


DRUG & ALCOHOL FINDINGS *Research abstract*

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► [Screening for underage drinking and Diagnostic and Statistical Manual of Mental Disorders, 5th Edition alcohol use disorder in rural primary care practice.](#)

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Journal of Pediatrics: In press, 2016

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A US study of young people in rural primary care settings finds that alcohol use disorders can be identified with a single question about frequency of drinking.

SUMMARY In the United States, a national study of young people aged 12 to 18 [found that](#) past-year drinking frequency was an accurate proxy for alcohol-related problems – considerably more so than quantity of alcohol per occasion or frequency of heavy episodic drinking. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) subsequently adopted the use of alcohol frequency to screen for problematic drinking in young people. This study explored the accuracy of NIAAA drinking frequency screening thresholds for detecting alcohol use disorders (as defined by Diagnostic and Statistical Manual of Mental Disorders, 5th Edition or DSM-5 diagnostic criteria).

1193 young people (aged 12–20) attending six rural primary care clinics opted into the study. They were provided with a tablet computer and asked to enter information about past-year drinking and alcohol-related symptoms. This took around three to six minutes of their time.

The researchers gauged the accuracy of the screening thresholds using measures of “sensitivity” (the proportion correctly detected as having an alcohol use disorder), and “specificity” (the proportion correctly ruled out of having an alcohol use disorder). Together, sensitivity and specificity (reported as percentages) tell us how well a screening tool can pick up on risky drinking, without drawing into the net large numbers of non-risky drinkers.

From the sample, 2% of younger adolescents (aged 12–14), met DSM-5 criteria for an alcohol use disorder in the past-year, compared with 10% of those aged 15–17 and 10% aged 18–20. When applied to the same age range as the earlier national study (i.e. 12–18), the NIAAA [thresholds for moderate risk](#) showed acceptable levels of accuracy (85% sensitivity and 87% specificity) as a screen for *any* DSM-5 alcohol use disorder symptom; and the NIAAA [thresholds for the highest level of risk](#) showed acceptable levels of accuracy (91% sensitivity and 93% specificity) as a screen for *severe* DSM-5 alcohol use disorders.

In practice, “an alcohol use frequency screen followed by an [alcohol use disorder] evaluation among those who screen positive would constitute a simple, brief, and cost-effective clinical assessment procedure” – and it would enable practitioners to check whether those who have screened positive, do indeed have an alcohol use disorder. The researchers found that, for those in the age band 12–17 years, around 44% of those who screened positive could be expected to have an alcohol use disorder (based on a calculation of a statistical measure called the “positive predictive value”), and around 99% of those who screened negative could be expected to not have an alcohol use disorder (based on a calculation of the “negative predictive value”).

Overall, the findings suggested that drinking frequency can be a useful and accurate indicator of alcohol use disorders among young people, and that at-risk young people can be identified with a single question on alcohol use frequency.

FINDINGS COMMENTARY The study considered here used computer-based self-assessments to screen young people for alcohol use disorders. Modern technologies present new opportunities for increasing rates of screening among young people, as explored in other Effectiveness Bank analyses including assessment and feedback [by email](#) for university students, [web-based](#) alcohol screening and brief intervention for university students, and [text-message-based](#) drinking assessments and brief interventions for young adults discharged from the emergency department.

Last revised 20 May 2016. First uploaded 17 May 2016

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