NURSE-LED SCREENING, BRIEF INTERVENTION, AND REFERRAL TO TREATMENT FOR PATIENTS WITH ALCOHOL USE DISORDER IN AN INPATIENT SETTING

By

Angela Kim Winter

A scholarly project submitted in partial fulfillment
of the requirements for the degree

of

Doctor of Nursing Practice

in

Family/Nurse Practitioner

MONTANA STATE UNIVERSITY
Bozeman, MT

May 2022

DEDICATIONS

I dedicate my DNP project work to my family and my many friends. I owe a debt of gratitude to my loving parents. My dad, who always told me I could do whatever I set my mind to. In my eyes, he is an unproclaimed spiritual giant; his life wisdom and words of encouragement constantly ring in my ears. And my mom, who inspired me to become a nurse. As a little girl, I would bury my head in her medical books because they interested me more than any story book. She set an example of strength, fierce independence, hard work, and determination. I inherited her will to overcome, despite all odds.

I also dedicate this work to my two young sons, Cade and Myles. They unknowingly have been the biggest supports. Their tenacious and loving spirits brought much needed levity and humor during the sometimes endless and overbearing challenges of this doctorate program. They were my happy distractions. As a mother, it is easy to feel selfish while pursuing personal goals. I plan to make up for precious time lost with my sons while pursuing my goals. I completed this degree to set an example for them of what hard work can achieve and to give them footsteps worth following.

It would take multiple pages to express my gratitude for all my friends have done to support me through the rough waters I stormed, both personally and professionally, while completing this doctorate program during a pandemic. When in this foxhole, thanks to my friends, I was never alone. I was always confident in the hearts, minds and dialogue of those hunkered with me, supporting me with their actions and endless words of encouragement.

And finally, I dedicate this work to all those who helped me achieve and maintain my sobriety from alcohol since July 22, 2010. Thanks to the grace of God, and those who did not give up on me, I am blessed with the opportunity to pay it forward and give the gift of sobriety to others. It is my personal experience with alcoholism that inspired this work, and I will never give up trying to help the still-suffering alcoholic.

ACKNOWLEDGEMENTS

I would like to thank my committee chair, Dr. Sandra Benavides-Vaello, whose expertise was invaluable in guiding me through the process of this quality-improvement project. Her insightful feedback pushed me to focus my vision and continuously bring my work to a higher level. Dr. B always told me what I needed to hear, not what I wanted hear. She was tireless in reading and correcting multiple drafts of this manuscript. Implementing a quality-improvement project during a pandemic presented challenges that often made me feel as though I was up against the impossible. I know I could not have completed this process without her ongoing direction and encouragement.

I would like to acknowledge my colleagues at Providence Hospital for their wonderful collaboration. I would particularly like to thank my supervisor, Sarah Furtney, for all the support she provided to assist me in completing my project on the medical oncology unit and the encouragement to pursue higher education.

A few professors have stood out to me during my studies. Dr. Paul Krogue, whose incredible gift for teaching inspired me to spend part of my career in education. And Dr. Tracy Hellem, whom I credit with helping me to develop the skills to interpret research and understand data analysis. The research expertise taught in her statistics course laid the foundation of translating research to practice, which is such an essential function of my future role as a DNP-prepared nurse.

TABLE OF CONTENTS

TABLE OF CONTENTS CONTINUED

LIST OF FIGURES

Figure Page

ABSTRACT

Many preventable health risks result from unhealthy alcohol use. Two hundred thirty International Classification of Diseases (ICD-10) diagnosis codes are partially or completely associated with alcohol use disorder. The prevalence of alcohol use disorder (AUD) has risen in tandem with the COVID-19 pandemic. This creates an urgent call to action for clinicians to help patients recognize risky alcohol use and decrease the devastating burden this disease causes the individual and society. Healthcare providers generally receive limited content on how to address alcohol abuse in their training, and nurses generally lack confidence in addressing patients with AUD. Screening, brief intervention, and referral to treatment (SBIRT) is an effective, evidence-based process to identify and mitigate risky substance use. The screening portion of the SBIRT process involves the utilization of an Alcohol Use Disorder Identification Test (AUDIT-C) to stratify a patient's drinking into zones of risk. The purpose of this project was to utilize the literature to develop an educational training for nurses on the use of the AUDIT-C tool and motivational interviewing techniques to assist them in the SBIRT process. The project was implemented over a 6-week period on a 29-bed medical oncology unit within a 150-bed hospital in Western Montana. Forty-five nurses were administered a Likert scale survey at baseline and after watching the SBIRT educational PowerPoint to assess their confidence in addressing patients with AUD. The primary goal of this project was to increase nurses' self-reported levels of confidence in performing SBIRT care tasks. A secondary goal was to increase the frequency of AUDIT-C and SBIRT tool documentation within the electronic medical record (EMR). Outcomes of the project demonstrated that 70% (n=28) of survey respondents either agree or strongly agree they have confidence to carry out SBIRT-related care tasks after the SBIRT educational training as compared to 12.6% (n=2) at baseline. The project did not increase the frequency of AUDIT-C and SBIRT documentation within the EMR. These results are consistent with results in the literature, which suggest that, with adequate training, nurses in inpatient settings can play active roles in interdisciplinary initiatives to address unhealthy alcohol use among hospitalized patients.

CHAPTER ONE

INTRODUCTION

Background

Alcohol use disorder (AUD) is a medical condition classified by the impaired ability to stop or control alcohol use despite adverse health, social, or occupational consequences (USDHHS, 2021). The psychosocial, physical, and economic disease burden caused by AUD is devastating. Two hundred thirty 3-digit disease and injury codes recognized in the International Classification of Diseases and Related Health Problems-10th Revision (ICD-10) are partly or entirely caused by unhealthy alcohol use (WHO, 2018). The toxic effects of alcohol on diverse organs and tissues in the body lead to liver and digestive disease, cancer (oropharynx, liver, esophagus, colon, larynx, rectum, and female breast), cardiovascular disease, road injuries, violence, degeneration of the nervous system, suicide, mental disorders such as depression and psychosis, and increased incidence of HIV/AIDS (WHO, 2018). A recent U.S. study estimated that 40% of people who died violently have alcohol in their bloodstream (CDC, 2021).

Excessive alcohol use is a leading cause of preventable death in the United States (CDC, 2021). Excessive alcohol use is defined as binge drinking, heavy drinking, or alcohol use by pregnant women or anyone under 21 (CDC, 2021). Binge drinking is defined as consuming four or more drinks on an occasion for a woman or five or more drinks on an occasion for a man. Heavy drinking is defined as eight or more drinks per week for a woman or 15 or more drinks for a man (CDC, 2021). The CDC estimates one in six U.S. adults binge drink, with 25% doing so at least weekly and, on average, 25% consuming at least eight drinks during a binge session. Binge

drinking is responsible for almost half the deaths and three-quarters of the $249 billion annual costs associated with excessive alcohol consumption in the US (CDC, 2021). The CDC estimates 95,000 deaths annually, and one in 10 deaths among working adults are caused by excessive alcohol use (CDC, 2021).

Alcohol-related fatalities resulting from harmful use and motor vehicle accidents are significantly higher in Montana as compared to the national average. In 2018, 37% of all traffic fatalities in Montana were alcohol-related. In 2019, 79% of all substance-use related emergency medical systems activations involved alcohol (MDPHHS, 2021). Alcohol-related illness contributes significantly to the medical costs within the state. In 2019, over $189 million were charged by Montana hospitals for alcohol-related hospitalizations and emergency department visits (MDPHHS, 2021). These statistics support the need for intervention to try to decrease the morbidity, mortality, and costs resulting from harmful alcohol use in Montana.

The COVID-19 pandemic has worsened these statistics nationwide. A recent study was done by doctoral researchers from the National Institute on Alcohol Abuse and Alcoholism, an arm of the National Institutes of Health, to assess alcohol-related deaths during the COVID-19 pandemic. The researchers collected data from death certificates, recording deaths where alcohol was listed as an underlying cause. The study discovered, in 2020, there were 74,408 alcohol-related deaths among Americans age 18–64 while, according to the Centers for Disease Control and Prevention (CDC), there were 67,991 deaths among Americans under 65 that included COVID-19 as a cause (White et al., 2022). These data conclude, in people under 65, there were more alcohol-related deaths than COVID-19 deaths in the US in 2020 (White et al., 2022). This study also showed alcohol-related deaths during the first year of the pandemic (2020) increased

over 25% from 2019 (White et al., 2022). This is thought to be related to increased drinking to cope with pandemic-related stressors such as social isolation, economic strain, and disrupted treatment access (White et al., 2020). The surge of alcohol use has also been reflected on Montana death certificates. Comparisons were made averaging death rates from 2015 to 2019 compared to 2020. The mortality rate for chronic liver-disease deaths (14.5 and 18.7 per 100,000) and alcohol induced deaths (17.6 and 23.6 per 100,000) were significantly higher in 2020 compared to 2015–2019 (MDPHHS, 2021).

Problem and Rationale for Project

Providing effective care to patients with alcohol use disorder is an exceptionally complex task. Patients with AUD often live very complicated and chaotic lives. And, as with any disease manifested by behaviors, those who suffer from AUD are enveloped in stigmatization. Traditionally, intervention on patients with AUD has been identified as primarily a physician's role. However, studies have shown patients benefit more from repeated discussions over time; therefore, it should be a collaborative approach (Saitz, 2021). Nurses are often the first point of contact when patients enter an acute medical unit and, of all the disciplines, they usually spend the most time in direct contact with the patient (Hane et al., 2020). While medical doctors often have a directive approach to patients, this has been shown to be ineffective for patients with AUD. Nurses are known for their approachability and understandability, which places them in a pivotal role to collaborate with other disciplines to address AUD. "As the largest component of the healthcare team, nurses can make a significant impact on reducing harmful use of alcohol by engaging in screening and brief interventions (BIs)" (Joesph et al., 2014, para 12). Also,

physicians may not have the time needed to do brief interventions. A meta-analysis of the efficacy of nonphysician brief interventions for alcohol use disorder revealed there is evidence that nonphysician-based interventions are as effective as physician-based interventions in improving drinking outcomes (Sullivan et al., 2011). A systematic review comparing providers on the effectiveness of SBIRT on alcohol consumption identified that interventions delivered at least partly by nurses were the most effective (Platt et al., 2016).

Studies have shown nurses have reservations about treating patients with AUD when encountered in the hospital setting (Bove, Lisby, & Norlyk, 2019). Also, alcohol education among hospital staff is often inadequate. Patients suffering from AUD are an extremely vulnerable population with exceptional needs for healthcare. However, stigma, prejudice, negative attitudes, and stereotypes combined with feelings of inadequate knowledge about how to address this patient group create a barrier to helping these patients access the care they need. The barrier involves the provision of substandard care and subsequent missed opportunities for identification of and intervention for patients suffering from AUD (Brereton & Gerdtz, 2016). "Once harmful alcohol use is known, the clinician cannot remain silent, and brief intervention is the only reasonable path" (Saitz, 2021). Numerous studies have reported nurse-conducted brief intervention has been successful to reduce harmful drinking (Joseph et al., 2014). This quality-improvement project aims to educate nurses on a medical/oncology floor about how best to utilize the evidence-based AUDIT-C and SBIRT tools to provide efficacious brief interventions to improve outcomes for the high volume of patients admitted to this unit with alcohol use disorder.

Project Purpose

Healthcare providers have a moral and ethical obligation to help the poor and vulnerable in their time of need. Due to prevailing negative attitudes, stigmatization, and general lack of knowledge about how to address this population, patients with alcohol use disorder are among the most vulnerable. The U.S. Preventive Services Task Force recommends that healthcare providers screen all adults for excessive alcohol use and provide brief intervention and referral to treatment as needed (CDC, 2021). The healthcare community needs to respond to the surge of alcohol-related morbidity and mortality in Montana due to the COVID-19 pandemic. The implementation of education for nurses to empower them and improve their role adequacy in assisting patients with alcohol use disorder needs to be a priority. The purpose of this quality-improvement project is to demonstrate the feasibility of nurse-led screening, brief intervention, and referral to treatment on an inpatient medical oncology floor to respond to the high volume of patients treated with alcohol use disorder.

Project Aims

The four aims of this project are: (1) Nurse-reported improved self-reported confidence in carrying out SBIRT-related care tasks after the training session, (2) 100% of the patients admitted to the medical/oncology unit with AUD will have a documented AUDIT-C tool and SBIRT in the flowsheets of the electronic medical record, (3) Reduce the burden of alcohol-related injury, disease, and disability in the community, and (4) Decrease costs by reducing readmission rates for alcohol-related problems.

CHAPTER TWO

LITERATURE REVIEW

Search Methods

A comprehensive search of CINAHL, Google Scholar, PubMed, Medline, Cochrane, PsychInfo, ProQuest, and CatSearch was completed using the following search terms in various combinations: “Alcohol use disorder,” “screening,” “AUDIT,” “nurse,” “brief intervention,” “SBIRT,” “harmful or hazardous alcohol use,” and “inpatient medical unit.” Reference lists from “well-known studies” were also used to locate sources.

Review of the Evidence

From a reference list of more than 50 scholarly sources, exclusion criteria were used to identify research most applicable to the scenario for thematic analysis. The population focus was adult patients in a hospital setting, and interventions primarily led by nurses. Sources were excluded if studies involved non-Engligh speaking language, co-occurring tobacco or illicit drug use, adolescent patients, or if the intervention did not include screening for AUD. Nine studies met criteria. The themes of these studies were analyzed with a systematic approach and results were reviewed in an evidence table. The themes are used to provide support and guidance for the nurse-led SBIRT quality-improvement project.

Theme 1: Screening-linked Brief Intervention Reduces Hazardous Drinking Patterns

Brief intervention (BI) is a treatment strategy that involves a structured, short duration of therapy to increase insight and awareness of substance use. BI is offered with a goal to cease or reduce the use of a psychoactive substance and motivate behavioral change (SAMHSA, 2021). Since 2004, the U.S. Preventive Services Task Force (USPSTF) has recommended alcohol-misuse screening and behavioral counseling (also known as alcohol screening and brief intervention) to address adults with excessive alcohol use (McKnight-Elly et al., 2014). There is substantial evidence to support the effectiveness of BIs for harmful drinking when delivered by a qualified healthcare professional (SAMHSA, 2013). Joseph and Basu (2016) conducted a systematic review of randomized controlled trials across middle-income countries to explore the efficacy of alcohol BI in reducing harmful alcohol use. Nine randomized controlled trials were reviewed totaling 3,411 participants. The content of the brief intervention was based on principles of motivational interviewing, and the BI was delivered by nurses in almost all trials (Joseph & Basu, 2016). The results of this meta-analysis demonstrated a brief intervention's statistically significant effect in reduction of alcohol-related problems, alcohol abuse, and self-reported alcohol use (Joseph & Basu, 2016). This evidence provides support for the effectiveness of primarily nurse-led BI in reducing self-reported hazardous alcohol use. Screening and BI for unhealthy alcohol use has been shown to be effective at reducing the frequency of heavy drinking in a variety of clinical settings including mental health treatment, primary care, and hospitals. A randomized controlled trial study by Karno et al. (2021) provides evidence of brief intervention's effectiveness in helping patients with co-occurring mental health diagnoses. The study involved a motivation-based brief intervention that utilized the SBIRT process with

personalized feedback. A total of 718 patients age 18 and older with co-occurring AUD and mental health diagnoses were randomized to the BI group or a health-education session (Karno et al., 2021). Participants in the SBIRT intervention group had fewer heavy drinking days at the 3-month mark compared with participants in the health-education group (Karno et al., 2021). Karno's research provides hope for the efficacy of SBIRT among perhaps the most challenging alcohol use disorder to treat: those with co-occurring mental illness. Given the disproportionately high rates of heavy alcohol use among those with mental illness, Karno's evidence provides significant motivation for healthcare providers to engage high-risk individuals in behavioral modification techniques, which will ultimately reduce morbidity and mortality associated with AUD.

Theme 2: Context of SBIRT Implementation

There need to be effective clinical responses implemented for the wide range of alcohol-related conditions, accidents, violence, and self-harm within acute inpatient care settings and emergency departments. A systematic review of 65 studies involving 100,980 individuals from 17 countries identified a prevalence of self-reported AUD of 15.6% among emergency department patients and 16.5% of hospital ward patients (WHO, 2019). A multistate study of 459,999 hospitalized patients in the United States found 22.7% prevalence of AUD (Phillips et al., 2020). Patients with AUD place a significant impact on the healthcare costs due to their need to manage alcohol-related harms including chronic medical conditions, mental health disorders, social problems, and injuries (Phillips et al., 2020). Across the nation, there has been a drive to enhance the quality of care of those with AUD admitted to acute hospital care. The accrediting body for hospitals in the United States has adopted SBIRT procedures into their most recent

quality measures (Joint Commission, 2019). The evidence supports hospital settings as ideal for the SBIRT approach (Karno, 2020). Liu and colleagues' study offers important insights. Most notably, their post hoc analysis showed an association between the number of brief intervention sessions attended (up to three) and alcohol treatment utilization was statistically significant (Liu et al., 2011). Liu and colleagues' study supports the hypothesis that more intensive interventions are needed to facilitate a linkage between patients in medical settings and addiction treatment. This evidence aligns with earlier studies, which have shown that multiple contacts or sessions (in contrast to a single contact) with a provider can increase the impact of SBIRT in reducing risky alcohol consumption (Brown et al., 2007, Longabaugh et al., 2001).

Theme 3: Education Alone is Insufficient to Increase SBIRT Implementation Rates

Hospital nurses that feel ill-prepared to screen and manage patients with AUD create a barrier to implementing the SBIRT process. Providing SBIRT and motivational-interviewing education to clinicians is important to increase buy-in for the routine implementation of the SBIRT process, but, without other clinical supports in place, is insufficient to increase screening and referral rates (McKnight-Elly, 2014; & McQueen, 2015). A systematic and consistent protocol is needed to ensure the SBIRT process is completed and the evidence-based interventions of SBIRT implementation are triggered consistently (McKnight-Elly, 2014). Additional clinical supports to ensure successful implementation of SBIRT in ways that minimize the time for the staff include developing strong "champions" of SBIRT and providing time for staff to "buy into" activities. Staff are more likely to invest in SBIRT implementation if they are involved in the planning from the start (McKnight-Elly, 2014). Ongoing direct

supervision and monitoring with regular feedback has been found to be beneficial (McKnight, 2014). Other options include incorporating SBIRT training as a regular part of employee orientation and the sharing of patient-level outcomes data so staff members can tangibly see the help they provide to patients (SAMSHA, 2011). The Community Preventive Services Task Force has recommended several interventions to increase SBIRT delivery, which include use of computers, telephones, or mobile devices to deliver components of the SBIRT (McKnight-Elly, 2014) Also, providing nurses with prompts and feedback regarding SBIRT techniques may be an effective strategy to increase implementation. An example of this would be SBIRT being considered for inclusion as a meaningful use measure within the electronic health record process, which would likely increase its use (McKnight-Elly et al., 2014).

Evidence Limitations: Addressing Variability of Outcomes

While several studies have provided support for the use of BI in improving outcomes for patients with AUD, the systematic reviews on this topic have been too weak to establish alcohol brief intervention as a standard of care. The evidence reviews for this project revealed varied outcomes among the meta-analysis studies. Shorter et al. (2019) suggest this is due to heterogeneity of outcomes across studies limiting the effectiveness of meta-analysis. Outcome heterogeneity limits the strength of conclusions (Shorter et al., 2019). A meta-analysis was conducted to explore the heterogeneity of outcomes in studies with alcohol brief interventions. From 405 trials, 2,641 outcomes were extracted (Shorter et al., 2019). Alcohol ingestion-related outcomes include frequency of heavy drinking, weekly drinks, alcohol-related problems or consequences, at-risk drinking, typical quantity, and typical frequency. Nonconsumption-related

alcohol outcomes include psychologic health, severity of alcohol-related health problems, alcohol-related accidents, hospitalizations, use of/seeking of treatment, criminal justice use, etc. (Shorter et al., 2019). There are diverse timelines including 1 week, 1 month, 3 months, 6 months, 1 year, and 2 years. Diverse timelines, instruments, and outcome descriptions impede data synthesis and significantly limit the strength of conclusions. Also, authors may exclude otherwise eligible studies because of outcome reporting issues (Shorter et al., 2019). Coherent, consistent, clearly defined outcomes are needed in alcohol BI studies to advance the evidence base and provide more established support for BIs in practice.

It is also important to note, the current literature in this area tends to be hampered by other barriers inherent to any research involving substance abuse. The first barrier is small sample sizes related to the sensitivity of the subject matter dissuading participation. Another barrier is lack of reporting fidelity, frequently seen in patients with AUD, who tend to underreport their use. As stated previously, comparison across studies is hindered by the varied measurement of outcomes. And finally, outcomes involve self-reported use, without any ability to provide biologic confirmation (Karno et al., 2020).

CHAPTER THREE

SETTING & METHODS

Theoretical Framework: The Health Belief Model

The health belief model evolved from the idea that the world of the perceiver determines what he or she will do (Butterfield, 1990). Psychologists who outline this model were strongly influenced by Lewin, and the premise of the model stems from the viewpoint that a person's daily activities are guided by either the attraction to positive emotions, such as joy, or the aversion to negative emotions such as fear, anger, and shame (Butterfield, 1990). Ambivalence can be viewed as the conflict between positive and negative. The health belief model evolved to explain why people do or do not engage in preventative health action in response to a specific disease threat (Butterfield, 1990) The model is based on the theory a person's willingness to change their health behaviors is primarily due to their health perceptions (Boskey, 2020). The health belief model places the burden of action exclusively on the patient and posits only patients who have a distorted or negative perception of the specified disease or health actions will fail to act (Butterfield, 1990). The stigma and denial inherent with alcohol use disorder, the cultural normalizing of alcohol use, and the misunderstanding of alcoholism as a disease promote distorted perception among those suffering from AUD and create a significant barrier to positive behavior change.

Numerous studies have demonstrated the influence of misperception about drinking norms on thoughts and behavior (Bauman et al., 2015). Bauman et al. (2015) explored the incongruence between intention and behavior in patients with AUD. Incongruence and

misunderstanding about at-risk alcohol use was found to contribute to the gap between intentions to adhere to the recommended drinking limits and at-risk alcohol use. Therefore, interventions focusing on the reduction of misperceptions about unhealthy alcohol use create an opportunity to increase the number of patients who succeed in translating their intentions into behavior change (Bauman et al., 2015). The health belief model places a focus on the patient's perspective. This model fits the nurse-led SBIRT quality-improvement project because it focuses the nurse's efforts to intervene and modify the patient's distorted perception about AUD. The nurse's interventions involve the utilization of the SBIRT process to help solve the patient's alcohol problem by altering their belief system (Butterfield, 1990). The process of altering the patient's belief system is guided by the health belief model's four major concepts: Susceptibility, severity of alcohol drinking, benefits of alcohol cessation, and factors considered to be barriers to quitting (see Appendix A). Identifying susceptibility involves screening and educating patients about the results of a positive screen. Screening helps patients to identify the severity of their problem-drinking patterns with a goal of improving patients' understanding of the negative consequences of at-risk drinking. Nurses can assist patients in the hospital setting to connect their drinking patterns with their ailments, especially physical harm such as liver, brain, nervous system damage, gastrointestinal dysfunction, withdrawal syndrome, increased mental health issues such as depression and anxiety, and increased risk for hemorrhages (Rahmen et al., 2014) The health belief model provides context to nurses who may be unfamiliar with how to motivate the patient with AUD toward behavior change. Many of the core frameworks and propositions of the model align with this project's purpose. These include:

- Alcohol use disorder develops from a combination of multiple variables including biologic, psychosocial, relational, economic, and situational life stressors
- Stigma attached to alcohol use disorder increases the susceptibility of patients acquiring barriers to behavior change, including lack of social support, poor self-esteem, shame, and poor self-confidence, leading patients with alcohol use disorder to suffer in silence.
- Misperceptions about alcohol use disorder can be identified and changed by utilizing brief intervention to manifest the patients' knowledge and attitudes about alcohol use disorder. This knowledge precedes the ability to attempt recovery from the often baffling and inexplicable self-harm behavior of high-risk drinking.

The nurse-led SBIRT project used the health belief model as a guideline for the motivational-interviewing intervention to develop the patient's self-awareness of their problem-drinking, promote self-efficacy, and facilitate the development of a patient's self confidence in their ability to make lasting behavioral change.

Project Design

This is an evidence-based quality-improvement project with four parts: (1) Provide in-service education regarding the importance of stratifying severity of alcohol use among patients with AUD through the utilization of the AUDIT-C tool, how to utilize motivational interviewing strategies to implement SBIRT, and how to ensure proper referral to treatment; (2) The nurses complete AUDIT-C screening on patients diagnosed with AUD or patients hospitalized with disorders known to be associated with alcohol dependence including pancreatitis, cirrhosis,

hepatitis, and gastritis; (3) The nurses implement SBIRT on patients who screen positive on the AUDIT-C scale for the following stratifications of alcohol use: at risk (8–15 pts), high risk (16–19 pts), or very high risk/dependence (20–40 pts) (WHO, 2001). The screening and SBIRT documentation are completed within the medical record flowsheets; and (4) Intervene with referral to treatment services as appropriate with positive AUDIT-C scores of 20–40 points, which indicate potential necessity for referral to a specialist for diagnostic evaluation and possible treatment for alcohol dependence (WHO, 2001). The quality-improvement project utilized a quantitative quasi-experimental design.

The DNP student administered a 5-item Likert scale survey to the nurses to assess their role adequacy and motivation to address patients with AUD prior to the provision of the training PowerPoint. The DNP student and nurse managers collaborated to promote the viewing of the training PowerPoint provided to the nurses via email. The DNP student provided provider-reference cards (in addition to the email) to support SBIRT implementation. The provider-reference cards utilized visuals and specific language for nurses to guide and assist them through AUDIT-C and SBIRT processes. The educational PowerPoint contained a step-by-step guide with screenshots on how to access the AUDIT-C and SBIRT tools within the flowsheets of the medical record. During the 6-week implementation timeframe, a daily announcement was done by the DNP student or nurse managers to encourage nurses to participate in watching the educational PowerPoint, practicing the concepts taught with patients on the unit with AUD, and documenting the AUDIT-C and SBIRT tools in the flowsheets of the medical record.

This quality-improvement project sought to demonstrate the feasibility of a nurse-led SBIRT on an inpatient medical oncology floor. The goal outcomes were: (1) Significant

increases in nurses' reported role adequacy to work with patients with AUD; (2) Reported increased performance and competence with motivational-interviewing strategies and SBIRT implementation to reduce the burden of alcohol-related injury, disease, and disability, and decrease costs by reducing readmission rates for alcohol-related problems; and (3) Demonstrate, with adequate training and role support, nurses in inpatient settings could effectively contribute to the interdisciplinary initiative of addressing unhealthy alcohol use among hospitalized patients. Results were measured to determine (1) if the training increased the AUDIT-C screening and SBIRT implementation rates for hospitalized patients with AUD and (2) if nurses reported an increase in confidence to address patients with AUD after viewing the SBIRT training.

The short-term goals for this project were: (1) By March 22, 2022, nurses will report a 50% increase in confidence to complete SBIRT-related care tasks and address patients with AUD as measured by Likert scale scores and (2) By March 22, 2022, 100% of the patients admitted to the inpatient medical oncology unit with AUD will have an AUDIT-C and SBIRT assessment documented in the flowsheets. Once the project demonstrates the feasibility of nurse-led SBIRT implementation on an inpatient medical floor, the long-term goal was to influence policy change to include AUDIT-C and SBIRT implementation requirements on all inpatient hospital medical floors, not just the emergency room and intensive care unit. In addition, the SBIRT education would be an annual requirement for nurses and would be built into the new-hire orientation and mandatory health stream continuing-education modules.

Theoretical Model: Johns Hopkins Nursing Evidence-based Practice Model

As a means to achieve the project's aims and smart goals, Johns Hopkins Nursing Evidence-based Practice Model (JHNEBPM) was chosen to guide the application of research to nursing practice. This model was chosen because it involves the utilization of a learning culture to translate what nurses know into what they do (Dang et al., 2022). The JHNEBPM is among the most frequently cited in the literature for use in the clinical practice setting to successfully guide evidence-based practice processes and interdisciplinary engagement (McEwen & Willis, 2014) The nurse-led SBIRT implementation quality-improvement project aligns with this model because the culture of learning promoted by the model aims to inspire staff to continuously increase their knowledge and develop new skills. This facilitates nurses' abilit to effectively contribute to the interdisciplinary approach to treat patients with AUD. This evidence-based practice model fits the mission, vision, and environment of the organization by utilizing nurse education to improve practice and compassionately and respectfully ease the way of vulnerable patients suffering from alcohol use disorder. The organization is a Magnet-recognized hospital, which is a designation of excellence and innovation in professional nursing practice. Healthcare organizations that become Magnets empower nurses to reach their full potential, create guidelines to advance nursing excellence, and recognize the invaluable potential of nurses in providing excellent patient care (ANA, 2021).

The JHNEBPM was not only selected because of the applicability of the model to the project's purpose, but also the recognized success of the tool in the literature and the electronic accessibility of tools. To simplify the process of implementing EBP in the hospital setting, the

Johns Hopkins nurses developed a 19-step process with three components: practice question, evidence, and translation (PET). This quality-improvement project was guided by the steps of the JHNEBPM. The practice question step involved inquiry about the nature and details of the problem through the gathering of internal and external evidence. Next, the level and quality of evidence was appraised and summarized via an evidence table and the results were synthesized. Then, the nurse-led SBIRT best-practice recommendation was made to the organization. Translation involved creating the action plan, securing resources and support within the organization, providing the education, implementing the nurse-led SBIRT quality-improvement project, and evaluating the outcome. Each of JHNEBPM-guided steps are described in the subsequent sections (also see Appendix F).

Setting and Sample Population

This quality-improvement project was conducted on an inpatient medical oncology unit in a Western Montana hospital containing a total of 150 beds. All registered nurses working on this medical unit who provide direct patient care in staff-nurse positions were eligible for study participation and received the in-service education. Nurses in the float pool were not eligible for inclusion in the study due to the potential for multiple assignments across other medical floors that were not involved in data collection for this study's purposes. Participation by nurses was voluntary. Patients admitted to the unit with alcohol use disorder or for hospitalization due to a disorder known to be associated with alcohol dependence were screened and will receive brief intervention and referral to treatment based on their level of risk. Nurses were taught to use their judgment regarding the patient's ability to participate in SBIRT. Inclusion criteria included the

patient's willingness to participate, age greater than or equal to 18 years, diagnosis of alcohol use disorder or alcohol dependence, and English-speaking. Exclusion criteria included unwillingness to participate, age less than or equal to 17 years, any untreated mental illness, neurobehavioral issue, active severe withdrawal state, acute encephalopathy, memory deficit, developmental delay, or any other issues or conditions that, in the opinion of the nurse, may interfere with or impair the patient's ability to significantly participate in, recall, or provide accurate information regarding the SBIRT process.

Subject Protection

Review by the Montana State University IRB and subsequent review by the hospital's IRB determination group were sought for approval prior to retrospective data collection and conducting the steps of project implementation to ensure ethical guidelines were met. All subjects were protected under the Health Insurance Portability and Accountability Act (HIPAA). The nurse manager pulled reports to determine if the AUDIT-C screening tool and SBIRT were completed. To ensure no disclosure of protected health information, the DNP student did not have access to these reports. The numbers were calculated by the nurse managers and provided to the DNP student as aggregate data. The data were reported in the form of numbers of AUDIT-C and SBIRT tools documented in patient records. No patient-specific identifiers were associated with the data collection.

Description of Stakeholders

There were several stakeholders involved in this project's success. The main stakeholders in this project were the patients, as they stand to gain the most from implementation. While direct results of the patient outcomes are outside the scope of this quality-improvement project, an increase in implementation of AUDIT-C and SBIRT assessments completed would capture a measure of improvement in quality of care received after the project's implementation. The nurses working on the unit were the primary stakeholders because they were the people implementing the project. The two clinical nurse managers with collective nursing experience greater than 20 years were secondary stakeholders because, while they may not be directly affected by the project's implementation, as nurse leaders, they have a vested interest in ensuring quality of care and excellence in nursing practice on their unit. Their role was primarily to generate and review the data collection reports as well as facilitate the education process by participating in stakeholder meetings. Also, the nurse managers had a role in setting the expectation for nurses to complete AUDIT-C and SBIRT tools through frequent reminders in email notifications and daily huddles. Other secondary stakeholders included the quality and nurse excellence specialist and regional nurse scholar because they have interests in ensuring quality improving and maintaining Magnet accreditation. The clinical nurse educator also had a vested role in the potential long-term outcome of the project's success because nurse-led AUDIT-C and SBIRT implementation would be included in the nurse's annual education requirements as well as in new-employee orientation. The other providers on the floor included medical doctors, physician assistants, and nurse practitioners. These providers were made aware

via email of the details of the project prior to implementation so they could support the nurses' role in collaborating to assist patients with AUD.

Facilitators and Barriers to Implementation

A significant facilitator to this project's success was the DNP student's position to lead by example and provide support during the project's implementation. The DNP student had been employed as a registered nurse on this unit for five years and already had collaborative and supportive relationships with the primary stakeholders. Also, this project was supported by current facility policy. It is the organization's policy for nurses to implement the AUDIT-C and SBIRT tools in the emergency room and intensive care settings. This project sought to prove the benefit and feasibility of implementing these tools on all medical floors to reach a larger quantity of patients with AUD. A third facilitator was that the AUDIT-C and SBIRT templates already exist in the electronic health record and can be easily wrenched into the nurses' daily workflow without need for the creation of additional forms or costs. The linking of this quality-improvement project to the organization's strategic aims ensured the sponsorship and buy-in it needed from senior leaders to contribute to the project's success and sustainability.

The most significant threats to this project's success were the subsequent stressors associated with the COVID-19 pandemic. During this project's implementation timeframe, crisis staffing was initiated and the hospital recruited the Army National Guard and hired multiple out-of-state traveling nurses to cover the staffing shortages that occurred as a result of the pandemic. Several of the core staff nurses on the unit were out on maternity leave during the project's implementation. Crisis charting was approved to decrease stress and free up time for nurses to

work in this increasingly difficult environment. Crisis charting involves abbreviated charting requirements without threat of litigation due to the emergent nature of the current healthcare environment. Promoting motivation to improve practice and encouraging additional charting in an environment already taxed with staffing shortages, lack of continuity, stress, and burnout proved challenging. Also, there was a decreased number of patients admitted with AUD during the timeframe due to an increase in COVID patients on the medical floors. Also, there was decreased nurse time due to an increased acuity of patients on the floor suffering from active COVID, post COVID, and acute respiratory failure.

Another potential barrier inherent to the pandemic was the gathering restrictions. In-person staff meetings were not permitted, so the information dissemination had to be carried out via a voiceover PowerPoint. While nothing could be done to change the current healthcare environment, there were several things that could be done to mitigate the threats to this project's success. The methods to counter the barriers included (1) the DNP student having frequent conversations with the primary stakeholders about the project starting 5 months before the project's implementation to promote engagement and motivation, (2) the presentation of evidence to demonstrate rationale behind nurse-driven SBIRT implementation as best practice to improve outcomes, (3) the utilization of a snip tool to create screenshotted tip sheets to provide a resource that guides staff through the documentation processes, (4) recorded PowerPoint presentation allowing staff to watch the educational at their convenience, (5) the creation of a flyer to encourage staff participation in the educational, (6) the creation of a customized reference tool to guide nurses through the SBIRT process and provide tips on motivation

interviewing (see Appendix H), and (7) the DNP student attending many huddles during the project's implementation to answer questions and provide continual support and motivation.

Measures and Instruments

Due to the proven validity and reliability, patients at the medical oncology unit were screened for stratification of their alcohol abuse using the alcohol use disorder identification test (AUDIT-C) screening tool (see Appendix C). AUDIT-C is a 10-item screening tool used to identify persons with hazardous and harmful patterns of alcohol consumption (WHO, 2001). The AUDIT-C tool was developed by the World Health Organization as a simple method to screen for excessive drinking and to assist in brief assessment (WHO, 2001). The reliability or internal consistency of the AUDIT-C tool is excellent with a Cronbach's alpha of 0.96, and it has substantial stability with a Cohen's kappa of 0.64, indicating the AUDIT-C tool remains consistent in test-retest reliability (Johnson et al., 2013). The AUDIT-C tool is also more reliable than the briefer CAGE (cut, annoyed, guilty, eye) screening questionnaire. Although CAGE is less lengthy, it has a larger standard of error, so the reliability of the AUDIT-C screening tool makes the increased length worthwhile (Johnson et al., 2013). In addition, the AUDIT-C tool can help identify excessive drinking as the cause of a presenting illness. The AUDIT-C tool stratifies harmful drinking into one of four categories based on a point system (low-risk, moderate-risk, high-risk, and dependence) (WHO, 2001) (see Appendix D). This stratification provides a framework for intervention to assist at-risk drinkers to reduce or abstain from alcohol consumption and, therefore, avoid the harmful consequences of their drinking. This stratification helps patients to identify their own at-risk drinking and make connections between their harmful

drinking and their health conditions (Johnson et al., 2013). The AUDIT-C is designed for healthcare professionals and can be administered in a wide range of health settings (WHO, 2001).

Another instrument in this project was the use of the SBIRT tool within the agency's computer system (see Appendix F). EPIC is the computer charting system utilized on the medical oncology unit. The EPIC flowsheets contain an SBIRT section, which can be wrenched in by the nurses to guide and provide documentation of their brief intervention with patients. Data collection involved running a report to determine the frequency of SBIRT implementation in patients with AUD before and after project implementation.

The primary outcome examined was the nurse's level of confidence in addressing patients with AUD before and after the educational PowerPoint. After the nurses participated in the 45-minute voiceover PowerPoint about motivational-interviewing techniques and SBIRT-related care tasks, additional role support was provided throughout the 6-week implementation period, and a 5-item Likert scale survey (see Appendix G) was administered pre- and post-training to compare the nurse's confidence to assist patients with AUD before and after participating in the educational session. These data informed the effectiveness of the nurse-led SBIRT training.

CHAPTER FOUR

RESULTS

Data were collected and analyzed to compare the pre- and post-training survey scores. This helped determine the effectiveness of the nurse-led SBIRT training in increasing confidence to address patients with AUD and carry out SBIRT-related care tasks. Frequency values were calculated to determine the number of patients with a primary admitting diagnosis of AUD who had the AUDIT-C and SBIRT completed. The number of patients with a documented SBIRT were compared before and after the SBIRT training.

The survey was sent to 45 registered nursing staff on an inpatient medical/oncology floor. The respondents have nursing experience ranging from less than 1 year to 50 years. These nurses regularly provide service to patients on the medical floor suffering from complications of AUD. Of the 17 participants who completed the pre-training survey, only eight completed the post-training survey, which is a 52% dropout rate. Frequency distributions were generated to compare nurses' level of confidence in addressing patients with AUD and SBIRT-related care tasks before and after the training. At baseline, 60.4% (n-51) of all survey responses reflected nurses either disagree or strongly disagree they have confidence to carry out SBIRT-related care tasks; 26% (n=22) of responses indicated nurses were undecided about their confidence to carry out SBIRT-related care tasks. Outcomes of the project demonstrated that 70% (n=28) of all survey responses reflect nurses either agree or strongly agree they have confidence to carry out SBIRT-related care tasks after the SBIRT educational training as compared to 12.6% (n=2) at baseline. The pre- and post-training survey results can be compared in Figures 1 and 2.

Data collected prior to implementation of the training session determined the number of patients with a primary admitting diagnosis related to AUD. The charts of these patients were audited to determine how many had the AUDIT-C and SBIRT tools documented. In the 6 months prior to the study, of the 548 patients admitted to the unit, 21 patients had a primary admitting diagnosis related to AUD. Of those 21 patients, three had the AUDIT-C and SBIRT completed, which is 14%. Post-education session implementation data revealed, during the 6-week project implementation, of the 12 patients admitted to the unit with a primary admitting diagnosis related to AUD, one had the AUDIT-C and SBIRT documented, which is 8%. The project did not meet the goal of increasing the frequency of AUDIT-C and SBIRT documentation within the electronic medical record.

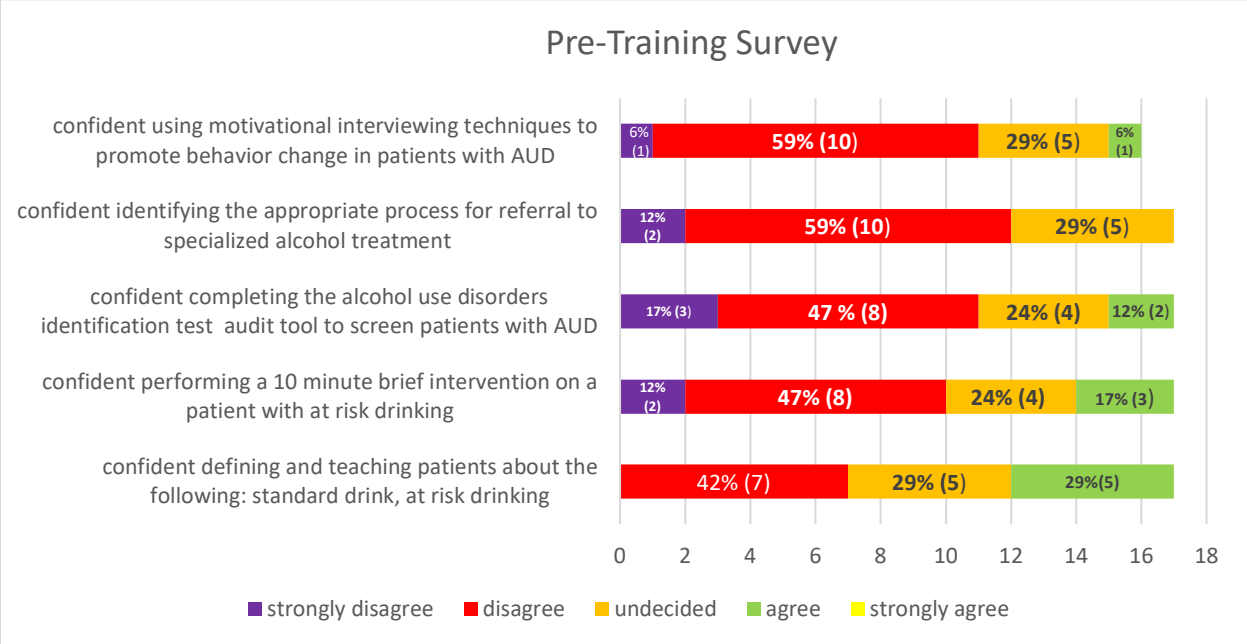


Figure 1. Pre-SBIRT Training Likert Scale Survey Results

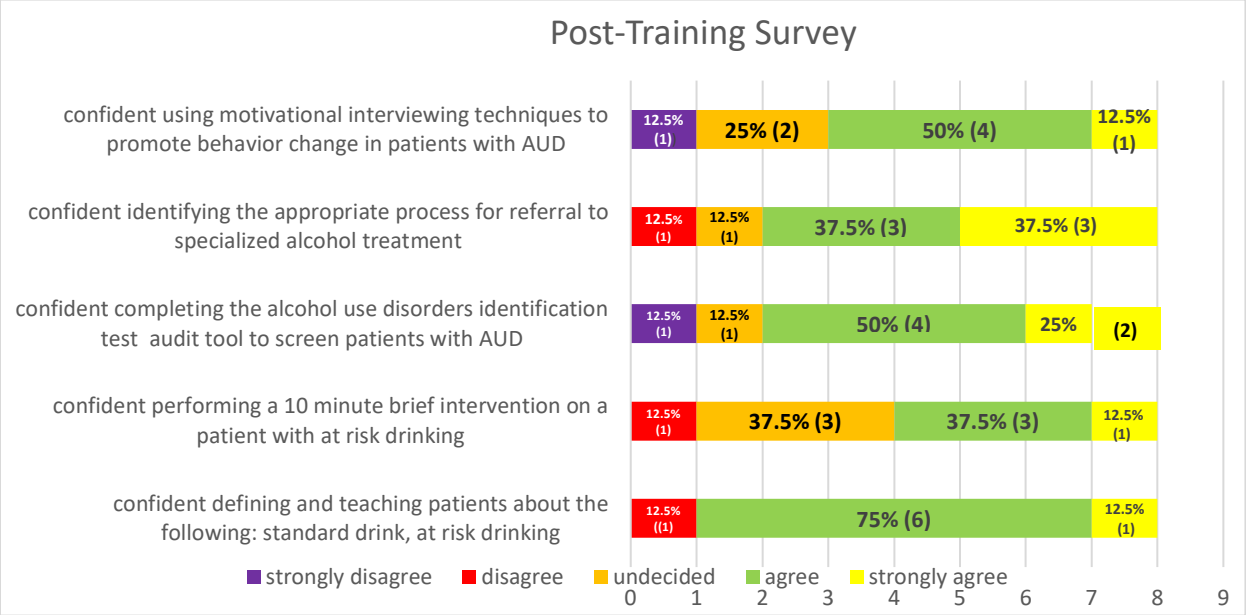


Figure 2. Post-SBIRT Training Likert Scale Survey Results

Discussion

This project sought to create a training session for nurses to improve confidence in intervening with patients who suffer from alcohol use disorder. The DNP student used the evidence to develop an educational training on the SBIRT process. This includes the use of the AUDIT-C screening tool to stratify drinking risk, brief intervention with motivational-interviewing techniques, and information on how and when to refer to treatment. The primary outcome goal was to increase nurse confidence in addressing patients with AUD using SBIRT-related care tasks by 50% after the SBIRT training. This goal was met with survey results reflecting a 58% increase in confidence to address patients with AUD as measured by the Likert survey scores.

The high dropout rate and low level of participation may be related to staffing challenges and burnout in the wake of the COVID pandemic. The unit experienced high rates of staff

turnover. Some nurses retired early, transferred to other units, or switched to travel nursing. Many of the core staff nurses were on maternity leave during this project's implementation. Travel nurses and resource-pool nurses did not meet the criteria to participate in the study. However, during this project's implementation, travel nurses and resource-pool nurses staffed the unit to cover shortages. Of the core staff present, many did not voluntarily participate, potentially due to a generalized lack of engagement. Caregiver-engagement surveys were compared across 2019–2022. In 2019, 43% of nurses reported being highly engaged in their work. In 2020, 37% continued to report high levels of engagement; but, by 2022, this level dropped to 28% (Caregiver Experience Survey, 2021).

The project's secondary goal was to have 100% of the patients admitted to the unit with AUD have the AUDIT-C and SBIRT tools documented in the flowsheets. Only one of the 12 patients admitted to the unit with AUD had a documented AUDIT-C and SBIRT during the 6 weeks of the project's implementation. This outcome was likely not met because increased documentation meant increased workload on the nurses at a time when there were already staff shortages and crisis charting was implemented. It is by nature nearly an impossible feat to expect additional charting at a time when the standard charting requirements have been minimized. Despite these challenges, the nurse-led SBIRT implementation project provided a solid first step toward increasing confidence in addressing patients with AUD. This may lead to a higher likelihood, in future practice, these nurses will screen and intervene.

Lessons Learned

1. A practice gap exists in the screening and brief intervention of AUD within this organization. This leaves patients with AUD at risk of not receiving the care they need. Utilizing an SBIRT educational session, such as the one presented for this project, would significantly increase SBIRT implementation. This would allow affected patients to receive the knowledge and services they need to promote the behavior change necessary to improve outcomes for this vulnerable population.

2. Collaboration is invaluable when undertaking a large project like this. It was necessary to collaborate with multiple members including the nurses, nurse managers, a regional nurse scientist, evidence-based-practice counsel, clinical informatics, and Montana State University clinical faculty. Collaboration is necessary to strengthen the ability to solve a problem. Quality-improvement projects blend the distinct strengths and expertise of each individual's contribution. In hindsight, it would have been helpful to engage a few key stakeholders to improve the project's success. In the future, it may be beneficial to recruit and prepare leaders, such as charge nurses or providers (MDs, NPs, and PAs), to be the early adopters and provide role support to other staff during the project's implementation. This would involve a "train-the-trainer" approach instead of this role falling entirely on one person (the DNP student).

3. Six weeks is too short of a timeframe to adequately educate and provide role support to nurses in a busy clinical environment with multiple competing priorities. This short timeframe, therefore, does not reliably assess the effectiveness of a practice change of this magnitude. Future projects and/or studies should allow a 6- to 9-month timeframe.

Limitations

There were a number of limitations to this quality-improvement project related to the methods, outcome measurement, and data analysis plan. This quality-improvement project was conducted at a time of crisis staffing due to the COVID-19 pandemic. This environment created nurse-specific barriers due to several factors: gathering restrictions prohibited a live educational session with opportunity to practice and ask questions, the staff did not have the opportunity for peer interaction during the learning process, the educational session was delivered in a 45-minute voiceover PowerPoint, participation was optional and voluntary, and many nurses did not participate (62% of nurses surveyed on the pre-education survey and 84% on the post-education survey did not participate). Of the 17 nurses who completed the pre-education survey, only eight completed the post-education survey, which is a 52% dropout rate. The limited participation may have been due to the time demand of learning to conduct brief intervention and use the AUDIT-C and SBIRT tools during a period when the COVID-19 pandemic was a major health priority. Consequently, this resulted in subsequent resource demand due to inadequate staffing, and large staff turnover occurred during the timeframe of this project's implementation.

Although this project was successful in meeting its target of 50% improved confidence in SBIRT-related care tasks, the validity and generalizability of the results are limited by the small sample size. Only eight nurses responded to the post-training survey. This means results regarding the effectiveness of the SBIRT educational training should be preliminary and may not be generalizable to other settings. Also, since participation in this project was voluntary and many nurses did not participate, participants who are "early adopters" of quality-improvement

type efforts who were more likely to participate, and nonparticipants who stayed idle with their experience, left unrecorded. This creates the potential for results to be skewed positive.

This project's quality-improvement design limits the data from drawing any conclusions about whether the educational session results in lower alcohol use. The use of process endpoints from secondary data within the EMR may not adequately evaluate if the educational session results in lower alcohol use and improved patient outcomes. Although these data are outside the scope of the project's outcome measures, it is important to acknowledge this limitation. The absence of patient clinical-outcome measures, such as maintenance of sobriety, decreased hospitalizations, or connection to treatment, impedes evaluation of the effectiveness of the educational session in the population focus, which is patients suffering from AUD.

This project had a limited timeframe of 6 weeks. The implementation of new techniques may take longer than 6 months to accurately measure whether the educational session resulted in practice change.

The project's data collection technique may be a barrier to the validity of the results. The Likert survey for this project was created by the DNP student. There was no psychometric testing done to determine the reliability and validity of the survey tool through the generation of a Cronbach's alpha. There was no test-retest analysis done to determine internal consistency. Since no validation methods were done, it is questionable whether the survey tool is an accurate measure of nurse confidence.

The use of the medical record to assess the SBIRT and AUDIT-C tools' frequency of use may have presented a threat to the accuracy of the project's outcome. The collection process within the EMR is flawed because the computer system will not allow filtering to include all

patients with co-occurring alcohol use disorder who are in for a complication of their drinking that may not be specified in the primary diagnosis code. Because of this, there may have been patients with alcohol-related complications who had the AUDIT-C and SBIRT documented, but the data were not captured. This flaw in the data collection process may result in an inaccurate representation of compliance with the practice change and subsequently decrease the validity of the data.

Recommendations for Practice

Reflecting upon the process of this quality-improvement effort has brought to light several considerations to guide the process of similar, future, quality-improvement efforts. First, the project implementation may be more effective if the education is mandatory instead of self-directed. There would need to be a change in the standard approach, which would likely require a policy change. Often, so long as something remains optional, people won't do it. This is especially true in a time of multiple competing demands on nurse staffing during a pandemic. Implementing the AUDIT-C screening tool routinely as a required part of the admit process may be one way of ensuring screening on a consistent basis.

Surveys showed the SBIRT-care task nurses were least confident with after the training was conducting brief intervention using motivational-interviewing techniques. Motivational-interviewing techniques take practice. This quality-improvement project utilized a voiceover PowerPoint as the technique to transfer didactic knowledge about SBIRT-care tasks. The literature suggests, when possible, in-person, live educational sessions are more effective because nurses can practice and role-play motivational interviewing skills (Broyles et al., 2013).

Other studies have reported clinician favorability for SBIRT role-playing and onsite circulating coaches to observe, model, and troubleshoot delivery of brief interventions (Stanton et al., 2012, Tetrault et al., 2012). Role-playing gives nurses the opportunity to practice the words (Broyles et al., 2013). Also, nurses have identified the watching of brief intervention demonstrations on video to be an effective tool for learning brief intervention (Broyles, 2013).

Although the DNP student did provide ongoing individual role support as much as time and scheduling would allow, the literature recommends creating a team of experts on the unit to specialize in their understanding of the SBIRT process to assist with additional role support. Booster sessions or focused groups could be required as part of the ongoing required education. It would be beneficial to include SBIRT training as part of employee onboarding, which could help mitigate the problem of scheduling conflicts, because large groups of people could be reached at once.

Conclusion

This project is a starting point to address a devastating public health concern. Unhealthy drinking patterns have been on the rise since the start of the COVID-19 pandemic. This has created urgency in the need to advance knowledge and practice to provide deliberative and effective approaches to SBIRT implementation. Nurses' approachability and understandability place them in a pivotal role to address this vulnerable patient group. The evidence provides substantial support of the effectiveness of nurse-led brief intervention in improving outcomes for patients with alcohol use disorder. To support the translation of this evidence to practice, the nurse must feel competent in their skills and knowledge to address this challenging patient

population. The nurse-led SBIRT quality-improvement project lends promise to the feasibility of implementing this evidence-based practice on a busy, acute inpatient medical floor. The project demonstrates the effectiveness of an inpatient curriculum to educate nurses on the utilization of SBIRT, brief intervention, and motivational-interviewing techniques to increase their role adequacy in addressing patients with AUD. The formative evaluation demonstrates the nurse stakeholders who participated were highly satisfied with the SBIRT education. The results from this project suggest that adequate training can enhance the nurse's ability to play an active role in the interdisciplinary approach of treating hospitalized patients with AUD.

CHAPTER FIVE

REFLECTION

Essentials of Doctoral Education for Advanced Nursing Practice

My DNP project, "Screening, Brief Intervention, and Referral to Treatment for Patients with Alcohol Use Disorder in an Inpatient Setting," was a rigorous, scholarly effort to contribute to the advancement of the nursing profession. There are many experiences throughout my DNP journey and this project's implementation that have shaped my role as a DNP and leader in healthcare. The eight DNP essentials are outcome competencies deemed necessary to attain throughout the student's coursework and through the implementation of a DNP project. In this final chapter, I will describe how my experience in the DNP program at MSU and the completion of the DNP project have helped me to successfully meet these essentials and prepare me for my future career as a doctoral-prepared nurse practitioner.

MSU DNP Program and Meeting the DNP Essentials

Essential 1: Scientific Underpinnings for Practice

Essential 1 requires DNP graduates to hold a broad knowledge of both physical and social sciences that provides a foundation for nursing practice (AANC, 2006). These include human biology, therapeutics, and psychosocial sciences. Advanced practice nurses must integrate knowledge from this foundation and translate it to achieve the highest level of nursing practice (AANC, 2006). The courses progressed sequentially, and each course was built on knowledge obtained from previous courses. We started at a sub cellular level in Nursing 602,

Advanced Physiology/Pathophysiology. This course provided a comprehensive examination of the physiologic functioning and common pathologic alterations in humans with a focus on anatomy, physiology, and pathology. The course helped me to understand etiology, pathogenesis, and clinical manifestations of disease. Nursing 601, Advanced Health Assessment, built on pathophysiology by helping me to hone my assessment skills and the ability to differentiate normal from abnormal physiologic and psychosocial processes across the lifespan. Advanced Pharmacology 1, 2, and 3 focused the understanding of pharmacokinetics and pharmacodynamics to guide therapeutic management of underlying disease processes. Nursing 619, Advanced Primary Care Skills and Procedures, enhanced the primary care series' didactic content. The 3-day on-campus lab gave me the opportunity to practice clinical skills such as splinting and casting, suturing, intrauterine device placement, analysis of wet-mount slides, incision and drain procedure, cyst removal, and joint injection. Nursing 607, Diagnostic Reasoning, taught me a systematic approach for critical thinking. The material from this course contributes significantly to one of the most challenging aspects of my role transition: evolving from ancillary/support staff to decision-maker.

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

Essential II requires DNP students to understand principles of practice management, including strategies for balancing productivity with quality of care (AANC, 2006). In Nursing 608, Design in Healthcare Delivery Systems, I had the opportunity to participate in an interdisciplinary approach to healthcare when I partnered with engineering students to help create systems to improve quality and decrease cost of healthcare delivery. Examples of

processes I examined included par-level stocking of medical supplies, lab specimen collection, and the care-delivery workflow for preoperative patients in day surgery. I utilized process maps to assess these systems within my current workplace and collaborated with the engineering students to develop ways to improve efficiency. Developing the skill of process mapping positions me to be able to analyze and influence systems within healthcare. This allows for the optimization of workflow and decreased medical errors, thereby maximizing patient safety, productivity, and quality of the care delivered.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-based Practice

Essential III involves the DNP student applying knowledge to solve practice problems and improve health outcomes (AANC, 2006). To acquire this knowledge, the DNP student must develop the skill of critically appraising existing literature to determine the best evidence for practice (AANC, 2006). The skill of critical appraisal was developed through extensive coursework involving the study of evidence-based practice and research methodologies. Evidence-based Practice I and II taught me how to critically review the literature. I had a great deal of experience reviewing and critically appraising evidence through the creation of evidence tables. Evidence tables involved identifying the level of evidence of a study, analyzing the statistical or qualitative findings, and recognizing the strengths and weaknesses of studies. I was given the opportunity to practice my new skills developed from this coursework to address a practice gap utilizing evidence-based interventions in Nursing 674, Graduate Scholarly Project Seminar. In this course, I worked with a group of peers to address a practice problem. We utilized the literature to create a proposal to improve identification and support of women with

postpartum depression in pediatric care settings. This assignment helped me develop the scholarly writing process and understand how to translate research into practice; both essential functions of the DNP-prepared nurse.

Essential V: Health Care Policy for Advocacy in Health Care

DNP Essential V involves critically analyzing health policies and the demonstration of leadership in the development of local, state, or international health policy (AACN, 2006). My passion for helping patients with alcohol use disorder and knowledge about the importance of health insurance benefits to allow access to treatment motivated me to evaluate which health insurance legislation was in place to help patients get the help they need. An assignment in Nursing 612, Ethics, Law, Policy, and Advocacy in Healthcare, assisted me in achieving DNP Essential V, which involves utilizing my role as a leader within healthcare to advocate for social justice and equity. I had the opportunity to analyze how the function of law and policy influences clinical practice using patients with alcohol use disorder as an example. Senator Kennedy referred to his own substance use disorder to be treated as a "second class illness" (Friedman et al., 2018). Personal stories like this sparked legislation to create equality between mental health disorders and physical disorders. The Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA) works to promote equitable insurance benefits for substance use disorder treatment and ensures similar copays, deductibles, and coinsurance for substance abuse treatment as physical medical coverage (Friedman et al., 2018). My assessment revealed there is a significant number of insured people to whom the MHPAE Act does not apply. This includes private employers of businesses with fewer than 50 employees and large, self-governmental employers who opt out of MHPAEA requirements (CMS, 2016). According to Goudreau & Smolenski

(2018), effective policy change involves a combined knowledge of expertise of an APRN and an individual who can navigate the political landscape (p. 72). I assessed the legislative barriers to care access for patients with alcohol use disorder. I proposed the creation of an insurance policy mandate to provide a minimum of 30 days of inpatient coverage or 6 weeks of outpatient coverage with a co-pay of no more than $500 out of pocket. This would apply for one round of inpatient treatments and one round of outpatient treatment per person. Subsequent treatment needs would vary depending on the policy. The intent of this law would be to give every person with alcohol use disorder a fair chance at recovery with a long-term goal of reducing alcohol dependency and increasing overall social welfare. Substance abuse is directly related to the perpetration of crimes, with 40% of violent criminals under the influence of alcohol (Bondurant, 2018). The annual societal costs of drug and alcohol-related crimes are estimated at over $56 billion (Bondurant, 2018). A policy to allow everyone exposure to a solution to their disease has the potential to greatly decrease the cost of alcoholism on individuals and society.

To promote my ability to navigate the political landscape, I would get on an action agenda for the Center on Addiction. I would want to gain support from this group because their mission involves shaping public policy as "advocates for the policies, practices, and resources needed to effectively prevent substance use and treat addiction by pairing research and experience of families and urging all levels of government to take action," and work to advance effective care by "promoting accessibility and affordability of care for everyone" (Center on Addiction, 2018). This group is an appropriate fit because they have 26 years of experience in their mission of addressing addiction at a national level. I would also contact Montana Aid to gain support of people taking action to address the problem of substance use in Montana. I

understand I would need to write and lobby many individual officials to generate support for my idea. I would need to contact a legislator with a record of supporting similar issues and try to influence the introduction of legislation. I would access resources such as the National Association of Clinical Nurse Specialist's Starter Kit for Impacting Change at the Government Level to guide my efforts in collaborating with regulators and legislators (Goudreau & Smolenski, 2018). Nursing 612 helped me to explore my ability to influence policy and legislation. My leadership role as a doctoral-prepared nurse practitioner places me in a position to advocate for patients on a much larger scale.

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

Essential VI involves the DNP graduate understanding how to work collaboratively with others to provide timely, effective, efficient, patient-centered care (AACN, 2006). While there were several group-project assignments throughout my coursework, my project in Nursing 611, Program Planning and Evaluation, stood out to me. This course's assignment involved collaboration of group members to develop a program for a population within a primary care setting. The group used the literature to develop a program to improve outcomes for patients with type 2 diabetes mellitus in the primary care setting. This was achieved through the use of shared medical appointments. I had the opportunity to deeply reflect on my role within the group. The work in this course gave me a better sense of how groups operate and raised awareness of all the roles within the group and how each works together to contribute to the outcome of the project. I learned negotiation skills, how to manage personalities, how to leverage my talents and strengths with those of my peers, and the value of obtaining a variety of perspectives. It gave me the

opportunity to develop skills in task coordination and joint problem-solving. I identified multiple necessary roles within the group dynamic that are essential to its function. These include facilitator, liaison, innovator, checker, and even a "wildcard" group role that was identified to fill gaps as a result of poor role identification at the project's outset. The strengths and weaknesses of my contribution were reviewed. I learned the importance of taking the time to reflect on what worked and did not work within the group dynamic. This reflection creates an opportunity to be more effective in future group-work experiences.

Impact of the QI Project on My Career

My project interest stemmed from a combination of both personal experience and 12 years of clinical experience working as a bedside nurse. I've witnessed the devastating nature of alcoholism both personally and professionally. My experience preceded a calling for me to research the best intervention methods to improve practice and outcomes for this challenging and vulnerable population. The disturbing outcomes I've experienced with alcohol use disorder created a spirit of inquiry. I desired to find the best answers to guide the development of my DNP project.

The clinical problem I identified is that clinicians lack knowledge and confidence to address patients with alcohol use disorder. I applied the knowledge gleaned from my research appraisal to develop an evidence-based educational intervention to solve this problem. DNP Essential VII involves reviewing biostatistical data on the health of individuals, addressing gaps of care, and implementing health prevention activities (AACN, 2006). Based on my experience and the review of evidence, I identified a practice gap that became more apparent as my DNP

project was immersed into the clinical setting. Healthcare professionals generally lack confidence in their ability to effectively intervene upon patients suffering from alcohol use disorder. The evidence gleaned from my literature review and the results of my project's survey support this observation. This quality-improvement project revealed the existence of generalized lack of confidence to address this patient population.

DNP Essential IV involves the utilization of information technology to analyze data from practice (AACN, 2006). The electronic medical record was used to gather pre- and post-education implementation data for analysis. These data validated the need for my educational intervention and provided a means to evaluate its effectiveness. I learned the ability to successfully implement a project can be challenged by what is possible within the electronic medical record (EMR). I explored the tools available within the facility's EMR before developing my project. I learned how to develop a Likert scale survey through the RedCap Survey platform as a means of data collection. The development of this skill could be utilized for evaluation of future quality-improvement efforts

In my opinion, one of the most important parts of the DNP Essentials is within Essential III: Disseminating the Findings of Evidence-based Practice Research to Improve Health Outcomes (AACN, 2006). This step widens the impact of my quality-improvement efforts. I presented my work at Montana State University and I have a plan after graduation to present my poster in the Providence Nurse Research Conference 2022. After this presentation, my abstract will be published to a digital canvas and will become Google Scholar searchable, so my project can continue to live on as it guides similar, future, quality-improvement efforts. I have been excited about the dissemination opportunities presented to me as word spread about my DNP

project. The head chaplain from the hospital where my quality-improvement project was implemented showed investment in my project and wants to contribute to my vision. I was invited to share my project with the hospital chaplains and the staff of the inpatient mental health unit as part of the upcoming value stream focus of improving care for those with substance abuse and co-occurring mental health disorders. I have experienced firsthand how the skills I have personally acquired from the development of my project will be applicable in family practice. A patient presented to the clinic with a desire to stop drinking and I was able to utilize the SBIRT process to stratify the patient's individual drinking risk and employed motivational-interviewing techniques to promote behavior change and help direct the patient to the help he needed. I was notified during this experience that the practice recently received a grant to implement integrated behavioral health, which will involve the use of the AUDIT-C tool on all new patients and during all annual wellness visits. This will make the AUDIT-C screening tool as routine as the PHQ-9 screening for depression and GAD-7 screening for anxiety. The practice manager approached me to share my project. I was told the clinic was doing the screening part of SBIRT, but they are unsure what's next. They offered for me to utilize my project to contribute to the development of a pathway providers within the clinic use to complete the SBIRT process. I was successful in utilizing the literature to try a practice change. I plan to continue to keep my DNP project alive in my future practice and in sharing my project with various healthcare sites. Unexpected doors opened after the creation of the nurse-led SBIRT project. This has created a ripple effect of potential to improve practice in a variety of healthcare settings.

DNP Essential VIII involves guiding, mentoring, and supporting other nurses to achieve excellence in nursing practice (AACN, 2006). I added the certified nurse educator courses to

qualify me to teach. I plan to find part of my niche in academia and have had the opportunity to start this mentoring process. The last 2 years, I've been a clinical instructor, teaching nursing students. My DNP project involved education to encourage advancement of nursing practice to promote excellence in patient care. The rise of alcohol use disorder with the COVID pandemic creates a call to action, which aligns with DNP Essential VII to educate and guide individuals and groups through complex health and situational transitions. There is a need for providers to be able to respond to the increasing levels of alcohol use in the aftermath of the COVID-19 pandemic. The experience of my DNP project has positioned me to guide fellow providers through this transition. I already have a plan to do so through multiple opportunities that arose throughout my project's dissemination. These opportunities include presenting to other scholars, faculty, and peers in academia, educating the staff of the neurobehavioral unit, contributing to the development of a provider educational program at a primary care clinic, and regionally presenting to DNP student peers within my organization.

I've witnessed the difficulty of addressing alcohol use disorder during my decade of work as a bedside nurse. This is the kind of thing I lose sleep over. I am passionate about doing everything I can to improve care and outcomes for these patients who, because of stigma and lack of knowledge, miss opportunities for the help they so desperately need. My doctoral education and the process of my DNP project have paved a road for me to address this gap in care. While the original goals and purposes of my DNP project have been completed, I feel as though the "Nurse-Led Screening, Brief Intervention, and Referral to Treatment" project is in its infancy. Much to my surprise, the effort and process of literature translation to practice change has opened many doors for me to continue to make an impact. The determination, perseverance,

and grit needed to see a practice change through is well worth the effort. The new opportunities presented during the processes of my project's implementation transformed and broadened the end-goals, facilitating an impact beyond what I could have imagined. The combination of my doctoral education and my experience implementing and evaluating a QI project have unveiled leadership qualities I did not know I embodied. My educational experiences at Montana State University over the last 4 years have shaped me into not only an advanced practice provider, but a leader capable of influencing healthcare delivery on large scales. This is only the beginning.

REFERENCES CITED

AACN. (2006). *The Essentials of Doctoral Education for Advanced Nursing Practice*. American Association of Colleges of Nursing.

Aid Montana. (2017). Substance Use in Montana: A Summary of State Level Initiatives for the Department of Justice. Retrieved March 28, 2022, from https://dojmt.gov/wp-content/uploads/Substance-Use-in-Montana-DOJ-FINAL-September-19th.pdf

Allanson, J. (2019). Drug, alcohol rehabilitation must address high costs. *UWIRE Text*. Retrieved March 28, 2022 from http://go.galegroup.com.proxybz.lib.montana.edu/ps/i.do?id=GALE|A576280888&v=2.1&u=mtlib_1_1123&it=r&p=AONE&sw=w

Baumann, S., Gaertner, B., Schnuerer, I., Haberecht, K., John, U., & Freyer-Adam, J. (2015). Belief incongruence and the intention–behavior gap in persons with at-risk alcohol use. *Addictive Behaviors*, *48*, 5–11. http://dx.doi.org/10.1016/j.addbeh.2015.04.007

Bondurant, S., Lindo, J., & Swensen, I. (2018). Substance Abuse Treatment Centers and Local Crime. *Journal of Urban Economics*. doi:10.3386/w22610

Boskey, E. (2020, October 13). *How the health belief model influences your health choices*. Verywell Mind. Retrieved October 28, 2021, from https://www.verywellmind.com/health-belief-model-3132721.

Bové, H. M., Lisby, M., & Norlyk, A. (2019). Do the carers care? A phenomenological study of providing care for patients suffering from alcohol use disorders. *Nursing Inquiry*, *27*(1). https://doi.org/10.1111/nin.12322

Brereton, R., Gerdtz, M. (2017). Alcohol and Other Drug (AOD) Education for Hospital Staff: An Integrative Literature Review, Issues in Mental Health Nursing, 38:1, 42–60. doi: 10.1080/01612840.2016.1248876

Brown, R. L., Saunders, L. A., Bobula, J. A., Mundt, M. P., & Koch, P. E. (2007). Randomized controlled trial of a telephone and mail intervention for alcohol use disorders: Three-month drinking outcomes. Alcoholism, Clinical and Experimental Research, *31*(8), 1372–1379.

Broyles, L., Kraemer, K., Kengor, C., & Gordon, A. (2013). A Tailored Curriculum of Alcohol Screening, Brief Intervention, and Referral to Treatment (SBIRT) for Nurses in Inpatient Settings. *Journal of Addictions Nursing*, *24*, 130–141. https://doi.org/10.1097/JAN.0b013e3182a4cb0b

Butterfield, P. (1990). Thinking upstream: Nurturing a conceptual understanding of the societal context of health behavior. *Advances in Nursing Science*, 1–8.

Caregiver Experience Survey. (2021). *2021 Providence Caregiver Experience Survey: Sustainable Engagement Segmentation.* Retrieved from https://iap2.towerwatson.cin/GMP#!/project/123838/report/40546/group/10947047138

CDC. (2021). *Excessive alcohol use*. Centers for Disease Control and Prevention. Retrieved April 6, 2022, from https://www.cdc.gov/chronicdisease/resources/publications/factsheets/alcohol.htm

Center on Addiction. *About Us*. (2018). Retrieved March 29, 2022, from https://www.centeronaddiction.org/about

CMS. (2016). MHPAEA factsheet. Retrieved from https://www.cms.gov/cciio/programs-and-initiatives/other-insurance-protections/mhpaea_factsheet.html

Freyer-Adam, J., Baumann, S., Haberecht, K., Bischof, G., Meyer, C., Rumpf, H.-J., John, U., & Gaertner, B. (2018). Can brief alcohol interventions in general hospital inpatients improve mental and general health over 2 years?

Friedman, S. A., Azocar, F., Xu, H., & Ettner, S. L. (2018). The Mental Health Parity and Addiction Equity Act (MHPAEA) evaluation study: Did parity differentially affect substance use disorder and mental health benefits offered by behavioral healthcare carve-out and carve-in plans? *Drug and Alcohol Dependence*, *190*, 151–158. doi:10.1016/j.drugalcdep.2018.06.008

Goudreau, K. A., & Smolenski, M. C. (2018). *Health policy and advanced practice nursing: Impact and implications*. New York, NY: Springer Publishing Company, LLC.

Johnson, J., Lee, A., Vinson, D., & Seale, P. (2013). "Use of AUDIT-Based Measures to Identify Unhealthy Alcohol Use and Alcohol Dependence in Primary Care: A Validation Study". Alcohol Clin Exp Res, Vol 37, No S1, 2013, pp E253–E259.

Joint Commission. (2019). Substance Use chart abstracted measures available via https://www.jointcommission.org/measurement/measures/substa nce-use/ [Accessed 12 Oct 2021]

Joseph, J., & Basu, D. (2016). Efficacy of brief interventions in reducing hazardous or harmful alcohol use in middle-income countries: Systematic review of Randomized Controlled Trials. *Alcohol and Alcoholism*, *52*(1), 56–64. https://doi.org/10.1093/alcalc/agw054

Joseph, J., Basu, D., Dandapani, M., & Krishnan, N. (2014). Are nurse-conducted brief interventions (NCBIS) efficacious for hazardous or harmful alcohol use? A systematic review. *International Nursing Review*, *61*(2), 203–210. https://doi.org/10.1111/inr.12096

Karno, M. P., Rawson, R., Rogers, B., Spear, S., Grella, C., Mooney, L. J., Saitz, R., Kagan, B., & Glasner, S. (2020). *Addiction*, *116*(1), 159–169. https://doi.org/10.1111/add.15114

Liu, S.-I., Wu, S.-I., Chen, S.-C., Huang, H.-C., Sun, F.-J., Fang, C.-K., Hsu, C.-C., Huang, C.-R., Yeh, H.-M., & Shih, S.-C. (2011). Randomized controlled trial of a brief intervention for unhealthy alcohol use in hospitalized Taiwanese men. *Addiction*, *106*(5), 928–940. https://doi.org/10.1111/j.1360-0443.2010.03330.x

Longabaugh, R., Woolard, R. F., Nirenberg, T. D., Minugh, A. P., Becker, B., & Clifford, P. R. (2001). Evaluating the effects of a brief motivational intervention for injured drinkers in the emergency department. Journal on Studies of Alcohol and Drugs, 62, 806–16.

McKnight-Elly, L., Liu, Y., Brewer, R., Kanny, D., Denny, C., Balluz, L., Collins, J., & Lu, H. (2014). Vital Signs: Communication Between Health Professionals and Their Patients About Alcohol Use—44 States and the District of Columbia, 2011. *Centers for Disease Control and Prevention*.

Mcqueen, J. M., Howe, T. E., Ballinger, C., & Godwin, J. (2015). Effectiveness of alcohol brief intervention in a general hospital: A randomized controlled trial. *Journal of Studies on Alcohol and Drugs*, *76*(6), 838–844. https://doi.org/10.15288/jsad.2015.76.838

Montana Department of Health and Human Services. (2019). Alcohol Use in Montana. Retrieved March 28, 2022, from https://dphhs.mt.gov/publichealth/epidemiology

Montana Department of Health and Human Services. (2021, June 14). *Provisional Leading Causes of Death and Other Select Causes in Montana, 2020 and 2015–2019*. Provisional Leading Causes of Death and Other Select Causes in Montana. Retrieved September 24, 2021, from https://dphhs.mt.gov/assets/publichealth/Epidemiology/VSU/MTLeadingCausesOfDeaths2015-2020.pdf

Phillips, T., Porter, A., & Sinclair, J. (2020). Clinical competencies for the care of hospitalized patients with Alcohol Use Disorders. *Alcohol and Alcoholism*, *55*(4), 395–400. https://doi.org/10.1093/alcalc/agaa024

Platt, L., Melendez-Torres, G. J., O'Donnell, A., Bradley, J., Newbury-Birch, D., Kaner, E., & Ashton, C. (2016). How effective are brief interventions in reducing alcohol consumption: Do the setting, practitioner group and content matter? Findings from a systematic review and metaregression analysis. *BMJ Open*, *6*(8). https://doi.org/10.1136/bmjopen-2016-011473

Rahmen, A., Mahmoud, A., Amal, M., & Mahmoud, S. (2014). The application of alcohol brief intervention using the health belief model in hospitalized alcohol use disorder patients. *International Journal of Caring Sciences*, *7*(3), 843–854.

SAMHSA. (2011). *Screening, Brief Intervention and Referral to Treatment (SBIRT) in Behavioral Healthcare*. Retrieved October 12, 2021, from https://www.samhsa.gov/sites/default/files/sbirtwhitepaper_0.pdf.

Shorter, G. W., Bray, J. W., Giles, E. L., O'Donnell, A. J., Berman, A. H., Holloway, A., Heather, N., Barbosa, C., Stockdale, K. J., Scott, S. J., Clarke, M., & Newbury-Birch, D. (2019). The variability of outcomes used in efficacy and effectiveness trials of alcohol brief interventions: A systematic review. *Journal of Studies on Alcohol and Drugs*, *80*(3), 286–298. https://doi.org/10.15288/jsad.2019.80.286

Simioni, N., Cottencin, O., & Rolland, B. (2015). Interventions for increasing subsequent alcohol treatment utilisation among patients with alcohol use disorders from somatic inpatient settings: A systematic review. *Alcohol and Alcoholism*, *50*(4), 420–429. https://doi.org/10.1093/alcalc/agv017

Stanton M. R., Atherton W. L., Toriello, P. J., Hodgson, J. L. (2012). Implementation of a "learner-driven" curriculum: A screening, brief intervention, and referral to treatment (SBIRT) interdisciplinary primary care model. Substance Abuse, 33, 312–315. doi: 10.1080/08897077.2011640140.

Substance Abuse and Mental Health Services Administration. *Coding for screening and brief intervention reimbursement*. SAMHSA. (2020, April 14). Retrieved October 12, 2021, from https://www.samhsa.gov/sbirt/coding-reimbursement

Sullivan, L. E., Tetrault, J. M., Braithwaite, R. S., Turner, B. J., & Fiellin, D. A. (2011). A meta-analysis of the efficacy of nonphysician brief interventions for unhealthy alcohol use: Implications for the patient-centered medical home. *The American Journal on Addictions*, *20*(4), 343–356. https://doi.org/10.1111/j.1521-0391.2011.00143.x

Tetrault, J. M., Green, M. L., Martino, S., Thung, S. F., Degutis, L. C., Ryan, S. A., & D'Onofrio, G. (2012). Developing and implementing a multispecialty graduate medical education curriculum on screening, brief intervention, and referral to treatment (SBIRT). Substance Abuse, 33, 168–181. doi: 10.1080/08897077.2011.640220.

U.S. Department of Health and Human Services. (2013). HIPAA for professionals. Retrieved 10/26/21 from https://www.hhs.gov/hipaa/for-professionals/index.html

U.S. Department of Health and Human Services. (2021). *National institute on alcohol abuse and alcoholism (NIAAA)*. National Institute on Alcohol Abuse and Alcoholism. Retrieved September 24, 2021, from https://www.niaaa.nih.gov/.

Vera, D. (2022). *2022 EBP models and Tools*. 2022 EBP Models and Tools. Retrieved February 16, 2022, from https://www.hopkinsmedicine.org/evidence-based-practice/ijhn_2017_ebp.html

White, A. M., Castle, I.-J. P., Powell, P. A., Hingson, R. W., & Koob, G. F. (2022). Alcohol-related deaths during the COVID-19 pandemic. *JAMA*. https://doi.org/10.1001/jama.2022.4308

World Health Organization. (2001). *AUDIT: The Alcohol Use Disorder Identification Test, Guidelines for Use in Primary Care Second Edition*. Department of Mental Health and Substance Dependence. Retrieved 10/25/2021 from file:///C:/Users/14065/Downloads/WHO_MSD_MSB_01.6a-eng.pdf

World Health Organization. (2018). *Global status report on alcohol and health 2018*. World Health Organization. Retrieved September 24, 2021, from https://www.who.int/publications/i/item/9789241565639

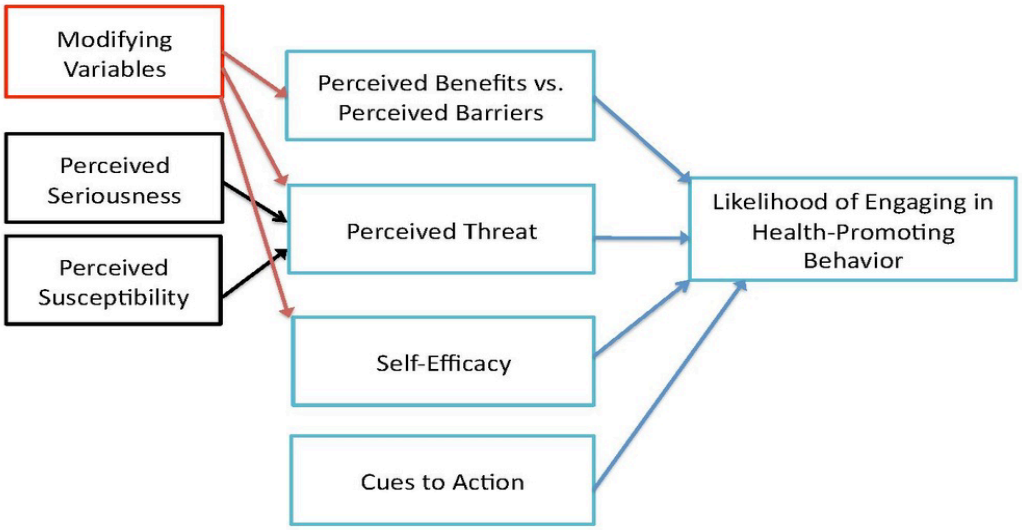
World Health Organization. (2019). Global Status Report on Alcohol and Health 2018. World Health Organization.

APPENDICES

APPENDIX A

THE HEALTH BELIEF MODEL

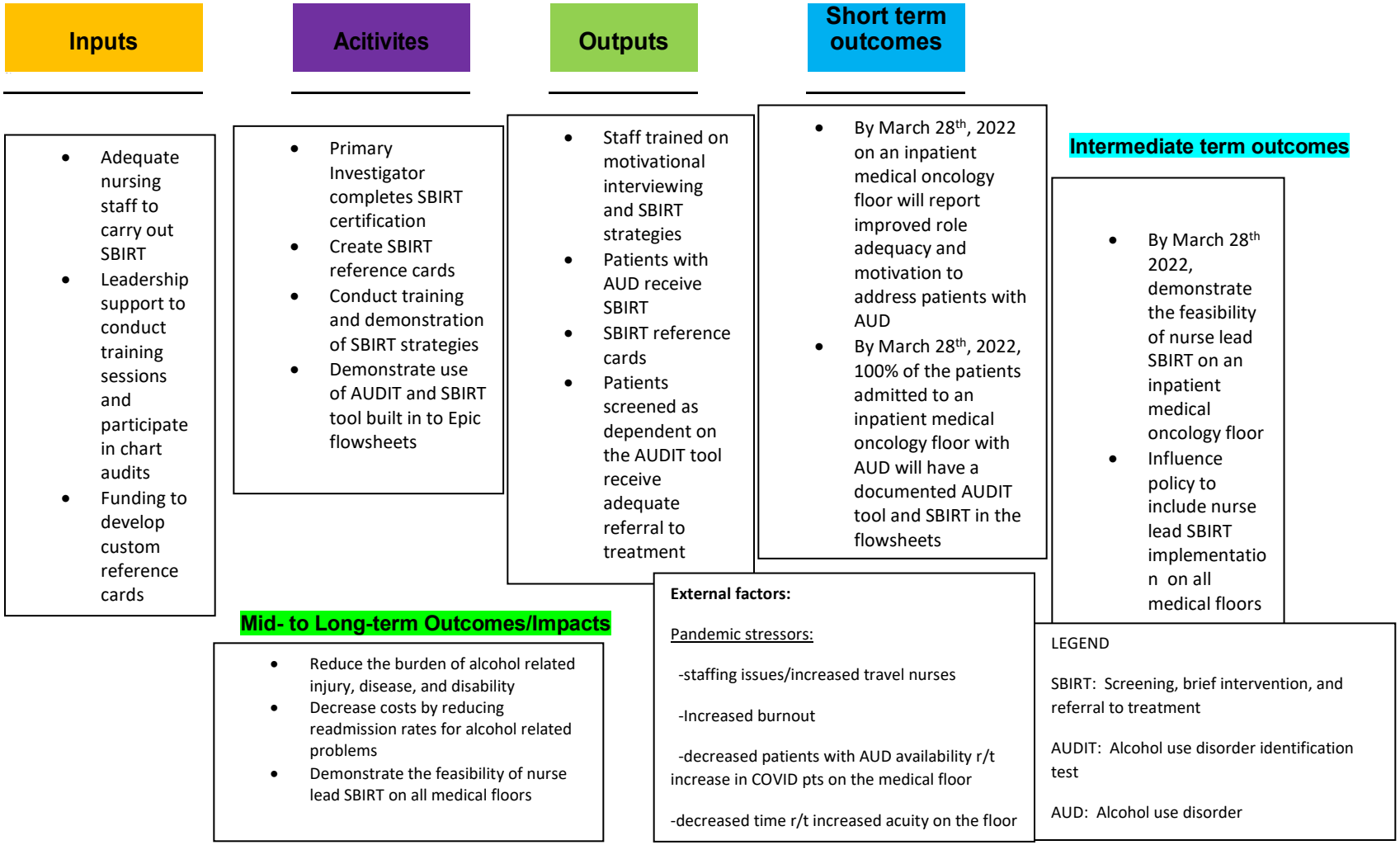
The Health Belief Model



APPENDIX B

LOGIC MODEL

Logic Model: "Nurse Lead Alcohol Screening, Brief Intervention, and Referral to Treatment in an Inpatient Setting"



APPENDIX C

ALCOHOL SCREENING QUESTIONNAIRE

Alcohol screening questionnaire (AUDIT)

Drinking alcohol can affect your health and some medications you may take. Please help us provide you with thebest medical care by answering the questions below.

One drink equals: 

12 oz.beer  5 oz.wine  1.5 oz. liquor (one shot)

1. How often do you have a drink containingalcohol?	Never	Monthly or less	2 - 4 times a month	2 - 3 times a week	4 or more times a week
2. How many drinks containing alcohol do you haveon a typical day when you are drinking?	0 - 2	3 or 4	5 or 6	7 - 9	10 or more
3. How often do you have five or more drinks onone occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
4. How often during the last year have you found that you were not able to stop drinking once youhad started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
5. How often during the last year have you failed todo what was normally expected of you because ofdrinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
6. How often during the last year have you needed afirst drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
7. How often during the last year have you had afeeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
8. How often during the last year have you beenunable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
9. Have you or someone else been injured becauseof your drinking?	No		Yes, but not in the last year		Yes, in the last year

10. Has a relative, friend, doctor, or other health care worker been concerned about your drinkingor suggested you cut down?	No		Yes, but not in thelast year		Yes, in the last year
	0	1	2	3	4

Have you ever been in treatment for an alcohol problem? ◯ Never ◯ Currently ◯ In the past

APPENDIX D

SCORING AND INTERPRETING THE AUDIT

(For the Provider)

Scoring and interpreting the AUDIT:

1. Each response has a score ranging from 0 to 4. All response scores are added for a total score.

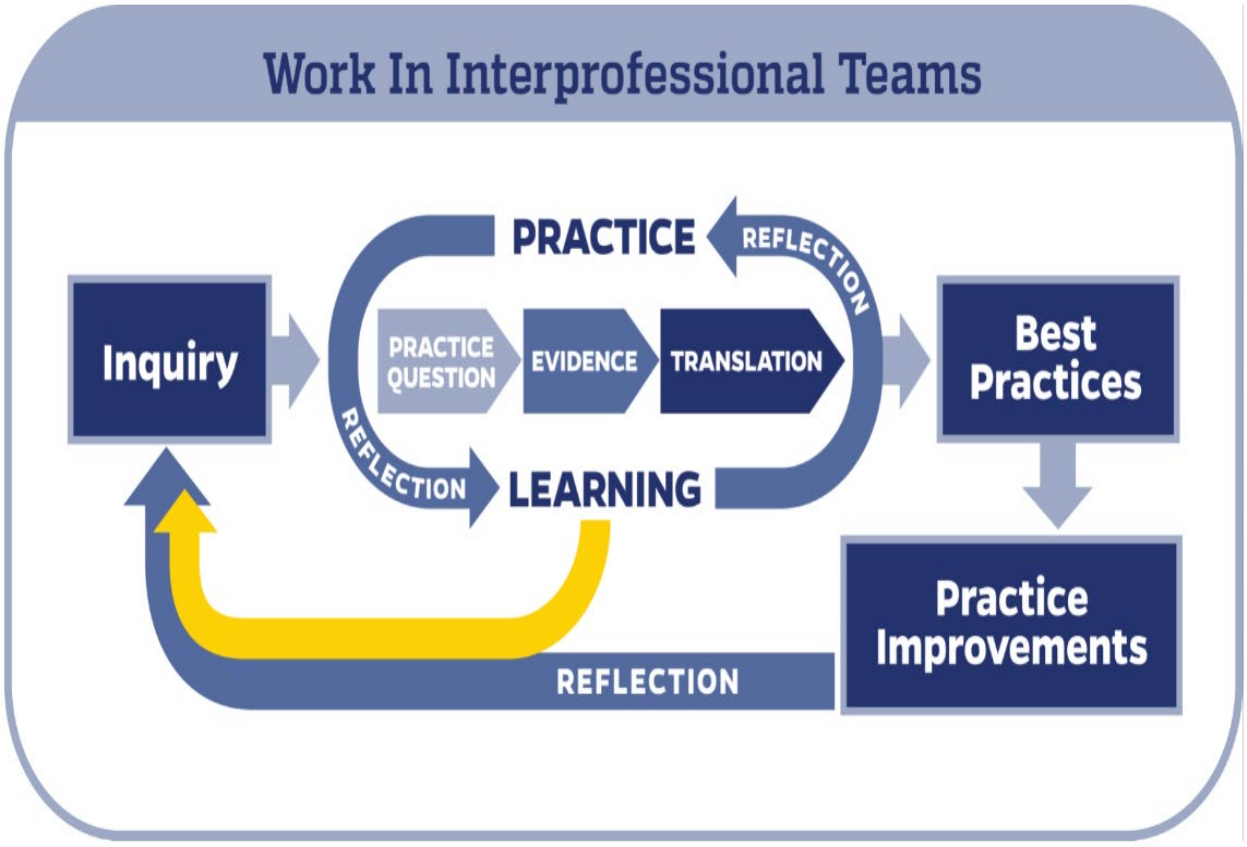
2. The total score correlates with a risk zone, which can be circled on the bottom left corner.

Score	**Zone**	**Explanation**	**Action**
0-3	I – Low Risk	"Someone using alcohol at this level is at low risk for health or social complications."	Positive Health Message – describe low risk drinking guidelines
4-9	II – Risky	"Someone using alcohol at this level may develop health problems or existing problems may worsen."	Brief intervention to reduce use
10-13	III – Harmful	"Someone using alcohol at this level has experienced negative effects from alcohol use."	Brief Intervention to reduce or abstain and specific follow-up appointment (Brief Treatment if available)
14+	IV – Severe	"Someone using alcohol at this level could benefit from more assessment and assistance."	Brief Intervention to accept referral to specialty treatment for a full assessment

***** Johnson J, Lee A, Vinson D, Seale P. "Use of AUDIT-Based Measures to Identify Unhealthy Alcohol Use and AlcoholDependence in Primary Care: A Validation Study." Alcohol Clin Exp Res, Vol 37, No S1, 2013: pp E253–E259

APPENDIX E

JOHNS HOPKINS NURSING EVIDENCE-BASED PRACTICE MODEL



Vera, D. (2022, February 1). *2022 EBP models and Tools*. 2022 EBP Models and Tools. Retrieved February 16, 2022, from https://www.hopkinsmedicine.org/evidence-based-practice/ijhn_2017_ebp.html

APPENDIX F

VIEW OF EPIC FLOWSHEETS WITHIN MEDICAL RECORD

Search (Alt+Comma)	1800
SBIRT Questions	
Are you currently in recovery?	
How many times in the past year have you had 5 or more drinks in a day? (MALE)	
How many times in the past year have you used a recreational drug or used a prescription medication for nonmedical reason...	
Alcohol Screening Questionnaire (USAUDIT)	
1. How often do you have a drink containing alcohol?	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	
3. How often do you have X (5 for men; 4 for women & men > 65) or more drinks on one occasion?	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking ses...	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	
8. How often during the last year have you been unable to remember what happened the night before because of your drinki...	
9. Have you or someone else been injured because of your drinking?	
10. Has a relative, friend, doctor, or other health care worker, been concerned about your drinking or suggested you cut down?	
AUDIT Score	
AUDIT Zone of use	

APPENDIX G

NURSING CONTINUING EDUCATION EVALUATION FORM

Please rate your level of confidence level in the following:

1) I am confident defining and teaching patients about the following: Standard drink, at risk drinking, alcohol abuse, and alcohol dependence

2) I am confident performing a 10-minute brief intervention on a patient with at risk drinking?

3) I am confident completing the Alcohol Use Disorders Identification Test (AUDIT) tool to screen patients for alcohol use disorder

4) I am confident identifying the appropriate process for referral to specialized alcohol treatment evaluation

5) I am confident using motivational interviewing techniques to promote behavior change in patients with alcohol use disorder

1 Strongly disagree
2 Disagree
3 Undecided
4 Agree
5 Strongly agree

APPENDIX H

PROVIDER REFERENCE CARD

PROVIDER REFENCE CARD

LOW-RISK DRINKING LIMITS

Source: National Institutes of Health

No more than AND no more than:

4 drinks per day 14 drinks per week

no more than AND no more than:

3 drinks per day 7 drinks per week

*Women who are pregnant or breastfeeding should not drink.

WHAT COUNTS AS ONE DRINK?

One drink is

12 oz beer

5 oz glass of wine

A shot of hard liquor (1.5 oz)

Steps of SBIRT:

1) Wrench in AUDIT tool
2) Using AUDIT tool, stratify patient's drinking
3) Based on AUDIT score, initiate brief intervention (8-40pts)
4) Wrench SBIRT into flowsheets

Place social work referral if indicated (20-40pts)

Raise the subject

- Explain your role; ask permission to discuss alcohol/drug use screening forms
- Ask about alcohol/drug use patterns: "What does your alcohol/drug use look like in a typical week?" • Listen carefully; use reflections to demonstrate understanding

Provide feedback

- Share AUDIT/DAST zone(s) and description; review low-risk drinking limits; explore patient's reaction: "Your score puts you in the _____ zone, which means _____. The low-risk limits are _____. What do you think about that?"
- Explore connection to health/social/work issues (patient education materials): "What connection might there be...?"

Enhance motivation

- Ask about pros/cons: "What do you like about your alcohol/drug use? What don't you like?"
- "How would you like your life to be different?"
- Explore readiness to change: "On a scale of 0-10, how ready are you to make a change in your alcohol/drug use?"
- If readiness is greater than 2: "Why that number and not a _____ (lower one)?"

If 0-2: "How would your alcohol use have to impact your life for you to think about changing?

Negotiate plan

- Summarize the conversation (zone, pros/cons, readiness); ask question: "What steps would you be willing to take?"
- If not ready to plan, stop the intervention; offer patient education materials; thank patient
- Explore patient's goal for change (offer options if needed); write down steps to achieve goal; assess confidence

Risk Zone	**I- Low risk**	**II- At risk**	**III-High risk**	**IV-Very high risk/dependent**
AUDIT score	**0-7**	**8-15**	**16-19**	**20-40**
Description of Zone	At low risk for health or social complications	May develop health problems or existing problems may worsen	Has experienced negative effects from substance abuse	Could benefit from more assessment and assistance
Interventions	Education about continuation of low risk drinking	Complete brief intervention	Complete brief intervention	-complete brief intervention -referral to treatment