



CARS Connect: Mental Health & Substance Use Screening for Impaired Drivers

Sarah Nelson, PhD

Division on Addiction, Cambridge Health Alliance

Dept. of Psychiatry, Harvard Medical School

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DISCLOSURES

- Responsibility.org has provided ongoing support for our work related to mental health screening for impaired drivers, and the National Institutes of Health provided support for our initial studies of repeat impaired driving offenders.
- The Division on Addiction also receives funding from
 - DraftKings, Inc., a sports betting and gaming company
 - International Center for Responsible Gaming (ICRG)
 - Massachusetts Department of Public Health, Office of Problem Gambling Services via Health Resources in Action
 - Massachusetts Gaming Commission
 - National Institutes of Health via The Healing Lodge of the Seven Nations.

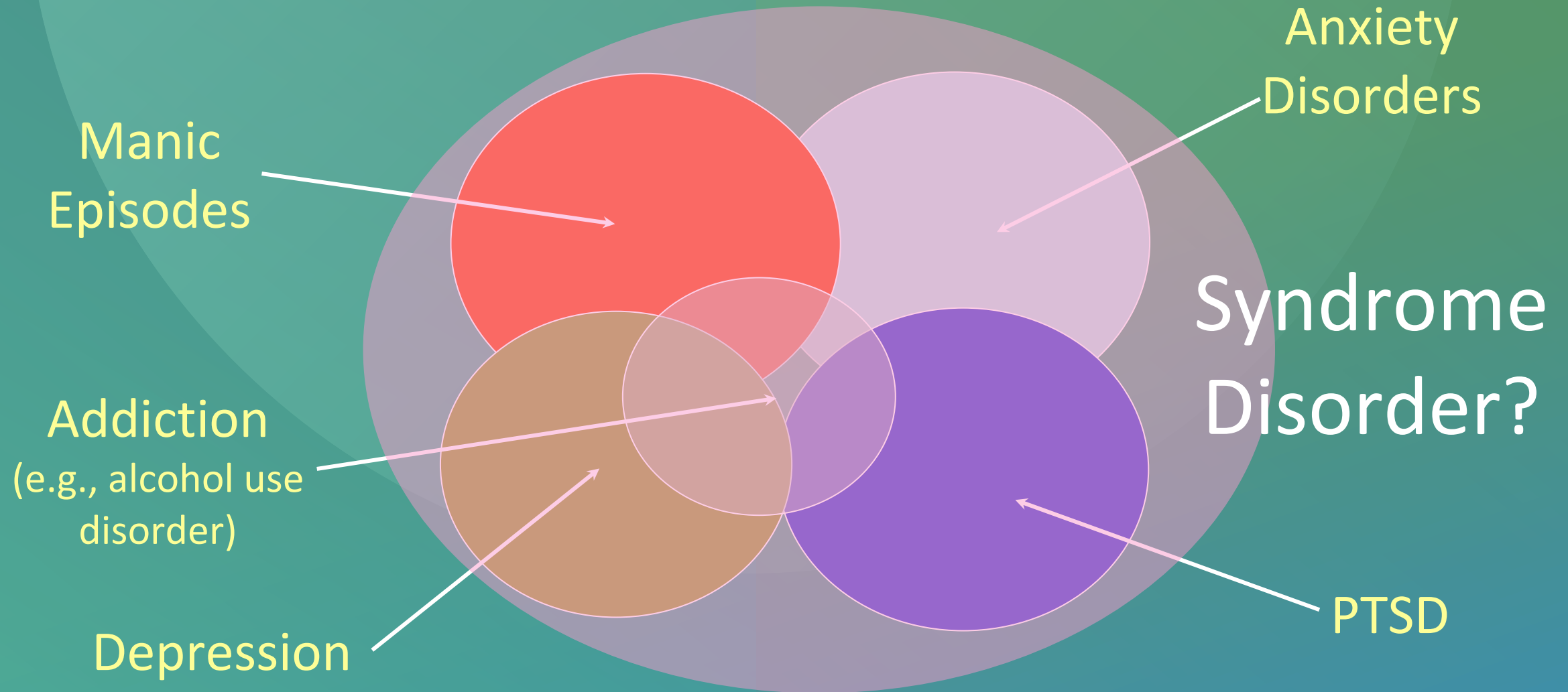
CARS Connect

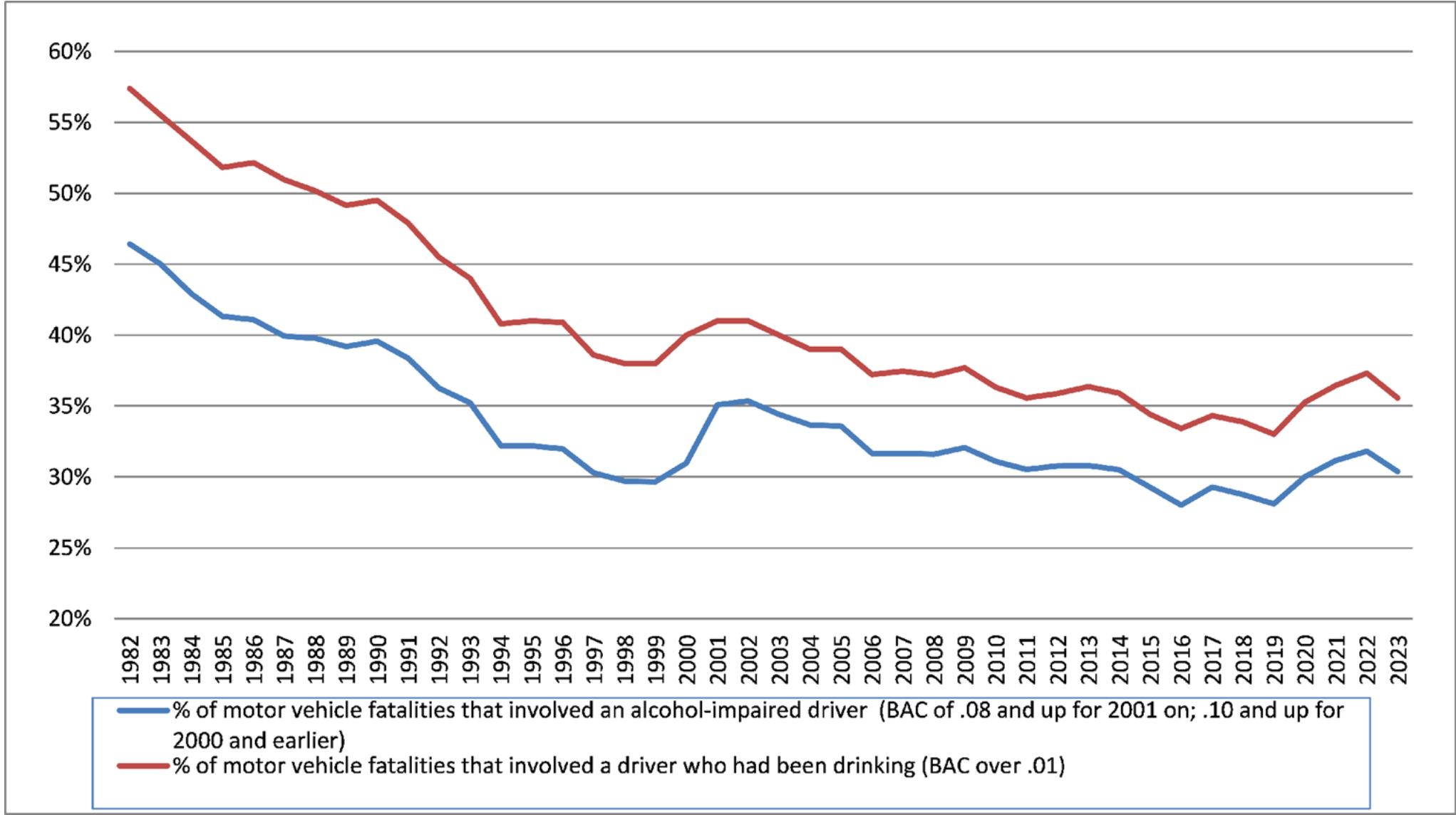
CARS Connect is a web-based version of the Computerized Assessment & Referral System (CARS) that provides comprehensive screening for 17 mental health conditions as well as risk factors for those conditions and impaired driving history and risks. CARS Connect provides tailored reports about clients' mental health symptoms, impaired driving, risk factors, and other relevant experiences, and includes a list of resources tailored to clients' geographical location. CARS Connect can be directly administered to clients or self-administered via a link.



Mental Health, Addiction, & Impaired Driving

WHEN IS ADDICTION ADDICTION?





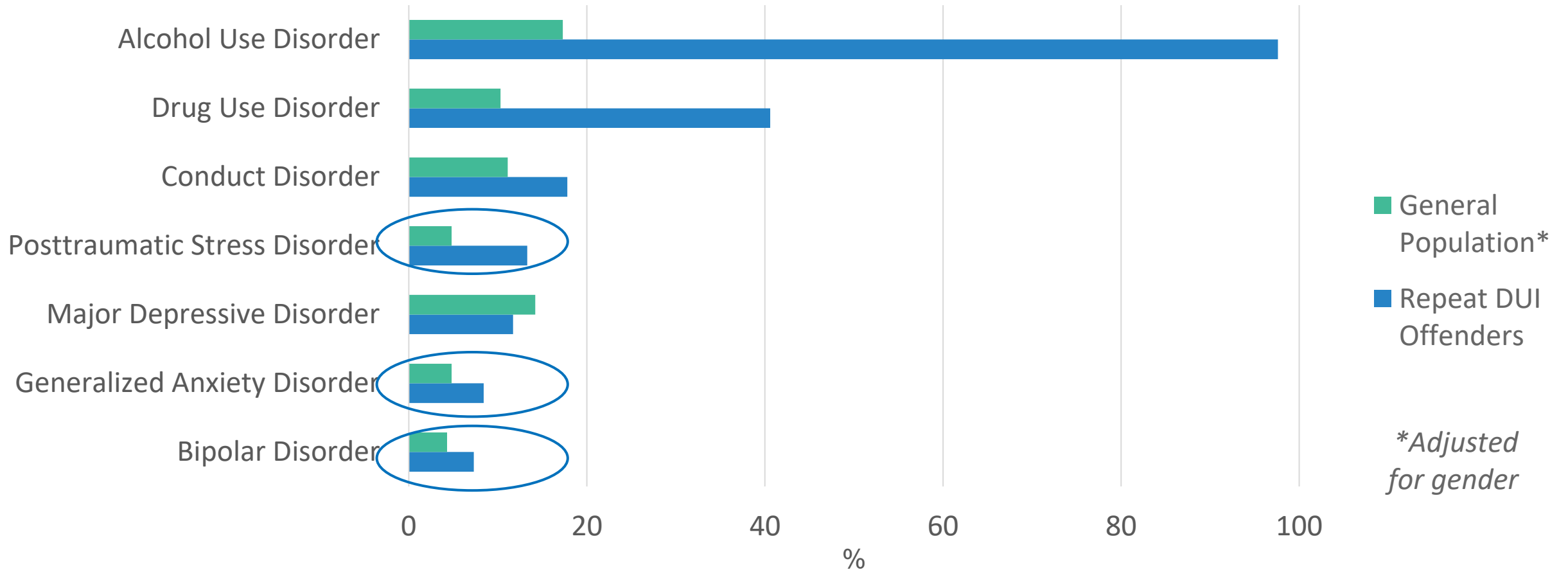
National Highway Traffic Safety Administration. (2007-2025). Traffic safety facts: Alcohol-impaired driving.

WHAT PERCENT OF REPEAT DUI OFFENDERS HAVE A
HISTORY OF MENTAL HEALTH DISORDERS IN ADDITION
TO ALCOHOL USE OR DRUG USE DISORDERS?

45%

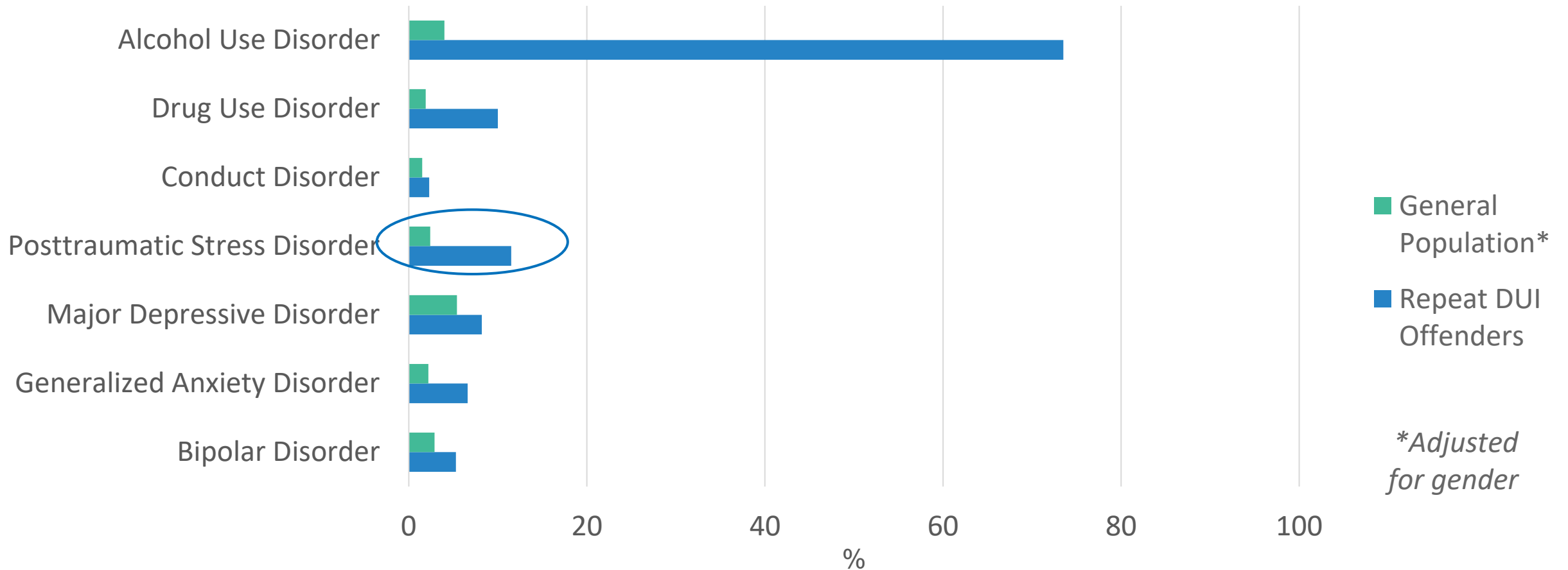
Shaffer, H. J., Nelson, S. E., LaPlante, D. A., LaBrie, R. A., Albanese, M. J., & Caro, G. (2007). The epidemiology of psychiatric disorders among repeat DUI offenders accepting a treatment sentencing option. *Journal of Consulting and Clinical Psychology*, 75(5), 795-804.

Lifetime Prevalence of Psychiatric Disorders



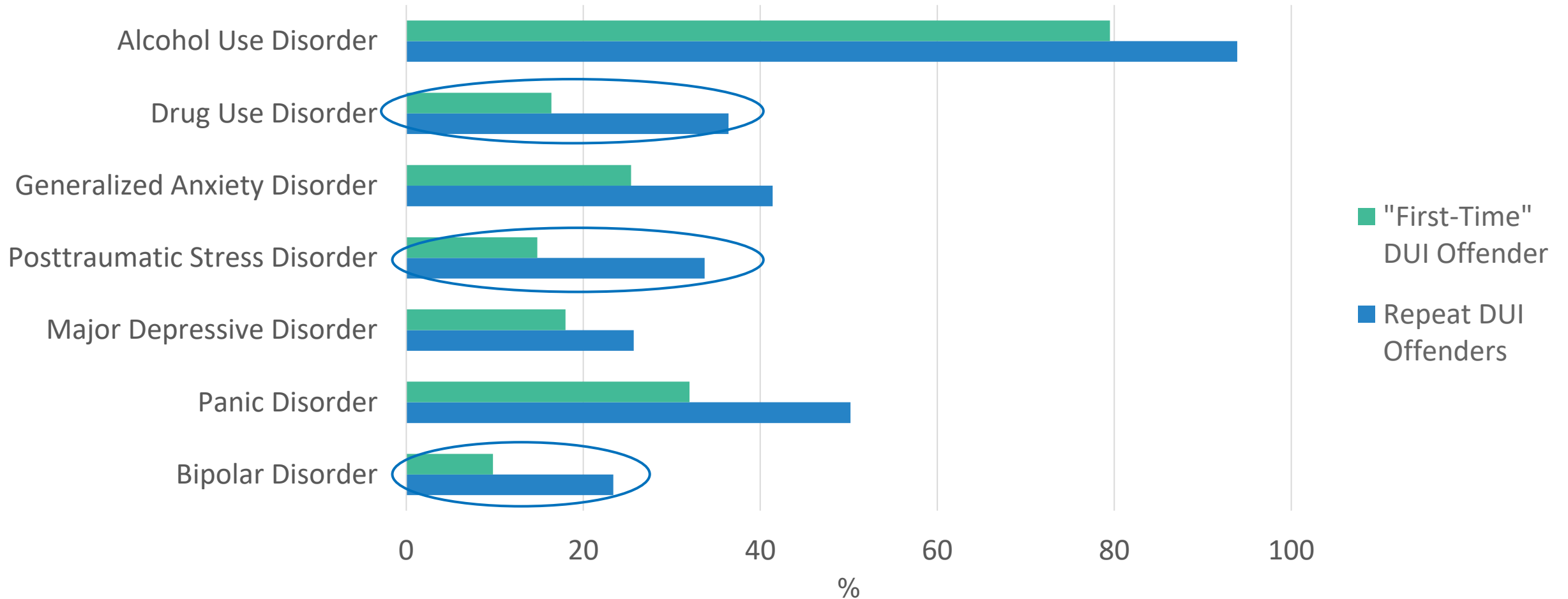
Shaffer, H. J., Nelson, S. E., LaPlante, D. A., LaBrie, R. A., Albanese, M. J., & Caro, G. (2007). The epidemiology of psychiatric disorders among repeat DUI offenders accepting a treatment sentencing option. *Journal of Consulting and Clinical Psychology, 75*(5), 795-804.

Past Year Prevalence of Psychiatric Disorders



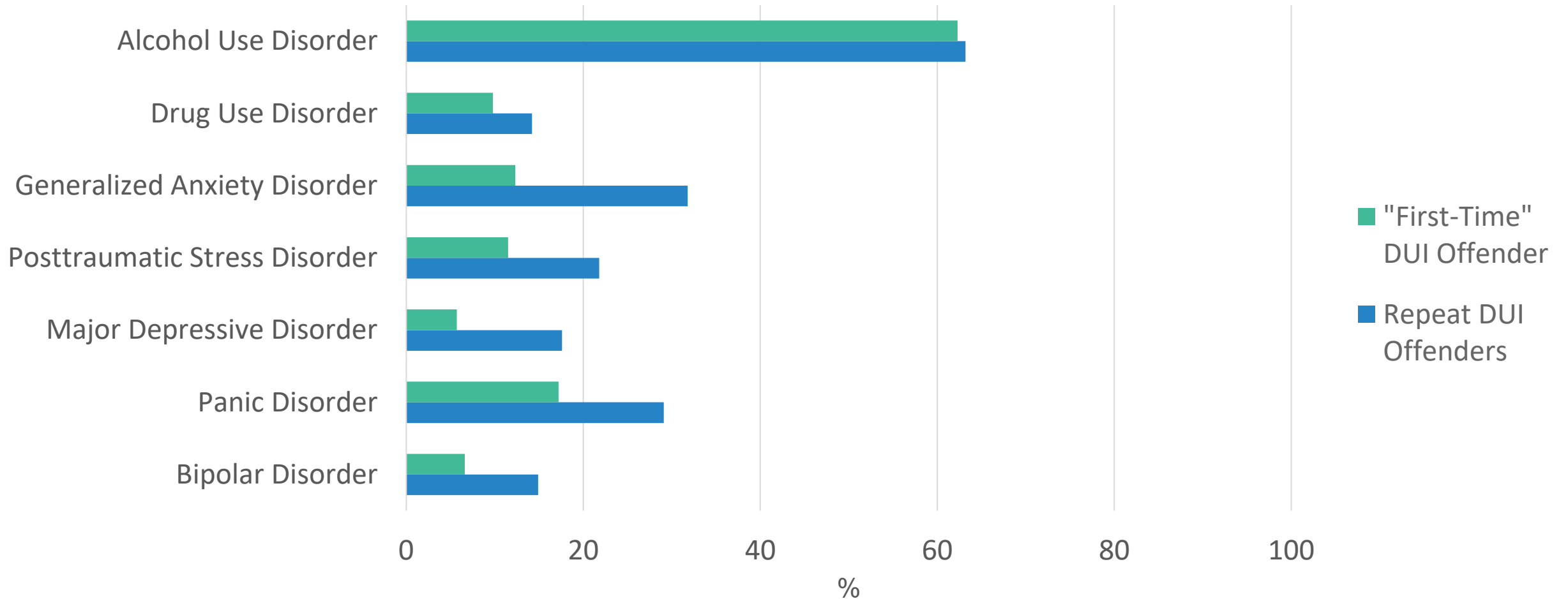
Shaffer, H. J., Nelson, S. E., LaPlante, D. A., LaBrie, R. A., Albanese, M. J., & Caro, G. (2007). The epidemiology of psychiatric disorders among repeat DUI offenders accepting a treatment sentencing option. *Journal of Consulting and Clinical Psychology, 75*(5), 795-804.

"First-Time" and Repeat DUI Offender Lifetime Screening Results



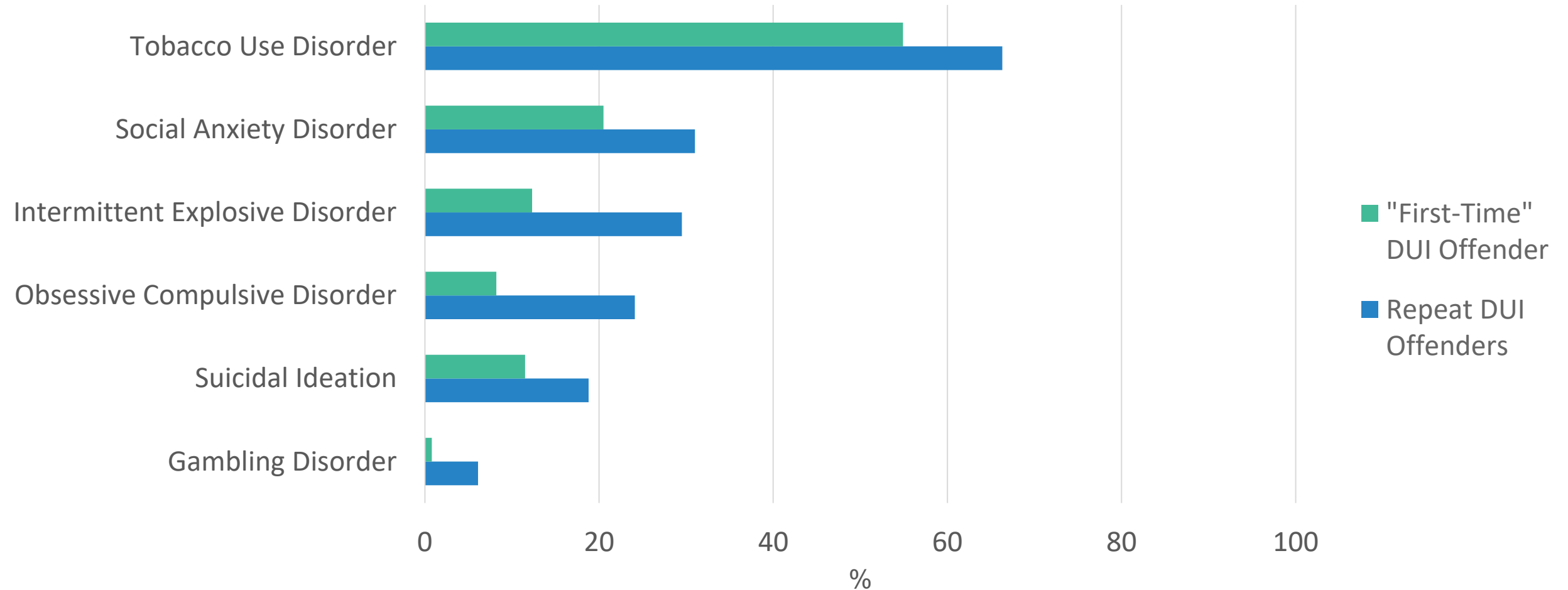
Keating, L. M., Nelson, S. E., Wiley, R. C., & Shaffer, H. J. (2019). Psychiatric comorbidity among first-time and repeat DUI offenders. *Addictive Behaviors*, 96, 1-10.

“First-Time” and Repeat DUI Offender Past Year Screening Results



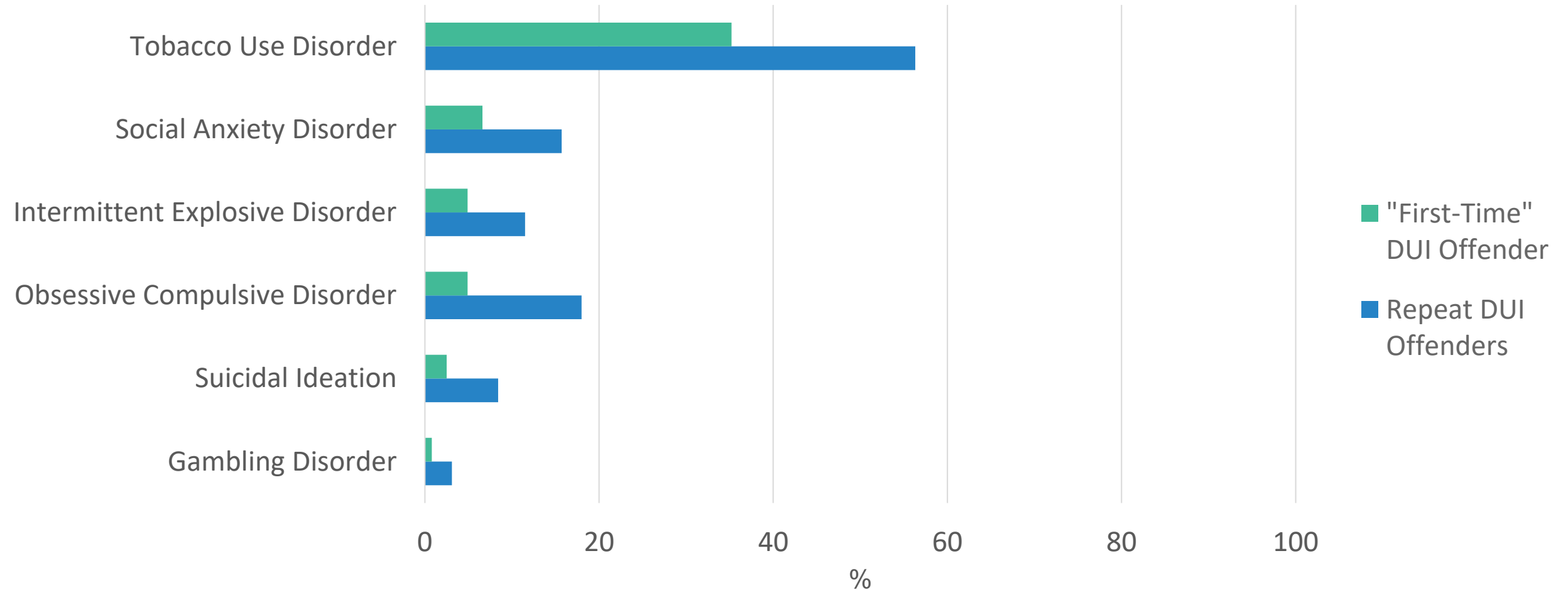
Keating, L. M., Nelson, S. E., Wiley, R. C., & Shaffer, H. J. (2019). Psychiatric comorbidity among first-time and repeat DUI offenders. *Addictive Behaviors*, 96, 1-10.

“First-Time” and Repeat DUI Offender Lifetime Screening Results



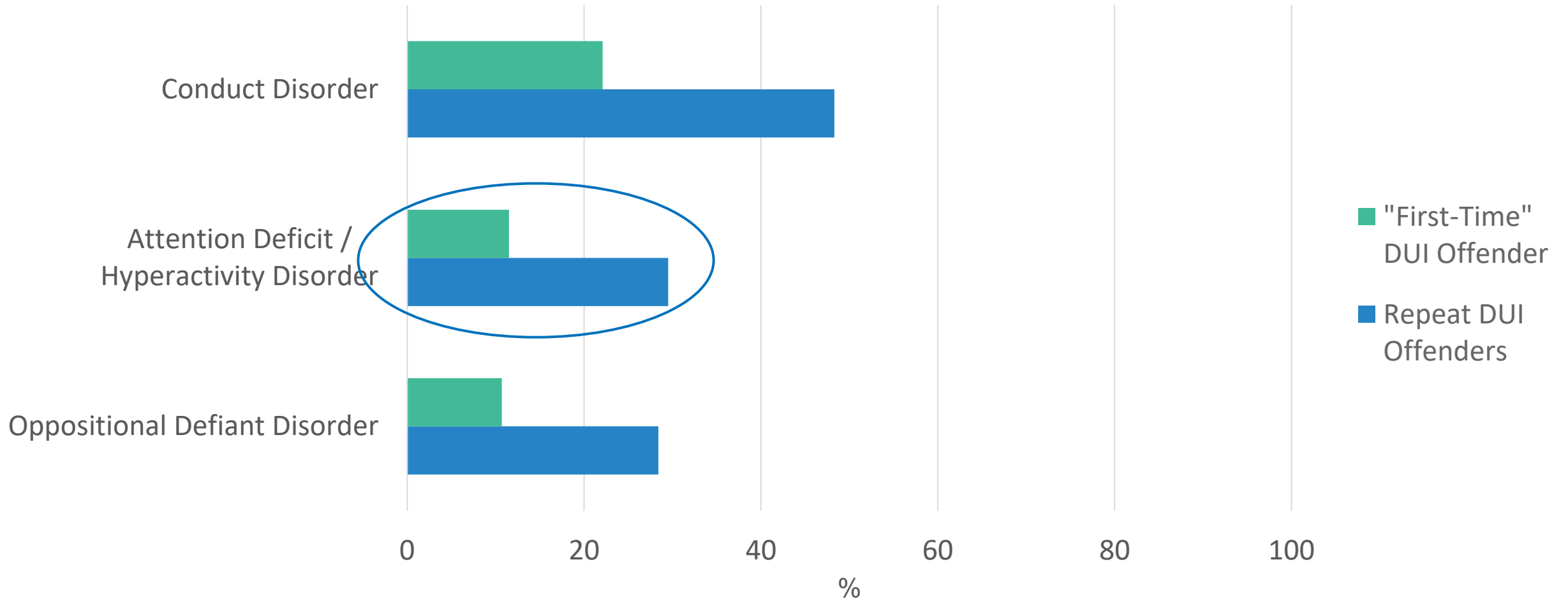
Keating, L. M., Nelson, S. E., Wiley, R. C., & Shaffer, H. J. (2019). Psychiatric comorbidity among first-time and repeat DUI offenders. *Addictive Behaviors*, 96, 1-10.

“First-Time” and Repeat DUI Offender Past Year Screening Results



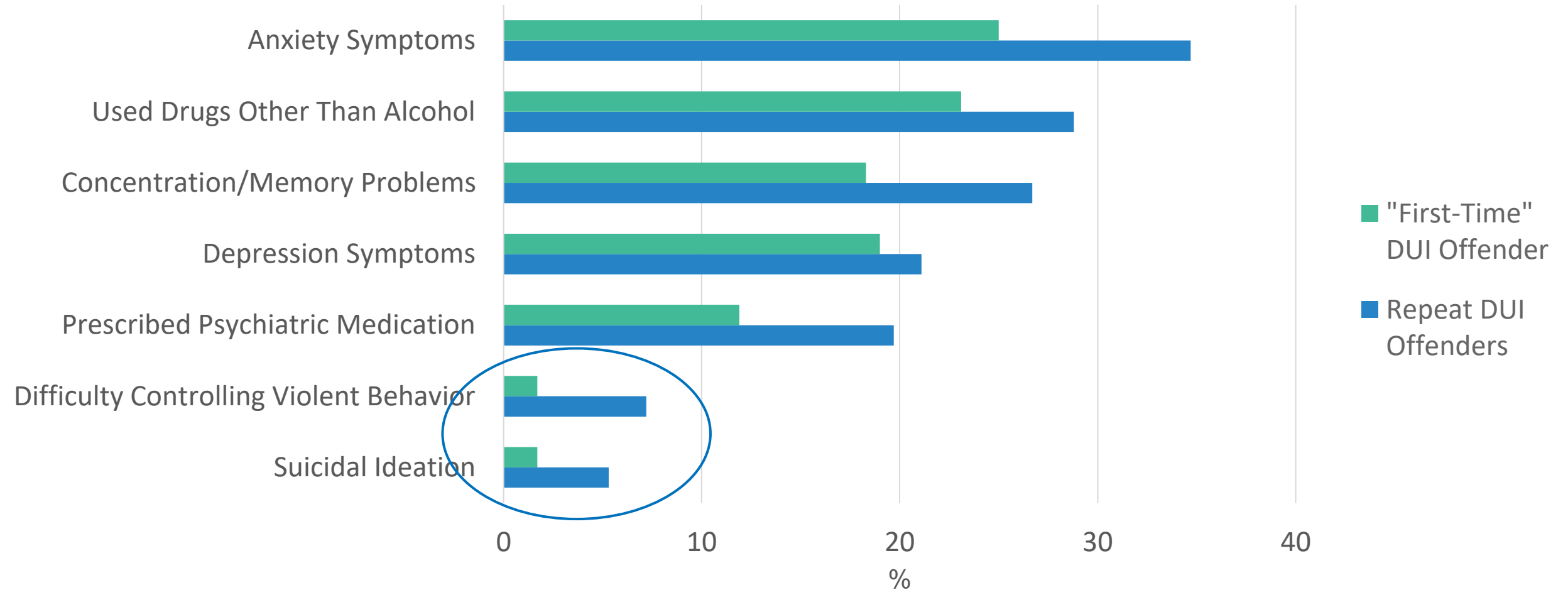
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"First-Time" and Repeat DUI Offender Past 30-Day Symptoms



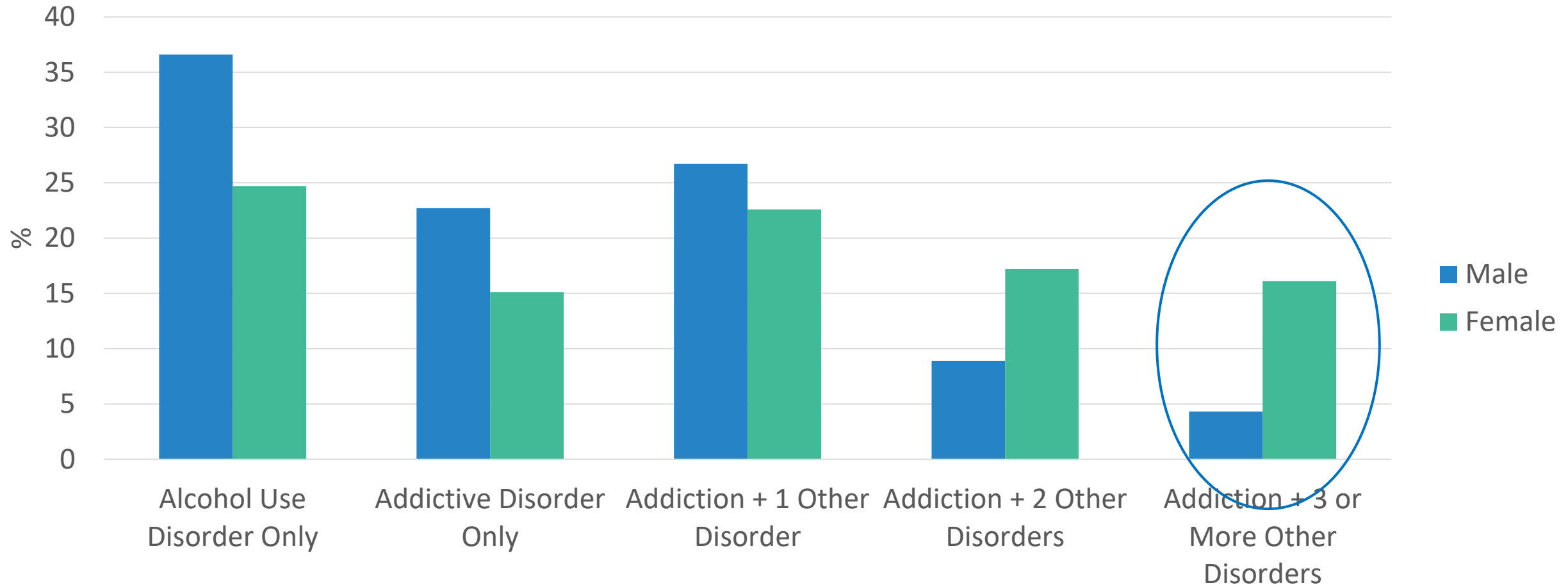
Keating, L. M., Nelson, S. E., Wiley, R. C., & Shaffer, H. J. (2019). Psychiatric comorbidity among first-time and repeat DUI offenders. *Addictive Behaviors*, 96, 1-10.

**“FIRST-TIME”
IMPAIRED
DRIVERS**

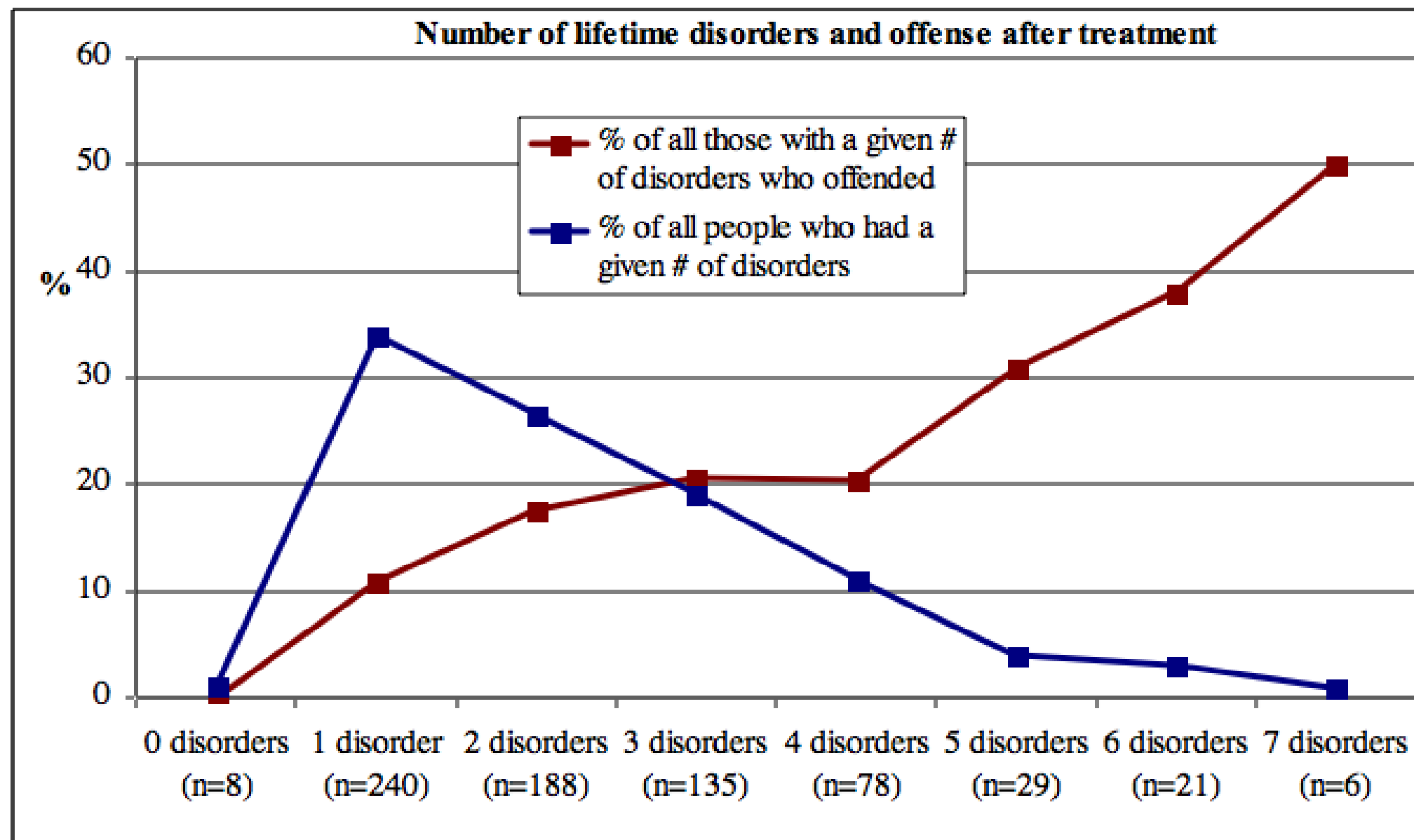
**How many DUI violations occur
for every DUI arrest?**

100+

Male & Female Repeat DUI Offenders

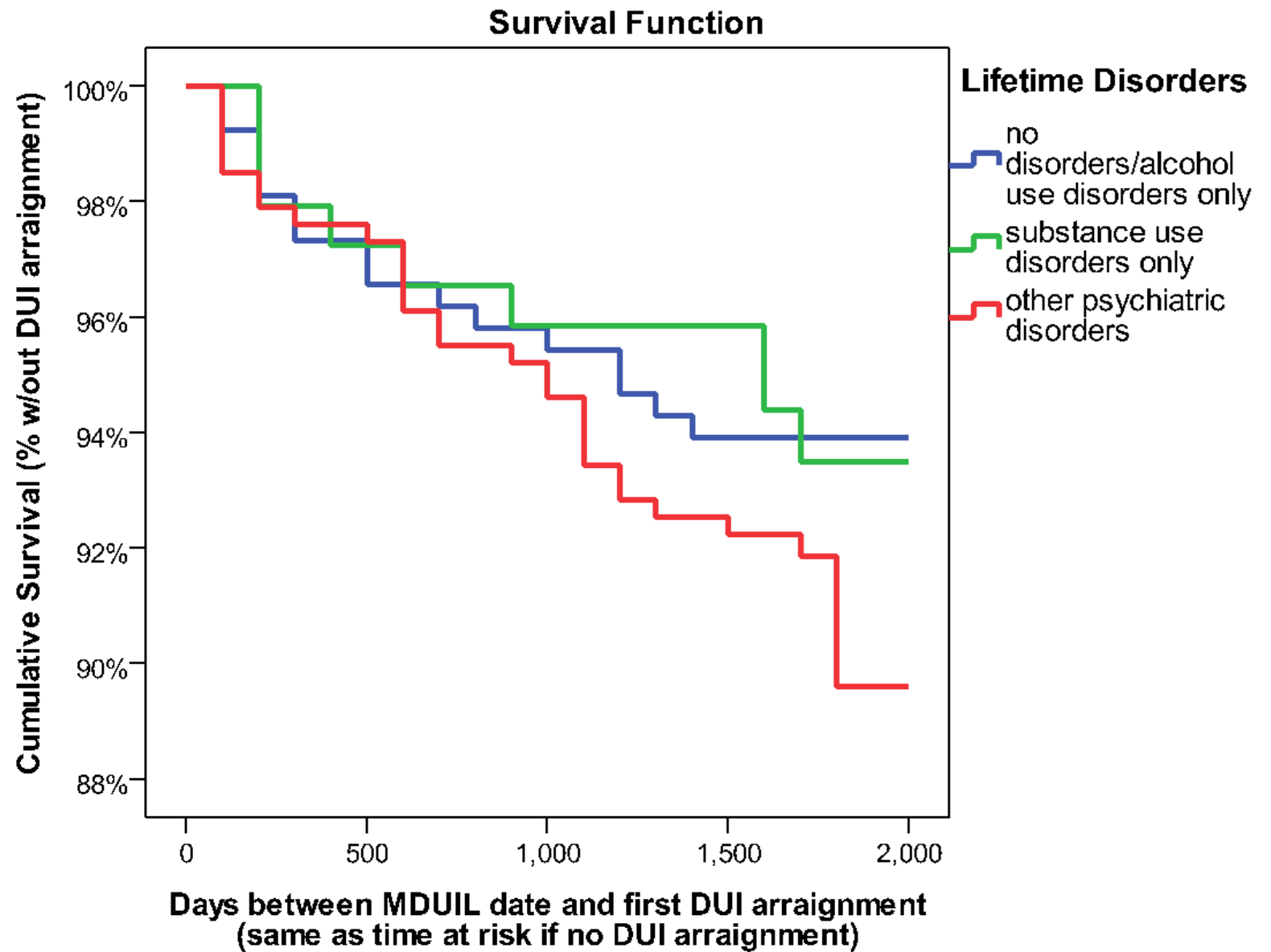


LaPlante, D. A., Nelson, S. E., Odegaard, S. S., LaBrie, R.A., & Shaffer, H. J. (2008). Substance and psychiatric disorders among men and women repeat driving under the influence offenders who accept a treatment-sentencing option. *Journal of Studies on Alcohol and Drugs*, 69(2), 209-217.



Nelson, S. E., Belkin, K., LaPlante, D. A., Bosworth, L., & Shaffer, H. J. (2015). A prospective study of psychiatric comorbidity and recidivism among repeat DUI offenders. *Archives of Scientific Psychology*, 3(1), 8-17.

MENTAL HEALTH & RECIDIVISM

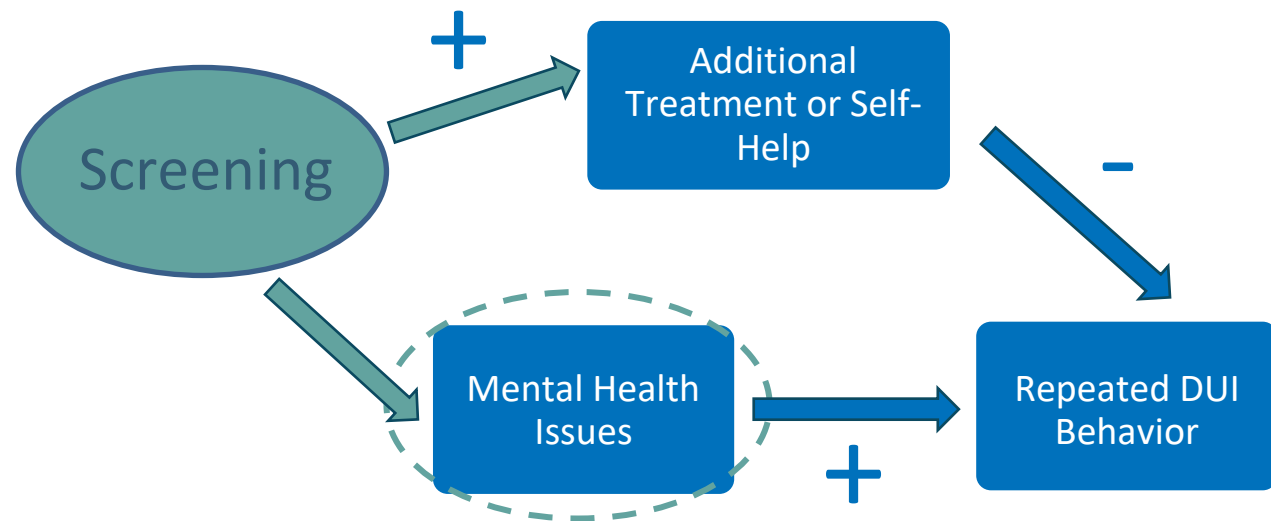


Nelson, S. E., Shoov, E., LaBrie, R.A., & Shaffer, H. J. (2019). Externalizing and self-medicating among repeat DUI offenders. *Drug & Alcohol Dependence*, 194, 88-96.

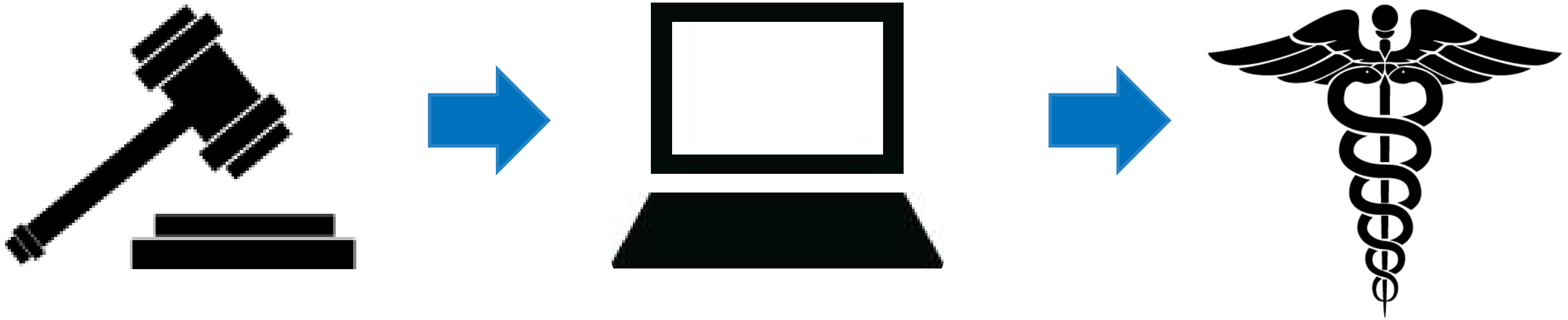
Screening for Mental Health among DUI Offenders

PURPOSE OF MENTAL HEALTH SCREENING IN IMPAIRED DRIVING SETTINGS

- Identify mental health issues that influence DUI
- Identification of these issues is a first step toward intervening to reduce their impact on impaired driving and improving offenders' chance of rehabilitation



WHEN SHOULD WE SCREEN FOR MENTAL HEALTH ISSUES?



- Often, by the time DUI offenders enter treatment, months have passed since they were arrested.
- The time between arrest, sentencing and DUI treatment represents missed assessment opportunity for at-risk clients.

BARRIERS TO MENTAL HEALTH SCREENING IN IMPAIRED DRIVING POPULATIONS

- Awareness
- Training
- Lack of User-Friendly Tools
- Time / Resources

DUI program providers don't always have the training or resources to identify and address mental health issues among their clients.

CARS

Generalized Anxiety Disorder
Oppositional Defiant Disorder
Alcohol Use Disorder
Drug Use Disorder
Eating Disorders
Conduct Disorder
Psychosis
Personality Disorder
Peer Networks
Gambling Disorder

Intermittent Explosive Disorder
Bipolar Disorder
Panic Disorder
Posttraumatic Stress Disorder

Major Depressive Disorder

Tobacco Use

DUI Behavior

Criminal History

Psychosocial Risks

Suicidality

Attention Deficit Hyperactivity Disorder

Obsessive Compulsive Disorder

Persistent Depressive Disorder...

and more



CARS: The Computerized Assessment & Referral System

Standardized mental health screening tool initially adapted from the Composite International Diagnostic Interview (CIDI: Kessler et al., 2004)

Screens for 17 mental health disorders

Assesses both lifetime and past year occurrence of each disorder

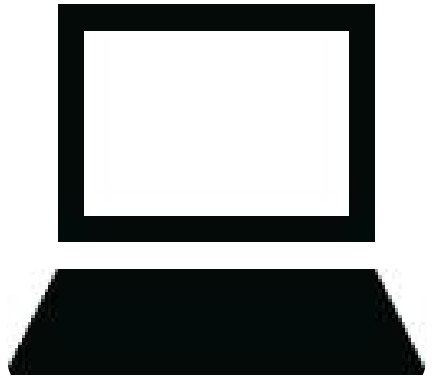
Includes both an interviewer-administered and self-administered version

Can be administered by non-clinicians

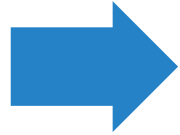
Takes less than one hour to complete

Includes questions about treatment, stress, domestic violence, and other life experiences

Automated report includes screening results, treatment history, risk factors, and geographically targeted information about mental health resources



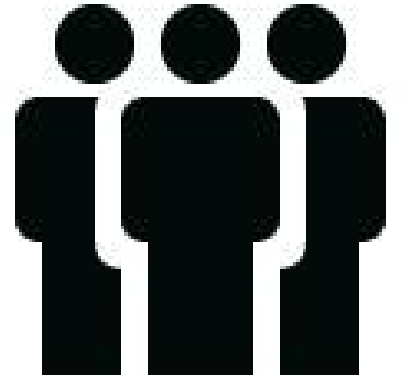
Develop



Test
usability



Implement
and Test



Expand

ENHANCEMENTS

- Created standalone screener – CARS Screener
- Created screener that clients can complete themselves – Self-Administered CARS Screener
- Created Spanish versions of the CARS Screener and Self-Administered CARS Screener
- Updated all of CARS to reflect the most current DSM diagnostic criteria – CARS-5.
- Created a version of the CARS Screener and Self-Administered CARS screener with additional assessment items and report output that is not specific to DUI populations – CARS-MH.
- Created a streamlined version of CARS (CARS-SC) and adapted it to run as a web-based application – **CARS Connect**

2017: Initial
CARS
Release



2021: CARS-
MH Release



2020: CARS-
5 & Spanish
Screener
Release



2026: CARS
Connect
Release



CARS SCREENER
PROPERTIES

Disorder	% Screening Positive LT (DUI)	% Screening Positive PY (DUI)	% of Positive PY Screens Qualifying for Disorder (DUI)	% of Positive LT Screens Qualifying for Disorder (NCS-R)	Sensitivity (NCS-R)	Specificity (NCS-R)
Panic	44.6%	25.5%	N/A	68.2%*	99.8%	62.4%%
Intermittent Explosive	24.1%	9.4%	N/A	25.0%	92.4%	85.4%
Major Depression	23.1%	13.6%	60.0%	64.9%	92.0%	96.5%
Bipolar	19.2%	12.3%		33.1%	100.0%	90.5%
Generalized Anxiety	36.2%	25.5%	44.4%	30.5%	94.5%	81.0%
Social Phobia	27.8%	12.9%	N/A	56.1%	87.7%	90.4%
PTSD	27.8%	18.6%	18.2%	47.9%	100.0%	87.2%
Tobacco	62.5%	49.6%	N/A	23.8%	99.7%	60.8%
Alcohol	89.2%	63.0%	100.0%	98.9%	99.1%	99.8%
Drug	29.9%	12.9%	100.0%	96.8%	99.8%	99.5%
Gambling	4.5%	2.4%	N/A	50.0%	86.0%	98.9%

**for panic attack;
PY=Past Year;
LT=Lifetime; DUI=CARS
Implementation Trial
Sample (N=381); NCS-
R=General Population
Sample (N=5692; 9282)*

Nelson, S. E., LaRaja, A., Juviler, J., & Williams, P. M. (2021). Evaluating the Computerized Assessment and Referral System (CARS) Screener: Sensitivity and specificity as a screening tool for mental health disorders among DUI offenders. *Substance Use & Misuse*, 56(12), 1785-1796.

WHAT DOES IT MEAN FOR A SCREENER TO BE “VALIDATED” IN DUI POPULATIONS?

- Validated – Measuring what it is supposed to be measuring
- Validated within a population – Measuring what it is supposed to be measuring in a specific population
- Validated within DUI populations – see above... but there are additional considerations:
 - How prevalent are conditions in a population
 - How do conditions affect risk for DUI



CARS Connect

CARS CONNECT

- Adapts the streamlined version of CARS (CARS-SC)
- Combined screener and impaired driving module
- Enhanced Report
- Simplified user interface and set-up
- Can be accessed online



CARS: The Computerized Assessment & Referral System

Panic (Attack/Disorder)	Tobacco Use Disorder
Intermittent Explosive Disorder	Alcohol Use Disorder
Depression	Drug Use Disorder
Manic Episode (Bipolar Disorder)	Gambling Disorder
Generalized Anxiety Disorder	Eating Disorder
Social Anxiety Disorder	Suicidal Ideation
Obsessive Compulsive Disorder	Domestic Violence
Psychosis	Physical Health
Post Traumatic Stress Disorder	Life Events and Triggers
Eating Disorder	Criminal History
Attention Deficit / Hyperactivity Disorder	Impaired Driving Behaviors
Oppositional Defiant Disorder	Risky Driving Behaviors
Conduct Disorder	Substance Use Behaviors & Motivations

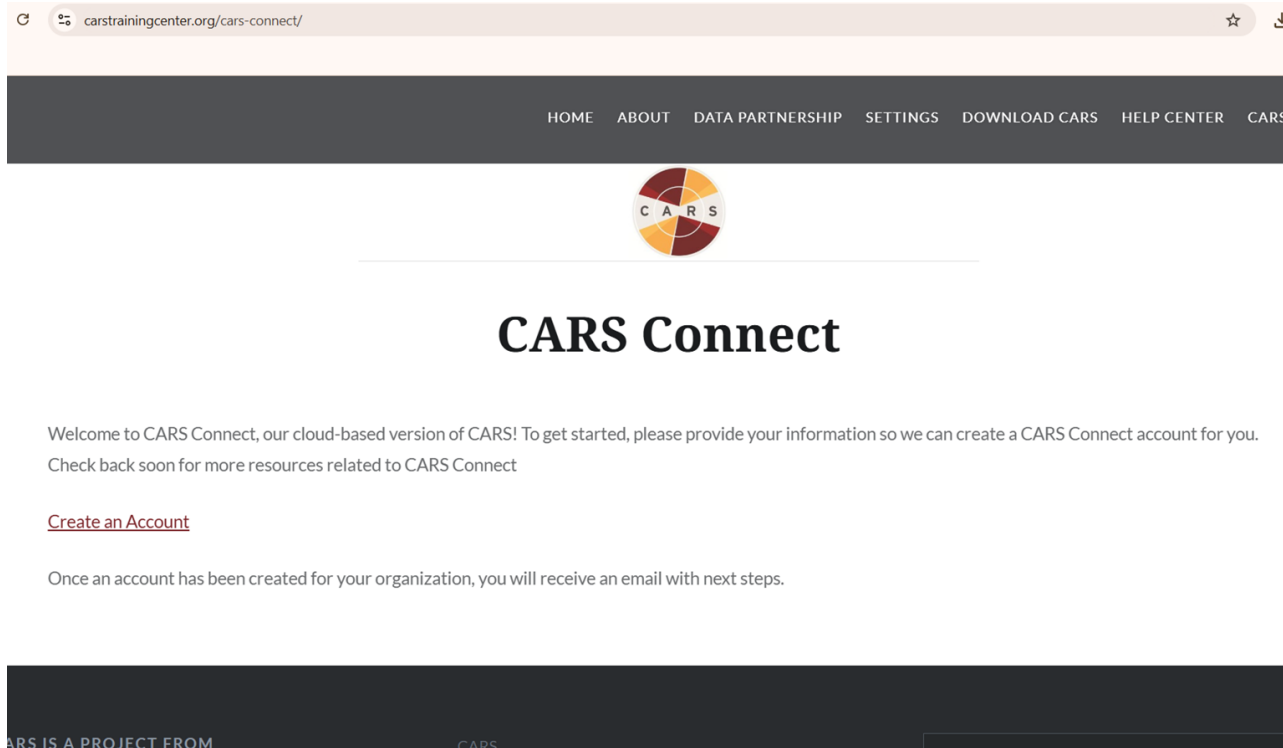
CARS Connect vs. CARS-5, CARS-MH, & CARS-SC

CARS Connect	CARS-5	CARS-MH	CARS-SC
Comprehensive mental health screener that can be completed in less than an hour	Full diagnostic modules and a comprehensive mental health assessment – can take 1-3 hours to complete	Comprehensive mental health screener that can be completed in less than an hour	Comprehensive mental health screener that can be completed in less than an hour
Optional DUI-specific output	DUI-specific output	No DUI-specific output	Optional DUI-specific output
Target population: 1) Impaired drivers being served in impaired driving programs or DUI courts; 2) Anyone who would benefit from a mental health screen	Target population: Individuals who have engaged in DUI behavior	Target population: Anyone who would benefit from a mental health screen w/ optional module for impaired driving courts and programs	Target population: 1) Impaired drivers being served in impaired driving programs or DUI courts; 2) Anyone who would benefit from a mental health screen
Hosted remotely via a web-based application	Stand-alone program installed on individual computers or local networks	Stand-alone program installed on individual computers or local networks	Stand-alone program installed on individual computers or local networks
Single version that can be administered within an organization by and interviewer, or self-administered via a link	Separate interviewer-administered and self-administered versions, as well as a Spanish version	Separate interviewer-administered and self-administered versions	Separate interviewer-administered and self-administered versions
Data password-protected and unique to interviewers within organizations*	Data password-protected and unique to interviewers within organizations	Data password-protected and unique to interviewers within organizations	Data password-protected and unique to interviewers within organizations

CARS Connect Walk-Through

REGISTERING

- Go to carstrainingcenter.org/cars-connect
- Click Create an Account and complete the google form



The screenshot shows the homepage of the CARS Connect website. At the top is a navigation bar with links: HOME, ABOUT, DATA PARTNERSHIP, SETTINGS, DOWNLOAD CARS, HELP CENTER, and CARS. Below the navigation bar is a large circular logo with the letters C, A, R, S in the quadrants. The main heading is "CARS Connect". Below this is a welcome message: "Welcome to CARS Connect, our cloud-based version of CARS! To get started, please provide your information so we can create a CARS Connect account for you. Check back soon for more resources related to CARS Connect". There is a link "Create an Account" and a note: "Once an account has been created for your organization, you will receive an email with next steps." At the bottom, it says "CARS IS A PROJECT FROM" followed by a logo.

carstrainingcenter.org/cars-connect/

HOME ABOUT DATA PARTNERSHIP SETTINGS DOWNLOAD CARS HELP CENTER CARS

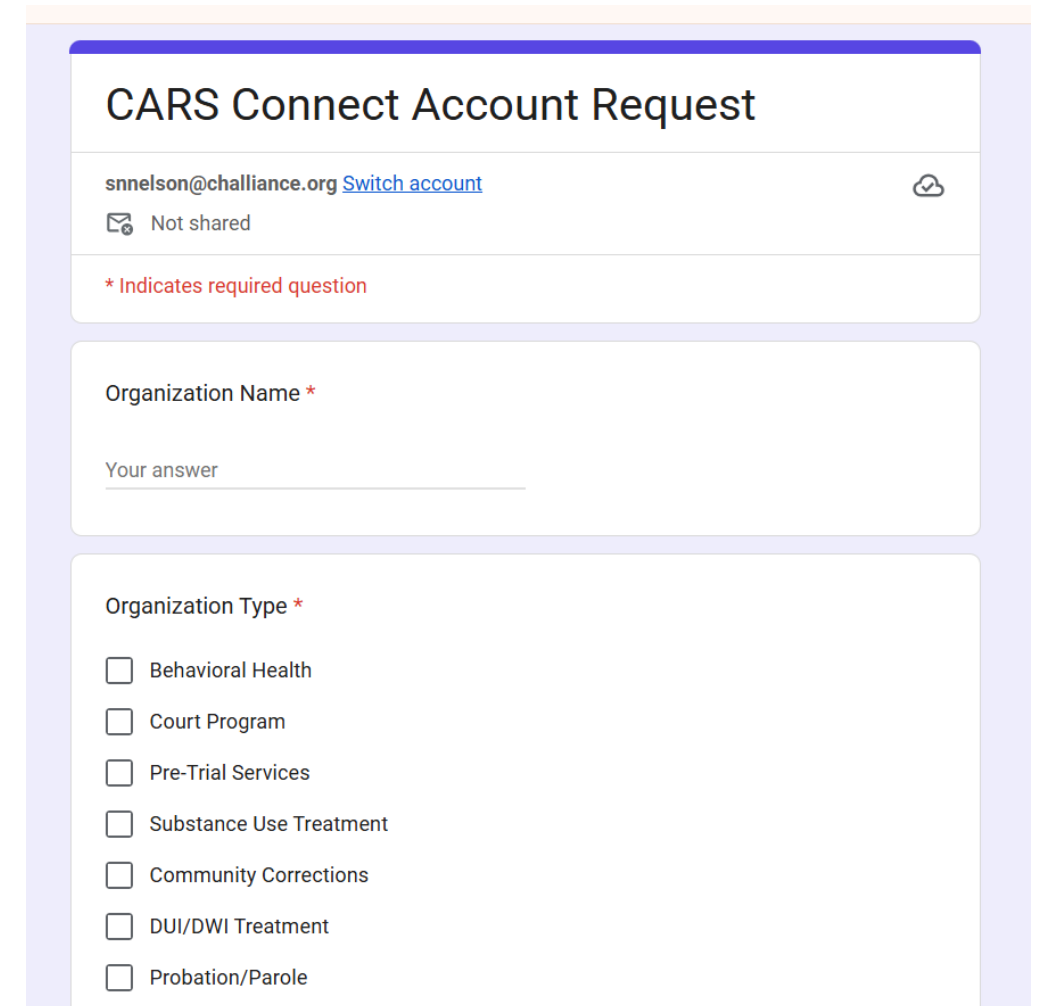
CARS Connect

Welcome to CARS Connect, our cloud-based version of CARS! To get started, please provide your information so we can create a CARS Connect account for you. Check back soon for more resources related to CARS Connect

[Create an Account](#)

Once an account has been created for your organization, you will receive an email with next steps.

CARS IS A PROJECT FROM



The screenshot shows the "CARS Connect Account Request" form. It includes a header with the title "CARS Connect Account Request". Below the header is a section for the user's email address, "snnelson@challiance.org", with a "Switch account" link and a "Not shared" status. A note indicates that an asterisk (*) denotes a required question. The form has two main sections: "Organization Name" with a text input field, and "Organization Type" with a list of checkboxes for different organizational roles: Behavioral Health, Court Program, Pre-Trial Services, Substance Use Treatment, Community Corrections, DUI/DWI Treatment, and Probation/Parole.

CARS Connect Account Request

snnelson@challiance.org [Switch account](#)

Not shared

* Indicates required question

Organization Name *

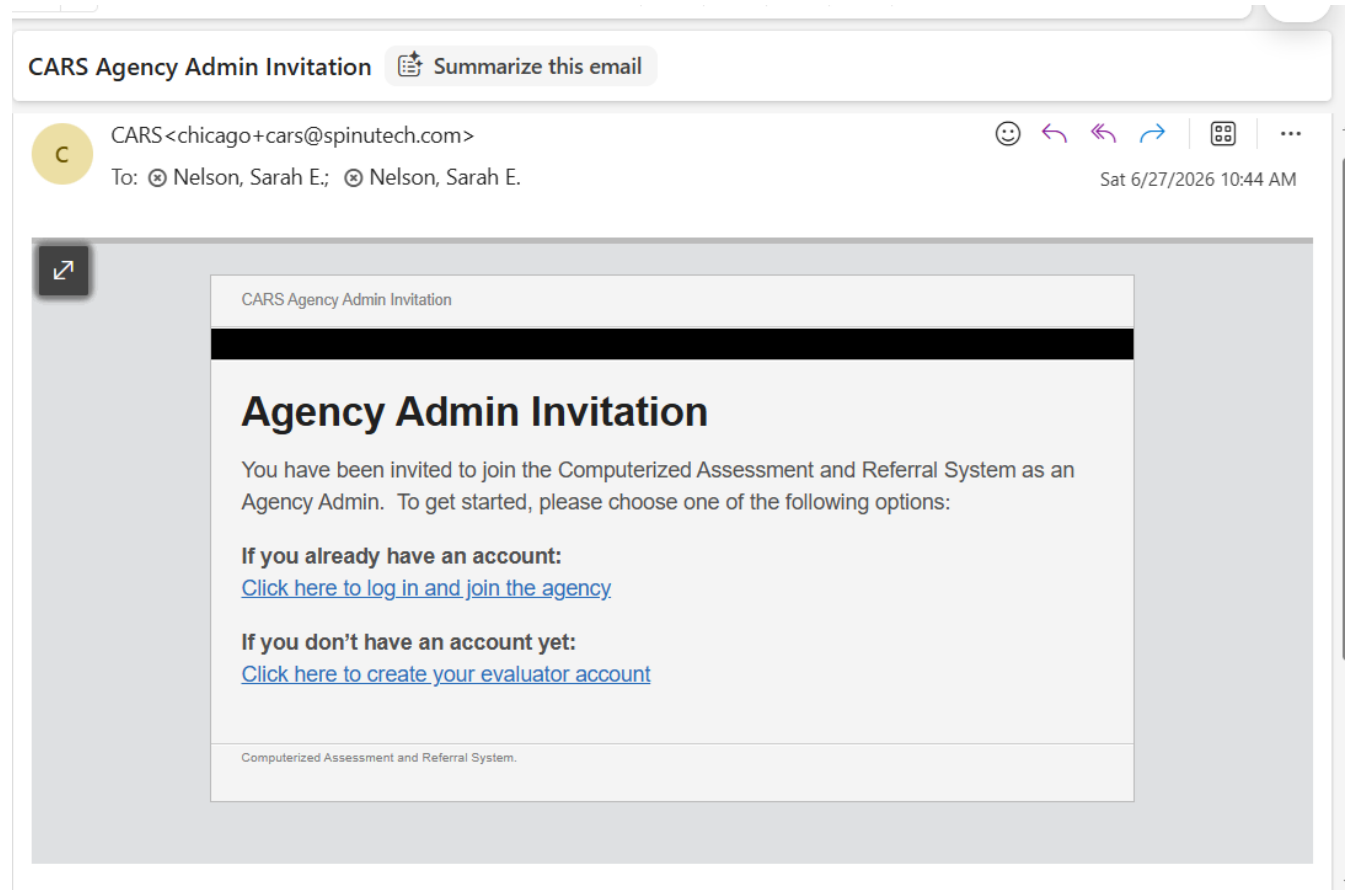
Your answer

Organization Type *

- ☐ Behavioral Health
- ☐ Court Program
- ☐ Pre-Trial Services
- ☐ Substance Use Treatment
- ☐ Community Corrections
- ☐ DUI/DWI Treatment
- ☐ Probation/Parole

REGISTERING

- You will receive an email within the week (beginning July 1) with your log in information.
- Accounts are created for *organizations*, not individuals. Each organization needs an administrator in charge of setting up other user accounts.
- From the email, select the link for “If you don’t have an account yet and complete the requested information



SETTING UP ADDITIONAL USERS

- When you log in, you will be logged into CARS Connect as an administrative user.
- Click the “Agency Admin button



COMPUTERIZED
ASSESSMENT
REFERRAL SYSTEM

Username

Password

Sign In

[Forgot Password?](#)

New to CARS Connect - [Join Here](#)
Want more Info - [Learn More](#)



Case List  **Agency Admin**  Referral Directory  Resources  Sarah Nelson - Logout 

Case List

Sorted by Date Case Created. Click any column header to sort the data by ascending order and again to sort by descending order.

Create new case

Export

Show cases for Sarah Nelson ▼

Search

Client ID	Case Created	Status	DUI Program	Options
No data available in table				

SETTING UP ADDITIONAL USERS



- Case List
- Agency Admin
- Referral Directory
- Resources
- Sarah Nelson - Logout

Division on Addiction - Agency Admin

+ [Invite user to join agency.](#)

Email address

Send invitation link

Evaluator	Email	Last login	Case count
Sarah Nelson ✖	snelson@hms.harvard.edu	6/29/2026	0
john slabczynski ✖	jslabczynski@challiance.org	6/16/2026	22

BEGINNING AN ASSESSMENT

[Case List](#)[Agency Admin](#)[Referral Directory](#)[Resources](#)[Sarah Nelson - Logout](#)

Case List

Sorted by Date Case Created. Click any column header to sort the data by ascending order and again to sort by descending order.

[Create new case](#)[Export](#)

Show cases for Sarah Nelson ▼

Client ID	Case Created	Status ▼	DUI Program	Options
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No data available in table

BEGINNING AN ASSESSMENT

Client ID

6467

Is this assessment self-administered or interviewer-administered?

- ☐ Self-administered
☒ Interviewer-administered

Is this assessment being completed part of a DUI court or DUI program?

- ☒ Yes
☐ No

Evaluator Name *

Sarah Nelson ▼

Client's Zip Code

01062

ASSESSMENT

CARS Connect

SC1a.

Welcome to CARS! CARS is an assessment that asks you about your thoughts, feelings, and behaviors. CARS will ask you a series of questions about yourself and your health history, including your mental health history. It will use your answers to develop a report personalized just for you. You and the program you are completing this for can use this report to help make future treatment decisions. Please answer honestly. Your answers to this interview will be shared with program staff. Speak to program staff about whether anyone else will see your answers. Data from this interview may be shared with the developers of this assessment, but no identifying information, like your name, will be attached to that data.

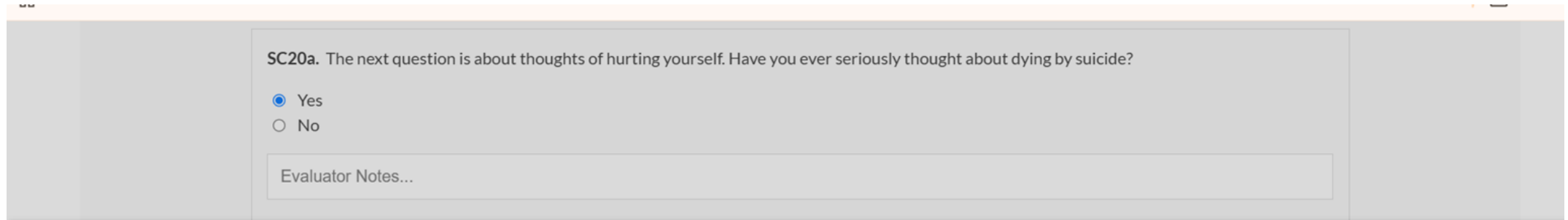
Please read each question and answer to the best of your ability. To answer each question, you might have to check a box, click a bubble, or type your own answer. You cannot go back and change answers to questions on previous screens during the assessment, so think carefully about each question. The assessment will take anywhere between 20 and 50 minutes. Are you willing to proceed?

- ☐ Willing to proceed with interview
- ☐ Refused to proceed with interview

Evaluator Notes...

Save and continue

ASSESSMENT- WARNING WINDOWS



SC20a. The next question is about thoughts of hurting yourself. Have you ever seriously thought about dying by suicide?

☒ Yes
☐ No

Evaluator Notes...

Warning

The clients responses indicate potential current suicidal ideation.

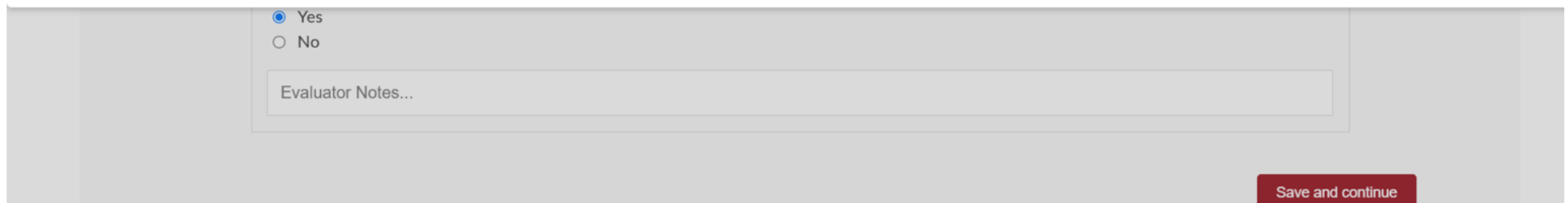
Stay with the client or arrange for someone else to do so. Implement your site's crisis management plan.

If you believe the client is in immediate danger and your site does not have a plan, contact 911 or the Suicide Prevention Line at 988.

When you have completed these steps, you can either save and exit this session, or continue with the assessment.

SAVE AND EXIT

CONTINUE WITH INTERVIEW



☒ Yes
☐ No

Evaluator Notes...

Save and continue

ASSESSMENT- INFO BUTTONS

☒ No

SC60e. Do you believe the respondent was under the influence of alcohol or drugs at the time of the interview?

☐ Yes

☒ No

SC60f. Taking into consideration all you have learned about the respondent during the interview, rate the respondent's psychological, social and occupational functioning in the worst months of the past 12 months from 0-100. Consider psychological, social, and occupational functioning on a hypothetical continuum of mental health-illness. Do not include impairment in functioning due to physical or environmental limitations. 

85

SC60g. Please make any additional comments about the interview or the interview situation.

non

Save and Exit

ASSESSMENT- INFO BUTTONS

☒ No

SC60e. Do you believe the respondent was under the influence of alcohol or drugs at the time of the interview?

☐ Yes

☒ No

SC60f. Taking into consideration all you have learned about the respondent during the interview, rate the respondent's psychological, social and occupational functioning in the worst months of the past 12 months from 0-100. Consider psychological, social, and occupational functioning on a hypothetical continuum of mental health-illness. Do not include impairment in functioning due to physical or environmental limitations. 

Score	Description
91-100	Superior functioning in a wide variety of activities. No symptoms.
81-90	Absent or minimal symptoms of mental problems, good functioning in all areas, generally satisfied with life, no more than everyday problems or concerns.
71-80	If symptoms of mental disorder are present, they are transient and expectable reactions to psychosocial stressors (e.g., difficulty concentrating after family argument); no more than slight impairment in social, occupational, or school functioning.
61-70	Some mild symptoms OR some difficulty in social, occupational, or school functioning, but generally functioning pretty well.
51-60	Moderate symptoms (e.g., occasional panic attacks) OR moderate difficulty in social, occupational, or school functioning.
41-50	Serious symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting) OR any serious impairment in social, occupational, or school functioning.
31-40	Some impairment in reality testing or communication (e.g., speech is at times illogical, obscure, or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgment, thinking, or mood.

ASSESSMENT- SELF-ADMINISTERED

[Case List](#)[Agency Admin](#)[Referral Directory](#)[Resources](#)[Sarah Nelson - Logout](#)

Case Details

Self Report

Copy this link and send it to the client if you would like them to self-administer the assessment. IMPORTANT: If the client will be accessing the self-administration link on this computer, log out of CARS before using the self-administration link.

URL: <https://cars.spinudev.com/evaluation/questions/0/600d3171-76af-4d94-a096-45e636957e29/d749f70b-0241-4895-ac4c-d0876e1388a0>

[Copy Link](#)

Please enter the information for this case. You will need to maintain separate records that match the client ID you input here to the client in your system. On this screen, you will select whether the assessment is to be administered to the client by yourself or a staff member, or whether you would like to generate a link to send the client to complete on their own. You will also select whether the assessment is being completed for a DUI program or not. If you select DUI program, the assessment will include a section on DUI-related behaviors, in addition to mental health and substance use.

REPORT- RAW DATA REPORT



Case List

Agency Admin

Referral Directory

Resources

Sarah Nelson - Logout

Review

Client: 6467
Status: Completed

Question	Response	Evaluator Notes
Is this assessment Self-administered or Interviewer-administered?	Interviewer-administered	
Agency	Spinutech	
Evaluator	Sarah Nelson	
Date Administered	6/27/2026	
Zip Code	01062	
Is this assessment being completed part of a	Yes	

REPORT- ACCESSING REPORTS



- Case List
- Agency Admin
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- Resources
- Sarah Nelson - Logout

Case List

Sorted by Date Case Created. Click any column header to sort the data by ascending order and again to sort by descending order.

Create new case

Export

Show cases for Sarah Nelson

Client ID	Case Created	Status	DUI Program	Options
6467	06/27/2026	Completed	Yes	Review / Report

REPORT- DIAGNOSTIC REPORTS

Client ID: 6467

Age: 42

Report Date: 6/27/2026



**COMPUTERIZED
ASSESSMENT**
AND
REFERRAL SYSTEM

CARS Report Prepared for: Spinutech

WARNING
CARS is a screening device and it does not provide a final diagnostic determination.
Further evaluation is necessary to determine whether problems reported are sufficient to
qualify as a disorder and to determine the level of problem severity.

CARS Screening Case Summary

The client is a 42 year-old white woman. She has screened positive for 5 mental health problems, 2 in the past year (see Mental Health Screening Summary table) and should consider seeking a professional mental health assessment. (Treatment resources are listed at the end of the report.)

The client reported that currently she considers her overall mental health to be fair.

Mental Health Screening Summary

	Lifetime Positive Screen	Past Year Positive Screen
Panic Disorder	No	No
Intermittent Explosive Disorder (IED)	Yes	No
Mood Disorder: Major Depression	No	No
Mood Disorder: Bipolar Disorder	No	No
Generalized Anxiety Disorder	Yes	No
Social Anxiety Disorder	Yes	No
Tobacco Use Disorder	No	No
Alcohol Use Disorder	Yes	Yes
Substance Use Disorder	No	No
Gambling Disorder	No	No
Eating Disorder	No	No
Obsessive Compulsive Disorder	No	No
Psychosis	No	No
Attention Deficit Hyperactivity Disorder	No	No
Oppositional Defiant Disorder	No	N/A
Conduct Disorder	No	N/A
Post Traumatic Stress Disorder	Yes	Yes

CARS Impaired Driving Risk Report

A risk assessment is a way to identify the potential for future harm. This kind of assessment does not predict the harmful outcome with certainty. The following is our assessment of the client's likelihood of future impaired driving or DUI recidivism if she does not change her behavior to reduce these risks. The client can change to reduce her risks for future impaired driving.

Having a history of impaired driving increases your likelihood of future impaired driving and DUI arrest. Individuals who experience mental health problems such as depression and anxiety, experience stressful life events, have a criminal history, report other traffic violations, or who often engage in risky patterns of drinking and/or driving, such as binge drinking or driving recklessly, also are at risk for continued or future impaired driving behavior and arrest.

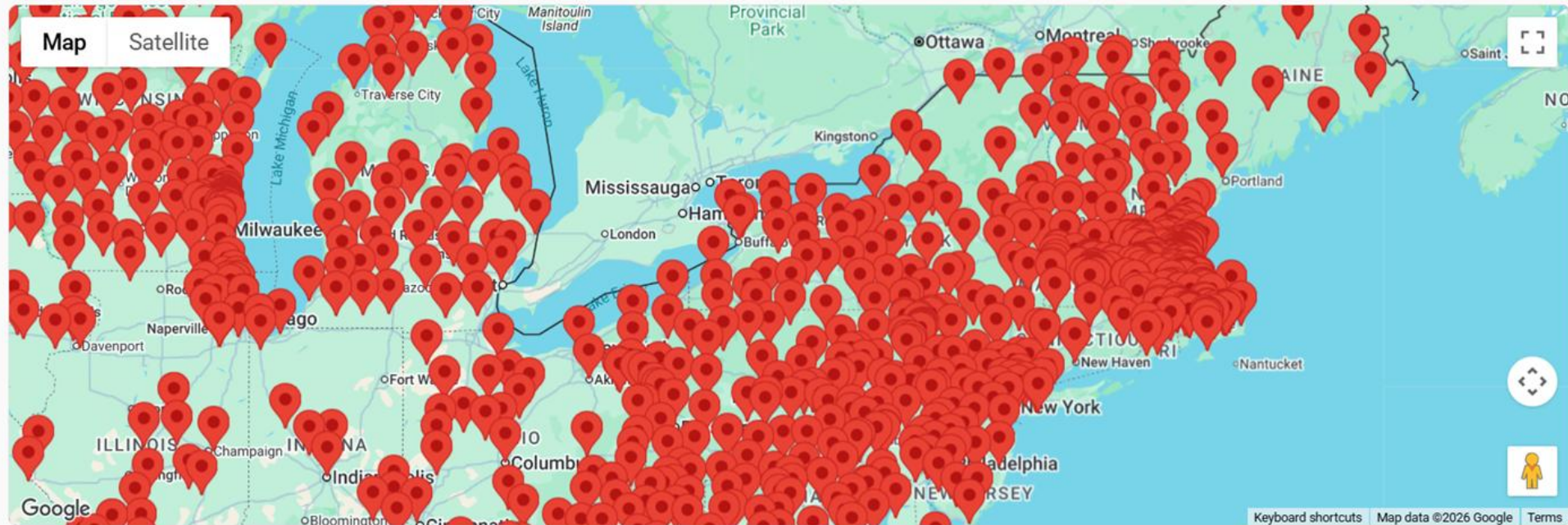
Based on the client's screening results, she is at very high risk for continued impaired driving behavior or DUI recidivism. Some of the risk factors contributing to this assessment include:

- Been arrested 5 time(s) for impaired driving
- Been arrested for impaired driving in the past year
- Been pulled over for impaired driving in the past year
- Attempted to avoid a sobriety checkpoint in the past year
- Has driven intoxicated 50+ times in her lifetime
- Screened positive for past year alcohol use disorder
- Screened positive for a past year anxiety disorder or posttraumatic stress disorder
- A BAC $\geq$ 0.20 measured during an impaired driving arrest
- Criminal history in addition to any impaired driving arrests
- Risky driving behaviors
- Coping motivations for drinking
- Past year stressors such as the death of a loved one, difficulties with housing or finances, and/or losing a job
- Currently not prepared to change drinking or impaired driving behaviors
- Continued impaired driving behavior within the past 30 days

REFERRAL DIRECTORY

[Case List](#)[Agency Admin](#)[Referral Directory](#)[Resources](#)[Sarah Nelson - Logout](#)

Referral Directory



IMPORTANT NOTES

- CARS Connect is a separate version of CARS. It *does not* interface with other versions of CARS.
- CARS Connect does not request any identifying information about the client, but includes a field for a client ID #. This helps protect the confidentiality of the client's information.
- CARS Connect includes a question about whether the assessment is being completed for an impaired driving program or court. Answering yes to that question activates the optional set of impaired driving and criminal history questions. If you answer no, those questions will not be asked.

“TREATMENT DEPENDS UPON DIAGNOSIS, AND EVEN THE MATTER OF TIMING IS OFTEN MISUNDERSTOOD. ONE DOES NOT COMPLETE A DIAGNOSIS AND THEN BEGIN TREATMENT; THE DIAGNOSTIC PROCESS IS ALSO THE START OF TREATMENT. DIAGNOSTIC ASSESSMENT IS TREATMENT; IT ALSO ENABLES FURTHER AND MORE SPECIFIC TREATMENT.”

-- KARL MENNINGER

RESOURCES

- carsconnect.org
- www.carstrainingcenter.org - Web portal for CARS distribution & resources
 - Link to CARS Connect (carstrainingcenter.org/cars-connect)
 - Downloadable CARS versions (CARS-SC)
 - User manuals & Quick guides
 - Publications & research snapshots
- support@carstrainingcenter.org
- www.divisiononaddiction.org
- www.basisonline.org
- Brief science reviews and editorials on current issues in the field of addictions; Self-help tools & resources
- snelson@hms.harvard.edu
 - Email me with any questions

Research Snapshot

CHA Division on Addiction
Cambridge Health Alliance

HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Evaluating the Computerized Assessment and Referral System (CARS) screener: Sensitivity and specificity as a screening tool for mental health disorders among DUI offenders

The Computerized Assessment and Referral System (CARS) provides comprehensive mental health screening for driving under the influence (DUI) offenders, a population with elevated risk of mental health problems.

CARS screens for the presence of 14 mental health disorders in either a lifetime or past 12-month frame.

The Study

Sensitivity	Specificity	Positive Predictive Value (PPV)
The proportion of people with a disorder who screen positive for that disorder.	The proportion of people without a disorder who screen negative for that disorder.	The proportion of people who screen positive for a disorder that actually have that disorder.

To assess the sensitivity, specificity, and PPV of the CARS screener, we used two samples:

- A sample of DUI offenders in Massachusetts who completed both the screener and the full CARS assessment.
- Data from the National Comorbidity Survey Replication (NCS-R), a large general population survey that included both full diagnostic assessments and questions that we used in the CARS screener.

Key Findings

The CARS screener had good and similar overall psychometrics in both samples.

The Table shows results for lifetime diagnoses from the larger NCS-R sample. In that sample, the CARS screener had high sensitivity and specificity (>80%) for all disorders except dysthymia, panic disorder, and tobacco use disorder (not pictured).

Positive predictive value was particularly high for substance use disorders, but lower for anxiety and mood disorders.

Disorder	Sensitivity	Specificity	PPV
Posttraumatic stress	100.0%	87.2%	47.9%
Panic	99.8%	62.4%	12.0%
Generalized anxiety	94.5%	81.0%	30.5%
Dysthymia	5.7%	96.5%	6.7%
Major depression	92.0%	87.8%	64.9%
Bipolar	100.0%	90.5%	33.1%
Alcohol use	99.1%	99.8%	98.9%
Drug use	99.8%	99.5%	96.8%

CARS screener properties in the NCS-R sample:

Key Takeaways

The CARS Screener offers a timely, sensitive, and specific method to screen for a variety of mental health and substance use disorders.

Though the CARS screener accurately detects issues related to panic, anxiety, and depression, it should be used to identify general areas of concern related to these disorders since its ability to differentiate between specific types of depression and anxiety is somewhat limited.

Nelson, S. E., LaRaja, A., Jubber, J., Williams, S. M. (2021). Evaluating the Computerized Assessment and Referral System (CARS) Screener: Sensitivity and Specificity as a Screening Tool for Mental Health Disorders among DUI Offenders. Substance Use & Misuse, 56(12), 1755-1766. <https://doi.org/10.1080/00207179.2021.1955624>

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