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USAUDIT

The Alcohol Use Disorders Identification Test, Adapted for Use in the United States: A Guide for Primary Care Practitioners

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Introduction

The World Health Organization (WHO) developed the Alcohol Use Disorders Identification Test (AUDIT) in 1989 as a simple method of screening for hazardous and harmful drinking. Since its introduction, the AUDIT has become the most widely used alcohol screening test in the world. The AUDIT now has more than a quarter century's worth of validation studies and practical applications in a wide variety of medical and research settings worldwide (Allen, Litten, Fertig, & Babor, 1997; Babor & Robaina, 2016). The AUDIT was recently adapted for use in the United States (Centers for Disease Control and Prevention [CDC], 2014).[1]

The purpose of the USAUDIT is to identify individuals with risky patterns of alcohol consumption, as defined by the U.S. standard drink (14 grams) and recommended drinking limits (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2007), and those who may have an alcohol use disorder (AUD), according to the *International Classification of Mental and Behavioral Diseases* – Tenth Revision (ICD-10; WHO, 1993) and the *Diagnostic and Statistical Manual of Mental Disorders* – Fifth Edition(DSM-5; American Psychiatric Association [APA], 2013).

The purpose of this guide

Included in this guide are instructions for the clinical application of the USAUDIT, a new adaptation of the instrument designed to meet NIAAA's recommended low-risk drinking levels as well as the severity levels recommended by WHO. The guide focuses on primary care settings. Practitioners in other medical and human service settings—such as obstetrics-gynecology clinics and specialty clinics for HIV/AIDS and sexually transmitted diseases—will find it useful as well.

This guide has three main parts. Section 1 describes the USAUDIT, Section 2 explains how to use the test, and Section 3 explains how to score and interpret the test results. In addition to these sections, a reference list is provided along with appendices. The appendices contain the USAUDIT Questionnaire (Appendix A), USAUDIT-C Questionnaire (Appendix B), and a handout on low-risk drinking (Appendix C).

Target audience

This guide is for healthcare personnel working in primary healthcare settings who routinely come into contact with people who may use alcohol in a risky or harmful way. This audience includes physicians, general practitioners, community health workers, behavioral health workers, health educators, nurses, social workers, psychologists, psychiatrists, obstetricians, and midwives. In addition, the target audience includes program managers, health service administrators, and support staff responsible for the incorporation of screening and early intervention procedures into the operations of routine primary health care.

[1]For assistance in the planning and implementation of alcohol screening and brief intervention, refer to the SAMHSA SBIRT Website http://www.samhsa.gov/sbirt or to CDC's Planning and Implementing Screening & Brief Intervention for Risky Alcohol Use: A Step-by-Step Guide for Primary Care Practices. Atlanta, Georgia: 2014.

1. The USAUDIT

What is the USAUDIT?

The USAUDIT is a brief screening questionnaire used in medical and social service settings to identify individuals using alcoholic beverages in a hazardous or harmful way. It is used to conduct routine as well as opportunistic screening. The USAUDIT is based on the same 10 questions developed by WHO for the international version of the AUDIT (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993). The first three questions of the AUDIT have been adjusted for the standard U.S. drink size (14 grams versus 10 grams of alcohol used in the international version) and U.S. drinking limits, as recommended in the AUDIT manual developed by WHO (Babor et al., 2001). The adjustments in the USAUDIT further include expanding the number of response alternatives in questions 1–3 (USAUDIT-C) and modifying the wording of question 3. These modifications improve precision in measuring the frequency and quantity of drinking and enable health practitioners to intervene according to the NIAAA low-risk drinking limits for men and women.

Table 1 describes the NIAAA limits as well as other relevant terms used in this manual.

Table 1. Diagnostic Terms and Drinking Limit Descriptions

Term	Description
Low Risk Alcohol Use	NIAAA defines *low-risk alcohol use* for men up to age 65 as no more than 4 drinks on any single day and no more than 14 drinks per week. For women and men ages 66 and older, low-risk alcohol use is no more than 3 drinks on any single day and no more than 7 drinks per week. Research shows that few people who drink within these limits have alcohol-related health conditions. Some people should not drink at all (e.g., those taking medications that interact with alcohol, patients with a medical condition that can be made worse by drinking, those under the legal drinking age, anyone planning to drive a vehicle or operate machinery, and women who are pregnant or trying to become pregnant).
Hazardous Drinking	Hazardous alcohol use is a pattern of drinking that increases the risk of future alcohol-related problems, although it may not yet be causing such problems.
Harmful Alcohol Use	Harmful alcohol use is a pattern of drinking that is damaging to the physical or mental health of the user (WHO, 1993).
Binge Drinking	*Binge drinking* is a pattern of alcohol use that on a single occasion brings blood alcohol concentration (BAC) levels to 0.08 g/dL. This typically occurs after 4 drinks for women and about 5 drinks for men, if consumed in approximately 2 hours (NIAAA, 2007).
Heavy Drinking	Engaging in binge drinking 5 or more days in the past 30 days is referred to as *heavy drinking* (Substance Abuse and Mental Health Services Administration [SAMHSA], Table 2.46B note, 2014).
Alcohol Dependence and AUD	Dependence on alcohol usually develops after years of regular drinking and periodic episodes of binge drinking. It involves a cluster of symptoms that may include a strong desire to drink, impaired control over alcohol use, persistent drinking even when it is causing harm, increased tolerance to the psychomotor effects of alcohol such that high doses can be consumed without apparent intoxication, and a withdrawal reaction when drinking is stopped or reduced. *Alcohol dependence* is the preferred term in ICD-10 (WHO, 1993).

As adapted to the U.S. setting, the first three questions of the instrument now provide an accurate measure of the patient's reported drinking in relation to the NIAAA low-risk drinking limits. Because drinking above these levels can cause many common medical conditions and complicate the treatment of many others, answers to the USAUDIT's first three questions quickly determine whether a patient's alcohol use is hazardous or may already be causing harm to the patient's health.

In addition to providing information about the pattern and amount of alcohol use, the USAUDIT provides a simple scoring system that estimates the severity of hazardous and harmful use, including the likelihood of an AUD/alcohol dependence, as defined in the DSM-5 (APA, 2013) and the ICD-10 (WHO, 1993). When administered and interpreted appropriately, the USAUDIT provides an opportunity to start reflective discussions with patients about the implications of their drinking for their current symptoms and future health. It can help health professionals identify alcohol use as a contributing factor to a patient's presenting illness and can educate patients about alcohol–medication interactions. The USAUDIT results can be used in a brief intervention to help patients who drink too much cut down or stop drinking to avoid the harmful consequences of their alcohol use. In patients with a more severe AUD, the test results can serve as a basis for a referral for further assessment and treatment.

Why screen for alcohol?

Because alcohol use contributes to a broad range of medical conditions (more than 100 by some counts), practitioners need to include alcohol screening on the agenda of primary care practice (Shield, Parry, & Rehm, 2013). Even moderate use of alcohol can cause or aggravate some of the most common medical conditions addressed in primary care.

Alcohol is a leading risk factor for premature and preventable death and disability in the United States (Mokdad, Marks, Stroup, & Gerberding, 2004). Excessive alcohol consumption makes a substantial contribution to total deaths (69 percent) among working-age adults (ages 20–64) in the United States. From 2006 through 2010, excessive alcohol use accounted for nearly 1 in 10 deaths and was a leading cause of premature mortality among working-age adults (Rehm et al., 2014; Stahre, Roeber, Kanny, Brewer, & Zhang, 2014). This includes harm related to injuries, violence, and cardiovascular diseases.

Based on the effectiveness of brief intervention for reducing at-risk drinking, WHO (Babor et al., 2001), the U.S. Preventive Services Task Force (USPSTF, 2004, 2013), SAMHSA (2013), and NIAAA (2007) recommend screening and brief intervention as a public health strategy to reduce alcohol-related problems. Professional organizations endorsing alcohol screening include the American Academy of Family Physicians (Shapiro, Coffa, & McCance, 2013), the American College of Obstetricians and Gynecologists (2011), the American Medical Association (n.d.), and the American Academy of Pediatrics (2011).

What are the health consequences of hazardous and harmful alcohol use?

Drinking above low-risk levels can cause or contribute to harm even without the presence of a diagnosable AUD. For example, people who binge drink consume enough alcohol on a single occasion to elevate

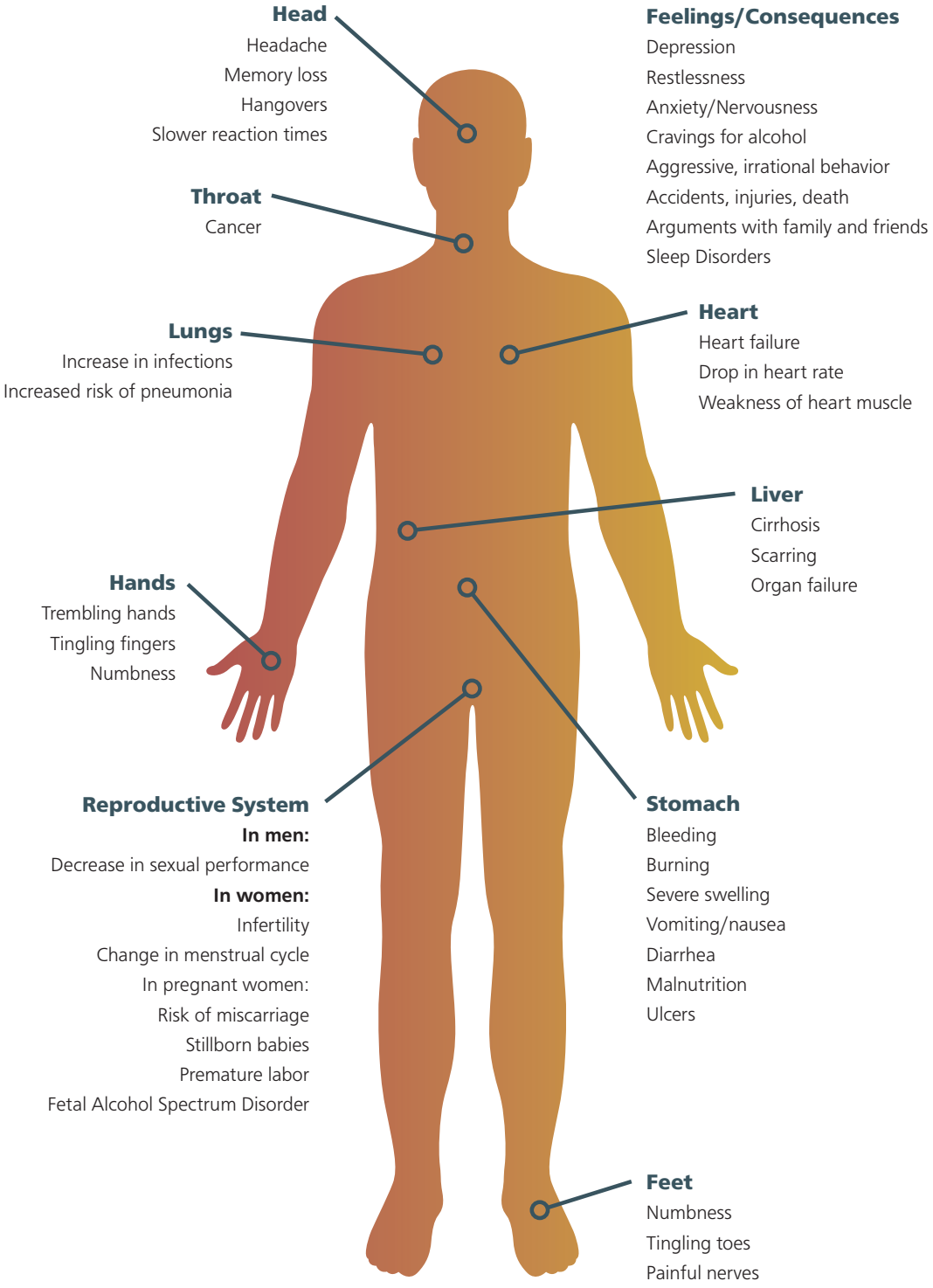
their BAC to a level that causes psychomotor impairment and behavior changes. These individuals who "occasionally binge drink" may well be the largest group of patients the USAUDIT will identify.

Figure 1 illustrates some of the adverse physical, psychological, behavioral, and cognitive effects of alcohol use. This figure has been used extensively by WHO to educate patients about the risks of alcohol.

Practitioners often make the following points during patient education conversations about alcohol-related health problems (WHO, 2014):

- High blood pressure, diabetes, obesity, acid reflux, and other gastrointestinal issues, as well as depression and sleep disorders, are all adversely affected by alcohol consumption.
- Long-term excessive drinking is causally linked to breast, esophageal, stomach, and colon cancers as well as stroke and cirrhosis of the liver.
- Drinking to intoxication is commonly associated with vehicular crashes, pedestrian injuries, violence, spousal and child abuse, falls, fires, drowning, and sexual assaults.
- Fetal alcohol spectrum disorders (FASDs), which include irreversible, lifelong birth defects and developmental disorders, are fully preventable if a pregnant woman abstains from alcohol.

Figure 1. Health Consequences of Hazardous and Harmful Alcohol Use



By taking just a few seconds with every patient once a year and just a few minutes with those who drink too much, primary care practitioners can improve their treatment of these common conditions and prevent considerable future harm.

To identify and manage patients who drink in excess of recommended limits, it is essential to conduct standardized screening using a validated instrument like the USAUDIT. Because harm can result from a broad range of alcohol use patterns—not just from an AUD—a screening test should identify the full spectrum of alcohol consumption. Such a screening procedure requires knowledge of (1) low-risk drinking levels, (2) the exceptions that make any alcohol use risky, and (3) elevated levels of risk, including levels indicating alcohol dependence. In the United States, epidemiological research shows that 24.7 percent of people ages 18 and older engage in binge drinking, and 6.7 percent engage in heavy drinking (five or more binge episodes) in the past month (Center for Behavioral Health Statistics and Quality, 2015).

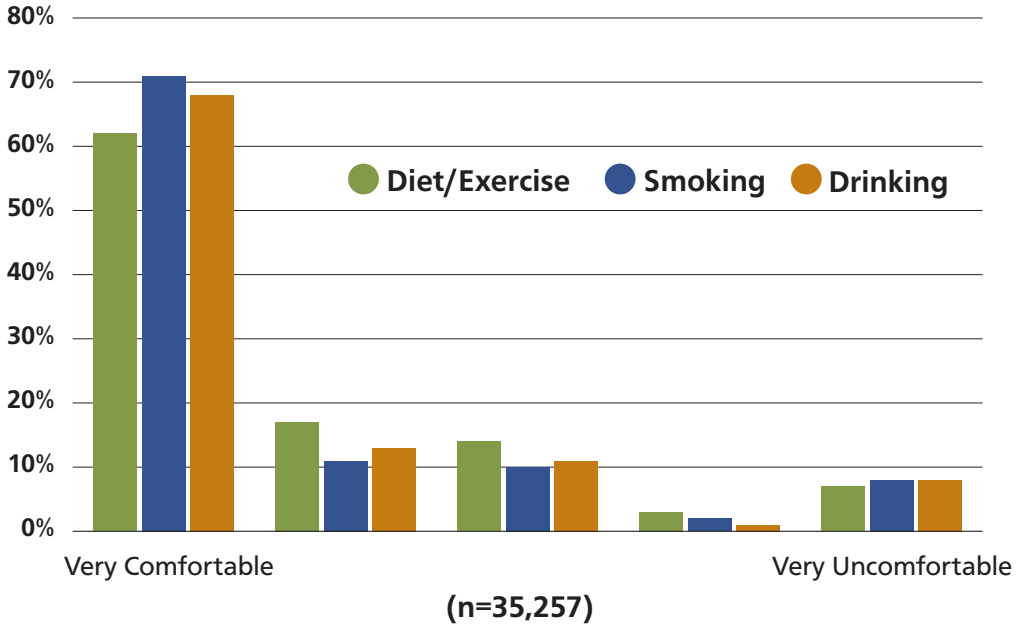
Routine screening and brief intervention allow the practitioner to:

- Identify whether alcohol use may be causing or aggravating a medical condition.
- Reduce the risk of negative interaction with prescribed medications.
- Educate patients about the hazards of at-risk drinking.
- Identify problems before a severe AUD has developed.
- Motivate patients to change their drinking behavior.
- Expose individuals at risk to brief but effective interventions or refer them to appropriate treatment services.

Do patients respond truthfully to questions about their drinking?

It is often believed that people with alcohol problems not only deny they drink too much, but also become defensive when questioned. Experience with hundreds of alcohol screening programs has shown that when such screening is used in a medical setting to improve the quality of care, patients are almost always open, receptive, and willing to respond honestly to questions about their alcohol use (Miller, Thomas, & Mallin, 2006). Figure 2 illustrates this point with data collected from more than 35,000 primary care patients who were asked how they feel about questions concerning alcohol, tobacco, physical activity, and dietary habits. The overwhelming majority of patients reported feeling comfortable with all such questions and were no more likely to feel uncomfortable being asked about alcohol use than about other important risk factors.

Figure 2. Patient Comfort With Screening



When questions about their lifestyle are asked by a concerned and interested clinician or in a health history questionnaire, few patients will be offended. In fact, many patients who drink heavily may be relieved to find that a health professional is interested in their use of alcohol and any associated problems.

Nevertheless, a small number of patients may be reluctant to report the full extent of their alcohol use or admit that it is causing them harm. Individuals who feel threatened by revealing this information may give inaccurate responses. Even patients considered most likely to underreport their drinking (i.e., heavy drinkers) nearly always screen positive on the USAUDIT because they report drinking above the recommended limits.

How do practitioners successfully conduct the USAUDIT screening?

One factor in ensuring successful screening is to create conditions that are comfortable for patients. Patients tend to answer questions about alcohol use most accurately under the following conditions:

- The interviewer or context of the self-report questionnaire is friendly and nonthreatening.
- The patient is oriented to the screening, and the purpose of the questions is clearly related to a review of his or her health status.
- The patient is alcohol and drug free at the time of the screening.
- The patient is told that the information he or she provides is confidential.
- The interviewer reads the questions as written and clarifies questions that the patient does not understand.
- The interviewer asks clarifying questions or makes summarizing statements but does not answer questions for the patient.

In addition to these general considerations, the health professional should use the following interviewing techniques:

- Use nonjudgmental language and tone, listening carefully to patient responses.
- Interview patients under the best possible circumstances. For example, for patients requiring emergency treatment or who are severely impaired, it is best to wait until their condition has stabilized and they have become accustomed to the health setting where the interview is to take place.
- Look for signs of alcohol or drug intoxication. Patients who have alcohol on their breath or who appear intoxicated may be unreliable respondents. Conduct the interview at a later time. If this is not possible, note observations in the patient's record.

Interviewers should establish these conditions before the USAUDIT is administered. Alternatively, practitioners may use the USAUDIT to guide an interview with a concerned friend, spouse, or family member.

2. Using the USAUDIT

How to administer the USAUDIT most efficiently

Understanding the purpose and structure of the USAUDIT helps practitioners decide how best to use it in clinical settings. The USAUDIT provided in Appendix A can be reproduced and used without permission or cost by medical and human service practitioners in clinical settings.

The USAUDIT consists of 10 questions addressing alcohol use, alcohol dependence symptoms, and alcohol-related problems, as presented in Table 2. By addressing these three domains, the instrument can identify patients who (1) are drinking in excess of recommended levels for healthy adults, (2) are already experiencing some symptoms of dependence, and (3) may recognize problems relating to their drinking. This information is important and useful in helping patients reduce their consumption, thereby avoiding potential harm and improving their health.

Table 2. Domains and Item Content of the USAUDIT

Domains	Question Number	Item Content
Hazardous Alcohol Use	1	Frequency of drinking
	2	Typical quantity
	3	Frequency of binge drinking
Dependence Symptoms	4	Impaired control over drinking
	5	Increased salience of drinking
	6	Morning drinking
Harmful Alcohol Use	7	Guilt after drinking
	8	Blackouts
	9	Alcohol-related injuries
	10	Others concerned about drinking

The USAUDIT can be administered as a self-report questionnaire, an oral interview, or a computer-administered survey. Self-report or computer administration takes less clinician time, produces comparable results, and allows for combining alcohol questions with questions about other aspects of the patient's health history. An oral interview accommodates patients with poor reading skills, helps build rapport, and allows for seamless feedback to the patient.

Because patients who do not drink above recommended low-risk levels rarely experience problems or a related disorder, a two-stage screening process can make use of the USAUDIT considerably more efficient. If the test is administered orally, questioning may be stopped if a patient answers "Never" to question 1, indicating that no alcohol has been consumed during the last year. Similarly, if the patient responds to questions 2 and 3 with "1 drink" and "Never," respectively, questioning may stop.

Administering the first three USAUDIT questions (Appendix B) to all patients will identify those whose alcohol consumption exceeds low-risk levels for healthy adults according to NIAAA (n.d.). Typically 70–90 percent of primary care patients have negative screening results on these questions, and they require no additional questioning or time (Babor & Robaina, 2016). Thus, the vast majority of patients can be screened in the few seconds it takes them to answer just three (or fewer) simple questions—either on a health questionnaire completed in the waiting room or when asked by the staff person taking vital signs, as guided by electronic health record (EHR) system prompts.

Patients who score positive on the first three USAUDIT questions should complete the remaining seven questions so that the presence of alcohol-related problems and signs of dependence can be identified. This can be done most efficiently by the patient alone using a paper form. The total USAUDIT score (see Section 3) can then guide a practitioner in discussing alcohol use with the patient.

Sometimes, a clinician will suspect that patients who appear to be abstinent or drinking moderately may have had problems with alcohol in the past. In such cases, following completion of the USAUDIT-C, it may be advisable to skip to questions 9 and 10, which ask about prior problems with alcohol. Patients who score points on these questions may be considered at risk if they begin to drink again and, therefore, should be advised to avoid alcohol.

How to develop a screening plan

Implementing alcohol screening requires a plan for who will be screened, how often, when, and how or by whom. A variety of options are available that allow each practice to decide what will work best for its unique personnel and style.

Because excessive alcohol use is so prevalent across all types of patients, the USPSTF (2013) recommends that all adult patients be screened. And because patients' drinking habits change over time, WHO (2014) recommends that all patients be screened annually.

USAUDIT screening can be adapted to whatever methods are already used to screen for other risk factors. If a general health and lifestyle questionnaire or medical history is administered annually, the USAUDIT can be incorporated along with its introduction and instructions. The instrument can be administered on paper in a waiting room or by computer before an office visit.

As an alternative, the USAUDIT-C questions can be incorporated into the EHR system with instructions for whoever asks the questions, and the system can record, store, and score the responses. Patients who score positive and must complete the full USAUDIT can do so on paper for scoring by a staff member.

Most primary care staff members who interact with patients can be easily trained to administer USAUDIT screening.

How to introduce the USAUDIT

Care is required when administering the USAUDIT orally because some patients might consider this a sensitive conversation. Although most patients are comfortable with and capable of answering questions about their alcohol use, the USAUDIT in Appendix A contains instructions that should be included or adapted with the questions. Patients are more likely to respond accurately and honestly to questions about alcohol use if they know why the questions are being asked. For this reason, the patient instructions provided with the USAUDIT in Appendix A include a brief rationale for posing the questions.

Explaining why questions about alcohol use are being asked creates an open, nonthreatening context in which patients are most likely to respond accurately and honestly. The following illustrative introduction can be adapted for written or oral delivery:

> *If it is OK with you, I am going to ask you some questions about your use of alcoholic beverages during the past year. Because alcohol use can affect many areas of health and may interfere with certain medications, it is important for us to know how much you usually drink and whether you have experienced any problems or consequences as a result of your drinking. Please try to be as honest and as accurate as you can.*

A statement like this should be followed by a description of what constitutes a "drink," using typical examples of alcoholic beverages (e.g., "By an 'alcoholic beverage' or a 'drink' we are referring to a 5-ounce glass of wine, 1 12-ounce bottle or can of beer, or 1 shot—or 1.5 ounces—of vodka, gin, whiskey, or other spirits, whether alone or in a mixed drink."). A graphic illustration of a standard drink is a useful tool for this orientation, and describing standard drink equivalencies is also helpful.

If the USAUDIT is administered orally, the questions should be read exactly as they are written and in the order indicated. By following the exact wording, practitioners will obtain more accurate results and more comparability between their results and those of other interviewers.

If a patient's responses are ambiguous or evasive, the practitioner should ask for clarification by repeating the question and then the response options, asking the patient to choose the best one. At times answers are difficult to record because the patient may not drink on a regular basis. For example, if a patient was drinking intensively for the month before an accident but not since, then it would be difficult to characterize the "typical" drinking sought by the question. In these cases, it is best to record the amount of drinking and related symptoms for the heaviest drinking period in the past year, noting that this amount may be atypical or transitory for the individual.

Practitioners should record answers carefully, noting special circumstances, additional information, or clinical inferences in the patient's EHR. Often patients will provide the interviewer with helpful comments about their drinking that can be used in the interpretation of the USAUDIT score. This information can also be used as personalized feedback if the patient requires a brief intervention.

3. Scoring, interpreting, and using the USAUDIT

The USAUDIT's 10 questions provide an easy means of determining the following three measures, which are essential to managing patients whose alcohol use creates health risks:

1. Alcohol consumption patterns, including typical weekly consumption and occasions on which excessive amounts are consumed
2. Symptoms that suggest the presence of alcohol dependence
3. Problems the patient has experienced related to alcohol use

Scoring the USAUDIT is a simple matter of totaling the numeric scores associated with the patient's responses. Each response is scored using the numbers at the top of each response column. Practitioners write the appropriate number associated with each answer in the column at the right and then add the numbers in that column to obtain the total score. Scores of 7 for women (and men ages 66 and older) and 8 for men ages 65 and younger represent the thresholds beyond which drinking begins to entail health risks as endorsed by NIAAA. A score of 1 or more by pregnant women are grounds for discussing health risks, including FASDs.

The higher the total score, the higher the patient's alcohol-related risk. Table 3 provides guidance regarding the interpretation of USAUDIT scores by severity levels, intervention options, and possible AUD risks. The adoption of revised AUD criteria by APA (2013) points out the value of using severity scores (i.e., mild, moderate, and severe) to assign patients to different types and intensities of interventions. As illustrated in Table 3, the USAUDIT zones conform approximately to the severity levels of the DSM-5 and to the ICD-10 distinction between harmful use and dependence.[2] The use of USAUDIT zone numbers is recommended in discussions with patients to avoid ascribing a label to the patient that may be stigmatizing.

[2]The minor changes introduced in the first 3 questions of the USAUDIT are unlikely to result in any loss in sensitivity and specificity as determined by extensive research on the 10 item WHO AUDIT total score (Babor and Robaina, 2016). Nevertheless, there has been little research on the upper cut-off points for Zones III and IV, and further research is needed to assure accurate classification along the higher end of the severity continuum.

Table 3. Guidance for Interpreting the USAUDIT

Risk Level	Intervention	USAUDIT Score	Possible AUD (DSM-5, ICD-10)
Zone I	Feedback	0–6/7 (Women/Men)	None
Zone II	Feedback/brief intervention	7/8–15 (Women/Men)	Mild AUD, hazardous use
Zone III	Feedback/monitoring/brief outpatient treatment	16–24	Moderate AUD, harmful use
Zone IV	Referral to evaluation and treatment	25+	Moderate/severe AUD, alcohol dependence

Because cutoff scores are based on NIAAA drinking limits, false positives are unlikely. With the exception of a few false negatives (i.e., patients who score under the cutoffs but still exceed the recommended limits in some way), USAUDIT scores above the cutoffs will reflect drinking above the NIAAA low-risk limits in every case. The use of the USAUDIT should be guided by clinical judgment as well as attention to the research literature. A full clinical evaluation of the patient by a skilled diagnostician is required to translate screening test results into an appropriate diagnostic classification for clinical and reimbursement purposes.

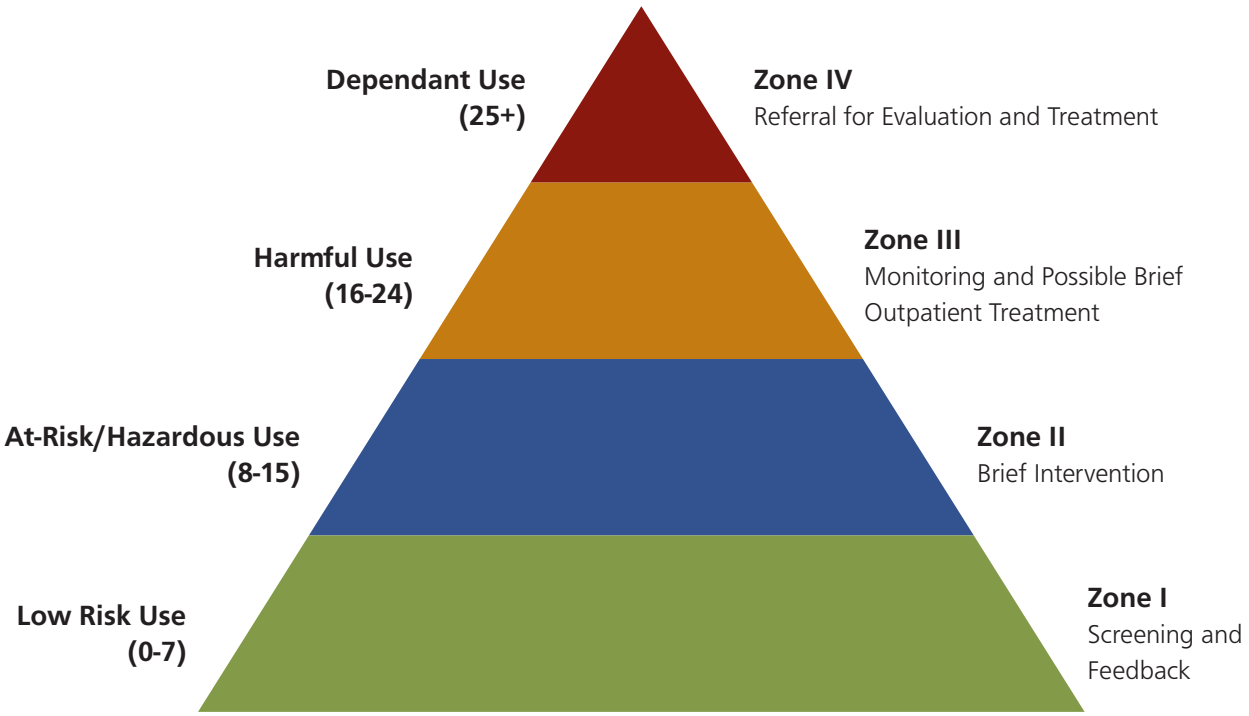
The primary care practitioner may obtain additional information about a patient's drinking by noting responses to individual questions and, when appropriate, exploring some responses further. Key items of interest include the following:

- Response options to question 1 (frequency) and question 2 (amount of drinks consumed) can be multiplied to calculate weekly drinking. More than 7 drinks per week for women and men older than age 65 or more than 14 drinks per week for younger men indicate excessive weekly drinking that can contribute over time to many chronic diseases, including cancer and stroke, and present a risk to managing hypertension and diabetes.
- Points on question 3 indicate occasions of binge drinking that can lead to injury and many social problems.
- Points on questions 4–6 (especially weekly or daily symptoms) suggest possible alcohol dependence.
- Points on questions 7–10 indicate that alcohol-related harm is already being experienced.

Primary care practitioners should take all responses into account when deciding how best to manage a patient who screens positive according to the total score. These responses may also indicate matters to discuss when the total score is used as the basis for feedback and a brief intervention.

Four levels of risk (or zones) are shown in the Drinkers' Pyramid in Figure 3.

Figure 3. The Drinker's Pyramid



Zone I refers to lower risk drinking or abstinence. Most patients score in this zone, and no further action is necessary other than to remind these patients of the low-risk drinking limits and praise them for drinking within those limits or for not drinking at all. Almost 80 percent of primary care patients fall into this category (Madras et al., 2009; Rubinsky, Kivlahan, Volk, Maynard, & Bradley, 2010).

Zone II consists of alcohol use in excess of low-risk guidelines and is generally indicated when the USAUDIT score is between 7/8 (women/men) and 15. A brief intervention using feedback, engaging patients in reflective motivational conversations, and providing patient education materials is the most appropriate course of action for these patients. Studies (e.g., Madras et al., 2009; Rubinsky et al., 2010; Madras et al., 2009) found that 16 percent of primary care patients fall into this category.

Zone III scores in the range of 16 to 24 suggest harmful drinking, which can be managed by a combination of feedback, repeated brief interventions, and continued monitoring, with further diagnostic evaluation indicated if the patient fails to respond or is suspected of possible alcohol dependence. If a behavioral health service provider is associated with the primary care clinic or practice, these patients may be candidates for brief outpatient treatment.

Zone IV is indicated by USAUDIT scores of 25 or greater. These patients should be referred to a specialist for diagnostic evaluation and probable treatment for alcohol dependence. If these services are not available, these patients may be managed in primary care, especially when the provider has access to medications, behavioral health services, and mutual-help organizations that can provide community-based support. The health professional may also choose to further screen these patients to identify potential needs for more immediate medical intervention.

Conducting the intervention

Although the content and style of the intervention for a positive USAUDIT score vary with the severity level indicated by the total score, some common strategies apply to all feedback and counseling conversations:

- Use a nonjudgmental, empathic, motivating, encouraging approach.
- Give clear feedback on what the screening has revealed.
- Evoke the patient's concerns about alcohol use.
- Offer medical advice about the risk implications for the patient's health, including any connections to current conditions.
- Ask questions to lead the patient to evaluate his or her current drinking behavior.
- Ask whether and when the patient wants to change.
- Encourage the patient to talk about what to improve.
- Be brief; longer is not necessarily better.
- Close on a positive note with clear mutual understanding of goals and actions.

Certain patients, regardless of their score, should be encouraged to avoid alcohol completely, especially those who:

- Plan to drive a vehicle or operate machinery.
- Take medications that interact with alcohol.
- Have a medical condition that alcohol can aggravate.
- Are pregnant or sexually active and not using effective contraception (birth control).

Brief intervention for at-risk drinking

A total USAUDIT score that is positive but **under 16** typically means that the patient's drinking pattern is hazardous (presents risks) but has not (or not yet) resulted in harm to the patient or others. Responses to questions 7–10 may clarify whether the pattern has already become harmful. A clinician must decide in each case whether the patient's drinking could exacerbate existing medical conditions or cause interactions with medications, in addition to potentially having social as well as other medical consequences. Relating these risks to patients' current medical conditions may provide motivation to change. These patients rarely require alcohol treatment services to reduce their drinking. A key part of the brief intervention is to educate patients on the low-risk drinking limits.

Brief treatment for harmful drinking

USAUDIT scores of **16–24** suggest that alcohol-related harm has begun to occur. Identification of that harm from responses to specific USAUDIT questions and discussion of the medical, social, and emotional implications are warranted. Connection to current medical conditions and medications may motivate change. According to SAMHSA (Center for Substance Abuse Treatment, 1999), brief therapy, also known as *brief treatment,* helps resolve ambivalence, build motivation, and provide the patient with tools to change behavior and handle life problems. Brief treatment is most often provided for people with mild to moderate AUD. Most commonly, brief treatment combines motivational enhancement therapy and cognitive behavioral therapy in limited (usually three to six) sessions. If such sessions are not available through a qualified behavioral health service provider affiliated with the primary care facility, providers would need to be identified through a list of community-based behavioral health services.

Brief intervention facilitating referral to evaluation and treatment

Patients scoring **25+** on the USAUDIT are appropriate for referral to specialty care that can provide diagnostic evaluation for alcohol dependence and appropriate treatments. Although some patients will not follow the recommendation, referral is one means of fulfilling the clinician's ethical responsibility. Not wanting to change and refusing help are common characteristics of a substance-dependent condition, but many patients do respond to a referral when recommended by their clinician. Of course, it always remains the patient's choice.

Types of specialty alcohol treatment include:

- Outpatient counseling and other psychosocial rehabilitation services
- Medications to relieve craving
- Involvement with mutual-help groups (i.e., Alcoholics Anonymous, Narcotics Anonymous, or Al-Anon)
- Intensive outpatient programs
- Inpatient residential rehabilitation programs

Alcohol treatment is provided within levels of care from general outpatient counseling to inpatient hospitalization and is often available in multiple treatment settings. Level of care is determined by severity of illness: Is the patient a dependent or nondependent user? Are there medical or psychiatric comorbidities? Inpatient treatment is reserved for those with serious illnesses (dependence, comorbidity).

Detoxification

Although most patients involved in treatment are served in outpatient care, detoxification may be necessary for some patients. Special attention should be paid to patients whose USAUDIT responses indicate daily consumption of large amounts of alcohol or positive responses to questions indicative of possible dependence (questions 4–6). Inquiry should be made about how long a patient has gone since having an alcohol-free day and whether he or she has experienced any withdrawal symptoms.

Detoxification should be provided for patients likely to experience moderate to severe withdrawal—not only to minimize symptoms, but also to prevent or manage seizures or delirium. Detoxification may also facilitate acceptance of therapy to address dependence. While inpatient detoxification may be necessary in a small number of severe cases, ambulatory or home detoxification can be used successfully with the majority of less severe cases.

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Appendix A. The USAUDIT-C Questionnaire*

Description

The AUDIT-C is a short, easy-to-administer screening process using the first three questions of the AUDIT modified for the US standard drink (14 grams, rather than the 10 grams standard used in the international version of the AUDIT). It was developed for and used in the *Cutting Back Study*[1] to measure patients' weekly consumption and occasions of excessive drinking.

Use

Can be included in an intake or health behavior questionnaire to provide a quick screen to identify excessive drinking. Best administered on paper or electronically, where the patient must choose one of the response alternatives. Patients who score positive should then receive the full USAUDIT to determine their level of risk and any signs of dependence.

How to Score

Each response is scored using the numbers at the top of each response column. Write the appropriate number associated with each answer in column at right. Then add all numbers in that column to obtain the total score.

Cutoff Scores

A total of 7 or more for women and men over age 65, and 8 or more for younger males is a positive risk indicator.

Advantages

Identifies both excessive regular drinking and excessive occasional drinking in only three questions.

Instrument

Instructions: Alcohol can affect your health, medications, and treatments, so we ask patients the following questions. Your answers will remain confidential. Place an x in one box to answer. Think about your drinking in the past year. A drink means one beer, one small glass of wine (5 oz.), or one mixed drink containing one shot (1.5 oz.) of spirits.

QUESTIONS	0	1	2	3	4	5	6	Score
1. How often do you have a drink containing alcohol?	Never	Less than monthly	Monthly	Weekly	2-3 times a week	4-6 times a week	Daily	
2. How many drinks containing alcohol do you have on a typical day you are drinking?	1 drink	2 drinks	3 drinks	4 drinks	5-6 drinks	7-9 drinks	10 or more drinks	
3. How often do you have X (5 for men; 4 for women & men over age 65) or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	2-3 times a week	4-6 times a week	Daily	
							Total	

The AUDIT 1–3 (US) can be used for clinical purposes without permission or cost.

[1]Barbor TF, Higgins-Biddle J, Dauser D, Burleson JA, Zarkin GA, Bray J. Brief Interventions for at-risk drinking: patient outcomes and cost-effectiveness in managed care organizations. Alcohol 2006 Nov–Dec; 41(6): 624–31.

*Excerpted from CDC (2014).

Appendix B. USAUDIT Questionnaire

Instrument USAUDIT

Instructions: Alcohol can affect your health, medications, and treatments, so we ask patients the following questions. Your answers will remain confidential. Place an X in one box to answer. Think about your drinking **in the past year.** A drink means one beer, one small glass of wine (5 oz.), or one mixed drink containing one shot (1.5 oz.) of spirits.

QUESTIONS	0	1	2	3	4	5	6	Score
1. How often do you have a drink containing alcohol?	Never	Less than monthly	Monthly	Weekly	2-3 times a week	4-6 times a week	Daily	
2. How many drinks containing alcohol do you have on a typical day you are drinking?	1 drink	2 drinks	3 drinks	4 drinks	5-6 drinks	7-9 drinks	10 or more drinks	
3. How often do you have X (5 for men; 4 for women & men over age 65) or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	2-3 times a week	4-6 times a week	Daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
5. How often during the past year have you failed to do what was expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
6. How often during the past year have you needed a drink first thing 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 past year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
8. How often during the past year have you been unable to remember what happened the night before because you had been drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily			
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the past year		Yes, during the past year			
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking and suggested you cut down?	No		Yes, but not in the past year		Yes, during the past year			
							Total	

Appendix C. A Guide to Lower-Risk Drinking*

A GUIDE TO LOWER-RISK DRINKING

WHAT IS A STANDARD DRINK?

One Standard Drink is...

A 12-ounce can of ordinary BEER

A 1.5-ounce shot of SPIRITS (whiskey, gin, rum, vodka, etc.)

A 5-ounce glass of WINE or a 2–4-ounce glass of SHERRY

A 2–4-ounce glass of LIQUEUR or APERITIF

How much is too much?

The most important thing is the amount of pure alcohol in a drink. These drinks, in normal measures, each contain roughly the same amount of pure alcohol. Think of each one as a standard drink.

What is Lower-Risk Drinking?

FOR MEN:

No more than 2 drinks per day.
No more than 14 drinks per week.
No more than 4 drinks at any one time.

FOR WOMEN AND PERSONS OVER 65:

No more than 1 drink per day.
No more than 7 drinks per week.
No more than 3 drinks at any one time.
Do *not* drink at least 2 days of the week.

Remember, there are times when even one or two drinks can be too much, such as:

- When driving or operating machinery.
- When pregnant or breastfeeding.
- When taking certain medications.
- If you have certain conditions, diseases, or disorders.
- If you cannot stop or control your drinking.

Ask your healthcare provider for more information.

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*Adapted from Babor, T. F., & Higgins-Biddle, J. C. (2001). *Brief intervention for hazardous and harmful drinking: A manual for use in primary care.* Geneva: World Health Organization