

The Relationship between Services Delivered and Substance Use Outcomes in New Mexico's Screening, Brief Intervention, Referral and Treatment (SBIRT) Initiative

Background: Recent years have seen increased diffusion of SBIRT in healthcare environments. This study examined the relationship between substance use outcomes and service variables within the SBIRT model.

Methods: Over 55,000 adult patients were screened for substance misuse at rural health clinics throughout New Mexico during the SBIRT Initiative. This naturalistic pre-post services study used administrative baseline, 6 month follow-up, and services data for adult participants in the New Mexico SBIRT evaluation ($n=1,208$). Changes in self-reported frequency of illicit drug use, alcohol use, and alcohol intoxication were examined as a function of service level (brief intervention– BI vs. brief treatment/referral– BT/RT) and number of service sessions.

Results: Participants reported decreased frequency of illicit drug use, alcohol use, and alcohol intoxication 6 months after receipt of SBIRT services ($p<.001$ for each). Compared to those who received BI, participants who received BT/RT had sharper reductions in frequency of drinking (IRR=.78; $p<.05$) and alcohol intoxication (IRR=.75; $p<.05$). Number of service sessions was associated with reduced frequency of alcohol use (IRR=.84; $p<.01$) and intoxication (IRR=.82; $p<.05$), but only among those who received BI.

Conclusions: Substance-using patients with disparate levels of use may benefit from SBIRT. In a real-world, multi-site rural SBIRT program, services of higher intensity and (within the BI modality) frequency were associated with greater magnitude of change in drinking behaviors. Reductions in illicit drug use, while substantial, did not differ significantly based on service variables. Future studies should identify the preferred service mix in the SBIRT model as it continues to expand.