gender distribution of the study participants. The figure shows that males represent the largest homeless population at 85.7%, while females represent only 14.3%. This result is consistent with the United States' data on homelessness, which indicates that the male population makes up the most significant percentage. According to Statista (nd), in the United States, more than 60% of the homeless population is male, while females represent 40%.

Figure 1



Gender Distribution

Program Engagement

Figure 3 summarizes the level of participation and engagement in the suicide screening program among the participants. Throughout the intervention, 42 participants, 84% of the contacted participants, were screened at least once during the scheduled sessions. Of the 42 participants, 7.1% were referred to special care by the crisis team.

Table 2

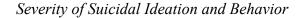
Measure	Results
Screening rate	84%
Referral rate	7.1%

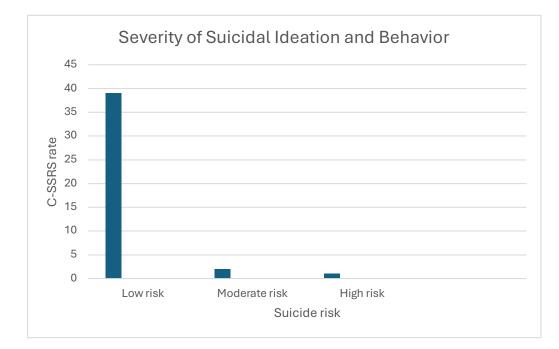
Program Engagement

Suicidal Ideation

The C-SSRS was administered to all participants in order to assess suicide risk. The results revealed that all of the screened individuals have had suicidal ideations at least once. While all the participants had suicidal ideations, the screening determined that, 92.85% of homeless clients screened indicated a low suicide risk at the time of screening, and 4.8% of the population demonstrated moderate risk. In comparison, 2.4% demonstrated high risk, indicating either recent suicidal behavior, suicidal ideation, or self-injurious behavior with intent to die. The results were consistent with different studies which suggested that homelessness was associated with a high risk of suicidality (Bommersbach et al., 2020, Kleinman & Morris, 2023). According to Bommersbach et al. (2020), a significant number of the homeless population reported suicidal behaviors, which are enhanced by depression, loneliness, and anxiety. A breakdown of the severity of suicidal ideation and behavior among people experiencing homelessness is presented in Figure 2.

Figure 2



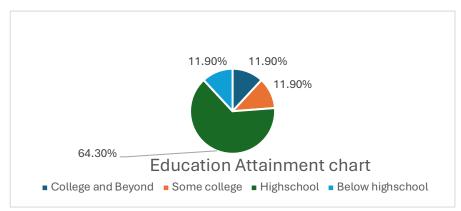


Education Attainment

Figure 3 provides a summary of the education attainment among the participants. The education level of the participants in the study indicated that a significant number of participants were high school graduates, at 64.3%. In comparison, college graduates and beyond represented 11.9%, and those with some colleges also represented 11.9% as did those who reported below high school level of education. The results were consistent with a study by Kull et al. (2019), which found that individuals who do not complete high school education are more likely to experience homelessness. The study found that the relationship between education attainment and homelessness was high among those who did not have a college education qualification. Figure 3 provides a summary of the results on the education level among the participants in the project.

Figure 3

Education Attainment



Employment Rate

Figure 4 provides a summary of the employment rate of the participants in the study. The results indicated that the unemployment rate was increased among the homeless population. The individuals who reported being employed were only 11.9%, while 88.1% reported being unemployed. The results were consistent with various studies in the country which indicated that a significant number of homeless individuals were unemployed. In any case, unemployment is the primary factor associated with homelessness. A study by Heston (2023) determined that unemployment in the United States was among the primary contributing factors to homelessness. Pratap et al. (2021) also explained that homeless unemployment rates are significantly higher than among the general population. Many factors contribute to this, including lack of stable housing, limited access to education and job training, mental health issues, substance abuse, and discrimination in the job market.

Figure 4

Employment Status



Health Insurance Cover

Table 3 presents a summary of the population's health insurance coverage. The results showed that a significant portion of the population lacked health insurance coverage, with 62% without coverage and only 38% having health insurance. The results suggested that health insurance coverage among the homeless population was significantly lower than the national average of 92.1%. Additionally, a study by Cernadas and Fernández (2021) found that not all homeless individuals qualify for Medicaid services, and even among those who do, enrollment and retention can be challenging due to factors such as lack of documentation, unstable living situations, and difficulty navigating the healthcare system.

Table 3

Health Insurance

Measure	Rate
Health insurance cover	

-Yes	16 (38%)
-No	26(62%)

Chi-square Test

A Chi-square test of independence is a statistical test used to determine if there is a significant association between two categorical variables. It compares the observed frequencies of cases in each category to the frequencies that would be expected if there were no associations between the variables. In this study, the Chi-square test of independence was used to examine the relationship between gender and reported suicidal thoughts, as well as between race and reported suicidal thoughts, among the participants.

A Chi-square test of independence was conducted to examine the relationship between gender and reported suicidal thoughts. The test produced the following results:

 $\chi_!^{\#_"} = 1.61 \times 10^{\%"} \chi$, p = 1

These results indicate that there is no significant association between gender and reported suicidal thoughts among the participants. The p-value of 1 suggests that any observed differences in suicidal thoughts between genders are likely due to random chance rather than a true underlying difference.

A second chi-square test of independence was conducted to examine the relationship between race and reported suicidal thoughts. The test produced the following results:

$$\chi_{!}^{\#_{"}} = 3.72, p = 0.16$$

The results showed that there was no significant link between race and reported suicidal thoughts among the participants. The p-value of 0.16, while lower than 1, was still higher than the common threshold of 0.05 for statistical significance. This implied that any differences

observed in suicidal thoughts between different racial groups were not statistically significant and could be due to random variation rather than a real association.

Project Findings

This DNP project aimed to provide mental health screening services to the homeless population in Houston, Texas. A total of 42 participants were screened during the project. Of these, 62% were male, with 38% female. Additionally, a significant number of the participants had no employment or health insurance coverage, and most did not have more than a high school diploma. During the project, 39 participants denied having suicidal ideation, while 3 reported having suicidal thoughts. The three individuals were referred to specialists for further observation and treatment as they demonstrated active suicidal ideations.

Despite the results, screening tools such as the C-SSRS have demonstrated its effectiveness in the identification of high suicide risk within vulnerable populations, such as the homeless. This tool can be implemented to prevent further risks, including self-harm, harm to others, and even potential fatalities.

Chapter Summary

This chapter has outlined various aspects, including the screening results of the 42 participants who participated in the project. All the participants who agreed to take part in the study were screened. Of the individuals, 36 of them were male, while six were female. A significant number (38) reported being single; one reported being divorced; and three stated that they were married. Of the individuals, 28 were African Americans; nine were Asian Americans; and five were white. 29 of these individuals indicated that they had been homeless for more than 5 years, while the rest have been homeless for between 1 and 4 years. The screening was conducted using the C-SSRS to assess suicidality among the homeless population. The results indicated that most of the individuals had suicidal thoughts. All of the participants screened

reported suicidal ideations; however 92.8% of them were determined to be at low risk of suicide at the time. The remaining 2.4% of the screened individuals were referred to a crisis team due to active suicidal ideations. Different factors were established among the population, including a high unemployment rate, low education level, limited insurance coverage, and limited access to healthcare services. The high proportion of homeless clients screening positive for suicide risk underscored the importance of implementing suicide prevention interventions within homeless shelters and service organizations. The following chapter covers the interpretation of the project, its limitations, plans for sustainability, implications for advanced practice nursing, and application of the DNP essentials.

CHAPTER FIVE

DISCUSSION

Chapter Five focuses on interpreting the project results, discussing its limitations, drawing conclusions, outlining plans for sustainability, exploring implications for advanced nursing practice, and the project itself. Additionally, the application of the American Association of the College of Nursing (AACN) DNP Essentials in the implementation and evaluation phases of the project will be discussed.

Interpretation

This QIP was conducted to screen homeless adults for suicide risk with the primary goal of reducing the rate of unreported suicidal ideations among homeless adults and preventing suicide. Homeless individuals were offered an opportunity to undergo recommended screening, specifically the C-SSRS assessment. For individuals identified as high-risk, an opportunity to create a safety plan and connect them with local mental health services and resources was available.

The literature highlighted the fact that homelessness is a significant predictor of suicide and suicidal ideation (Ayano et al., 2019; Murray et al., 202; Tinland et al., 2018;). Studies indicate that homeless individuals are more likely to experience suicidal ideation and attempts due to factors such as mental health. A recent study found that the prevalence of suicide and suicidal thoughts among homeless individuals was strongly linked to the presence of stressors in this vulnerable population. Bommersbach et al. (2020) reported that 21% of adults who had experienced homelessness in the previous year had attempted suicide during that time, a significantly higher percentage compared to 5.8% for those who had been homeless before the past year, and 6.3% for those who had never experienced homelessness. Screening tools like the C-SSRS are critical in identifying at-risk individuals and providing timely interventions to

prevent suicide (Shepard et al., 2023). The tool is considered an essential aspect of intervening with at-risk individuals as it contributes to saving lives and improving the overall well-being of homeless adults (Pinals, 2020). This project's findings aligned with existing literature, reinforcing the necessity of targeted screening and intervention programs within homeless populations.

The project involved 42 participants who consented to the suicide risk screening. Demographically, the participants were diverse, with a substantial majority being male (85.7%) and African American (66.67%). This aligns with broader trends in homeless populations, in which males and African American males are overrepresented (Willison et al., 2024). The age range of participants varied, but the mean age was 46 years, supporting assertions made in the previous literature demonstrating the overrepresentation of unemployed individuals in this category (Willison et al., 2024). A significant proportion of the participants had been experiencing homelessness for an extended period, with 69% reporting being homeless for over five years, highlighting the chronic nature of homelessness among the sample. Health insurance coverage was notably low, with 57.14% of the participants lacking any form of health insurance, which underscores the barriers to accessing healthcare faced by homeless individuals. The CSSRS screening revealed that a vast majority (92.85%) of participants were at low risk for suicide at the time of screening. However, 7.1% reported previous suicide attempts, indicating a history of suicidal behavior, and 2.4% were identified as high-risk and were subsequently referred to a crisis team for immediate intervention. The high engagement rate was a notable success of the intervention, with 84% of the contacted participants agreeing to be screened. This high rate of participation suggests that when provided with appropriate outreach and support, homeless individuals are willing to engage in mental health assessments. The screening process not only identified those at risk but also facilitated the connection of high-risk individuals to

necessary mental health services, thereby potentially mitigating immediate risks and fostering long-term mental health support.

Limitations

The study faced some limitations, including limited staffing and challenges reaching participants due to the transient nature of the homeless population. These two limitations resulted in frequent visits and high turnover, making it difficult to screen all individuals. The project also faced challenges due to staffing because there were not enough staff or volunteers to carry out the screening and post-screening processes effectively. Some homeless adults also appeared to decline screening or provide inaccurate responses due to fear that the information could lead to their placement in a psychiatric hospital. The topic's sensitive nature may have made clients uncomfortable answering the questions. For example, a total of 5 participants declined to be screened. Some clients were annoyed and found the questions to be intrusive. An additional challenge with privacy and confidentiality existed in the absence of an electronic health record (EHR) system. All forms were completed on paper and stored in the manager's locked drawer. These elementary security standards could compromise confidentiality and privacy. Finally, a potential for bias from the staff regarding the accuracy of client responses existed.

Implications for Advanced Nursing Practice

The project had a significant impact on nursing practice, emphasizing the importance of public health awareness and addressing mental health among a vulnerable population. It highlighted the critical role of screening tools and referrals for mental health support, as well as the need to educate staff and participants about the link between homelessness and suicide and the importance of community awareness. Additionally, the project held implications for the education and training of staff and participants. Advanced Practice Nurses (APNs) should advocate for programs that focus on educating healthcare staff and homeless individuals about

the links between homelessness and mental health and should lead initiatives to equip staff with the skills and knowledge needed to conduct sensitive screenings and provide appropriate referrals. Furthermore, educating participants about the importance of mental health care and available resources can empower them to seek help and support. These combined approaches ensure that providers and care recipients are better informed and engaged in the process.

The project also had implications for understanding the impact of social determinants of health, such as lack of stable housing, unemployment, and limited access to healthcare, on mental health outcomes. APNs should consider these factors when designing care plans while advocating for policies and programs that address these social determinants. The goal must be to provide a supportive environment that fosters the overall well-being of homeless individuals, thereby reducing the risk of suicide and other adverse health outcomes.

From the advocacy and community engagement perspective, the project also has implications for APNs. These nurses are well-suited to engage with community organizations and policymakers in such a way as to advocate for the needs of homeless populations. APNs should collaborate with community stakeholders to provide holistic care and address the complex needs of homeless individuals. Close collaboration can ensure adequate resources and lead to systemic changes that improve access to mental health services, housing, and other essential resources. Finally, APNs should take the lead in efforts to institutionalize screening as a critical aspect of intervening in the vulnerable population, ensuring that mental health screenings become a standard part of the care provided to homeless individuals. This integration will help maintain the focus on mental health and ensure that at-risk individuals continue to receive the support they need.

Plan for Sustainability

Given the low-budget nature of the project, continued implementation of the C-SSRS screening, assuming a fully trained staff, is conceivable. Using Lewin's Theory of Change, the organization can create a structured plan to integrate the screening process into routine practice. This plan involves unfreezing the current state by raising awareness about the importance of suicide screening, moving by implementing the screening process and training staff, and refreezing by integrating the screening into the organization's standard operating procedures. Continuous monitoring and evaluation will ensure the sustainability and effectiveness of the program.

Adequate training of staff and volunteers is needed to implement the screening tool and safety plan effectively while correctly identifying high-risk individuals for mental health referrals. The organization is supported by community programs that offer mental health support. The organization plans to invest in an EHR system to ensure client privacy and confidentiality, even though the screening can be done on paper. The importance of an EHR lies in ensuring that client documents are kept safe and cannot go missing.

The most important reason to ensure the organization's sustainability is to reduce the reported suicide rate within the community and to educate awareness about suicide risk among homeless adults. This will prompt other community leaders and organizations to focus on supporting and providing resources for those at high risk. The organization has an established crisis team and can refer all identified high-risk clients to proper mental health services.

Application of the AACN DNP Essentials

Essential I: Scientific Underpinnings for Practice

This essential encompasses integrating the scientific underpinnings of nursing with knowledge from ethics, biophysical sciences, psychosocial sciences, analytical methods,

organizational systems, EBP, nursing theories, and genomic competency (AACN, 2021). It also emphasizes the nursing profession's significance concerning improving organizational practices (AACN, 2021). As the project lead, the DNP student used EBP by incorporating the C-SSRS, a validated tool for assessing suicide risk. The theoretical foundation provided a scientific basis for the intervention, ensuring the study's grounding in research and best practices. The practice is based on integrating nursing science and theories from other disciplines. The C-SSRS has been tested for reliability and validity in various populations, providing a solid scientific foundation for effective practice. The intervention also integrated theoretical knowledge about homelessness and mental health to ensure its relevance and impact.

Essential II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking

Essential II emphasizes developing leadership skills for organizational change, systems thinking to address complex healthcare issues, and championing quality improvement initiatives (AACN, 2021). This essential emphasizes the role of nursing leadership in developing and evaluating care delivery approaches that meet current and future needs of patient populations based on scientific findings in nursing and other clinical sciences, as well as organizational, political, and economic sciences (AACN, 2021).

As the project lead, the DNP student used effective leadership and systems thinking, which were crucial in implementing the screening program. The project required coordination among various stakeholders, including staff training and managing the logistics of the screening process. Leadership was also essential in addressing the challenges and barriers encountered during the project. Organizational and systems leadership were critical in the implementation of this project. Effective leadership facilitated the coordination among staff, volunteers, and external mental health services, ensuring a smooth and efficient screening process. Systems thinking

enabled the identification of barriers and the development of strategies to overcome them, such as addressing the lack of EHRs by securely storing paper forms. As a team lead, the student played a crucial role in advocating for resources and support needed to sustain the screening program, highlighting the importance of a structured approach to quality improvement within healthcare organizations.

Essential III: Clinical Scholarship and Analytical Methods for EBP

Essential III focuses on applying critical thinking and research analysis to integrate the best available evidence into clinical decision-making for EBP (AACN, 2021). It encompasses the need to use analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice. The project demonstrated clinical scholarship by using analytical methods to evaluate the effectiveness of the intervention. Data collection and analysis were crucial for understanding the impact of the screening program and identifying areas for improvement. Clinical scholarship and analytical methods were vital for the project's success. Systematically gathering and analyzing data provided valuable insights into the intervention. The project yielded valuable findings capable of guiding similar initiatives in the future. The evidence-based scholarly approach ensured that the intervention contributed new knowledge to the field, highlighting the role of APNs when conducting meaningful research.

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Healthcare

Essential IV emphasizes utilizing information technology and patient care technology to enhance healthcare delivery, improve patient outcomes, and transform the healthcare system (AACN, 2021). In the context of this DNP, this essential was achieved by integrating technology to enhance patient care in the healthcare system. Although the project faced limitations due to the

lack of an EHR system, it still drew attention to the significance of information systems and technology in healthcare. EHRs can significantly improve data management, confidentiality, and the efficiency of patient care processes. Implementing an EHR system could enhance the screening program by facilitating better documentation, follow-up care, and integration with other healthcare services (Rashid et al., 2022). Therefore, the essential underscores the need for technological advancements to transform healthcare delivery to improve patient outcomes, reduce costs to the system, and improve the quality of life for vulnerable populations in line with the tripartite goal of care.

Essential V: Health Care Policy for Advocacy in Health Care

Essential V focuses on the role of nurses in understanding and influencing healthcare policy to advocate for improved health outcomes and access to quality care for patients and communities (AACN, 2021). In the context of the present DNP, this essential was met as the study led to inferences that potentially influenced and advocated for better mental healthcare policies. The DNP project's overall aim was to highlight the importance of healthcare policy in addressing the needs of vulnerable populations through implementing the suicide screening protocol at the non-profit community organization. The DNP project goal was to raise awareness of mental health needs and increased suicide risk among the homeless in order to provide better mental health services and improve access to care for the homeless. As the team lead engaged with all stakeholders, the DNP student is able to influence the development and implementation of policies promoting health equity and improving marginalized groups' health outcomes. Therefore, the project emphasized the role of policy advocacy in achieving systemic change and enhancing the quality of care.

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes.

Essential VI emphasizes the significance of interprofessional collaboration, in which nurses work effectively with other healthcare professionals to optimize patient care coordination, improve health outcomes for individuals and populations, and ultimately enhance the healthcare system (AACN, 2021). For the present DNP, high-level interprofessional collaboration was imperative for achieving the project's objective. The DNP student collaborated with various healthcare professionals, including social workers, mental health professionals, and other stakeholders, ensuring a comprehensive approach to addressing the needs of homeless individuals. Collaborative efforts facilitated the seamless referral of high-risk individuals to appropriate mental health services, demonstrating the importance of teamwork when achieving positive health outcomes. These essentials underscore the need for effective communication and cooperation among healthcare professionals to provide holistic and patient-centered care.

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health

Essential VII highlights the importance of clinical prevention strategies and population health initiatives to improve the overall health of the nation by focusing on disease prevention, health promotion, and addressing social determinants of health (AACN, 2021). A DNP project that meets this essential should demonstrate a focus on improving population healthcare through clinical prevention and health promotion. The project focused on clinical prevention by identifying at-risk individuals and providing timely interventions to prevent suicide. Early interventions are critical for reducing the suicide risks amongst vulnerable populations like the homeless. The emphasis on screening and early intervention aligned with the principles of clinical prevention, highlighting the importance of taking proactive measures to reduce the incidence of adverse health outcomes. Such measures also reinforce the role of DNP-prepared clinicians in the promotion of public health and preventing disease within communities.

Essential VIII: Advanced Nursing Practice

Essential VIII emphasizes the roles and responsibilities of nurses with advanced degrees in providing specialized care, leading healthcare teams, conducting research, and shaping the future of nursing practice. It ensures advanced nursing practice delivers high-quality care to improve patient outcomes (AACN, 2021). The essential, therefore, highlights the importance of advanced nursing practice in improving health outcomes and advancing the nursing profession. The project aimed to demonstrate advanced nursing practice through the integration of clinical expertise, EBP, and interprofessional collaboration. The DNP student, who is an APN, was involved in the implementation of screening of homeless adults to assess and manage suicide risk among homeless individuals. The project highlighted the critical role of APNs in leading quality improvement initiatives, addressing complex health issues, and providing high-quality, patientcentered care.

Conclusion

The DNP QIP aimed to reduce unreported suicidal thoughts and prevent suicide among homeless adults by implementing a suicide risk screening program and referral to mental health care services. The implementation involved using the C-SSRS to identify at-risk individuals, create a safety plan for those who reported suicidal ideation, and refer high-risk individuals to appropriate mental health services. The findings demonstrated the effectiveness of the screening in detecting high-risk individuals and providing necessary interventions. The project provided evidence that suicide ideation was high among homeless adults at some point in their lives. However, the majority scored low risk due to not presently having suicidal ideation though they reported having past suicidal ideation. Providing food, shelter, and other resources by the organization may contribute to lowering the current risk. The screening was effective in detecting high-risk individuals, and providing mental health support, such as completing a safety plan and

referring to a crisis team, can prevent someone at high risk of suicide from carrying out their intentions.

Despite limitations such as limited staffing and participant reluctance, the project highlighted the importance of targeted suicide prevention efforts within the homeless population. The implications for advanced nursing practice emphasize the need for public health awareness, education, and advocacy. The sustainability plan involves integrating screening into routine practice using Lewin's Theory of Change and focusing on Maslow's Hierarchy of Needs. This demonstrates how a lack of physiological needs can prevent a person from achieving selfactualization, increasing their risk of self-harm. The application of the AACN DNP Essentials throughout the project underscores the critical role of APNs in leading QIPs and improving population health projects. The QIP successfully demonstrated that early interventions, such as screening protocols for suicide, can effectively identify and potentially prevent self-harm or death.

References

Althubaiti, A. (2022). Sample size determination: A practical guide for health researchers. Journal of General and Family Medicine, 24(2), 72–

78. https://doi.org/10.1002/jgf2.600

American Association of Colleges of Nursing (AACN). (2021). The essentials: Core Competencies for professional nursing education.

https://www.aacnnursing.org/Portals/0/PDFs/Publications/Essentials-2021.pdf

Armoon, B., Griffiths, M. D., Mohammadi, R., & Ahounbar, E. (2023). Suicidal behaviors and risk-taking among homeless individuals: A systematic review and meta-analysis.

Community Mental Health Journal, *59*(7), 1283–1299. https://doi.org/10.1007/s10597-023-01111-3

- Augustino, L. R., Braun, L., Heyne, R. E., Shinn, A., Lovett-Floom, L., King, H., ... & Hatzfeld,
 J. (2020). Implementing evidence-based practice facilitators: A case series. *Military Medicine*, 185(Suppl 2), 7-14. https://doi.org/10.1093/milmed/usz460
- Austria-Corrales, F., Jiménez-Tapia, A., Astudillo-García, C. I., Arenas-Landgrave, P., Xochihua-Tlecuitl, T., Cruz-Cruz, C., ... & Galynker, I. (2023). The Columbia-suicide severity rating scale: Validity and psychometric properties of an online Spanish-language version in a Mexican population sample. *Frontiers in Public Health*, *11*. https://doi.org/10.3389/fpubh.2023.1157581
- Ayano, G., Belete, A., Duko, B., Tsegay, L., & Dachew, B. A. (2021). Systematic review and meta-analysis of the prevalence of depressive symptoms, dysthymia, and major depressive disorders among homeless people. *BMJ Open*, *11*(2), e040061. https://doi.org/10.1136/bmjopen-2020-040061
- Belsher, B. E., Smolenski, D. J., Pruitt, L. D., Bush, N. E., Beech, E. H., Workman, D. E., ... & Skopp, N. A. (2019). Prediction models for suicide attempts and deaths: A systematic review and simulation. *JAMA Psychiatry*, *76*(6), 642-651. https://doi.org/10.1001/jamapsychiatry.2019.0174
- Bommersbach, T. J., Stefanovics, E. A., Rhee, T. G., Tsai, J., & Rosenheck, R. A. (2020). Suicide attempts and homelessness: Timing of attempts among recently homeless, past homeless, and never homeless adults. *Psychiatric Services*, 71(12), 1225-1231. https://doi.org/10.1176/appi.ps.202000073

Brackertz, N. (2020). The role of housing insecurity and homelessness in suicidal behaviour and effective interventions to reduce suicidal thoughts and behaviours: A review of the evidence.
Australian Housing and Urban Research Institute

Limited.

https://www.ahuri.edu.au/sites/default/files/migration/documents/AHURIProfessional-Services-The-role-of-housing-insecurity-and-homelessness-in-suicidalbehaviour.pdf

Cernadas, A., & Fernández, Á. (2021). Healthcare inequities and barriers to access for homeless individuals: A qualitative study in Barcelona (Spain). *International Journal for Equity in Health*, 20(1), 1-17. https://doi.org/10.1186/s12939-021-01409-2

City of Houston (nd). Houston homeless response system. https://www.houstontx.gov/council/committees/housing/20220719/homeless.pdf

Culatto, P., Bojanić, L., Appleby, L., & Turnbull, P. (2021). Suicide by homeless patients in England and Wales: National clinical survey. *BJPsych Open*, 7(2).

https://doi.org/10.1192/bjo.2021.2

- Culhane, D., Szymkowiak, D., & Schinka, J. A. (2019). Suicidality and the onset of homelessness: Evidence for a temporal association from VHA treatment records. *Psychiatric Services*, 70(11), 1049-1052. https://doi.org/10.1176/appi.ps.201800415
- Eynan, R., Langley, J., Tolomiczenko, G., Rhodes, A. E., Links, P., Wasylenki, D., & Goering, P. (2002). The association between homelessness and suicidal ideation and behaviors:
 Results of a cross-sectional survey. *Suicide & Life-threatening Behavior*, *32*(4), 418–427. https://doi.org/10.1521/suli.32.4.418.22341
- Fleury, M. J., Grenier, G., Sabetti, J., Bertrand, K., Clément, M., & Brochu, S. (2021). Met and unmet needs of homeless individuals at different stages of housing reintegration: A

mixed-method investigation. PLOS ONE, 16(1), e0245088.

https://doi.org/10.1371/journal.pone.0245088.

- Franco-Martín, M. A., Muñoz-Sánchez, J. L., Sainz-de-Abajo, B., Castillo-Sánchez, G.,
 Hamrioui, S., & de La Torre-Díez, I. (2018). A systematic literature review of
 technologies for suicidal behavior prevention. *Journal of Medical Systems, 42*, 17. https://doi.org/10.1007/s10916-018-0926-5
- Gaur, M., Alambo, A., Sain, J. P., Kursuncu, U., Thirunarayan, K., Kavuluru, R., ... & Pathak, J. (2019). Knowledge-aware assessment of severity of suicide risk for early intervention. In *The World Wide Web Conference*. (pp. 514-525). https://doi.org/10.1145/3308558.3313698

https://doi.org/10.1110/05000500.5515090

Gentil, L., Grenier, G., & Fleury, M. (2020). Determinants of suicidal ideation and suicide

attempt among former and currently homeless individuals. Social Psychiatry and

Psychiatric Epidemiology, *56*(5), 747-757. https://doi.org/10.1007/s00127-020-01952-3 Genuchi, M. C. (2019). Masculinity and suicidal desire in a community sample of homeless men:

bringing together masculinity and the interpersonal theory of suicide. The Journal of

Men's Studies, 27(3), 329-342. https://doi.org/10.1177/1060826519846428

Goldstein G.J., & Boudreaux, E. D. (2023). Universal suicide screening is feasible and necessary to reduce suicide. *Psychiatric Services*, 74(1), 81-83.

https://doi.org/10.1176/appi.ps.202100625

Harris, S. S. L., & DeSantis, G. R. (2021). Suicide Prevention Coordinating Council 2021 Annual Report. https://sprc.org/wp-content/uploads/2022/08/2021-Suicide-Prevention-Coordinating-Council-Annual-Report-Final-1.pdf

Heston, T. F. (2023). The cost of living index as a primary driver of homelessness in the United

States: A cross-state analysis. *Cureus*, 15(10).

https://doi.org/10.1101/2023.09.19.23295803

Holleran, L., & Poon, G. (2018). Dying in the shadows: Suicide among the homeless. *Harvard Public Health Review*, 20, 1–5. https://www.jstor.org/stable/48515221

Holliday, R., Forster, J. E., Desai, A., Miller, C., Monteith, L. L., Schneiderman, A. I., &
Hoffmire, C. A. (2021). Association of lifetime homelessness and justice involvement
with psychiatric symptoms, suicidal ideation, and suicide attempt among post-9/11
veterans. *Journal of Psychiatric Research*, 144, 455461. https://doi.org/10.1016/j.jpsychires.2021.11.007

Hossain, M. M., Sultana, A., Tasnim, S., Fan, Q., Ma, P., McKyer, E. L., & Purohit, N. (2020).
Prevalence of mental disorders among people who are homeless: An umbrella review. *International Journal of Social Psychiatry*, 66(6), 528-541.

https://doi.org/10.1177/0020764020924689 Interian, A., Chesin, M., Kline, A., Miller, R., St. Hill, L., Latorre, M., & Stanley, B. (2018). Use

of the Columbia-Suicide Severity Rating Scale (C-SSRS) to classify suicidal behaviors. Archives of Suicide Research, 22(2), 278-

294. https://doi.org/10.1080/13811118.2017.1334610

Katz, I., Barry, C. N., Cooper, S. A., Kasprow, W. J., & Hoff, R. A. (2019). Use of the Columbia-Suicide Severity Rating Scale (C-SSRS) in a large sample of veterans receiving mental health services in the veterans health administration. *Suicide and Life-Threatening Behavior*, 50(1), 111-121. https://doi.org/10.1111/sltb.12584

Jobes, D. A. (2016). Managing suicidal risk: A collaborative approach. Guilford Publications.

Kim, Y. J., Boyas, J. F., Lee, K. H., & Jun, J. S. (2019). Suicidality among homeless people: Testing the mediating effects of self-efficacy and depression. *Journal of Human Behavior in the Social Environment*, 29(7), 922-

936. https://doi.org/10.1080/10911359.2019.1639579

- Kleinman, R. A., & Morris, N. P. (2023). Suicide, homicide, and other violent deaths among people experiencing homelessness in the United States: A cross-sectional study. *Public Health Reports*, 138(2), 309-314. https://doi.org/10.1177/00333549221087228
- Kull, M. A., Morton, M. H., Patel, S., Curry, S., & Carreon, E. (2019). Missed opportunities:
 Education among youth experiencing homelessness in America. *Chapin Hall at the University of Chicago*.
 https://www.chapinhall.org/wpcontent/uploads/ChapinHall_VoYC_NationalReport_Final

.pdf

- Lee, K. H., Jun, J. S., Kim, Y. J., Roh, S., Moon, S. S., Bukonda, N., & Hines, L. (2017). Mental health, substance abuse, and suicide among homeless adults. *Journal of EvidenceInformed Social Work, 14*(4), 229-242. https://doi.org/10.1080/23761407.2017.1316221
- Li, J. S., & Urada, L. A. (2020). Cycle of perpetual vulnerability for women facing homelessness near an urban library in a major US metropolitan area. *International Journal of Environmental Research and Public Health*, 17(16), 5985. https://doi.org/10.3390/ijerph17165985.
- Matarazzo, B. B., Brown, G. K., Stanley, B., Forster, J. E., Billera, M., Currier, G. W.,
 Ghahramanlou-Holloway, M., & Brenner, L. A. (2019). Predictive validity of the
 Columbia-Suicide Severity Rating Scale among a cohort of at-risk veterans. *Suicide and Life-Threatening Behavior*, 49(5), 1255-1265. https://doi.org/10.1111/sltb.12515

Moscardini, E. H., Hill, R. M., Dodd, C. G., Do, C., Kaplow, J. B., & Tucker, R. P. (2020).
 Suicide safety planning: Clinician training, comfort, and safety plan utilization.
 International Journal of Environmental Research and Public Health, 17(18), 6444.
 https://doi.org/10.3390/ijerph17186444

Murray, R. M., Conroy, E., Connolly, M., Stokes, D., Frazer, K., & Kroll, T. (2021). Scoping review: Suicide-specific intervention programmes for people experiencing homelessness. *International Journal of Environmental Research and Public Health*, 18(13), 6729. https://doi.org/10.3390/ijerph18136729

National Health Care for the Homeless Council Fact Sheet. (2023.). https://nhchc.org/wpcontent/uploads/2019/08/suicide-fact-sheet.pdf

- Nichter, B., Tsai, J., & Pietrzak, R. H. (2023). Prevalence, correlates, and mental health burden associated with homelessness in US military veterans. *Psychological Medicine*, *53(9)*, 3952-3962. https://doi.org/10.1017/S0033291722000617
- Nihan, S. T. (2020). Karl Pearson Chi-square tests. *Educational Research and Reviews*, 15(9), 575–580. https://doi.org/10.5897/err2019.3817

O'Rourke, M. C., Jamil, R. T., & Siddiqui, W. (2020). Suicide screening and prevention. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK531453/#:~:text=It%20has%20seven%20long

%20questions,to%20identify%20high-risk%20patients.

- Padgett, D. K. (2020). Homelessness, housing instability, and mental health: making the connections. *BJPsych bulletin*, *44*(5), 197-201. https://doi.org/10.1192/bjb.2020.49
- Panadero, S., Martín, R., & Vázquez, J. J. (2018). Suicide attempts and stressful life events among homeless people in Madrid (Spain). *Journal of Community & Applied Social Psychology*, 28(4), 200–212. https://doi-org.mylibrary.wilmu.edu/10.1002/casp.2351

Pinals, D. A. (2020). Crisis services: Meeting needs, saving lives. Alexandria, VA, National Association of State Mental Health Program Directors. https://www.nasmhpd.org/sites/default/files/2020paper1.pdf

- Pratap, P., Dickson, A., Love, M., Zanoni, J., Donato, C., Flynn, M. A., & Schulte, P. A. (2021).
 Public health impacts of underemployment and unemployment in the United States:
 Exploring perceptions, gaps, and opportunities. *International Journal of Environmental Research and Public Health*, 18(19), 10021. https://doi.org/10.3390/ijerph181910021
- Rashid, A., Choukair, D., Bauer, C., Ullrich, M., & Maisch, T. (2022). Practical use of electronic patient records: Findings from two care projects in centers for rare diseases. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz, 65*(11), 1143-1150. https://doi.org/10.1007/s00103-022-03599-8
- Salon, M. S. B. (2024, January 14). Exploring suicide risk among homeless adults in Texas: Investigating factors influencing suicide ideation and the need for safety planning.

https://sswr.confex.com/sswr/2024/webprogram/Paper52964.html Schober, P., & Vetter, T. R. (2019). Chi-square tests in medical research. *Anesthesia* &

Analgesia, 129(5), 1193-1193. https://doi.org/10.1213/ane.00000000004410

- Statista (nd). Estimated share of homeless individuals in the United States in 2022, by gender. https://www.statista.com/statistics/962171/share-homeless-people-us-gender/
- Temblique, E. K., Foster, K., Fujimoto, J., Kopelson, K., Borthwick, K. M., & Capone-Newton,
 P. (2022). A 1-Year review of a nationally led intervention to improve suicide prevention screening at a large homeless veterans clinic. *Federal Practitioner*, 39(1)).
 https://doi.org/10.12788/fp.0215

- Tinland, A., Boyer, L., Loubière, S., Greacen, T., Girard, V., Boucekine, M., Fond, G., Auquier, P. (2018). Victimization and post-traumatic stress disorder in homeless women with mental illness are associated with depression, suicide, and quality of life. *Neuropsychiatrists Treat.14*. 2269-2279. https://doi.org/10.2147/NDT.S161377.
- Tsai, J., & Cao, X. (2019). Association between suicide attempts and homelessness in a population-based sample of US veterans and non-veterans. *Journal of Epidemiology and Community Health*, 73(4), 346-352. https://doi.org/10.1136/jech-2018-211065
- Willison, C., Unwala, N., Singer, P. M., Creedon, T. B., Mullin, B., & Cook, B. L. (2024).
 Persistent disparities: Trends in rates of sheltered homelessness across demographic subgroups in the USA. *Journal of Racial and Ethnic Health Disparities*, *11*(1), 326-338. https://doi.org/10.1007/s40615-023-01521-9
- Winetrobe, H., Wenzel, S., Rhoades, H., Henwood, B., Rice, E., & Harris, T. (2017). Differences in health and social support between homeless men and women entering permanent supportive housing. *Women's Health Issues*, 27(3), 286-293.

https://doi.org/10.1016/j.whi.2016.12.011 World Health Organization. (2020). International standards for the treatment of drug use disorders: Revised edition incorporating results of fieldtesting. https://www.unodc.org/documents/drug-prevention-and-treatment/UNODC-WHO_International_Standards_Treatment_Drug_Use_Disorders_April_2020.pdf

Yershova, K., Lesser, A., Logan, K., & Posner, K. (2016). Asking about suicide as a means of suicide prevention: The Columbia Suicide Severity Rating Scale (C-SSRS). In Understanding Suicide: From Diagnosis to Personalized Treatment (pp. 29-41). https://doi.org/10.1097/PEC.00000000000225

- Yohannes, K., Gezahegn, M., Birhanie, M., Simachew, Y., Moges, A., Ayano, G., Toitole, K. K., Mokona, H., & Abebe, L. (2023). Suicidality and homelessness: Prevalence and associated factors of suicidal behavior among homeless young adults in Southern Ethiopia. *BMC Psychology*, *11*(1). https://doi.org/10.1186/s40359-023-01162-x
- Yurdakul, G., & Arar, T. (2023). Revisiting Maslow's hierarchy of needs: Is it still universally applicable? *Journal of Human Behavior in the Social Environment*, 1-28. https://doi.org/10.1080/10911359.2023.2177227
- Zalsman, G., Hawton, K., Wasserman, D., van Heeringen, K., Arensman, E., Balazs, J., et al. (2016). Suicide prevention strategies revisited: A 10-year systematic review. *The Lancet Psychiatry*, 3(7), 646-659. https://doi.org/10.1016/S2215-0366(16)30030-X

Appendix A

Facility Letter of Approval





October 16, 2023

I, Allie Archer, Katy Branch Manager of Hope Impacts, am writing to inform you that our organization has agreed with Chinwe Osuagwu, a student enrolled in the DNP program at Wilmington University. The agreement pertains to our organization's involvement in her DNP project, which involves the implementation of suicide screening tools to assess suicide severity among homeless adults who are receiving services from our organization.

Both parties have agreed to the following terms:

1An Internal Review Board (IRB) approval through Wilmington University will be secured before any participant-related activities. A copy of this approval will be shared with our facility, as we do not currently possess an IRB of our own.

2. Our facility will provide Chinwe Osuagwu with complete support throughout the implementation and completion of her DNP project.

3. We are optimistic that this project will enhance our ability to identify at-risk homeless adults and improve our mental health advocacy and referral interventions.

Please let us know if you have any questions or concerns about this agreement.

Sincerely,

Allie Archer Katy Branch Manager



Scanned with CamScanner

Appendix B

HSRC Approval Letter



November 3, 2023

Chinwe Osuagwu

Dear Chinwe,

Wilmington University's Human Subjects Review Committee (HSRC) is pleased to inform you that your

Doctor of Nursing Practice project proposal *Development and Evaluation of a Nurse Practitioner Directed Suicide Rating Scale among Homeless Adults in a Nonprofit Community Organization* was reviewed on *November 2, 2023*. The project was categorized as <u>Exempt</u> and meeting the requirements of a quality improvement intervention. Your signed HSRC form is attached. Now that your DNP project has been approved by the HSRC, there are multiple elements with which you must comply. Wilmington University adheres strictly to these regulations:

- 1. You must conduct your DNP project exactly as it was approved by the HSRC.
- 2. Any additions or changes in procedures must be approved by the HSRC before they are implemented.
- 3. You must notify the HSRC promptly of <u>any</u> events that affect the safety or well-being of subjects.
- 4. You must notify the HSRC promptly of any modifications to your DNP project or other responses that are necessitated by any events reported in items 2 or 3.
- Your approval is provisional if you require Institutional Review Board approval from your organization. Once organizational approval has been obtained, please submit your signed approval and completed IRB application to DNP Administrative Assistant via email.

The HSRC may review or audit your project at random or for cause. In accordance with Wilmington University policy, the HSRC may suspend or terminate your DNP project if your project has not been conducted as approved and/or if other difficulties are detected.

While not under the purview of the HSRC, DNP students are responsible for adhering to US copyright law when using existing scales, survey items, and other works in the conduct of research/DNP projects.

In conclusion, you have developed an interesting evidence-based practice project aligned with the AACN DNP Essentials (2006). This is an important project for healthcare practices now and in the future. Best wishes for continued success.

Sincerely,

angel Human, DNP, RN

Angela Herman, DNP, RN HSRC Committee Representative Chair, Health Sciences Program College of Health Professions and Natural Sciences

Kathryn Leach, DNP, CPNP-BC Chair, DNP Program College of Health Professions and Natural Sciences

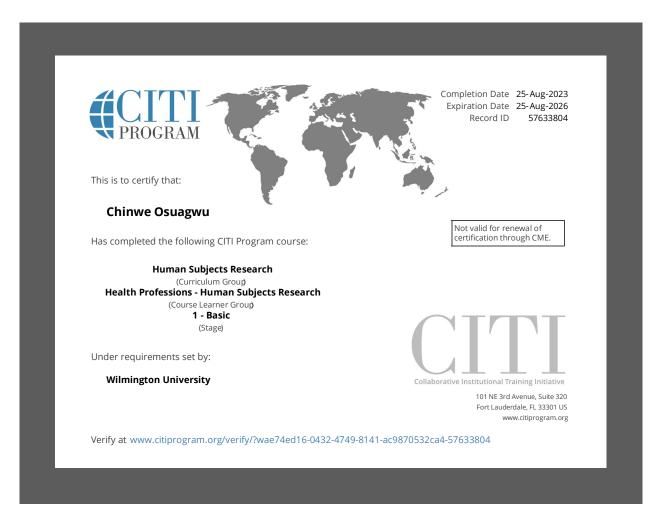
From A Jeach

COLLEGE OF HEALTH PROFESSIONS AND NATURAL SCIENCES 320 N DuPont Hwy, New Castle, Delaware 19720

Appendix

Citi Training Certificate

С



D

Columbia Suicide Screening Rating Scale (CSSR-S)

COLUMBIA-SUICIDE SEVERITY RATING SCALE

Screen Version - Recent

SUICIDE IDEATION DEFINITIONS AND PROMPT	S
Soleibe idealion del intriono and i norm i	•

Past month

Appendix

	Ask questions that are bolded and <u>underlined</u> .		NO
	Ask Questions 1 and 2		
1)	Have you wished you were dead or wished you could go to sleep and not wake up?		
2)	Have you actually had any thoughts of killing yourself?		
	If YES to 2, ask questions 3, 4, 5, and 6. If NO to 2, go directly to question 6.		
	 Have you been thinking about how you might do this? E.g. "I thought about taking an overdose but I never made a specific plan as to when where or how I would actually do itand I would never go through with it." 		
	4) <u>Have you had these thoughts and had some intention of acting on them?</u> As opposed to "I have the thoughts but I definitely will not do anything about them."		
	5) Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?		
6)	Have you ever done anything, started to do anything, or prepared to do anything to end your life?	YES	NO

Examples: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn't swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn't jump; or actually took pills, tried to shoot yourself, cut yourself, tried to hang yourself, etc.

If YES, ask: Was this within the past three months?

Low Risk Moderate Risk High Risk

For inquiries and training information contact: Kelly Posner, Ph.D. New York State Psychiatric Institute, 1051 Riverside Drive, New York, New York, 10032; posnerk@nyspi.columbia.edu © 2008 The Research Foundation for Mental Hygiene, Inc.

E

Patient Safety Plan Form

Patient Safety Plan Template

Appendix

Step 1:	Warning signs (thoughts, images, mood,	situation, behavior) that a crisis may be developing:	
1.			2.
	3		
Step 2:	Internal coping strategies – Things I can o technique, physical activity):	to to take my mind off my problems without contacting another perso	on (relaxation
1.			2.
	3		
Step 3:	People and social settings the	•	
		Phone	
		Phone	
	3. Place	4. Place	
Step 4:	People whom I can ask for help:		
1.	Name	Phone	2.
Name		Phone	
	3. Name	Phone	
Chain E.			
Step 5:	Professionals or agencies I		
<u>.</u>		Phone	
Clini	cian Pager or Emergency Contact #		
Clini		Phone	
		Urgent	Care Services
5. 10	•	orgene	care services
Urge		4. Sui	cide Prevention
-	hone: 1-800-273-TALK (8255)		
Step 6:	Making the environment safe:		
	1		
	2		

The one thing that is most important to me and worth living for is:



Search Strategy

Years: 2018-2023

Limiters: English, peer-reviewed, full text,

