



Between the Lines

Mark Your Calendars

National Teen Driver Safety Week

State Farm
October 18–24, 2015

IACP Annual Conference International Association of Chiefs of Police

Chicago, IL
October 24–27, 2015

Halloween Drunk Driving Prevention: Buzzed Driving is Drunk Driving NHTSA

October 31, 2015

National Drunk & Drugged Driving Prevention Month

ONDCP
December 2015

Drive Sober or Get Pulled Over NHTSA, MADD, GHSA

Dec. 18, 2015–Jan. 3, 2016

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Computerized Assessment and Referral System (CARS): The New Frontier in DUI Offender Assessment

By Erin Holmes

In 2013, 10,076 people lost their lives in alcohol-impaired crashes. This number is simply unacceptable. Approximately 25 percent of individuals arrested for drunk driving are repeat offenders (Warren-Kigenyi and Coleman, 2014). This means that contact with the criminal justice system in and of itself, does not deter at least one fourth of all offenders. What, then, can be done to stop this revolving door and reduce both the frequency of this behavior and the number of fatalities and injuries that occur on our roadways?

The assessment of DUI offenders is the first step – and a necessary step – towards addressing the underlying causes of impaired driving behavior, which will subsequently reduce recidivism and save lives. Absent the identification and treatment of substance use and co-occurring disorders, long-term behavior change is unlikely for these offenders.

In recognition of the need for effective assessment instruments, the Foundation for Advancing Alcohol Responsibility (Responsibility.org) partnered with the Division on Addiction at Cambridge Health Alliance (CHA), a teaching affiliate of Harvard Medical School, to test and expand the use of the Computerized Assessment and Referral System (CARS). This revolutionary tool is a standardized mental health assessment that provides immediate diagnostic information for major mental health disorders along with geographically and individually targeted referrals based on the findings of the assessment and the ZIP code of the client. In addition to screening for substance

use disorders, CARS is able to identify whether DUI offenders are at-risk of having one or more psychiatric disorders.

The need for CARS

The motivation for the CARS project was borne out of research that revealed that there is a very high level of psychiatric co-morbidity among the DUI offender population and that these mental health issues are often linked to recidivism (Shaffer et al., 2007).

When most people think of DUI offenders, particularly repeat offenders, they tend to assume that the origin of the behavior is an alcohol and/or drug problem. Alcohol consumption is the most obvious behavior related to drunk driving and many offenders do have elevated rates of substance use disorders when compared to the general population. DUI offenders also have elevated rates of psychiatric co-morbidity. In other words, they suffer from one or more mental health disorders in addition to their substance use problems.

To give an example of the extent of co-occurring disorders among the impaired driving offender population, one study conducted by Shaffer et al. (2007) showed that 45% of repeat DUI offenders had a lifetime major mental health disorder that was not alcohol or drug-related. What is also known from epidemiological research is that the presence of a substance use disorder increases an individual's likelihood of having other psychiatric disorders. So among this population, it is common to find individuals suffering with anxiety disorders (such as

post-traumatic stress disorder), mood disorders (such as depression), bipolar disorder, and anti-social personality characteristics.

Treatment for this offender population has historically consisted of alcohol education or interventions that focus solely on alcohol or substance use. Screening and assessment for mental health issues are not always available and even if they are, they might not be performed. Without screening and evaluation, in many cases, problems are not identified.

CARS was developed to identify those problems. Its primary purpose is to identify mental health and substance use disorders among DUI offenders so that we can facilitate treatment referral for those issues. A potential secondary use is to predict DUI recidivism risk from those mental health profiles.

The development of CARS

Developed with initial funding from the National Institute on Alcohol Abuse and Alcoholism (NIAAA), CARS is adapted from the World Health Organization's (WHO) Composite International Diagnostic Interview (CIDI). The WHO developed the CIDI for use by trained lay interviewers and it is reliable, validated, and has been used with populations around the world. Researchers use the CIDI to conduct research and to provide diagnostic information across a variety of international settings. Cambridge Health Alliance collaborated with one of the founders of the CIDI, Dr. Ron Kessler, and his team at the Harvard School of Public Health to adapt content from the CIDI for CARS.

To test the usability of CARS, CHA recruited a sample of five agencies working with DUI offenders. They asked the staff to use CARS and provide feedback. Based on the results of this study and input from key stakeholders, the instrument was further modified. In particular, the CHA team created an empirically-based screener module that can be used on its own in settings where less than a half hour is available for assessment.

How CARS works

CARS packages a powerful mental health assessment tool with a user-friendly interface. CARS output includes personalized information about a client's mental health disorders and a summary of risk factors and important issues associated with these disorders. CARS also provides individually targeted referrals to treatment services based upon the outcomes of the assessment.

There are three versions of the CARS tool that can be used: the full assessment, a brief screener, or a self-administered brief screener. The full assessment can take more than two hours to complete, but includes all diagnostic criteria for the disorders it assesses.

The full CARS assessment includes a module specific to DUI behavior and drinking and driving patterns and motivations. The data obtained from the questions in this section are integrated with other risk factors to generate an overall DUI recidivism risk score. A graphic is generated as part of the outcomes report that indicates where an individual is within a range of low to very high risk. Currently, this score is derived from past research – in the future, this scoring will be based on the results of the studies currently ongoing.

For programs or users that do not have the time or resources to conduct the full CARS assessment, the brief screener can be used to provide a good indication of diagnostic areas that need further assessment. The screener takes between 15-40 minutes to complete

and indicates disorders for which a respondent might be at risk or might qualify. There is also a version of this same screener that can be self-administered by a respondent. For all versions of CARS, individual diagnostic reports provide information about the mental health disorders for which a person qualifies or is at risk, his or her experience of symptoms, as well as a summary of bio-psycho-social risk factors.

Aside from being a completely electronic instrument, the other aspect that sets CARS apart from other assessment tools is the built-in referral database. At the end of each diagnostic report, a list of individually-targeted referrals is included. These referrals are generated based on an individual's ZIP Code and assessment profile. The services can include hospitals, outpatient treatment programs, detox programs, halfway houses, self-help programs, and so forth. Another added benefit is that public transportation options (such as bus routes) can be input into the database. This is particularly useful as many individuals being assessed lack driving privileges because of their DUI offense history.

Benefits of CARS

CARS has a number of benefits that make it an ideal tool for practitioners and set it apart from other existing assessment instruments:

- Developed specifically for a DUI offender population.
- Provides immediate diagnostic information for up to 15 major psychiatric disorders.
- Generates user-friendly reports containing targeted referrals at the click of a button.
- Can inform sentencing, treatment, and intervention decisions.
- Runs on free open source software; there is no cost associated with its use.
- Can be used by non-clinicians – in designing the instrument, the team at CHA endeavored to create a tool that laypeople, practitioners, and researchers can use easily.
- Applicable in a number of settings – within the criminal justice setting, CARS can be utilized at multiple junctures. The earlier the information is gathered, the more it can be used to plan and inform decision-making. CARS may be used at initial appearance, pre-sentencing, initial sentencing, during probation supervision, as well as during treatment and aftercare.

Current evaluation

Cambridge Health Alliance is currently conducting a multi-site randomized control implementation trial to evaluate CARS. This study is being conducted at two Massachusetts DUI programs – the Middlesex Driving Under the Influence of Liquor (MDUIL) Program, a two-week inpatient program for repeat offenders, and the Behavioral Health Network Driver Alcohol Education Program for first offenders.

For six months, within each of these two treatment programs, CHA is randomizing the implementation of CARS so that equal numbers of participating clients receive one of four conditions: (1) intake as usual; (2) full CARS assessment; (3) screener only; and (4) self-administered screener. The researchers will then conduct follow-up with all of the clients six months after their initial participation by collecting information about their treatment progress, drinking behavior, driving behavior, and legal involvement since they first entered the study. To date, 375 repeat DUI offenders have been enrolled in the trial and CARS data is

available for 257 of these participants.

In addition to continuing to assess CARS usability, the data collected will allow researchers to answer several key questions:

- How does the CARS screener perform in comparison to the full CARS assessment? How well does it stand alone as a valid assessment?
- Can the CARS screener be successfully self-administered? Are the results the same as those from an interviewer-administered version?
- How do specific psychiatric disorders relate to recidivism?
- Does engaging with CARS increase later treatment engagement and retention and improve outcomes?

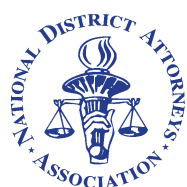
Preliminary data has shown positive results as it relates to the sensitivity, specificity, and predictive value of the CARS screener. Full analyses will be available by the end of 2015.

For more information

For practitioners who are interested in utilizing CARS in their courtroom, probation department, or treatment program, FAAR anticipates that this cutting-edge instrument will be available for use, free of charge in 2016.

To access a webinar with a live demonstration of the CARS assessment, please visit Responsibility.org. Please direct all questions and inquiries to Erin Holmes, Director of Traffic Safety – erin.holmes@responsibility.org

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