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Commentary

Adolescent Screening, Brief Intervention, Referral to Treatment: Defining a Research Agenda

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In 2020, the United States Preventive Services Task Force (USPSTF) concluded for the second time in 13 years (or third if you include the alcohol Screening, Brief Intervention, Referral to Treatment [SBIRT] review) that there is insufficient evidence available to assess the effectiveness of SBIRT and more study is needed. This report, which focused on reducing substance use, misses some of SBIRT's potential benefits. For example, screening for substance use may lead to better clinical care, even if it does not reduce use. Knowing that an adolescent is using psychoactive substances can inform diagnoses and impact treatment options—including for mental health disorders such attention-deficit hyperactivity disorder, anxiety, and depression or medical conditions. Such benefits may be impossible to detect in small research projects, but vital on a population level.

The main goal of brief intervention (BI) is to reduce harms from substance use. Although evidence that BI improves outcomes is lacking, there is no evidence that it causes harms. On the contrary, both the opioid and vaping epidemics have demonstrated that ignoring substance use during adolescence is very harmful. That should be a call to action—but we need to rethink the research agenda. Randomized controlled trials that compare a standardized BI with usual care are important for identifying "signals" and guiding the discovery process, but they are challenging to implement in real-world settings, are inefficient, and, as the recent USPSTF review has yet again demonstrated, cannot alone tell us what we need to know in a reasonable timeframe or within a reasonable budget. This is especially so in adolescent populations, for whom substance use is often sporadic. Too much observation (i.e., detailed assessment batteries and large samples) is needed to be practical, especially when the goals of interventions and foci of measurement include nonescalation of sporadic use.

Yet, the premise is untenable that health care professionals are powerless to help adolescents to change substance use trajectories. Given the low-cost and low-risk nature of SBIRT, the logical next step is to "crowd source" screening and intervention techniques, broadly diffusing and evaluating them across a range of sites and settings to develop a rich and pragmatically derived evidence base regarding how best to use these procedures to achieve health benefit. Pragmatic studies that use medical records and administrative data and examine outcomes from large numbers of adolescents are needed—large-scale rollout is the only way to support this type of investigation. By collecting data from entire populations and linking outcomes to intervention approaches implemented in real-world settings, big data analyses can advance the evidence base and accommodate the reality of diverse clinical settings. This methodology emphasizes external validity where innovation may fit local needs. This is a crucial component for addressing diversity, equity, and inclusion because we know that culturally responsive adaptations are needed for different patient populations. This approach also increases the likelihood that successful SBIRT models will be sustained. Models that originate from a local setting may be highly likely to be maintained once demonstrated to be feasible and effective. Enabling rigorous evaluation of local models has the potential to reverse a pattern where bespoke research efforts are published but not thereafter practiced once research dollars are exhausted. Furthermore, it allows us to push boundaries of how we address substance use in primary or specialty care by encouraging health care providers to determine how other clinical tools—such as laboratory monitoring and medications to treat withdrawal symptoms or suppress cravings—can be thrown into the mix to make interventions more powerful. Rigorous pragmatic research that supports investigation of what was implemented along with outcomes will allow us to determine key components of more effective programs. If we believe adolescent substance use is modifiable through clinical

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interventions, then this is what we need to know. The alternatives are either to continue with the research paradigm of small projects, that may or may not scale, or to completely disregard the potential for addressing substance use as a health risk behavior in general medical settings, which is fatalistic and illogical.

Lack of SBIRT endorsement by the USPSTF runs the risk of undermining SBIRT practice improvement and diminishes efforts toward providing comprehensive care to the age group at high risk for initiating substance use behaviors. Medical care represents a unique opportunity to interrupt substance use trajectories before they intensify to a disorder or treat disorders before the known medical, mental health, and sociological problems begin to accumulate—a rationale closely tied to the goals of primary and secondary prevention. Opting not to address adolescent substance use means as a society we are sanctioning inattention to detecting a modifiable health behavior that is known to contribute to the leading causes of morbidity and mortality among youth, young and older adults in the United States and globally.

The urgent need to address adolescent and young adult substance use population-wide tips the calculation of risk/benefit toward action even as knowledge and 'best practices' are being advanced. Widespread adoption and diffusion of adolescent SBIRT are needed if we are to advance the research agenda. High-quality research is needed to advance the adolescent SBIRT evidence base including rigorous studies of the performance of different screening tools, BI approaches, and their outcomes. Advancing implementation so that data accrue and models can be adequately studied is the logical next step. At the time of the next USPSTF review, having another statement that concludes that too little information is available and more study is needed is insufficient, especially in the context of having drawn these exact same conclusions previously.

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