

HB2390
Opponent
Nick Reinecker

03/09/23
Senate Public Health and Welfare
Chair. Senator Beverly Gossage

Thank you for the opportunity to provide testimony on this matter. I am against this bill for the following concerns.

In New Section 1, the term drug in subsection (b)(3), includes both legal (alcohol, tobacco, caffeine) and illegal/illicit (cocaine, fentanyl, methamphetamine, cannabis/"marijuana") substances and the term "substance use disorder" in subsection (b)(8) references the American psychiatric association's diagnostic and statistical manual. I, as a taxpayer, am displeased at how monies received from state-owned gambling "revenues" and opioid settlement sources go to general idolatry/"addiction" abatement, especially when the only exempt or non-exempt substances included in this policy trajectory are solely based on the American psychiatric association's diagnostic and statistical manual and the monies are not used for their exclusive purpose of gambling or opioid desires. The LD50 or lethal dose for most of these substances is high or so high it is practically impossible to die from an overdose. This bill along with the Kansas Fights Addiction Act, the Crisis Intervention Act and the Kansas Lottery Act grow government and are shotgun blasts for rifle needs. The people dying are usually involved with civil contracts outside the lines of the rule of law, to mitigate this we must prioritize how we define crime in the law and what contracts we want to prevent from being completed.

In New Section 2, subsection (a), the making of recommendations regarding evidence-based strategies to prevent or mitigate the consequences of drug overdose is not exclusive to fatalities which enhances the broad-brush approach for data collection, also in subsection (e) the spending of tax money for compensation is unwarranted.

In Section 4, relating to crimes involving controlled substances, if we legalize these strips in the name of harm reduction, it should be common sense that natural occurring substances like cannabis should not be controlled either. I went to a fentanyl "crisis" meeting in Wichita last year where a lady was giving public comment and she was telling the panel how she had a non-fatal overdose experience while trying to smoke some crack but there was fentanyl in it and she was saying how she wasn't trying to do fentanyl she thought she was doing crack. Without further commentary, the least we could do is get cannabis off the table as a gateway to either the public safety or public health containment system. This will alleviate pressure on both ends of the continuum and standard of care, preserve resources for the most serious people and save the taxpayers money by being smart on health and tough on crime.

My request is that cannabis would be exempted from its controlled status, to eliminate the use of the DSM, if not completely, at least the fifth edition* with consideration be given to the ICD-10 or ICD-11 and for the sake of principle, to not incentivize the membership of this board.

*Substance Abuse and Mental Health Services Administration. Impact of the DSM-IV to DSM-5 Changes on the National Survey on Drug Use and Health [Internet]. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2016 Jun. PMID: 30199183.

Thank you
Nick Reinecker

http://www.kslegislature.org/li/b2023_24/statute/

79-4805. Problem gambling and addictions grant fund; purpose; authorized expenditures; annual report. (a) There is hereby established in the state treasury the problem gambling and addictions grant fund. All moneys credited to such fund shall be used only for the awarding of grants under this section. Such fund shall be administered in accordance with this section and the provisions of appropriation acts.

(b) All expenditures from the problem gambling and addictions grant fund shall be made in accordance with appropriation acts upon warrants of the director of accounts and reports issued pursuant to vouchers approved in the manner prescribed by law.

(c) (1) There is hereby established a state grant program to provide assistance for the direct treatment of persons diagnosed as suffering from pathological gambling and to provide funding for research, prevention and recovery for the residents of Kansas. Research grants awarded under this section may include, but need not be limited to, grants for determining the effectiveness of education and prevention efforts on the prevalence of pathological gambling in Kansas. All grants shall be made after open solicitation of proposals and evaluation of proposals against criteria established in rules and regulations adopted by the secretary of the Kansas department for aging and disability services. Both public and private entities shall be eligible to apply for and receive grants under the provisions of this section. The secretary shall ensure that an adequate problem gambling treatment services network is available in Kansas to individuals seeking treatment for a pathological gambling disorder.

(2) Moneys in the problem gambling and addictions grant fund shall be used:

(A) To fund a helpline with text messaging and chat capabilities; and

(B) for the treatment, research, education or prevention of pathological gambling.

(3) **Moneys in the problem gambling and addictions grant fund that are not used for the purposes described in paragraph (2) shall be used to treat alcoholism, drug abuse, other addictive behaviors and other co-occurring behavioral health disorders.**

75-776. Same; definitions. As used in K.S.A. 2022 Supp. 75-775 through 75-781, and amendments thereto:

(a) "Act" means the Kansas fights addiction act.

(b) "Covered conduct" means any conduct covered by opioid litigation that resulted in payment of moneys into the Kansas fights addiction fund.

(c) "Defendant" means a defendant or putative defendant in any opioid litigation.

(d) "Moneys that are received" includes damages, penalties, attorney fees, costs, disbursements, refunds, rebates or any other monetary payment made or paid by any defendant by reason of any judgment, consent decree or settlement, after payment of any costs or fees allocated by court order.

(e) "Municipality" means the same as defined in K.S.A. 75-6102, and amendments thereto.

(f) "Opioid litigation" means any civil lawsuit, demand or settlement, including any settlement in lieu of litigation, alleging unlawful conduct in the manufacturing, marketing, distribution, prescribing or other use of opioid medications and asserting or resolving claims of the state or any municipality.

(g) "Qualified applicant" means any state entity, municipality or not-for-profit private entity that provides services for the purpose of preventing, reducing, treating or otherwise abating or remediating substance abuse or addiction and that has released its legal claims arising from covered conduct against each defendant that is required by opioid litigation to pay into the fund.

(h) "State" means the state of Kansas, including any agency or official thereof.

(i) "Sunflower foundation" means the sunflower foundation: health care for Kansas, established pursuant to the settlement agreement entered into by the attorney general in the action filed by blue cross and blue shield of Kansas, inc., in the district court of Shawnee county, Kansas, case No. 97CV608.

https://www.ksrevisor.org/statutes/chapters/ch40/040_022_0058.html

40-2258. Group policies; mental illness, alcoholism, drug abuse or substance use disorder; limitations; exceptions; definitions. (a) An accident and sickness insurer which offers coverage through a group policy or certificate of coverage providing hospital, medical or surgical expense benefits pursuant to K.S.A. [40-2209](#), and amendments thereto, which includes mental illness or alcoholism, drug abuse or other substance use disorder benefits shall be subject to the following requirements:

(1) If the policy does not include an aggregate lifetime limit on substantially all hospital, medical and surgical expense benefits, the policy may not impose any aggregate lifetime limit on mental illness or alcoholism, drug abuse or other substance use disorder benefits;

(2) if the policy includes an aggregate lifetime limit on substantially all hospital, medical and surgical expense benefits the plan shall either: (A) Apply the applicable lifetime limit both to the hospital, medical and surgical expense benefits to which it otherwise would apply and to mental illness or alcoholism, drug abuse or other substance use disorder benefits and not distinguished in the application of such limit between such hospital, medical and surgical expense benefits and mental illness or alcoholism, drug abuse or other substance use disorder benefits; or (B) not include any aggregate lifetime limit on mental illness or alcoholism, drug abuse or other substance use disorder benefits that is less than the applicable lifetime limit on hospital, medical and surgical expense benefits;

(3) if the policy does not include an annual limit on substantially all hospital, medical and surgical expense benefits, the plan or coverage may not impose any annual limit on mental illness or alcoholism, drug abuse or other substance use disorder benefits; and

(4) if the policy includes an annual limit on substantially all hospital, medical and surgical expense benefits the policy shall either: (A) Apply the applicable annual limit both to hospital, medical and surgical expense benefits to which it otherwise would apply and to mental illness or alcoholism, drug abuse or other substance use disorder benefits and not distinguish in the application of such limit between such hospital, medical and surgical expense benefits and mental illness or alcoholism, drug abuse or other substance use disorder benefits; or (B) not include any annual limit on mental illness or alcoholism, drug abuse or other substance use disorder benefits that is less than the applicable annual limit.

(b) If the group policy providing hospital, medical or surgical expense benefits is not otherwise covered by subsection (a) and either does not apply a lifetime or annual benefit or applies different lifetime or annual benefits to different categories of hospital, medical and surgical expense benefits, the commissioner may adopt rules and regulations under which subsections (a)(2) and (a)(4) are applied to such policies with respect to mental illness or alcoholism, drug abuse or other substance use disorder benefits by substituting for the applicable lifetime or annual limits an average limit that is computed taking into account the weighted average of the lifetime or annual limits applicable to such categories.

(c) Nothing in this section shall be construed as either:

(1) Requiring an accident and sickness policy to offer mental illness or alcoholism, drug abuse or other substance use disorder benefits except as otherwise required by K.S.A. [40-2,105a](#), and amendments thereto; or

(2) affecting any terms and conditions of a policy which does include mental illness or alcoholism, drug abuse or other substance use disorder benefits including provisions regarding cost sharing, limits on the number of visits or days of coverage, requirements relating to medical necessity, requirements relating to the amount, duration or scope of mental illness or alcoholism, drug abuse or other substance use disorder benefits under the plan or coverage, except as specifically provided in subsection (a).

(d) This section shall not apply to any group accident and health insurance policy which is sold to a small employer as defined in K.S.A. [40-2209](#), and amendments thereto.

(e) This section shall not apply with respect to a group policy providing hospital, medical or surgical expense benefits if the application of this section will result in an increase in the cost under the plan of at least 2% in the case of the first plan year in which this section is applied and 1% in the case of each subsequent plan year. Determinations as to increases in actual costs under a plan shall be made and certified by a qualified and licensed actuary who is a member in good standing of the American academy of actuaries. All such determinations shall be in a written report prepared by the actuary.

(f) In the case of a group policy providing hospital, medical or surgical expense benefits that offers an eligible employee, member or dependent two or more benefit package options under the policy, subsections (a) and (b) shall be applied separately with respect to each such option.

(g) As used in this section:

(1) "Aggregate lifetime limit" means, with respect to benefits under a group policy providing hospital, medical or surgical expense benefits, a dollar limitation on the total amount that may be paid with respect to such benefits under the policy with respect to an eligible employee, member or dependent;

(2) "annual limit" means, with respect to benefits under a group policy providing hospital, medical or surgical expense benefits, a dollar limitation on the total amount of benefits that may be paid with respect to such benefits in a 12-month period under the policy with respect to an eligible employee, member or dependent;

(3) "hospital, medical or surgical expense benefits" means benefits with respect to hospital, medical or surgical services, as defined under the terms of the policy;

(4) "mental illness benefits" means benefits with respect to mental health services, as defined under the terms of the policy;

(5) "alcoholism, drug abuse or substance use disorder benefits" means benefits with respect to services for the treatment of alcoholism, drug abuse or other substance use disorders, as defined under the terms of the policy;

(6) "mental illness, alcoholism, drug abuse or substance use" means disorders specified in the diagnostic and statistical manual of mental disorders, fourth edition, (DSM-IV, 1994) of the American psychiatric association.

(h) This section shall be effective for group policies providing hospital, medical or surgical expense benefits which are entered into or renewed after January 1, 1998.

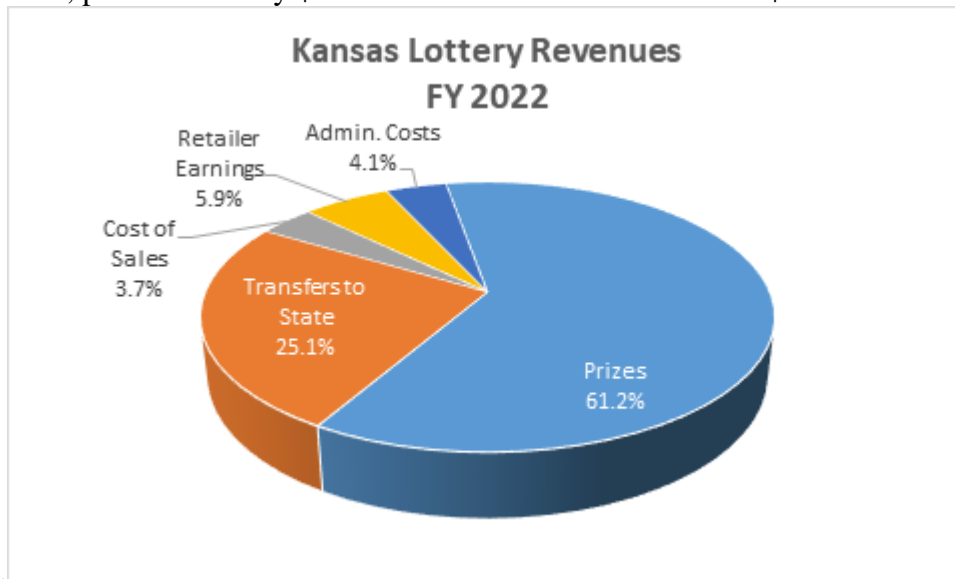
(i) The commissioner is hereby authorized to adopt such rules and regulations as may be necessary to carry out the provisions of this section.

History: L. 1997, ch. 190, § 13; L. 2002, ch. 158, § 19; L. 2003, ch. 88, § 1; L. 2004, ch. 157, § 1; L. 2005, ch. 163, § 11; L. 2006, ch. 123, § 1; L. 2007, ch. 25, § 1; L. 2008, ch. 13, § 1; L. 2009, ch. 136, § 9; November 1.

<https://www.kslottery.com/about/where-the-money-goes>

Traditional Lottery -Where Does The Money Go?

Since the Kansas Lottery’s start up in November 1987, through June 30, 2022, lottery ticket sales have produced nearly **\$2.1 billion** in revenues transferred to the State of Kansas. In that same time period, nearly **\$4.0 billion** worth of prizes have been paid to players, and retailers have earned more than **\$411 million** in commissions. The Lottery’s fiscal year 2022, which ended June 30, 2022, produced nearly **\$313 million** in sales and more than **\$80 million** transferred to



the State.

The Kansas Lottery Act requires a minimum of 45 percent of total sales be paid back to the players through the prize fund. In fiscal year 2022, the Kansas Lottery paid out 61.2 percent in prizes. Transfers to state programs were 25.1 percent of ticket sales; cost of sales was 3.7 percent, which covers online vendor fees, telecommunications costs, and instant ticket printing; 5.9 percent was paid to Lottery retailers for commissions and bonuses; and 4.1 percent covered administrative expenses, including salaries, advertising, depreciation, professional services, and other expenses.

How are Lottery Proceeds Distributed?

The State Gaming Revenues Fund (SGRF) is funded through monthly transfers from the Kansas Lottery. Transfers are then made from the SGRF to funds dedicated to economic development initiatives, prison construction and maintenance projects, local juvenile detention facilities, problem gambling assistance, and the State General Fund.

The first \$50 million is divided by a formula that first transfers \$80,000 to the Problem Gambling and Addictions Grant Fund. Then 85 percent of the balance is transferred to the Economic Development Initiatives Fund, 10 percent to the Correctional Institutions Building Fund, and 5 percent to the Juvenile Detention Facilities Fund. Any receipts in excess of \$50 million must be transferred to the State General Fund.

State Gaming Revenues Fund FY 2022

| | |
|---|--------------|
| Economic Development Initiatives Fund | \$42,432,000 |
| Juvenile Detention Facilities Fund | \$2,496,000 |
| Correctional Institutions Building Fund | \$4,992,000 |
| Problem Gambling Grant Fund | \$80,000 |
| Veterans Programs | \$1,260,000 |
| Mental Health Programs | \$7,418,897 |
| State General Fund | \$21,457,762 |

Kansas Lottery Veterans Benefit Tickets

Legislation passed by the 2003 Legislature authorizes net profits from Veterans Benefit Games to go directly to designated veterans' programs. Every penny of the money is used here in Kansas and goes to provide basic things for Kansas military veterans. All net profits received from the sale of Kansas Lottery Veterans Benefit Games are deposited into the state treasury and are then directed to three special funds:

- National Guard Educational Assistance Act Scholarships
- Veterans Home Fee Fund to be used for the Kansas veterans' homes and the state veterans' cemetery system
- Veterans Enhanced Service Delivery Program

Transfers to these and other programs as designated by the Kansas Legislature totaled \$22,480,816 from FY 2004 through FY 2022. Transfers in FY 2022 totaled \$1,260,000.

Beginning in FY 2019, a fixed amount is transferred from the Kansas Lottery to the Veterans Benefit Lottery Game Fund (VBLGF) once a year on July 15. The transfer is made at the same time the Lottery makes its monthly transfer to the SGRF. If calculated net profits from the designated games at the end of the fiscal year are more than the initial transfer, the additional net profits are transferred to the VBGLF.

How Much Money Has the Lottery Transferred from Veterans Games?

| | Fiscal Year Transfers |
|---------|-----------------------|
| FY 2004 | \$632,695 |
| FY 2005 | \$701,164 |
| FY 2006 | \$717,113 |
| FY 2007 | \$913,138 |
| FY 2008 | \$880,163 |
| FY 2009 | \$1,628,958 |
| FY 2010 | \$1,030,443 |

| | |
|------------------------|---------------------|
| FY 2011 | \$755,687 |
| FY 2012 | \$1,352,562 |
| FY 2013 | \$1,594,127 |
| FY 2014 | \$1,795,054 |
| FY 2015 | \$1,587,428 |
| FY 2016 | \$1,658,099 |
| FY 2017 | \$1,225,812 |
| FY 2018 | \$1,028,373 |
| FY 2019 | \$1,200,000 |
| FY 2020 | \$1,260,000 |
| FY 2021 | \$1,260,000 |
| FY 2022 | \$1,260,000 |
| TOTAL ALL YEARS | \$22,480,816 |

Lottery Ticket Vending Machines

Legislation passed in 2018 authorized lottery ticket vending machines in Kansas. Lottery ticket vending machine sales began in FY 2020.

Beginning in FY 2020, up to \$8.0 million from the annual sale of lottery tickets through the vending machines is transferred to the following funds within the Kansas Department for Aging and Disability Services:

- 75 percent to the Community Crisis Stabilization Centers Fund
- 25 percent to the Clubhouse Model Program Fund

How Much Money Has the Lottery Transferred from Lottery Ticket Vending Machine Sales?

| | Fiscal Year Transfers | | | |
|------------------------|-----------------------|------------------------|---|------------------------------------|
| | TOTAL SALES | TOTAL TRANSFERS | Community Crisis Stabilization Centers Fund (75%) | Clubhouse Model Program Fund (25%) |
| FY 2020 | \$6,494,405 | \$1,716,218.00 | \$1,287,163.50 | \$429,054.50 |
| FY 2021 | \$18,762,900 | \$5,563,671.00 | \$4,172,753.25 | \$1,390,917.75 |
| FY 2022 | \$24,648,492 | \$7,418,897.00 | \$5,564,172.75 | \$1,854,724.25 |
| TOTAL ALL YEARS | \$49,905,797 | \$14,698,786.00 | \$11,024,089.50 | \$3,674,696.50 |

Substance Use Screening and Risk Assessment in Adults

Lead authors: Jennifer McNeely, MD, MS,¹ and Angeline Adam, MD, ¹ with the Substance Use Disorder Guideline Committee, October 2020

(DSM-5 criteria 1 to 4)

- Consuming the substance in larger amounts and for a longer amount of time than intended.
- Persistent desire to cut down or regulate use. The individual may have unsuccessfully attempted to stop in the past.
- Spending a great deal of time obtaining, using, or recovering from the effects of substance use.
- Experiencing craving, a pressing desire to use the substance.

Social impairment

(DSM-5 criteria 5 to 7)

- Substance use impairs ability to fulfill major obligations at work, school, or home.
- Continued use of the substance despite it causing significant social or interpersonal problems.
- Reduction or discontinuation of recreational, social, or occupational activities because of substance use.

Risky use

(DSM-5 criteria 8 and 9)

- Recurrent substance use in physically unsafe environments.
- Persistent substance use despite knowledge that it may cause or exacerbate physical or psychological problems.

Pharmacologic

(DSM-5 criteria 10 and 11)

- Tolerance: Individual requires increasingly higher doses of the substance to achieve the desired effect, or the usual dose has a reduced effect; individuals may build tolerance to specific symptoms at different rates.
- Withdrawal: A collection of signs and symptoms that occurs when blood and tissue levels of the substance decrease. Individuals are likely to seek the substance to relieve symptoms. No documented withdrawal symptoms from hallucinogens, PCP, or inhalants.
- Note: Individuals can have an SUD with prescription medications, so tolerance and withdrawal (criteria 10 and 11) in the context of appropriate medical treatment do not count as criteria for an SUD.

Notes:

- a. Adapted from [APA 2013].
- b. SUDs are classified as mild, moderate, or severe based on how many of the 11 criteria are fulfilled: mild, any 2 or 3 criteria; moderate, any 4 or 5 criteria; severe, any 6 or more criteria.
- c. Please consult the DSM-5 for substance-specific diagnostic information



CLINICAL GUIDELINES PROGRAM

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Substance Use Screening and Risk Assessment in Adults

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Substance Use Screening and Risk Assessment in Adults

Purpose and Development of This Guideline

This guideline on screening and risk assessment for substance use in adults (≥18 years old) was developed by the New York State (NYS) Department of Health (DOH) AIDS Institute (AI) for use by primary care providers and in other adult outpatient care settings in NYS to achieve the following goals:

- Increase the identification of unhealthy substance use among NYS residents and increase access to evidence-based interventions for appropriate patients. “Unhealthy substance use” refers to a spectrum of use that increases the risk of health consequences and ranges from hazardous or risky patterns of use to severe substance use disorder (SUD).
- Increase the number of clinicians in NYS who perform substance use screening and risk assessment as an integral part of primary care.
- Provide clinicians with guidance on selecting validated substance use screening and risk assessment tools and on providing or referring for evidence-based interventions.
- Promote a harm reduction approach to the identification and treatment of substance use and SUDs, which involves practical strategies and ideas aimed at reducing the negative consequences associated with substance use.
 - See the NYSDOH AI guideline *Harm Reduction Approach to Treatment of All Substance Use Disorders*.

Role of Primary Care Providers in New York State

Primary care providers in NYS play an essential role in identifying and addressing unhealthy substance use in their patients. In light of the potential consequences of alcohol and drug use for individuals, communities, and healthcare systems, this *committee* recommends that all primary care providers in NYS be prepared to perform or provide substance use screening, assessment of risk level, and brief interventions as appropriate.

Development of This Guideline

This guideline was developed by the NYSDOH AI Clinical Guidelines Program, which is a collaborative effort of the NYSDOH AI Office of the Medical Director and the Johns Hopkins University School of Medicine, Division of Infectious Diseases.

Established in 1986, the goal of the Clinical Guidelines Program is to develop and disseminate evidence-based, state-of-the-art clinical practice guidelines to improve the quality of care throughout NYS for people who have HIV, hepatitis C virus, or sexually transmitted infections; people with substance use issues; and members of the LGBTQ community. NYSDOH AI guidelines are developed by committees of clinical experts through a consensus-driven process.

The NYSDOH AI charged the Substance Use Disorder Guideline Committee with developing evidence-based clinical recommendations to guide primary care and other medical care providers in screening for substance use and assessing the level of risk in adult patients with unhealthy use. The resulting recommendations are based on extensive review of the medical literature and reflect consensus among the committee members. Each recommendation is rated for strength and quality of evidence based on the rating scheme below. If a recommendation is based on expert opinion, the rationale for the opinion is provided in the text.

See *About the Substance Use Disorder Guidelines* for a full description of the development process, including evidence collection and recommendation development.

| AIDS Institute Clinical Guidelines Program Recommendations Rating Scheme | |
|--|--|
| Strength of Recommendation | Quality of Supporting Evidence |
| A = Strong | 1 = At least one randomized trial with clinical outcomes and/or validated laboratory endpoints |
| B = Moderate | 2 = One or more well-designed, nonrandomized trials or observational cohort studies with long-term clinical outcomes |
| C = Optional | 3 = Expert opinion |

Definition of Terms

Screening

Screening entails asking patients brief questions about substance use and should be routinely performed by care providers for all patients seen in medical settings. This guideline recommends substance use screening for all adults seen by primary care providers. Screening can quickly identify patients with potentially *unhealthy substance use* (see *Box 1: Unhealthy Substance Use*, below), many of whom will not have substance use–related clinical signs or symptoms [Gordon, et al. 2013; Saitz R., et al. 2014a]. Most screening instruments are brief and may be as short as a single question; therefore, they do not collect detailed information on the risk level, duration, or specific pattern of substance use.

- See guideline section on *Substance Use Screening for All Adult Patients in the Primary Care Setting*
- See *Table 1: Recommended Validated Tools for Use in Medical Settings to Screen for Alcohol and Drug Use in Adults*

| Box 1: Unhealthy Substance Use |
|--|
| <ul style="list-style-type: none"> • “Unhealthy substance use” refers to a spectrum of use that increases the risk of health consequences and ranges from hazardous or risky patterns of use to severe substance use disorder (SUD). • As defined here, unhealthy alcohol use is use that exceeds guideline-recommended levels; for illicit drugs, any use is considered potentially unhealthy. For prescription medications with potential for misuse, any nonmedical use (use of prescribed medication at increased dose or frequency or for reasons other than prescribed) or use of medications that were not prescribed is considered unhealthy. • Brief screening tools can identify potentially unhealthy use and can be followed by a risk assessment to determine the clinical significance and severity of use. |

Risk Assessment

Risk assessment is performed using brief assessment tools to collect information on the extent, duration, and pattern of an individual patient’s substance use. Assessment tools determine the level of risk (i.e., low, moderate, or high) and thus the potential for negative consequences (see *Box 2: Substance Use Levels of Risk*, below). This guideline recommends that clinicians use only validated questionnaires for risk assessment in patients who have a positive screening result or a history of SUD or overdose (see guideline section on *Risk Assessment*). As shown in *Figure 1: Substance Use Identification and Risk Assessment in Primary Care*, below, risk level and other individual patient factors guide clinicians in recommending appropriate interventions and informing patients about the potential consequences of their substance use [Saitz R. 2005; McNeely J, et al. 2016b].

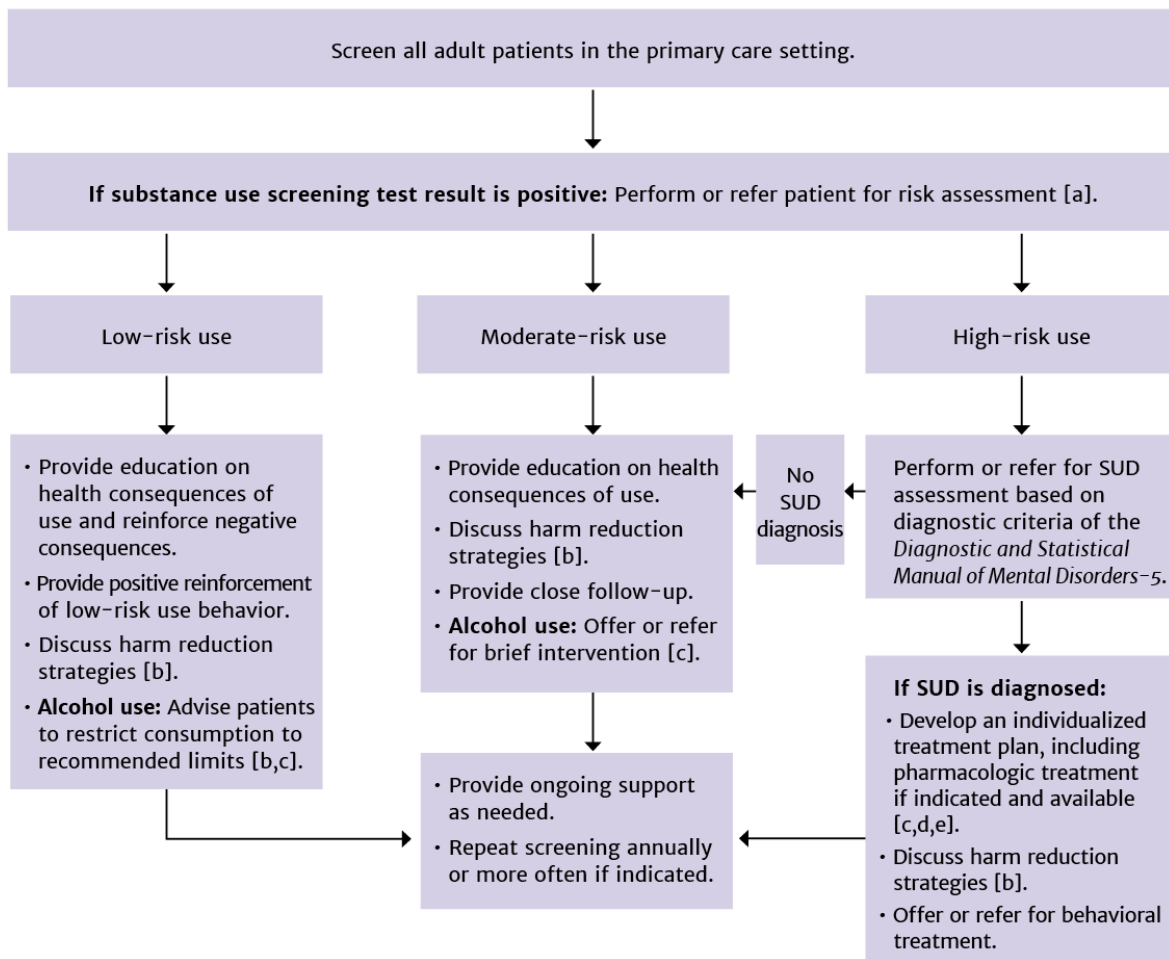
- See guideline section on *Risk Assessment*
- See *Table 2: Brief, Validated Risk Assessment Tools for Use in Medical Settings With Adults ≥18 Years Old*
- See guideline section on *Diagnosis of Substance Use Disorder*

Box 2: Substance Use Levels of Risk [a]

- **Low risk:** Patient is abstinent or uses substances in a way that is not currently associated with negative health consequences or other problems (e.g., alcohol consumption that does not exceed guideline-recommended levels or occasional cannabis use).
- **Moderate risk:** Patient is at risk for and may already be experiencing negative health consequences or other problems, such as elevated blood pressure related to alcohol use, atypical chest pain related to cocaine use, or family problems or poor work performance related to opioid use.
- **High risk:** Patient likely has an SUD, is likely experiencing substance-related health or other types of problems (e.g., alcohol use–related cirrhosis or consequences such as separation from family or loss of employment), and is engaging in continued or escalating use despite negative consequences.

a. Adapted from [Saitz R. 2005].

Figure 1. Substance Use Identification and Risk Assessment in Primary Care



Notes:

- a. For patients with a known history of SUD or overdose, screening may not be required but assessment is recommended.
- b. See the NYSDOH AI guideline *Harm Reduction Approach to Treatment of All Substance Use Disorders*.
- c. See the NYSDOH AI guideline *Treatment of Alcohol Use Disorder and Helping Patients Who Drink Too Much: A Clinician’s Guide* [NIAAA 2016].
- d. See the NYSDOH AI guideline *Treatment of Opioid Use Disorder*.
- e. See *A Clinical Practice Guideline for Treating Tobacco Use and Dependence: 2008 Update. A U.S. Public Health Service Report* [USPHS 2008].

Goals of Screening and Risk Assessment

In the United States, tobacco, alcohol, and other (e.g., illicit, nonmedical prescription) drug use are among the top 10 leading causes of preventable death, accounting for more than 500,000 deaths per year [GBDS 2018; White, et al. 2020]. Alcohol-related deaths have doubled in the past 2 decades; in 2017, there were more than 72,500 alcohol-related deaths in the United States [White, et al. 2020]. Increases in opioid use disorder and skyrocketing rates of drug overdose deaths (often opioid-related) are a public health crisis across the country [DHHS 2016; Rudd, et al. 2016; Dowell, et al. 2017; Wilson, et al. 2020].

Patient visits to healthcare settings are an opportunity for clinicians to identify substance use and related problems, offer timely interventions, and provide or link patients to treatment when indicated. Screening and treatment for tobacco use have been widely adopted as core clinical quality measures for primary care [CMS 2013], but alcohol and drug use screening is not as widely performed, and use is substantially under-recognized [Venkatesh and Davis 2000; WHO 2016]. Although screening for alcohol use has been a recommended practice in adult primary care since 1996 [Curry, et al. 2018], only 1 in 6 adults in the United States report ever discussing alcohol use with a healthcare professional [McKnight-Eily, et al. 2014].

Screening for substance use in primary care is generally well accepted by patients as a marker of quality care [Miller, et al. 2006; Simonetti, et al. 2015]. However, for patients and care providers to be comfortable, thoughtful implementation, with sensitivity to stigma and privacy concerns, is essential [McNeely J, et al. 2018; Bradley, et al. 2020] (see the NYSDOH AI guideline *Harm Reduction Approach to Treatment of All Substance Use Disorders > Reducing Stigma*).

The goals of screening for and assessing substance use in primary care vary by practice setting and resources and may include:

- **Informing medical care:** One goal is to inform a patient’s medical care. Substance use is an important aspect of medical history because it can significantly affect disease processes, response to treatment, and exposure to health risks. Knowledge of a patient’s substance use informs a care provider’s diagnosis of other medical and psychiatric conditions and alerts them to associated health risks (e.g., overdose, liver disease) and common comorbid conditions (e.g., depression). Similar to knowing about a patient’s past medical history, family history, or social determinants of health, knowing about a patient’s substance use helps care providers formulate effective patient-centered treatment plans.
- **Identifying the need for intervention:** A second goal is to identify patients who would benefit from interventions to reduce their consumption (see guideline section on *Management of Low-, Moderate-, and High-Risk Substance Use*) or patients who are candidates for substance use disorder treatment (see *Figure 1: Substance Use Identification and Risk Assessment in Primary Care*). Evidence-based interventions are available, including brief interventions for moderate-risk alcohol use, pharmacotherapy for opioid and alcohol use disorders, and treatment for smoking cessation [USPHS 2008; Jonas, et al. 2014; Mattick, et al. 2014; Curry, et al. 2018; Patnode, et al. 2020]. Such treatments can be delivered effectively in a primary care setting, but they remain underused.
 - See the NYSDOH AI guidelines *Treatment of Opioid Use Disorder* and *Treatment of Alcohol Use Disorder*.
- **Engaging patients:** Another goal is opening the conversation and engaging patients in discussion about substance use; if done with knowledge and sensitivity, this may reduce stigma, improve the patient–care provider relationship, and lead to behavior change. Initiating a discussion about substance use communicates to patients that it is a health issue, not a moral failing, and that their care provider is concerned enough about substance use to address it and offer help (see the NYSDOH AI guideline *Harm Reduction Approach for Treatment of All Substance Use Disorders > Reducing Stigma*).

→ KEY POINT

- It is essential that clinicians are aware of their own biases and try to set them aside when screening and evaluating patients for drug and alcohol use; see the NYSDOH AI guideline *Harm Reduction Approach for Treatment of All Substance Use Disorders > Reducing Stigma*.

Substance Use Screening for All Adult Patients in the Primary Care Setting

☑ RECOMMENDATIONS

Primary Care Screening for Adults

- During the initial visit and during annual follow-up visits, primary care clinicians should screen for the following in adults ≥ 18 years old:
 - Alcohol use, and when unhealthy use is identified, assess the level of risk to the patient. (A1)
 - Tobacco use, and when it is identified, provide assessment and counseling. (A1)
 - Drug use (B3), and when unhealthy use is identified, assess the level of risk to the patient. (A3)
 - See guideline section on *Risk Assessment*
- Before screening for drug use, clinicians should explain the risks and benefits of screening to all patients, especially those who are pregnant or planning to conceive; the discussion should include state reporting requirements and the potential for involvement of child protective services. (A3)
 - For information on the Child Abuse Prevention and Treatment Act (CAPTA) in New York State, see *Plans of Safe Care for Infants and their Caregivers*.
- Clinicians should repeat substance use screening to inform clinical care when:
 - Prescribing medication(s) that have adverse interactions with alcohol or drugs. (A2)
 - A patient has symptoms or medical conditions that could be caused or exacerbated by substance use. (A3)

→ KEY POINTS

- It is important to ask patients about substance use during an initial visit and during follow-up visits because patterns of use may change over time. Annual screening may be most appropriate, and most validated alcohol and drug screening questionnaires ask about use in the past year.
- It is important to inform patients that information about their substance use is protected by the same privacy laws that apply to all other information in their medical records.

Alcohol

In primary care settings, clinicians should screen all adult patients ≥ 18 years old for alcohol use. A large body of evidence indicates that screening tools can accurately identify unhealthy alcohol use (see *Table 1: Recommended Validated Tools for Use in Medical Settings to Screen for Alcohol and Drug Use in Adults*) and that brief counseling interventions can reduce alcohol use, improve health, and be cost-effective [Maciosek, et al. 2006; McNeely JD, et al. 2008; Solberg, et al. 2008; Kaner, et al. 2009; O'Donnell, et al. 2014; O'Connor, et al. 2018; Patnode, et al. 2020]. The National Committee on Quality Assurance adopted alcohol screening and brief intervention as a quality indicator in 2018 and incorporated it into the widely used *Healthcare Effectiveness Data and Information Set (HEDIS) performance measures*.

In the absence of systematic screening, unhealthy alcohol use typically goes unidentified [McKnight-Eily, et al. 2017] or is identified by healthcare providers only when an individual has developed a severe alcohol use disorder or alcohol-related health problems, such as alcohol-related cirrhosis or pancreatitis. In a study among individuals reporting current alcohol use, only 17.4% reported ever discussing their use with a health professional, and the rate was only modestly higher (25.4%) for those who reported binge drinking [McKnight-Eily, et al. 2017].

Tobacco

Clinicians should screen all patients for all types of tobacco use, and when it is identified, provide counseling, assessment, and treatment [USPHS 2008]. Every visit with a healthcare provider affords the opportunity to identify a patient's tobacco use and offer effective cessation interventions. Screening for tobacco use is often accomplished with 1 question: "Have

you ever smoked cigarettes or used any other kind of tobacco?” Patients who answer “yes” should be asked about frequency and level of use in the past 30 days (e.g., number of cigarettes smoked per day) [AHRQ 2014]. Despite concern about increasing rates of e-cigarette use, screening for electronic nicotine delivery systems is not currently a recommended practice [USPSTF 2020].

Drugs

Based on clinical experience and expertise, this *committee* recommends that clinicians screen for drug use in adult patients ≥ 18 years old who present for primary care. The decision to screen should consider the rationale and specific circumstances discussed below and should only be performed for the purpose of informing clinical care. Screening should identify a patient’s use of illicit drugs and nonmedical use of prescription drugs that can be misused (e.g., opioids, benzodiazepines, and stimulants).

Evidence supports the accuracy of validated screening questionnaires in adults [Patnode, et al. 2020]; however, data on the effectiveness of drug screening plus brief intervention to reduce drug use and associated health consequences are currently limited, and this is an area of active research. Randomized controlled clinical trials have generated mixed results regarding the efficacy of brief interventions in reducing drug use [Humenuik, et al. 2012; Roy-Byrne, et al. 2014; Saitz R., et al. 2014b; Gelberg, et al. 2015; Patnode, et al. 2020].

Evidence supports the benefits of pharmacologic treatment for opioid use disorder, which can be delivered effectively in primary care settings (see the NYSDOH guideline *Treatment of Opioid Use Disorder > Treatment Options*). However, no pharmacotherapy is currently approved by the U. S. Food and Drug Administration for other types of drug use disorders. Some patients with unhealthy use of drugs other than opioids will benefit from referral to addiction treatment or from psychosocial interventions integrated into primary care, but data on long-term outcomes of interventions in primary care settings are scarce, and many patients may not have access to evidence-based services [Chou, et al. 2019].

No currently published studies demonstrate harms associated with screening adult primary care patients for drug use, although the potential for harm does exist [Saitz R 2020]. For some patients, especially those who are pregnant or planning to conceive, positive results from a drug screening test could pose social or legal consequences, such as required reporting and the potential for involvement of child protective services (see discussion below). It is essential that care providers respect the sensitivity of any substance use information documented in patients’ health records and ensure that patients understand privacy protections for their health information.

Rationale for screening: This *committee’s* rationale for recommending drug use screening in adult patients, even with the potential for harm in some specific circumstances, is based on the following:

- Stigma is a significant barrier to identifying and treating unhealthy drug use or substance use disorders (SUDs). The exclusion of routine screening for drug use may perpetuate the perception that discussion of drug use with healthcare providers is taboo. This is especially the case if alcohol and tobacco use are discussed openly but drug use is not mentioned. Routine, matter-of-fact, nonjudgmental screening for drug use may help reduce stigma by normalizing this discussion.
- The social history that clinicians currently perform typically includes questions about alcohol, tobacco, and drug use but may not collect this information in a systematic and clinically useful manner. It is important that clinicians screen for drug use consistently, in a nonbiased manner, and use standardized, evidence-based screening tools.
- Opioid overdose deaths can be reduced through increased identification of unhealthy opioid use and, when indicated, effective treatment with medications for opioid use disorder [Cousins, et al. 2016; Sordo, et al. 2017; SAMHSA 2019].
- Identifying and addressing unhealthy drug use, including drug use disorders, may positively affect other patient outcomes. For instance, identification of nonmedical benzodiazepine use in a patient receiving opioids for chronic pain could inform overdose prevention counseling, opioid prescribing, and provision of naloxone to reduce the patient’s overdose risk.
- Knowledge of a patient’s drug use is essential for accurate diagnosis and treatment. For example, in a patient who uses cocaine, chest pain could be the result of drug use rather than a blocked coronary artery, but without knowledge of the drug use, the healthcare provider will not have the information necessary to perform the appropriate diagnostic work-up. In addition, knowledge of drug use may be essential for an accurate diagnosis of psychiatric disorders, and knowledge of injection drug use can help guide screening for infections.

→ KEY POINT

- Urine toxicology, measures of blood alcohol level, and other laboratory tests should not be relied on for identifying unhealthy drug use.

Screening in individuals who are pregnant or planning to conceive: Because there are potential legal and social consequences of a positive drug use screening result in individuals who are pregnant or planning to conceive, this *committee* urges caution when performing drug use screening. It is essential to engage patients in shared and informed decision-making *before* screening is performed. Fully informed consent includes clear discussion and confirmed patient understanding of the potential harms, consequences, and benefits of screening. For patients who are pregnant or planning to conceive, the informed consent discussion should include:

- Description of drug screening processes and procedures.
- Potential benefits of drug screening for the patient.
- Discussion of how results are interpreted and likely next steps if the screening result is positive.
- Confirmation of confidentiality of the patient’s medical information.
- Description of the *CAPTA law and legal requirements* for healthcare providers when screening results are positive.
- Discussion of the patient’s ability to refuse drug screening without repercussions, except in cases in which screening is mandated by an employer or by the court.
- Psychosocial support and counseling about potential harms of drugs and treatment options for SUD, if patients decline to be screened for other drugs.

Repeat screening to inform clinical care in individual patient circumstances: Iatrogenic harm is possible if a patient’s drug use is not identified, including adverse effects resulting from drug-medication interactions, overdose from combining prescribed medications with illicit drugs, and withdrawal syndromes when a patient’s drug use is undisclosed and they are unable to use, such as during hospitalization [Antoniou and Tseng 2002; CDC 2007; Lindsey, et al. 2012].

Clinicians should repeat substance use screening in patients who have symptoms or other medical conditions that could be caused or exacerbated by substance use, such as chest pain, liver disease, or mood disorders [Lock and Kaner 2004; Mertens, et al. 2005; Ries, et al. 2014; Edelman and Fiellin 2016; Kim, et al. 2016; NIAAA 2016].

Screening is also recommended for patients who use medications that have adverse interactions with alcohol or drugs and for patients who engage in known risk behaviors, such as unprotected sex, that may co-occur with substance use [Rehm, et al. 2012; Scott-Sheldon, et al. 2016; McKetin, et al. 2018; Maxwell, et al. 2019]. Patients taking prescription opioids or benzodiazepines should be screened for use of alcohol and for illicit or nonmedical use of other sedating drugs (including other opioids or benzodiazepines) that can increase the risk of overdose. Patients taking any controlled substances should be assessed for co-occurring substance use that may increase the probability of engaging in risky use of prescribed medications or of having or developing an SUD. Specific assessment tools (e.g., *Opioid Risk Tool*, *Current Opioid Misuse Measure*) have been developed to predict and evaluate prescription opioid misuse among patients receiving chronic opioid therapy, but discussion of these tools is beyond the scope of this guideline. Care providers should be aware of potential interactions between alcohol or drugs and medications, such as antiretroviral, pain management, or neurologic medications (e.g., gabapentin and pregabalin) [Antoniou and Tseng 2002; Saitz R. 2005; Bruce, et al. 2008; Lindsey, et al. 2012; Gomes, et al. 2017; Lyndon, et al. 2017]. When counseling patients who use substances about drug-medication interactions, care providers should be clear about the safety of their prescribed medications and be certain to encourage adherence to all critical medications, such as antiretroviral treatment [Kalichman, et al. 2015].

See the following resources for checking drug interactions:

- [Drugs.com > Drug Interactions Checker](#)
- [University of Liverpool HEP Drug Interactions Checker](#)
- [University of Liverpool HIV Drug Interactions Checker](#)
- [Consensus validation of the POSAMINO \(POtentially Serious Alcohol–Medication INTERactions in Older adults\) criteria](#) [Holton, et al. 2017]
- [NYSDOH AI ART Drug-Drug Interactions](#)
- For patients: [National Institute on Alcohol Abuse and Alcoholism > Harmful Interactions: Mixing Alcohol With Medicines](#)

Implementing Substance Use Screening in Primary Care Settings

- **Who to screen:** All adults seen by primary care providers should be screened for substance use. Some specific patient populations may have higher rates of unhealthy substance use [Schulden, et al. 2009; SAMHSA 2019], but there are no specific demographic characteristics that reliably predict such use.
- **How often to screen:** Because substance use behavior changes over time, care providers should repeat screening at regular intervals. However, evidence is lacking about the optimal frequency of screening [Moyer 2013]. Annual screening may strike the best balance between the need for frequent repetition of screening and time and resource constraints and has been recommended by an expert panel convened by the National Council for Behavioral Health and Substance Abuse and Mental Health Services Administration (SBIRT Change Guide, February 2018) [SAMHSA 2018].
- **Who should perform the screening:** Most of the screening instruments discussed in *Table 1: Recommended Validated Tools for Use in Medical Settings to Screen for Alcohol and Drug Use in Adults* can be administered verbally by trained staff or can be self-administered by patients on paper or on a computer. Primary care practices must choose the format that is most appropriate for their clinical workflow and patient population. Generally, self-administered screening facilitates more accurate reporting of stigmatized behavior, such as substance use [Tourangeau and Smith 1996; Wight, et al. 2000]. A self-administered approach may ensure fidelity of administration [Bradley, et al. 2011; Williams, et al. 2015], increase patient comfort [Spear, et al. 2016; McNeely J, et al. 2018], and reduce the burden on staff. Electronic screening tools that can be self-administered can be completed online through a patient portal or an app made available with a tablet computer or kiosk in the clinic, with results uploaded to a patient’s electronic health record.
- **How to introduce substance use screening to patients:** Explain the reasons for screening, the type of screening that will be performed, the potential benefits, and any potential harms. Make sure that patients understand how results will be interpreted and the likely response to screening results. Remind them of the privacy protections for the information being collected, including who will see the information; acknowledge the potential sensitivity of the information; and avoid judgmental or stigmatizing language [NIDA 2012].

Screening Tools

RECOMMENDATION

Screening Tools

- Healthcare providers should use standardized and validated questionnaires for substance use screening (see *Table 1: Recommended Validated Tools for Use in Medical Settings to Screen for Alcohol and Drug Use in Adults*). (A3)

Successful substance use screening relies on accurate patient self-report. Although urine toxicology, measures of blood alcohol level, or other laboratory testing may detect the presence of substances used very recently, (typically hours or ≤4 days after the last use), these tests are not appropriate for identifying unhealthy use, which may be intermittent and occur over time [Verstraete 2004; Cone and Huestis 2007; Bosker and Huestis 2009]. Laboratory screening tests for alcohol and drugs do not provide information about the severity or consequences of use, and thus provide less information than questionnaires.

There is no reliable biomarker with sufficient sensitivity and specificity to identify the range of drinking behaviors that constitute unhealthy alcohol use [Neumann and Spies 2003; Verstraete 2004; Jatlow, et al. 2014; Stewart, et al. 2014; Afshar, et al. 2017; Jarvis, et al. 2017]. For drug use, urine, saliva, and blood testing are not recommended as replacements for questionnaire-based screening because laboratory tests have a brief window of detection (typically 1 to 4 days) [Verstraete 2004; Cone and Huestis 2007; Bosker and Huestis 2009]. Although hair testing has a more extended detection period, the cost and lack of reliability for detecting occasional drug use decrease its utility in primary care [Verstraete 2004].

| Table 1: Recommended Validated Tools for Use in Medical Settings to Screen for Alcohol and Drug Use in Adults | | |
|---|---|--|
| Tool [a], References | Substance(s) Included | No. of Items, Approximate Time Required to Complete, and Format |
| <i>AUDIT-C</i> (Alcohol Use Disorders Identification Test–Concise) [Bush, et al. 1998; Bradley, et al. 2007] • Available in languages other than English | Alcohol | <ul style="list-style-type: none"> • 3 items; 1 to 2 minutes • Interviewer or self-administered via electronic app or on paper |
| <i>SISQ-Alc</i> (Single-Item Screening Questions for Alcohol) [Smith, et al. 2009; McNeely J, et al. 2015a] | Alcohol | <ul style="list-style-type: none"> • 1 item; 1 minute • Interviewer or self-administered via electronic app or on paper |
| <i>SISQ-Drug</i> (Single-Item Screening Questions for Drug Use) [Smith, et al. 2010; McNeely J, et al. 2015a] | Prescription drugs, other drugs | <ul style="list-style-type: none"> • 1 item; 1 minute • <i>Interviewer-</i> or <i>self-</i>administered via electronic app or on paper |
| <i>SoDU</i> (Screen of Drug Use) [Tiet, et al. 2015] | Prescription drugs, other drugs | <ul style="list-style-type: none"> • 2 items; 1 minute • Interviewer |
| <i>SUBS</i> (Substance Use Brief Screen) [McNeely J and Saitz 2015] | Tobacco, alcohol, prescription drugs, other drugs | <ul style="list-style-type: none"> • 4 items; 2 minutes • Interviewer or self-administered via electronic app or on paper |
| <i>TAPS-1</i> (Tobacco, Alcohol, Prescription Medication, and Other Substance Use) [Gryczynski, et al. 2017] | Tobacco, alcohol, prescription drugs, other drugs | <ul style="list-style-type: none"> • 4 items; 2 minutes • Interviewer or self-administered via electronic app |
| a. For information on the sensitivity and specificity of tools for drug screening, please see the U.S. Preventive Services Task Force (USPSTF) evidence review <i>Unhealthy Drug Use: Screening</i> ; for information on the sensitivity and specificity for alcohol screening, see <i>Screening and Behavioral Counseling Interventions to Reduce Unhealthy Alcohol Use in Adolescents and Adults: An Updated Systematic Review for the USPSTF</i> . | | |

→ KEY POINT

- Whenever possible, it is best to have patients self-administer the screening and assessment questionnaires rather than having the clinician or staff ask the questions. In general, self-administered screening facilitates more accurate reporting of stigmatized behavior, such as substance use [Tourangeau and Smith 1996; Wight, et al. 2000; Bradley, et al. 2011; Williams, et al. 2015; Spear, et al. 2016; McNeely J, et al. 2018].

An optimal screening instrument will quickly and accurately identify individuals with the full spectrum of unhealthy use, fit into the existing clinical workflow, and have flexible administration options (i.e., self- or interviewer-administered). To facilitate patient report of substance use, the language used in any screening tool should be clear and nonjudgmental. Drug screening should capture nonmedical prescription drug use and illicit drug use. *Table 1: Recommended Validated Tools for Use in Medical Settings to Screen for Alcohol and Drug Use in Adults*, above, lists recommended substance use screening tools.

The briefest approach to screening may be to use the Single-Item Screening Questions (SISQ) for alcohol or drug use (SISQ-Alc and -Drug). SISQ tools are validated for interviewer administration or self-administration and have good sensitivity and specificity. A positive response on SISQ tools identifies unhealthy use in the past year but does not indicate the level of risk. Both the Substance Use Brief Screen (SUBS) and the first section of the Tobacco, Alcohol, Prescription Medication, and Other Substance Use (TAPS-1) tool elicit information about use of tobacco, alcohol, illicit drugs, and nonmedical prescription drugs through a single 4-item instrument. Like the SISQ-Alc and -Drug, the SUBS and TAPS-1 tools screen for any use in the past year, and a positive response indicates unhealthy use but does not identify level of risk.

In some circumstances, the purpose of screening may be to diagnose substance use disorder rather than identify unhealthy drug use. For example, if the clinical setting cannot offer early intervention or preventive care, screening may be used to identify individuals in need of referral to addiction treatment. In such cases, the Screen of Drug Use (SoDU) tool, which specifically identifies drug use disorders, may be used. The SoDU was validated using *Diagnostic and Statistical*

Manual of Mental Disorders–IV (DSM-IV) criteria, and a positive screen corresponds to a *DSM-IV* diagnosis of “drug abuse or dependence.”

Alcohol: The briefest alcohol screening questionnaires (SISQ-Alc, TAPS-1, SUBS) use a single question about binge drinking in the past year to identify unhealthy alcohol use. Although it is possible for patients to use more alcohol than the recommended limits in the *U.S. Department of Health and Human Services and Department of Agriculture Dietary Guidelines* (14 drinks/week for men ≤65 years old, 7 drinks/week for women and men ≥65 years old), even in the absence of binge drinking, validation studies have demonstrated good sensitivity [NIAAA 2016; DHHS 2020]. The 3-item Alcohol Use Disorders Identification Test–Concise (AUDIT-C) is a widely used and recommended brief screening tool for alcohol use in medical settings [Bush, et al. 1998; Bradley, et al. 2003; Bradley, et al. 2007; Reinert and Allen 2007; Frank, et al. 2008; Moyer 2013]. Unlike the other brief screening tools, the AUDIT-C identifies the level of risk to patients with problem use and high-risk use. The AUDIT-C does not screen for tobacco or drugs.

Tobacco: Tobacco use is incorporated into some of the brief screening instruments (SUBS, TAPS-1) included in *Table 1: Recommended Validated Tools for Use in Medical Settings to Screen for Alcohol and Drug Use in Adults*, above. The accuracy of SUBS and TAPS-1 tools for identifying tobacco use is high, with a sensitivity of 98% and a specificity ranging from 80% to 96% [McNeely J, et al. 2015b; Gryczynski, et al. 2017]. Use of a single instrument that concurrently screens for tobacco and alcohol use will streamline the screening process.

Drugs: Screening for drug use can be performed with the SISQ-Drug, SUBS, or TAPS-1 tools, all of which perform well in validation studies of adults in primary care settings [McNeely J, et al. 2015a; McNeely J, et al. 2015b; McNeely J, et al. 2016b; Gryczynski, et al. 2017]. With changes in the legal status of cannabis and shifting attitudes toward cannabis use, clinics should provide patients and staff with clear instructions about reporting cannabis use on questionnaires that categorize cannabis as an illicit drug [Lapham, et al. 2017]. In states where cannabis is legal, it may be best to ask about its use separately from illicit drugs [Sayre, et al. 2020].

Risk Assessment

RECOMMENDATIONS

Risk Assessment

- Clinicians should assess the level of substance use risk in individuals who have a positive substance use screening result or a history of substance use disorder (SUD) or overdose. (A3)
- Clinicians should use standardized and validated tools to assess the level of risk associated with substance use (see *Table 2: Brief, Validated Risk Assessment Tools for Use in Medical Settings With Adults ≥18 Years Old*). (A3)

Candidates for Risk Assessment

Clinicians should use validated tools to perform substance use assessment in individual patients who have any of the characteristics discussed below. The purpose of assessment is to identify the level of risk (low, moderate, or high) posed by a patient’s substance use to guide clinical decisions about intervention, treatment, and follow-up (see *Figure 1: Substance Use Identification and Risk Assessment in Primary Care*).

Positive substance use screening test: Given current levels of substance use in the general population and the negative effects of unhealthy substance use, any positive screening test result should prompt an efficient and accurate risk assessment [McNeely J, et al. 2015a; McNeely J, et al. 2015b].

Known history of SUD or overdose: Polysubstance use is common in people with SUD [Earleywine and Newcomb 1997; McLellan, et al. 2000; Falk, et al. 2006; Callaghan, et al. 2018]. For patients with a history of SUD, identification of all substances used, including tobacco, and assessment of the associated levels of risk are indicated for early intervention and clinical decision-making. SUDs are chronic conditions, and even patients with long periods of abstinence remain vulnerable to resuming previous patterns of use [McLellan, et al. 2000]. Patients with a history of SUD may reduce or stop use of one substance but develop unhealthy use of a different substance (e.g., alcohol) [Earleywine and Newcomb 1997; Falk, et al. 2006; Wang, et al. 2017; Callaghan, et al. 2018; Lin, et al.]. Furthermore, overdose is frequently the result of polysubstance use, often involving use of opioids in combination with alcohol and other drugs [Tori, et al. 2020]. In

patients with a history of nonfatal overdose, it is critically important to conduct an assessment and identify all of the substances being used; the results will guide education and treatment to reduce the risk of another overdose.

The level of risk of associated with substance use in individuals who are planning to become pregnant should inform counseling, particularly in light of the risk of fetal alcohol spectrum disorder that occurs early in pregnancy [CDC 2003; DHHS 2005; Floyd, et al. 2006; Floyd, et al. 2008; Stade, et al. 2009; Moyer 2013; May, et al. 2018]. In addition, it is reasonable to perform a substance use assessment in patients with chronic diseases who have poor adherence to treatment recommendations or are not responding as expected to treatment of their medical condition [Daskalopoulou, et al. 2014; Garin, et al. 2017].

Risk Assessment Tools

Substance use assessment tools are designed to collect information on the quantity, frequency, and duration of substance use and to indicate a risk level (see *Table 2*, below).

| Table 2: Brief, Validated Risk Assessment Tools for Use in Medical Settings With Adults ≥18 Years Old [a] | | |
|---|---|---|
| Tool [a], References | Substance(s) Included | No. of Items, Approximate Time Required to Complete, and Format |
| <i>ASSIST</i> (Alcohol, Smoking, and Substance Involvement Screening Test) [Humenuik, et al. 2008] • Available in languages other than English | Tobacco, alcohol, prescription drugs, other drugs; identifies specific drug classes | <ul style="list-style-type: none"> • 10 to 71 items; 5 to 15 minutes, depending on no. of substances used • Interviewer administered |
| <i>ACASI-ASSIST</i> (Audio Computer-Assisted Self-Interview–ASSIST) [Kumar, et al. 2016; McNeely J, et al. 2016a] | Tobacco, alcohol, prescription drugs, other drugs; identifies specific drug classes | <ul style="list-style-type: none"> • 10 to 98 items; 5 to 15 minutes, depending on no. of substances used • Self-administered on computer/tablet |
| AUDIT (Alcohol Use Disorders Identification Test) [Reinert and Allen 2007] • Available in languages other than English | Alcohol | <ul style="list-style-type: none"> • 10 items; 3 minutes • <i>Interviewer-</i> or <i>self-</i>administered |
| <i>DUDIT</i> (Drug Disorders Identification Test) [Berman AH, et al. 2003; Hildebrand 2015] • Available in languages other than English | All drugs; does not identify drug classes | <ul style="list-style-type: none"> • 11 items; 5 minutes • Interviewer or self-administered on paper |
| <i>DAST-10</i> (Drug Abuse Screening Test) [Skinner 1982; Yudko, et al. 2007] • Available in languages other than English | All drugs; does not identify drug classes | <ul style="list-style-type: none"> • 10 items; 10 minutes or less • Interviewer or self-administered on paper |
| <i>TAPS</i> (Tobacco, Alcohol, Prescription Medication, and Other Substance Use) [McNeely J, et al. 2016b; Adam, et al. 2019] | Tobacco, alcohol, prescription drugs, other drugs; identifies specific drug classes | <ul style="list-style-type: none"> • 4 to 25 items; 2 to 4 minutes, depending on no. of substances used • Interviewer or self-administered on computer/tablet |
| a. Clinicians with experience in treating patients with substance use and substance use disorder may choose to use <i>Diagnostic and Statistical Manual of Mental Disorders–5 diagnostic criteria</i> as the initial assessment tool. | | |

Alcohol use: To assess level of risk in patients who use alcohol, clinicians can use the Alcohol Use Disorders Identification Test (AUDIT) or the AUDIT-Concise (AUDIT-C) tool, both of which have been widely adopted in medical settings [Bradley, et al. 2003; NIAAA 2005; Bradley, et al. 2007; Reinert and Allen 2007]. The AUDIT is a 10-item questionnaire developed by the World Health Organization (WHO) for alcohol use screening in medical settings. The AUDIT-C consists of the first 3 items of the AUDIT, which asks only about alcohol consumption. Although the full AUDIT is still widely used, the 3-item AUDIT-C performs as well as the full 10-item AUDIT instrument for identifying risky use and problem use in studies conducted among primary care patients in the United States [Bradley, et al. 2007]. However, use of the full AUDIT provides expanded information about problems related to alcohol use that may be helpful for care providers offering brief interventions or other alcohol counseling.

Tobacco use: For patients who use tobacco, assessment of health risks is typically accomplished by asking about the number of cigarettes smoked per day. The 2-item *Heaviness of Smoking Index*, which asks about total cigarettes per day and the timing of the first cigarette, can determine the level of dependence for daily smokers.

Drug use: For assessment of drug use, which can involve multiple substance classes with varying levels of risk, the instruments are by necessity more complex. The WHO Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) was one of the first screening tools designed for use in healthcare settings to provide substance-specific risk stratification for drugs. Its length and complexity have hindered its implementation in primary care settings [Babor, et al. 2007; Ali, et al. 2013], but a self-administered electronic version may be more feasible [McNeely, et al. 2016a].

The more recently developed Tobacco, Alcohol, Prescription Medication, and Other Substance Use (TAPS) tool streamlines the ASSIST to perform this assessment relatively quickly and still supply substance-specific information about the level of risk. Scores range from 0 to 4, with higher scores indicating greater severity. The TAPS tool was specifically developed for adult primary care and is recommended for use in general medical settings to screen for opioid and other substance use [SAMHSA 2018a]. It is validated in an electronic, patient self-administered format (myTAPS) [Adam, et al. 2019] and a more traditional interviewer-administered questionnaire. An online version of the TAPS tool with clinical guidance on interpreting the scores and resources for intervention is available on the *National Institute on Drug Abuse TAPS* website.

Management of Low-, Moderate-, and High-Risk Substance Use

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Assessment with validated tools can characterize the level of risk as low, moderate, or high (see *Figure 1: Substance Use Identification and Risk Assessment in Primary Care* and *Table 2: Brief, Validated Risk Assessment Tools for Use in Medical Settings With Adults ≥18 Years Old*). Intervention options for substance use are determined by the level of risk identified in the assessment process, an individual's perception of the problem, and time restrictions, among other factors. Individuals with unhealthy substance use regularly interact with the healthcare system, and primary care settings are optimally positioned to offer prevention and treatment interventions. All clinicians can develop the skills to offer treatment or refer patients for appropriate interventions [Edelman and Fiellin 2016; McLellan 2017].

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Harm reduction strategies should be discussed with individuals who engage in substance use at all risk levels; see the NYSDOH AI guideline *Harm Reduction Approach to Treatment of All Substance Use Disorders > Box 2: Harm Reduction Counseling in the Medical Setting*.

Clinical resources for addressing tobacco use include the New York State Department of Health *Information about Tobacco Use, Smoking and Secondhand Smoke*, the New York City Department of Health and Mental Hygiene publication *Treating Tobacco Addiction*, and the American Academy of Family Physicians table of *FDA-Approved Medications for Smoking Cessation*. For patients who use any type of tobacco, the *U.S. Public Health Service Clinical Practice Guideline for Treating Tobacco Use and Dependence: 2008 Update* recommends the “5 As” approach as an intervention:

1. **Ask** patients about tobacco use.
2. **Advise** tobacco users to quit.
3. **Assess** willingness to quit.
4. **Assist** in a quit attempt.
5. **Arrange** for follow-up.

For individuals with low-risk use of any substance, clinicians can offer positive reinforcement and reminders of the negative consequences of use. For individuals who use alcohol, clinicians can provide information on the recommended limits of use; see the *U.S. Department of Health and Human Services and Department of Agriculture Dietary Guidelines* [DHHS 2020]. Robust evidence supports the efficacy of screening and brief interventions in the primary care setting for reducing alcohol use among individuals with unhealthy use who do not meet criteria for alcohol use disorder [Jonas, et al. 2012; Curry, et al. 2018]. Studies on the efficacy of brief interventions in reducing drug use have found mixed results [Humeniuk, et al. 2012; Roy-Byrne, et al. 2014; Saitz R., et al. 2014b; Gelberg, et al. 2015]; however, brief interventions are recommended by the Substance Abuse and Mental Health Services Administration and have been implemented in many healthcare settings with no evidence of harm [SAMHSA 2018]. If an individual has high-risk substance use, it is essential to perform or refer for a full diagnostic substance use disorder assessment using the *Diagnostic and Statistical Manual of Mental Disorders–5 criteria* (see guideline section on *Diagnosis of Substance Use Disorder*).

Brief interventions: Brief interventions range from 5 to 20 minutes in duration, vary in frequency, and include a variety of components based on different psychological and motivational approaches. Common elements of a brief intervention include discussion of the risks and benefits of substance use as perceived by the patient, individualized feedback regarding level of risk, advice on reducing use to within recommended safe limits, discussion of any related health effects, and motivational support (see *Figure 2: Brief Intervention: “Can We Spend a Few Minutes Talking About Your Substance Use?”*, below). A commonly used acronym is *FRAMES: Feedback, Responsibility, Advice, Menu Options, Empathy, and Self-Efficacy*. The time available for an intervention and the individual’s level of engagement and motivation for change often determine the duration, type, and frequency of brief interventions.

For further information and resources, see the NYSDOH AI guideline *Treatment of Alcohol Use Disorder > Non-Pharmacological Treatment > Online Resources: Behavioral Therapy for Alcohol Use Disorder*.

Figure 2: Brief Intervention: “Can We Spend a Few Minutes Talking About Your Substance Use?” [a]



[a] Adapted from [Yale 2017]. See the full guideline for citations.

Diagnosis of Substance Use Disorder

Lead authors: Susan D. Whitley, MD,⁴ and Alan Rodriguez Penney, MD,⁵ with the Substance Use Disorder Guideline Committee, October 2020

☑ RECOMMENDATIONS

Diagnosis of Substance Use Disorder

- For accurate diagnosis of a substance use disorder (SUD) and its severity, clinicians should perform or refer patients for a full assessment based on *Diagnostic and Statistical Manual of Mental Disorders–5 (DSM-5)* criteria. (A3)
- Clinicians should assess patients’ perceptions of their substance use and readiness to change substance use behaviors. (A3)
- If individuals present with symptoms consistent with both an SUD and a mental health disorder, clinicians should assess for both types of disorder before making a diagnosis and should refer for specialty behavioral healthcare when indicated. (A3)

Healthcare providers should perform or refer patients for a full assessment based on *DSM-5 diagnostic criteria* to accurately diagnose an SUD [APA 2013] (see *Table 3: DSM-5 Diagnostic Criteria for Diagnosing and Classifying Substance Use Disorders*, below). The *DSM-5* criteria can accurately diagnose the SUD and its severity—mild, moderate, or severe—and the assessment can be performed by the clinician or experienced staff. If expertise or resources are limited, then clinicians may refer the patient to a care provider who can perform the full assessment. Clinicians experienced in assessing and treating SUD may elect to use the *DSM-5* criteria as the initial assessment tool.

To enhance patient engagement and increase the possibility that a patient will follow through with the care plan, interventions must be tailored to match an individual’s perception of the problem and their readiness to change [DHHS 1997; VA/DoD 2015; NIAAA 2016]. Based on clinical experience, the diagnostic process is an opportunity to build rapport; explore a patient’s attitudes toward substance use and treatment; dispel any misconceptions about treatment, particularly pharmacologic treatment; and engage patients in care.

Patients often present with concurrent substance use and mental health disorders, and symptoms of one can mimic the other, which can complicate diagnosis and make it more challenging [SAMHSA 2019]. Clinicians should consider a diagnosis of SUD before establishing a primary psychiatric diagnosis (e.g., consider alcohol-induced depressive disorder before diagnosing a major depressive disorder). Symptoms of intoxication, such as depressed or elevated mood or perceptual disturbances, and symptoms of withdrawal, such as depression, anxiety, and insomnia, can also mimic psychiatric symptoms and should be carefully assessed.

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| Table 3: DSM-5 Diagnostic Criteria for Diagnosing and Classifying Substance Use Disorders [a,b,c] | |
|--|--|
| Criteria Type | Descriptions |
| Impaired control over substance use (DSM-5 criteria 1 to 4) | <ul style="list-style-type: none"> • Consuming the substance in larger amounts and for a longer amount of time than intended. • Persistent desire to cut down or regulate use. The individual may have unsuccessfully attempted to stop in the past. • Spending a great deal of time obtaining, using, or recovering from the effects of substance use. • Experiencing craving, a pressing desire to use the substance. |
| Social impairment (DSM-5 criteria 5 to 7) | <ul style="list-style-type: none"> • Substance use impairs ability to fulfill major obligations at work, school, or home. • Continued use of the substance despite it causing significant social or interpersonal problems. • Reduction or discontinuation of recreational, social, or occupational activities because of substance use. |
| Risky use (DSM-5 criteria 8 and 9) | <ul style="list-style-type: none"> • Recurrent substance use in physically unsafe environments. • Persistent substance use despite knowledge that it may cause or exacerbate physical or psychological problems. |
| Pharmacologic (DSM-5 criteria 10 and 11) | <ul style="list-style-type: none"> • Tolerance: Individual requires increasingly higher doses of the substance to achieve the desired effect, or the usual dose has a reduced effect; individuals may build tolerance to specific symptoms at different rates. • Withdrawal: A collection of signs and symptoms that occurs when blood and tissue levels of the substance decrease. Individuals are likely to seek the substance to relieve symptoms. No documented withdrawal symptoms from hallucinogens, PCP, or inhalants. • Note: Individuals can have an SUD with prescription medications, so tolerance and withdrawal (criteria 10 and 11) in the context of appropriate medical treatment do <i>not</i> count as criteria for an SUD. |
| <p>Abbreviations: DSM-5, <i>Diagnostic and Statistical Manual of Mental Disorders–5</i>; PCP, phencyclidine; SUD, substance use disorder.</p> <p>Notes:</p> <p>a. Adapted from [APA 2013].</p> <p>b. SUDs are classified as mild, moderate, or severe based on how many of the 11 criteria are fulfilled: mild, any 2 or 3 criteria; moderate, any 4 or 5 criteria; severe, any 6 or more criteria.</p> <p>c. Please consult the <i>DSM-5</i> for substance-specific diagnostic information.</p> | |

All Recommendations

All RECOMMENDATIONS

Primary Care Screening for Adults

- During the initial visit and during annual follow-up visits, primary care clinicians should screen for the following in adults ≥ 18 years old:
 - Alcohol use, and when unhealthy use is identified, assess the level of risk to the patient. (A1)
 - Tobacco use, and when it is identified, provide assessment and counseling. (A1)
 - Drug use (B3), and when unhealthy use is identified, assess the level of risk to the patient. (A3)
 - See guideline section on *Risk Assessment*
- Before screening for drug use, clinicians should explain the risks and benefits of screening to all patients, especially those who are pregnant or planning to conceive; the discussion should include state reporting requirements and the potential for involvement of child protective services. (A3)
 - For information on the Child Abuse Prevention and Treatment Act (CAPTA) in New York State, see *Plans of Safe Care for Infants and their Caregivers*.
- Clinicians should repeat substance use screening to inform clinical care when:
 - Prescribing medication(s) that have adverse interactions with alcohol or drugs. (A2)
- A patient has symptoms or medical conditions that could be caused or exacerbated by substance use. (A3)

Screening Tools

- Healthcare providers should use standardized and validated questionnaires for substance use screening (see *Table 1: Recommended Validated Tools for Use in Medical Settings to Screen for Alcohol and Drug Use in Adults*). (A3)

Risk Assessment

- Clinicians should assess the level of substance use risk in individuals who have a positive substance use screening result or a history of substance use disorder (SUD) or overdose. (A3)
- Clinicians should use standardized and validated tools to assess the level of risk associated with substance use (see *Table 2: Brief, Validated Risk Assessment Tools for Use in Medical Settings With Adults ≥ 18 Years Old*). (A3)

Diagnosis of Substance Use Disorder

- For accurate diagnosis of a substance use disorder (SUD) and its severity, clinicians should perform or refer patients for a full assessment based on *Diagnostic and Statistical Manual of Mental Disorders–5 (DSM-5)* criteria. (A3)
- Clinicians should assess patients' perceptions of their substance use and readiness to change substance use behaviors. (A3)
- If individuals present with symptoms consistent with both an SUD and a mental health disorder, clinicians should assess for both types of disorder before making a diagnosis and should refer for specialty behavioral healthcare when indicated. (A3)

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Expanding the Definition of Addiction: DSM-5 vs. ICD-11

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Abstract

While considerable efforts have been made to understand the neurobiological basis of substance addiction, the potentially ‘addictive’ qualities of repetitive behaviors, and whether such behaviors constitute ‘behavioral addictions’, is relatively neglected. It has been suggested that some conditions, such as gambling disorder, compulsive stealing, compulsive buying, and compulsive sexual behavior, and problem internet use, have phenomenological and neurobiological parallels with substance use disorders. This review considers how the issue of ‘behavioral addictions’ has been handled by latest revisions of the Diagnostic and Statistical Manual (DSM) and International Classification of Disease (ICD), leading to somewhat divergent approaches. We also consider key areas for future research in order to address optimal diagnostic classification and treatments for such repetitive, debilitating behaviors.

Introduction

The field of addictions has undergone dramatic changes in recent years. In 2001, Constance Holden wrote an article for *Science* discussing the concept of ‘behavioral addictions’¹, and since that time, the issue of how best to conceptualize addictions and what to include under the umbrella of addiction has been the focus of considerable research attention.^{2–5} Not surprisingly, both the Diagnostic and Statistical Manual, 5th Edition (DSM-5) and International Classification of Disease, 11th Edition (ICD-11) have attempted to address the nosological issue of whether ‘addiction’ should be enlarged to include not just psychoactive substances, but also types of behavior; and if so, what types of behavior should be included. This opinion article will review the DSM-5 and proposed ICD-11 changes to the category of substance use disorders and how each has handled the concept of behavioral addictions. In addition, this article will suggest some ideas for future research considerations in this field.

The 5th Edition of the Diagnostic and Statistical Manual (DSM-5)

As compared to DSM-IV, the DSM-5’s chapter on addictions was changed from “Substance-Related Disorders” to “Substance-Related and Addictive Disorders” to reflect developing understandings regarding addictions.⁶ The DSM-5 specifically lists nine types of substance

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addictions within this category (alcohol; caffeine; cannabis; hallucinogens; inhalants; opioids; sedatives, hypnotics, and anxiolytics; stimulants; and tobacco). These disorders are presented in separate sections, but they are not fully distinct because all drugs taken in excess activate the brain's reward circuitry, and their co-occurrence is common.

An important departure for DSM-5 from its predecessors was the inclusion of gambling disorder in the chapter on Substance-Related and Addictive Disorders. Gambling disorder was formerly listed as pathological gambling in the section on impulse control disorders not elsewhere classified. Gambling disorder was relocated because of evidence showing similarities in phenomenology and biology to substance use disorders.⁵ For example, many people with gambling disorder report an urge or craving state prior to gambling, as do individuals with substance addictions; gambling often decreases anxiety and results in a positive mood state or "high", similar to substance intoxication; and emotional dysregulation often contributes to gambling cravings just as with alcohol or drug cravings. In addition, there are unusually high rates of co-occurrence between gambling disorder and substance use disorders.^{5,7–8} In clinical samples, around 50% of participants with gambling disorder report substance abuse, and up to 63% of individuals seeking treatment for gambling disorder screen positive for lifetime substance use disorder. Some evidence from neuroimaging studies supports a shared neurocircuitry of gambling disorder and substance use disorders.⁹ For example, abnormal functioning of the ventral medial prefrontal cortex has been associated with gambling and substance addictions, and diminished ventral striatal activation has also been implicated in the cravings associated with gambling and substance addictions.^{9–11}

While gambling disorder was included in the addiction realm for DSM-5, other behaviors such as excessive sexual behavior, compulsive buying, Internet use, or stealing, were not included as the research on these behaviors was considered to be insufficient. The rejection of these other putative behavioral addictions in DSM-5 raises two important considerations for future research: first, what is the justification (based on published scientific literature) to characterize a repetitive behavior as a form of addiction, such as in the case of compulsive sexual behavior or problematic Internet use? And second, what is the evidentiary basis for how to categorize disorders in relation to each other? Without enough evidence to answer the first question, the second becomes moot. For example, the DSM-5 rejected its own Sexual and Gender Identity Disorders Work Group's proposal to include "hypersexuality" based on an objection to the implicit normative reference to the "right amount" of sexuality. Due to this rejection, arising from a lack of background research, there was no need to examine where hypersexuality should be categorized.

In the case of kleptomania (compulsive stealing), however, the situation differed. Long included in DSM, kleptomania would appear to have passed the initial threshold for inclusion – i.e. that it qualifies as a mental health disorder.⁵ A recent definition of a mental health disorder suggests the defining features are: a behavioral or psychological syndrome or pattern that occurs in an individual; the consequences of which are clinically significant distress or disability; not merely an expectable response to common stressors and losses; reflects an underlying psychobiological dysfunction; is not solely a result of social deviance or conflicts with society; has diagnostic validity using one or more sets of diagnostic

validators; and has clinical utility.¹² Instead of assigning kleptomania to a work group, however, it was summarily categorized in the chapter on Disruptive, Impulse-control, and Conduct Disorders.⁶ In fact, and contrary to its current grouping, evidence suggests that stealing in some individuals shares much with substance addiction – a similar clinical presentation with cravings, withdrawal, and tolerance; a similar neurocognitive and personality profile; controlled family studies supporting a shared relationship; and a similar responsiveness to pharmacological treatments, particularly to opioid antagonists.¹³ Whereas the data are admittedly quite limited in terms of total number of publications for kleptomania's inclusion as a Substance-Related and Addictive Disorder, there are interestingly few if any data to support its categorization with either conduct disorder or intermittent explosive disorder.

In summary, DSM-5 concluded that of existing disorders, only gambling had enough in common with substance addictions to justify its inclusion with those other disorders. In addition, other disorders that have garnered much research attention around the world – problematic Internet use, compulsive sexual behavior – were deemed to have insufficient evidence for their inclusion as a disorder regardless of category.

International Classification of Disease, 11th Edition (ICD-11)

The World Health Organization's ICD-11 Working Group on Obsessive-Compulsive and Related Disorders has proposed a different categorization of these 'behavioral addictions.' Diverging from the approach of DSM-5, the Working Group for ICD-11 has instead proposed that the category of impulse control disorders should be retained and should broadly define these disorders by the repeated failure to resist an impulse, drive, or urge to perform an act that is rewarding to the person (at least in the short-term), despite longer term harm either to the individual or to others.¹⁴ It is suggested that gambling disorder should be included in this category instead of alongside substance addictions, and that the category should be broadened to include compulsive sexual behavior.¹⁴ Other possible impulse control disorders such as problematic Internet use and compulsive buying were examined at length and it was felt that there were insufficient data, at this time, to support their inclusion as independent mental health conditions. For example, one argument (valid in our view) is that we cannot yet address whether excessive Internet represents a conduit for other types of repetitive behavior (e.g. sexual behaviour, or gambling), or constitutes a distinct entity in its own right.

To understand the proposed group of disorders, it is important to remember that the goal of the ICD-11 is not the same as that for DSM-5. Whereas DSM-5's goal is to provide a common research and clinical language for mental health problems, the WHO has emphasized that ICD-11 should pay particular attention to issues of clinical utility in a broad range of settings, global applicability, and scientific validity.¹⁵ Therefore, because of the impact of compulsive sexual behavior on global public health, the Work Group recommended that compulsive sexual behavior be included as a disorder. In addition, because of the focus on clinical utility, the ICD-11 Working Group felt that conceptualizing compulsive sexual behavior disorder as being related to other impulse control disorders that

are characterized by repeated failures to resist impulses, drives, or urges despite longer-term harm would be most clinically useful.

Similarly, these goals underpinned the proposal to retain pathological gambling in the impulsive control disorders category as well. It was felt that categorizing problematic gambling behavior as an addiction was premature based on the scientific evidence and that such a change in categorization lacked clear clinical utility given that treatments other than those for substance addictions may be useful for problematic gambling behavior.^{16–17} Although evidence may indicate that problematic gambling behavior clinically resembles substance addictions in many ways, data also support its relationship to other impulse control disorders and further supports its categorization as an impulse control disorder.⁵

In summary, the ICD-11 Work Group recommended, based on the current evidence, that there be a category of impulse control disorders and that this category should include pathological gambling, kleptomania, pyromania, compulsive sexual disorder, and intermittent explosive disorder. Keeping these disorders all together, arguably contrary to the DSM-5 approach, should increase the chance that clinicians, who identify a given impulse control disorder in a patient, then think to screen for the other, related, impulse control disorders. Clinically, this approach should be easier for clinicians to use as it is more continuous with previous classifications and therefore should be more feasible in low-resource settings.¹⁴

Future Directions

The differences in approach to ‘behavioral addictions’ in the DSM-5 and the ICD-11 highlight the growing but as yet inconclusive data we currently have regarding these disorders. Several key issues emerge when we compare the approaches of these diagnostic systems, and when we consider the way forward in terms of addressing limitations in the existing corpus of literature. These issues are important because – irrespective of arguments about how we best conceptualize these repetitive behaviors – they result in enormous personal tolls for affected individuals.

Many problematic behaviors such as Internet use, compulsive shopping, sex, stealing, and eating all lack persuasive data regarding their neurobiological (including genetic) underpinnings. A fundamental limitation exists in regard to exploring neurobiological underpinnings of candidate behavioral addictions: whereas substance addiction can readily be observed and modelled in experimental animals, it is difficult to see how this could be the case for the behavioral addictions. While compulsive sexual behavior could theoretically be modelled in animals – at least in simplified form – this would be exceedingly problematic in relation to the other types of behavior. Possibly gambling could be modelled by using a cognitive approach: *viz* using impaired decision-making in animals as a proxy for modelling gambling problems. As well as this fundamental difficulty with translational modelling, there are too few studies of candidate behavioral addictions – reflecting a relative lack of interest (though this is changing), and a lack of funding for such research. In this regard, it is worth noting that behavioral addictions could actually represent a useful model for studying broader addictive processes: repetitive consumption of some psychoactive drugs has

demonstrable negative effects on brain structure and function, whereas, it is argued, this is unlikely to be the case for repetitive behaviors. Thus, the study of how behavioral addictions develop could inform our understanding of substance use disorders, while avoiding the confounding direct toxic effects on the brain that occurs with substances themselves.

Another key issue is that we still need data to understand whether some or any of these behaviors are valid as diagnostic entities.^{18–20} This in turn should ultimately allow for a better approach to treating the individual. Although many of the current data suggest some of these behaviors have ‘addictive’ qualities, one must be cautious that the conclusion does not result from over-interpretation. For example, if gamblers are compared (for example, neurobiologically, phenomenologically, etc) to cocaine addicted individuals, one might find many similarities to addictions, and therefore conclude that gambling is an addiction; whereas if one compares gamblers to anxiety disordered individuals, one might again find overlap, but this time conclude that gambling is a type of anxiety disorder. Can both perspectives be valid? Or could it be that both perspectives hold some truth? Of course, if there is substantially more evidence for the former than the latter, then that would provide legitimate grounds to support gambling as an addiction, rather than an anxiety disorder.

If certain behaviors represent ‘addictions’, one would expect them to respond to the same (or similar) treatments as show efficacy in substance use disorders. It is unclear whether this is the case in general terms. The most convincing evidence so far is for gambling disorder, which appears to respond positively to certain opioid medications, and indeed to some glutamate-modulating agents.²¹

Finally, these comparisons between diagnostic systems raise the issue of whether diagnostic categories are too all encompassing and ignore individual differences within disorders, including family history. For example, our recent research found that individuals with hair pulling disorder (trichotillomania, classified as an obsessive-compulsive related disorder in DSM-5 and likely and impulse disorder in ICD-11) who have a first-degree relative with alcoholism respond preferentially in terms of their hair pulling to naltrexone, a medication long used for alcoholism.²² Thus it makes one question whether impulsive behaviors in some individuals are mediated by different neural substrates (e.g. mesocorticolimbic versus prefrontal) or neurochemicals as compared to the same impulsive behaviors in other individuals. Neither diagnostic system allows for this level of heterogeneity within disorders. Substantial future research, including both human and animal studies, is urgently needed to bring our knowledge of repetitive behaviors to the level of that for substance addictions or other mental health conditions, irrespective of whether those behaviors are ultimately considered addictive, impulsive, or both.

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