Evaluation of Screening Practices for Alcohol Use in Primary Care

Tiffany Centers
University of Kentucky, tgce223@uky.edu

Recommended Citation
Centers, Tiffany, "Evaluation of Screening Practices for Alcohol Use in Primary Care" (2017). DNP Projects. 159.
https://uknowledge.uky.edu/dnp_etds/159

This Practice Inquiry Project is brought to you for free and open access by the College of Nursing at UKnowledge. It has been accepted for inclusion in DNP Projects by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.
Final DNP Project

Evaluation of Screening Practices for Alcohol Use in Primary Care

Tiffany Centers, RN, BSN

University of Kentucky

College of Nursing

Fall 2017

Lynne A. Jensen, PhD, APRN, Committee Chair

Elizabeth Tovar, PhD, APRN, Committee Member

Kristin Pickerell, DNP, RN, NE-BC, CPHQ, Clinical Mentor
Dedication

This project is dedicated to those who have somehow been impacted by an alcohol use disorder, be it a loved one, a friend, or personally. I hope that, through increasing awareness and education regarding this subject, providers and patients can become more comfortable with discussing alcohol use. I hope to empower patients to make positive changes in their lives and to remove the stereotype associated with individuals with alcohol use disorders.
Acknowledgments

Thank you to Dr. Elizabeth Tovar, committee member, for your guidance, knowledge, and encouragement. To my clinical mentor, Dr. Kristin Pickerell – I have looked at you as a leader for a decade. Thank you, once again, for sharing your knowledge and demonstrating true and selfless leadership. Finally to my advisor, Dr. Lynne Jensen – thank you for your endless effort, continuous encouragement, and constant support over the last three years. Your professionalism is unmatched, your knowledge is astounding, and your kindness will always be remembered.

To my friends, family, and my husband – I appreciate your support and understanding. Each of you has helped me along and given me more encouragement than I could have ever hoped for. You are all the best cheerleaders and listeners in existence.

Norton Healthcare Scholarship Recipient: This Doctor of Nursing Practice project and program of study was fully funded through the University of Kentucky College of Nursing and Norton Healthcare academic-practice partnership.
# Table of Contents

Acknowledgments .................................................................................. iii  
List of Tables ......................................................................................... v  
List of Figures ......................................................................................... vi  
List of Appendices .................................................................................... vii  
Final DNP Project Abstract ................................................................... 1  
Evaluation of Screening Practices for Alcohol Use in Primary Care .......... 2  
Background ........................................................................................... 2  
Introduction ............................................................................................ 4  
Screening, Brief Intervention, Referral to Treatment (SBIRT) .................. 4  
Standardized Screening Tools ................................................................. 5  
AUDIT ...................................................................................................... 5  
AUDIT-C ................................................................................................. 6  
Single Question Screening ..................................................................... 7  
Brief Intervention ................................................................................... 7  
Referral to Treatment ............................................................................. 10  
Purpose .................................................................................................. 10  
Methods ................................................................................................ 10  
Data Analysis ......................................................................................... 11  
Results .................................................................................................. 12  
Discussion ............................................................................................. 13  
Limitations ............................................................................................. 16  
Recommendations .................................................................................. 17  
Conclusion ............................................................................................ 17  
References ............................................................................................. 18  
Appendix A ............................................................................................. 23  
Appendix B ............................................................................................. 24  
Appendix C ............................................................................................. 25
List of Tables

Table 1: Gender and Comorbidity Prevalence among Sample Population……………..21
List of Figures

Figure 1: Ethnicity of Patients in Sample Population……………………………………22
List of Appendices

Appendix A: AUDIT-C .................................................................23

Appendix B: AUDIT .................................................................24

Appendix C: Provider Toolkit ..................................................25
Abstract

**Purpose:** The purpose of this practice inquiry project was to examine current screening practices for alcohol misuse within a primary care clinic. The United States Preventive Services Task Force (USPSTF) guidelines state that alcohol misuse screening should be performed on adults aged 18 years or older using one of three standardized screening tools: Alcohol Use Disorders Identification Test (AUDIT), the abbreviated AUDIT-Consumption (AUDIT-C), or a single-question screening. If indicated, providers should provide a brief intervention and/or referral to treatment through the process known as SBIRT (screening, brief intervention, referral to treatment).

**Methods:** A retrospective chart review was conducted to examine current screening practices within Norton Healthcare and to determine the percentage of patients being seen for a new patient visit or an annual wellness exam who were being screened for alcohol misuse. Demographic data, comorbidities, and who performed the screening were assessed. The charts were also examined to determine if a standardized screening tool was used to assess for alcohol misuse.

**Results:** While 97% of patients in the examined population were asked about whether or not they used alcohol using a yes or no question, there was no evidence of a standardized screening tool being used to evaluate alcohol misuse. There was no evidence of a screening bias with regard to patient characteristics such as age, gender or health problems.

**Conclusion:** No standardized tool for screening for alcohol misuse is currently in use within Norton Healthcare. Though 97% of patients were asked about their alcohol use,
current practice does not adhere to the recommendations of the USPSTF. A toolkit has been developed to provide the foundation for provider education in the Norton Healthcare System. Provider education regarding the SBIRT process and using standardized tools may help to increase adherence to national guidelines and to facilitate practice change.
Evaluation of Screening Practices for Alcohol Use in Primary Care

Background

Alcohol misuse impacts the lives of millions of Americans and is responsible for 88,000 deaths annually (Centers for Disease Control and Prevention [CDC], 2016). It is estimated that nearly 16.3 million adults over the age of 18 years have an alcohol use disorder, making this the “fourth leading preventable cause of death in the United States (National Institute on Alcohol Abuse and Alcoholism [NIAAA], p. 1, 2017).” The economic burden associated with alcohol misuse in 2010 was approximately $249 billion (NIAAA, 2017).

In Kentucky 5.5% of the population 12 years of age and older either depended on or abused alcohol during the year 2014 (Substance Abuse and Mental Health Services Administration [SAMHSA], 2015). This means that 202,000 individuals were impacted by alcohol misuse, a number that has remained consistent from previous years. Of these 202,000 individuals, only 8.2% received treatment for their alcohol misuse (SAMHSA, 2015).

The consequences of alcohol misuse are manifested in a ripple effect, potentially impacting an individual’s physical and mental health on both a short-term and long-term basis. Intoxication, a short-term consequence, impairs one’s ability to make decisions, hampers coordination, and alters perception and cognition (CDC, 2016). Other short-term consequences of alcohol misuse may include motor vehicle accidents and increased risk for involvement in violence such as assault and rape (NIAAA, 2017). This type of alcohol use may also lead to unnecessary utilization of emergency medical services. Between
2010 and 2011 around 3.8 million emergency room visits were related to alcohol intoxication (Rettner, 2016).

Chronic alcohol misuse leads to dependence, a state in which the ability to control drinking behaviors is impaired. This type of use also causes organ and tissue damage (World Health Organization [WHO], 2015). Long-term alcohol misuse increases health risks for various conditions including multiple types of cancers, gastrointestinal disorders, and developmental and gestational complications and defects. Approximately 45.8 percent of the deaths caused by liver failure or liver disease in 2013 were caused by alcohol intake (NIAAA, 2017).

**Introduction**

In order to effectively and efficiently prevent consequences of alcohol misuse, appropriate screening by primary care providers (PCP) is crucial. The Agency for Healthcare Research and Quality (AHRQ) and the United States Preventive Services Task Force (USPSTF) recommends that adults 18 years and older be screened for alcohol misuse using one of three methods: Alcohol Use Disorders Identification Test (AUDIT), abbreviated AUDIT-Consumption test (AUDIT-C), or a single-question screening method (2016). This screening is the first component of a method involving screening, brief intervention, and referral to treatment (SBIRT) in order to identify and treat alcohol misuse (SAMHSA, 2017).

**Screening, Brief Intervention, Referral to Treatment (SBIRT)**

“SBIRT is an evidence-based practice used to identify, reduce, and prevent problematic use, abuse, and dependence on alcohol and illicit drugs (SAMHSA, 2017).”
This method, consisting of screening, brief intervention, and referral to treatment if indicated, is easily implemented within primary care practices. Using this tool gives providers a structured, proven method to help patients identify alcohol misuse and to address any needs the patient has regarding drinking habits. “SBIRT places risky substance use where it belongs – in the realm of healthcare (SBIRT Colorado, 2011).”

The screening portion of SBIRT occurs by administering a screening tool to the patient in the primary care setting. These validated, recommended screening tools (AUDIT, AUDIT-C) identify those patients with low, risky, harmful, or severe alcohol use habits. The AUDIT-C is first administered as a brief screen. If the patient screens “negative” on this, the provider does not need to administer a full AUDIT screen. However, a positive screen on the AUDIT-C warrants administration of the AUDIT to further explore the patient’s alcohol use habits (CDC, 2014). Based on which zone the patient scores in, the provider should proceed to the second step of the SBIRT process and use the appropriate intervention, if indicated.

**Standardized Screening Tools**

**Alcohol Use Disorders Identification Test (AUDIT)**

The AUDIT was developed in 1989 by the World Health Organization and is useful in identifying either actual or potential alcohol misuse (see Appendix B). The tool has high sensitivity and acceptable specificity among various age groups and genders (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). For patients with a score of 4 or more, the sensitivity and specificity are 84-85% and 77-84% respectively (Moyer 2013). It is also used on an international basis and is therefore considered to be culturally
appropriate. For these reasons, the AUDIT is considered the most appropriate screening tool for “the whole range of alcohol problems in primary care” (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). The AUDIT is a ten question screening with the following score ranges and recommended treatment or intervention (World Health Organization [WHO], 2015):

0-7 – Zone I – Low Risk – alcohol education

8-15 – Zone II – Risky Use – simple advice on reducing drinking

16-19 – Zone III – Harmful use – brief counseling and continued monitoring

20 or higher – Zone IV – Severe Use – alcohol dependence, need for referral

**Alcohol Use Disorders Identification Test- Consumption (AUDIT-C)**

The AUDIT-C, a three question-screening tool, takes approximately 1-2 minutes to complete. This screening tool is an abbreviated form of the AUDIT (see Appendix A). The sensitivity and specificity of this tool are lower than that of the AUDIT, ranging from 74-88% sensitivity and 64-83% specificity. (Moyer, 2013). The questions included in this screen are:

1) How often do you have a drink containing alcohol?

2) How many standard drinks containing alcohol do you have on a typical day?

3) How often do you have six or more drinks on one occasion?

Responses to these questions are assigned point values from 0-4 for choices a-e, respectively. A score of 4 or above for men indicates hazardous drinking, while a score of
3 or more for women is indicative of hazardous drinking. If all of the points come from question one, however, this indicates that the patient’s drinking is below recommended limits (SAMHSA, 2017). A positive score on this tool then prompts the provider to administer the AUDIT to more accurately assess a patient’s alcohol intake.

**Single Question Screening**

The single question screening that is recommended by the USPSTF is, “How many times in the past year have you had 5 [for men] or 4 [for women and all adults older than 65 years] or more drinks in a day?” (United States Preventive Services Task Force [USPSTF], 2016) This question, while only taking one minute to administer, carries a sensitivity of 82-87% and a specificity of 61-79%, making it the least reliable among the screening methods recommended by the USPSTF. If a patient answers anything other than “none” or “never” to this question the provider should treat this patient as an individual who consumes more than the recommended amount of alcohol and proceed with the administration of the AUDIT (Moyer, 2013).

**Brief Intervention**

When a patient has completed the screening tool, the provider then begins the process of providing brief interventions. By first asking the patient for permission to review the scores from the screening tools, the provider is raising the subject and taking the first step to discuss the patient’s alcohol use habits. The provider determines whether a patient is in a low risk, risky, harmful, or severe use zone based on the screening tool scores and begins to provide feedback. “A brief intervention focuses on increasing insight and awareness regarding substance use and motivation toward behavioral change (SAMHSA, 2017).”
Discussing screening tool scores is an opportune time to review low risk drinking limits and to reinforce standard drink sizes. A standard drink is defined as 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of liquor. Low risk drinking limits differ for men, women, and individuals over 65 years of age. To be considered a low risk drinker, men may consume no more than 4 drinks per day or 14 drinks per week. For women and individuals over 65 years of age, no more than three drinks per day and seven drinks per week puts a patient in the low risk zone. Individuals in this zone do not require an intervention beyond brief education regarding healthy and safe levels of alcohol consumption. Approximately 78% of adult primary care patients fall into this zone (SBIRT Oregon, 2017).

Risky users are those patients with an AUDIT score of 5-14 for men or 4-12 for women. This group accounts for approximately 9% of primary care patients. These patients should be provided with a brief intervention in addition to education regarding safe consumption levels (SBIRT Oregon, 2017).

Harmful users, or 8% of primary care patients, are men with AUDIT scores of 15-19 and women with scores of 13-19. Patients in this category require a brief intervention as well as education regarding safe consumption levels. A referral to treatment should be considered in patients in this zone (SBIRT Oregon, 2017).

Patients within the severe zone make up approximately 5% of primary care. These patients score a 20 or above on the AUDIT. Alcohol education, a brief intervention, and referral to specialized treatment should be provided to individuals in this score range (SBIRT Oregon, 2017).
Brief interventions are shown to positively affect unhealthy drinking behaviors (Moyer, 2013). These interventions can range from under five minutes to greater than fifteen minutes based on the patient need and score zone. Brief, multi-contact interventions ranging from six to fifteen minutes has shown the most effectiveness in helping to reduce alcohol misuse. Patients receiving this type of intervention have reduced episodes of heavy drinking, reduced consumption of alcohol per week, and increased adherence to drinking limit recommendations over long term periods (Moyer, 2013).

This type of communication with patients may sometimes appear difficult to providers but can be simplified through scripted approaches such as motivational interviewing. Using motivational interviewing, the provider is able to incorporate expressing empathy, avoiding arguing, developing discrepancy, rolling with resistance, and supporting self-efficacy into the intervention process. These techniques assist patients in deciding on and adhering to positive behavior changes aimed at attaining goals and also enhances motivation.

During this phase of the intervention, providers may ask patients to use a numerical scale to rate their feelings toward behavior change. Providers will ask patients how important it is to change alcohol consumption behaviors, how confident they are that the changes can be made, and how ready they are to make the changes. This tool, or “readiness ruler,” shows a scale from 0-10 and correlates with “not at all” ready to “very” ready. The provider determines these scores and discusses with the patients why each score was chosen.

Finally, the provider and patient negotiate a plan for achieving the goals that were set during the intervention. This often includes having the patient verbalize their
perspective of the plan as well as the desired outcome that was discussed. Follow up appointments should be made at this time so that the patient’s progress can be monitored.

**Referral to Treatment**

If the patient’s consumption habits place them into a severe alcohol use zone a referral to treatment may be necessary. In this case, the provider should present the patient with options for specialized treatment for alcohol use disorders. This option may also be considered for patients who have not met goals through brief interventions alone (American Public Health Association, 2008).

**Purpose**

The purpose of this project was to determine if routine screening for alcohol misuse using a standardized tool, such as the AUDIT, is being performed in primary care clinics. The primary objectives included:

a) Assess alcohol misuse screening methods currently in place at Norton Healthcare primary care clinics

b) Determine the percentage of patients (being seen for a new patient visit or an annual wellness exam) being screened for alcohol misuse

**Methods**

This study was performed through a retrospective chart review to assess current alcohol screening practice at annual wellness exams or new patient exams. The retrospective chart review was conducted to determine the current screening rates and practices within Norton Community Medical Associates offices through a data request from Norton Healthcare. A data request was submitted to Norton Healthcare Information
Technology so that appropriate charts could be identified for use. This data request spanned one year, from June 1, 2016 to May 31, 2017. 100 charts were randomly selected from this pool of medical records.

The patient population included both male and female patients who were 1) between the ages of 18-89 years and 2) being seen in the office as a new patient or for a yearly well-patient exam. Exclusion criteria for the study population included those patients who were 1) non-English speaking 2) currently enrolled in an alcohol use disorder treatment program or 3) being seen in the clinic for an acute visit or any visit other than to establish care or have a yearly well-patient exam.

The patient population was determined by their visit diagnosis and ICD-10 code, Z00.00 or Z76.89. Any patients coming to the clinic for an acute issue or anything other than an annual wellness exam were excluded. The PI reviewed charts from June 1, 2016 to May 31, 2017 from Norton Community Medical Associates Audubon West 200 clinic location. Systematic sampling was utilized, pulling every third chart, until 100 charts were selected. These charts were examined to determine whether or not a patient was screened for alcohol misuse. Privacy was maintained by constructing a crosswalk table where patient data was correlated with a study number. The actual medical record number (and its correlation to a study number) was stored separately from the collected data.

Data Analysis

The data analysis conducted on the information retrieved from the chart reviews was performed using the Statistical Package for Social Sciences (SPSS) version 24.0. As the nature of the study was a retrospective chart review, descriptive statistics were run on
the retrieved data. The charts were reviewed to determine the patient’s age, gender, and race, zip code of residence, and presence comorbidities (such as diabetes, anxiety, depression, cardiovascular disease) to determine if presence of health issues influence alcohol screening. Charts were also reviewed to determine if the patient had insurance and whether the patient was seen by a medical doctor (MD) or nurse practitioner (NP).

Results

The data revealed that there was no standardized screening tool being used to assess patient’s alcohol use within the primary care clinic evaluated. The clinic did, however, inquire about patient’s alcohol use with a screening section that is built into Norton Healthcare’s EMR, Epic. Using this screening section, patients were asked if they used alcohol using a yes/no box. Free text fields were available to note how many drinks per week patients consumed in addition to a comment section where free text to describe alcohol use could be entered.

Out of the 102 patient charts that were reviewed, 97% of the patients were asked whether or not they used alcohol. Forty-five percent of the patients in the sample were female and 55% were male. Out of the 3% of patients not asked about alcohol use, all were male.

The majority of patients, or 78.6%, were white. African-Americans were 18.4% of the sample, while Asian (2%) and Hispanic (1%) made up the remainder of the group. (See figure 1) These percentages are consistent with the projected ethnic composition of the region according to the United States Census Bureau (2017).
Further descriptive studies on the data revealed 60% of the sample patients had comorbidities, including diabetes, anxiety, depression, or cardiovascular disease. These variables were measured to investigate the presence of a potential screening bias, which did not exist.

All patients in the data sample had health insurance and ranged in age from 18 to 86 years. Eighty-four percent of these patients were seen by MDs with the remaining 16% having been seen by NPs. The majority of patients in this sample were located within the same zip code region as the location of the practice.

**Discussion**

While the results of the chart review indicated use was assessed with single question, no standardized tool to provide detail was used. The tools recommended by the USPSTF have been selected because strong evidence supports they have the “best performance characteristics for detecting the full spectrum of alcohol misuse in adults (Moyer, 2013).” Implementation of utilizing the AUDIT-C, AUDIT, or single-question screening in practice would create a uniform, reliable method for detecting alcohol misuse.

There is a great need for early detection of alcohol misuse. Risky, non-dependent drinking is reported by 25% of adults in the primary care population. Alcohol consumption, even at these levels, presents a significant risk to individuals in terms of cost and health status (Centers for Disease Control and Prevention, 2014). Risky users are actually more costly to the healthcare system on a population level and also experience
more adverse consequences than those in the harmful or severe use zone (SBIRT Colorado, 2011).

Early intervention to decrease harmful alcohol use habits that are identified through screenings is crucial. The link between risky drinking and adverse health and economic outcomes is present long before patients reach a severe or dependent state. As providers screen patients for risk factors that could contribute to heart attack or stroke, screening for alcohol misuse should be treated as a clinically preventable problem. Detecting alcoholism does nothing to prevent the detrimental effects of harmful or severe use (SBIRT Colorado, 2011). “If you just screen for alcoholism, you are intervening too late, when chances of success dwindle and cost of treatment soar (Centers for Disease Control and Prevention, 2014).

In addition to being cost preventative, proper alcohol misuse screening is also cost effective, producing a significant return on investment. For every dollar spent on screening and providing interventions for patients with substance abuse issues, roughly four dollars can be saved in healthcare costs. Additionally, SBIRT may be billed through Medicare, Medicaid, or other commercial insurance at rates ranging from $24.00 to over $57.00 (SBIRT Colorado, 2011). “Screening and brief intervention are among the few things in medicine that not only improve patient outcomes, but also save money (SBIRT Colorado, 2011, p. 12).

The SBIRT process is pivotal in helping to detect alcohol misuse and to delay long-term subsequent healthcare consequences, an effect which further enhances the cost effectiveness of this process. Long-term alcohol use has been associated with a multitude of types of cancer including oropharyngeal, gastrointestinal, breast, liver, and pancreas.
Hepatitis and cirrhosis may also result from chronic use. Pancreatitis, hypertension, sleep disturbances, birth defects, encephalopathy, and neuropathy may also be experienced (SBIRT Oregon, 2017).

While the brief interventions can be carried out in the primary care setting there may be a need to refer a patient to specialized treatment. Providers should have a list of available resources should the patient need further treatment than what can be provided in the clinic setting. Alcoholics Anonymous, a national organization, has various locations locally to assist those individuals with alcohol use disorders. Independent therapists and hospital-affiliated programs are also available for use. Patients are also encouraged to use the phone number on the back of any insurance coverage card for information on services that are available through their coverage provider. Recent healthcare expansions have enabled substance abuse assistance to be more accessible but current legislation threatens this valuable resource.

The findings of this study prompted the development of a SBIRT toolkit to be implemented as a training resource for providers within Norton Healthcare. This toolkit can be presented to providers for education on the rationale, process, benefits, and clinic workflow that is associated with the SBIRT process. It contains a PowerPoint presentation that outlines the SBIRT process, including defining the process and the steps included. It includes an introduction to the process, dialogue on how to initiate the screening, embedded videos of interactions, and how to both interpret and address results. Recommendations for referring patients to treatment will also be included as well as billing information (See Appendix C).
Eventual integration of a standardized screening tool into the system’s electronic medical record is the goal. Provider education regarding the SBIRT process and using standardized tools may help to increase adherence to national guidelines and to facilitate practice change.

An additional benefit of screening being placed in the electronic medical record is to assure proper documentation in order to receive proper reimbursement. Merit-based Incentive Payment System, or MIPS, measure #431 covers preventive care screening regarding alcohol use. MIPS is an arm of MACRA, or Medicare Access and Children’s Health Insurance Program (CHIP) Reauthorization Act. Embedding these screening tools into the EMR will aid in the ease of screening and accurate reporting (Centers for Medicare & Medicaid Services, 2017).

**Limitations**

One of the limitations of this study is that the current process in place for screening does not allow for an accurate assessment of risk for alcohol misuse. There is only a yes or no option for assessing alcohol use and no standardized screening tool. This simply identifies if a patient has or does not have an alcohol use disorder and allows no room for early assessment and prevention.

The study was only performed at one clinic within the Norton Healthcare System. This limits the data available for analysis and does not account for practices that may be present in other clinic locations. Expanding the sample to cover other locations may change the results.

The clinic site chosen for the chart review was also unavailable to allow piloting of SBIRT. Without clearance to implement a change in alcohol use screening it is
impossible to identify the impact that SBIRT has on screening habits. There was also no opportunity to have a focus group with clinic providers to introduce SBIRT and to educate them on the process due to time constraints within the clinic.

**Recommendations**

The recommendation from this project is the implementation of the SBIRT toolkit throughout the Norton Healthcare system to aid in provider education. This process should be presented to all providers, not just primary care, as alcohol misuse can affect patients undergoing surgery or procedures, utilizing emergency services, or being hospitalized. This presentation can also be used in a variety of settings including staff meetings, continuing education opportunities, or for orientation purposes.

**Conclusion**

To effectively screen for and treat alcohol misuse, primary care providers must be active in the process of SBIRT. Use of standardized screening tools and adoption of streamlined workflows for carrying out SBIRT are crucial to the success of this approach. This should be implemented through multiple PDSA cycles to determine the most efficient process for each clinic. The PDSA cycle, which includes planning and implementing a change, reflecting on the positive and negative aspects, and then modifying the process as needed, would be the best approach at tailoring SBIRT to individual clinic structures (Institute for Healthcare Improvement, 2017).

Through the use of the electronic medical record and dispersal of education to system providers, Norton Healthcare can increase compliance with national guidelines, increase reimbursement, have a positive impact on local population health, and facilitate practice change within primary care clinics.
References

American Public Health Association and Education Development Center, Inc. (2008).

Alcohol screening and brief intervention: A guide for public health practitioners.


Substance Abuse and Mental Health Administration (2015). Behavioral Health Barometer; Kentucky, 2015: Rockville, MD.


Table 1. *Gender and Comorbidity Prevalence among Sample Population*

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>% OF SAMPLE POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALE</td>
<td>55</td>
</tr>
<tr>
<td>FEMALE</td>
<td>45</td>
</tr>
<tr>
<td>COMORBIDITIES</td>
<td>60</td>
</tr>
<tr>
<td>NO COMORBIDITIES</td>
<td>40</td>
</tr>
</tbody>
</table>
Figure 1. Ethnicity of Patients in Sample Population

Ethnicity

- White
- African-American
- Asian
- Hispanic
Appendix A

AUDIT-C

How often did you have a drink containing alcohol in the past year?

Never (0 points)
Monthly or less (1 point)
Two to four times a month (2 points)
Two to three times per week (3 points)
Four or more times a week (4 points)

How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?

0 drinks (0 points)
1 or 2 (0 points)
3 or 4 (1 point)
5 or 6 (2 points)
7 to 9 (3 points)
10 or more (4 points)

How often did you have six or more drinks on one occasion in the past year?

Never (0 points)
Less than monthly (1 point)
Monthly (2 points)
Weekly (3 points)
Daily or almost daily (4 points)
## Appendix B

### AUDIT

**Alcohol screening questionnaire (AUDIT)**

Our clinic asks all patients about alcohol use at least once a year. Drinking alcohol can affect your health and some medications you may take. Please help us provide you with the best medical care by answering the questions below.

<table>
<thead>
<tr>
<th>One drink equals:</th>
<th>12 oz. beer</th>
<th>5 oz. wine</th>
<th>1.5 oz. liquor (one shot)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Monthly or less</th>
<th>2 - 4 times a month</th>
<th>2 - 3 times a week</th>
<th>4 or more times a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How often do you have a drink containing alcohol?</td>
<td>Never</td>
<td>Monthly or less</td>
<td>2 - 4 times a month</td>
<td>2 - 3 times a week</td>
<td>4 or more times a week</td>
</tr>
<tr>
<td>2. How many drinks containing alcohol do you have on a typical day when you are drinking?</td>
<td>0 - 2</td>
<td>3 or 4</td>
<td>5 or 6</td>
<td>7 - 9</td>
<td>10 or more</td>
</tr>
<tr>
<td>3. How often do you have four or more drinks on one occasion?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>4. How often during the last year have you found that you were not able to stop drinking once you had started?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>5. How often during the last year have you failed to do what was normally expected of you because of drinking?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>7. How often during the last year have you had a feeling of guilt or remorse after drinking?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>8. How often during the last year have you been unable to remember what happened the night before because of your drinking?</td>
<td>Never</td>
<td>Less than monthly</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>9. Have you or someone else been injured because of your drinking?</td>
<td>No</td>
<td>Yes, but not in the last year</td>
<td>Yes, in the last year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?</td>
<td>No</td>
<td>Yes, but not in the last year</td>
<td>Yes, in the last year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Provider Toolkit

What is SBIRT?

"SBIRT is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders. Primary care centers, hospital emergency rooms, trauma centers, and other community settings provide opportunities for early intervention with at-risk substance users before more severe consequences occur (SAMHSA, 2017)."

Why SBIRT?

<table>
<thead>
<tr>
<th>SBIRT</th>
<th>Opioid</th>
<th>Alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing prevention and intervention</td>
<td>Incarceration and violent crime</td>
<td>Incarceration</td>
</tr>
<tr>
<td>Disruptive and delusional</td>
<td>Alcohol use</td>
<td>Alcohol use</td>
</tr>
<tr>
<td>Unhealthy behavior</td>
<td>Opioid use</td>
<td>Opioid use</td>
</tr>
<tr>
<td>Infection</td>
<td>Opioid use</td>
<td>Opioid use</td>
</tr>
<tr>
<td>Cognitive impairment</td>
<td>Opioid use</td>
<td>Opioid use</td>
</tr>
<tr>
<td>SBIRT Oregon (2017)</td>
<td>Opioid use</td>
<td>Opioid use</td>
</tr>
</tbody>
</table>

Screening

- Screen at annual wellness exam, new patient visits
- Briefly assess patterns of use
- Identify appropriate level of treatment
- Standardized, validated tools
  - AUDIT-C
  - abbreviated
  - Single Question Screener

(SBIRT Oregon, 2012)

Standard Drinks

<table>
<thead>
<tr>
<th>Drink Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
</tr>
<tr>
<td>Wine</td>
</tr>
<tr>
<td>Spirits</td>
</tr>
</tbody>
</table>

(SBIRT Oregon, 2012)
AUDIT-C

How many times in the past year have you had 5 (for men) or 4 (for women) or more drinks in a day?
- Never
- 1-2 days
- 3-4 days
- 5-6 days
- More than 6 days

How often do you have one or more drinks on a occasion?
- Never
- 1-2 days
- 3-4 days
- 5-6 days
- More than 6 days

Self-administered or via interview

Single Question Screening

How many times in the past year have you had 5 (for men) or 4 (for women) or more drinks in a day?

Alcohol Limits

Risk Zones

Low Risk Zone
- No intervention required; provide education and positive reinforcement
- Brief intervention

Harmful Zone
- Brief intervention and possible referral

Severe Zone
- Referral to specialized treatment

DO NOT ignore a positive score!
Brief Intervention
- Raise Subject
- Provide Feedback
- Enhance Motivation
- Negotiate Plan

Raise Subject
- Screening tools as conversation starters
- Ask permission to review scores

Provide Feedback
- Identify zone of use
- Reinforce low risk limits
- Discuss alcohol use and impact on health
- Negotiate changes in use patterns/amounts

Enhance Motivation
- Readiness Ruler
  - How important is it to you to make a change?
  - How ready are you to make a change?
  - How confident are you that you can make a change?
- Ask and reflect on patient responses
- Incorporate principles of motivational interviewing

Negotiate Plan
- Ask patient to give their perspective on behavior modifications
- Schedule follow up

Referral to Treatment
- Level I – Outpatient
- Level II – Intensive Outpatient
- Level III – Residential/Inpatient
- Level IV – Medically managed intensive inpatient
Treatment Options

- Counselling
- Medication
- Alcoholics Anonymous or other support groups
- Support options

Resources

- Adult Clinics of Alcoholics
  2901 N 39th Ave, Phoenix, AZ 85017
  • Provides educational and referral services for adults who were
  • Offers group counseling, individual therapy, and support groups.
  • Telephone: 602-347-9200
  • Email: info@adultclinics.org

- AEAT (Arizona Education and Treatment Services)
  • Provides education, treatment, and support services for
  • Offers individual and group therapy, as well as sober living programs.
  • Telephone: 888-797-4400
  • Email: info@aeat.org

- Arizona Alcohol and Drug Abuse Program
  • Offers education and prevention programs for
  • Provides resources for individuals and families affected by alcohol and drug abuse.
  • Telephone: 888-797-4400
  • Email: info@aadap.org

- NIAAA (National Institute on Alcohol Abuse and Alcoholism)
  • Provides information on alcoholism and addiction.
  • Offers resources and treatment options for individuals and families.
  • Telephone: 800-662-6273
  • Email: info@niaaa.nih.gov

Clinical Tools

- Pocket cards
  - Available for download
  - Customizable

Scenarios

- https://www.youtube.com/watch?v=b_HWHXEC
- https://www.youtube.com/watch?v=MaxHuf17A44

(Alcoholics Anonymous, 2017)