
What Is CARS?

CARS (i.e., the Computerized Assessment and Referral System) is an easy to use software package that includes a mental health screener and generates individualized clinical reports. This computer guided interview incorporates a structured diagnostic mental health assessment adapted from an internationally-validated instrument. Comprehensive clinical assessment tools can provide high quality diagnostic information that helps treatment planning, but commonly are not user-friendly. CARS packages a powerful mental health assessment tool with a user-friendly interface. CARS is flexible and provides immediate personalized output. CARS is a tool that laypeople can use easily to administer comprehensive mental health assessments. CARS output includes personalized information about the mental health disorders for which a client qualifies or is at risk, a summary of other risk factors and important issues, and a list of resources targeted by a client's issues and location.

Why Do People and Programs Need CARS?

Mental health problems that extend beyond substance use disorders are common among people with addiction, and can affect treatment outcomes (see Nelson et al., 2015). Yet, in a variety of clinical settings (e.g., addiction treatment facilities or DUI offender programs; see Shaffer et al., 2007), clients often do not undergo comprehensive screening for psychiatric disorders. Even when treatment programs attempt to estimate the extent of psychiatric disorders, in the absence of systematic screening tools, those efforts often are inaccurate. Consequently, standardized and automated assessment and diagnosis tools are essential to the widespread adoption of mental health screening. Because CARS uses the internationally-recognized CIDI (i.e., Comprehensive International Diagnostic Interview), the included assessments are well-validated and reliable.

How Has CARS Been Developed and Tested?

CARS is adapted from the Composite International Diagnostic Instrument (CIDI). We have collaborated with one of the founders of the CIDI, Dr. Ron Kessler and his team at the Harvard School of Public Health, to modify the CIDI for CARS. CARS also takes advantage of open source software (i.e., Java, Drools, and MySQL), reducing costs to potential users. CARS also includes a report generator to provide both diagnostic information and summary risks, as well as a zip code-based resource and referral database system. We conducted usability trials of CARS with DUI program providers in Massachusetts. We revised CARS based on those trials. CARS versions now include Full CARS, the CARS screener, and the self-administered CARS screener, described in more detail on the next page. We also conducted a randomized trial of CARS versions compared to intake as usual at two DUI programs. We are using these trials to assess the validity of the screener module included with CARS, as well as the potential for CARS to serve as a brief intervention.

What are the CARS Pilots?

As we prepare for widespread distribution of CARS and use within a variety of settings, we intend to begin by allowing five programs from across the nation to serve as our initial CARS pilot sites. These sites will be the first to integrate CARS into their programs and will provide valuable information for the standardization and implementation of CARS. These sites will work closely with the Division on Addiction and with the Foundation for Advancing Alcohol Responsibility to assess the usability of CARS at their locations and determine best practices for its use. In return, these sites will have access to individualized support for the use of CARS.



Available CARS Versions

CARS pilot sites can choose to use any of the following versions of CARS, depending on their resources and needs. All versions output a comprehensive report to be shared with clients. The mental health issues assessed through the CARS comprehensive mental health screener, which is included in all versions, are listed in Table 1.

1. **Full CARS:** This version of CARS includes a comprehensive mental health screener, as well as modules devoted to further evaluation of depression, bipolar disorder, post-traumatic stress disorder, generalized anxiety disorder, panic disorder, social phobia, alcohol use disorder, drug use disorder, and intermittent explosive disorder. Full CARS also includes a module devoted to assessing DUI and factors related to DUI recidivism, a module that assesses suicidality, and a personality disorder screener. Pilot sites using full CARS can choose which of these modules they want to use and whether they want to use the past 12-month or full lifetime version of each module. Full CARS takes between 1 and 2 hours to administer, depending on which modules are selected.
2. **CARS Screener:** This version of CARS includes the same comprehensive mental health screener as Full CARS. The screener was specifically constructed and modified during our trials to be able to stand alone as a screener for programs without the time or resources to conduct full CARS. The CARS Screener takes between 30 minutes and 50 minutes to administer.
3. **Self-Administered CARS Screener:** This version of CARS has identical content to the CARS Screener, but has been modified for self-administration by clients. The Self-Administered CARS Screener takes between 20 minutes and 50 minutes to complete.

Table 1. CARS Comprehensive Mental Health Screener Domains		
Panic Disorder	Social Phobia	Eating Disorders
Intermittent Explosive Disorder	Attention Deficit/Hyperactivity Disorder	Obsessive Compulsive Disorder
Depression	Generalized Anxiety	Suicidality
Mania/Bipolar Disorder	Post-traumatic Stress	Conduct Disorder
Oppositional Defiant Disorder	Psychosis	Nicotine Dependence
Alcohol Use Disorder	Drug Use Disorder	Gambling Disorder
Psychosocial Stressors	DUI/Criminal Behavior	

References

- 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.
- 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.