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Screening for Drug Use in Primary Care: Practical Implications of the New USPSTF Recommendation

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The US Preventive Services Task Force (USPSTF) has revised its recommendation regarding screening for drug use in primary care.[1] The USPSTF now recommends screening for illicit drug use when accurate diagnosis and treatment of drug use disorders (DUDs) are available in primary care or by referral. This updated recommendation reflects an important shift—away from the 2008 guideline's focus on preventive counseling in patients identified by screening[2]—to a focus on increasing diagnosis and treatment of DUDs.[1] However, the report does not address several key scientific and practical considerations important to practicing clinicians.

Shift from screening and brief intervention to diagnosis and treatment

The initial systematic review conducted for the USPSTF found no evidence that screening alone improves outcomes and no benefit of interventions in patients whose drug use is identified by screening.[3] The latter results, from 27 trials (22 in primary care), are not mentioned in the USPSTF update.[1] Instead, the updated recommendation rests on a subsequent supplemental review that expanded the population of studies reviewed,[4] adding 19 trials of pharmacotherapy and 25 trials of psychosocial treatments in patients identified *without* screening (e.g. seeking treatment for DUDs).[3] That supplemental review found that interventions decreased drug use. However, about half the patients in the reviewed trials were seeking or referred for treatment of DUDs, and sensitivity analyses restricted to individuals identified by screening again found no significant benefit. We were disappointed that the USPSTF report did not present the negative findings from the initial review focused on patients identified by screening.

At the same time, this new USPSTF report highlights two important findings from large bodies of research. First, valid screening tests for drug use are available. Second, treatments for DUDs are effective. The latter is especially true for medications for opioid use disorders and behavioral treatments for cannabis use disorders,[1,4] both of great relevance given the ongoing opioid epidemic[5] and increasing cannabis use in the US.[6] Moreover, increasing

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diagnosis and treatment of DUDs is critically important in light of the 9.9% lifetime prevalence of DUDs among US adults, with less than 25% receiving any treatment.[7] At the same time, no rigorous trials to our knowledge have yet demonstrated that screening leads to improved diagnosis and treatment, despite encouraging observational research.[8] Nevertheless, we agree with the USPSTF's ultimate conclusion, as well as other experts,[9] that routine drug screening should be part of high-quality primary care. Below we address potential benefits of screening and practical considerations not addressed in the USPSTF updated recommendation, for those considering whether to integrate routine drug screening into primary care.

How screening for illicit drug use is implemented will impact its validity and utility

Research suggests that how drug screening is implemented may dramatically impact its sensitivity. Early nationwide implementation of alcohol screening in the Veterans Affairs healthcare system found a low prevalence of positive screens despite use of a validated screening questionnaire.[10] Subsequent research demonstrated that the screen was only 39% sensitive when implemented and documented as part of routine care in the electronic health record (EHR), compared to the same screen on a confidential survey.[11] This low sensitivity partly reflects that staff often verbally asked screening questions in a non-standard manner to speed screening and increase patient comfort due to stigma.[12] Importantly, no research to our knowledge has tested the validity of drug screening tool(s) when routine screening is documented in EHRs, but ongoing implementation research in other systems has identified similar findings with alcohol. When questions were asked by staff, the prevalence of positive alcohol screens was 2% compared to 15–37% when patient self-administered.[13]

Separate screening for cannabis use may also be important. Although most drug use identified by screening in validation studies has been cannabis use,[1] screening questions about drug use can be confusing when cannabis use is legal. Currently, 33 states have legal medical use and, of those, 11 have legal non-medical use. In these states, cannabis use does not fit the USPSTF's definition of illicit drug use.[1] We encountered this issue when Kaiser Permanente (KP) Washington, a large regional health system, decided to screen all primary care patients for drug use in 2014.[14] Medical and non-medical cannabis use is legal in Washington state, and during the piloting phase, clinicians noted that a question about illicit drug use was ambiguous. Moreover, they wanted separate information on cannabis use given widespread legal access for adults. KP Washington's behavioral health screen therefore includes 1 question each about cannabis and other drug use.

Practical findings from research implementing cannabis and drug screening

The USPSTF recommends screening when accurate diagnosis and treatment can be offered in primary care or via referral.[1] However, little rigorous research has addressed how to practically diagnose and treat primary care patients with cannabis or other drug use disorders. DUDs are one of the most stigmatized health conditions[6] and primary care providers often feel they lack the skills, time, and support required to diagnose and manage DUDs.[15] Further, many patients with DUDs will not perceive a need for treatment.[16] Given

the historic neglect of DUDs in medical training and healthcare delivery, effective primary care for DUDs will likely require addressing stigma and training gaps, as well as developing systems to support diagnosis and treatment. We describe one sustainable pragmatic approach implemented in KP Washington below.[8,17,18]

KP Washington integrated paper-based drug screening and assessment into routine primary care using: (1) screening and risk-stratification with two questions on a behavioral health screen;[17] (2) assessment and engagement with a checklist for symptoms of DUDs based on Diagnostic and Statistical Manual 5th Edition (DSM-5) criteria ;[18,19] and (3) hands-on implementation support which addressed stigma.[8,17] Two single-item screening questions for cannabis and drug use are used, the latter adapted from a validated drug screen that included prescription misuse.[14,20] Patients who report daily cannabis use or any other drug use at screening are asked to complete the paper 11-item Substance Use Symptom Checklist, with results entered into the EHR at the time of rooming. Initial discomfort with handing out screening and checklist forms was addressed by encouraging primary care staff to develop scripting to normalize the process (e.g. “we screen all patients, every year, as part of whole health”).

With integration of routine drug screening and assessment, the prevalence of primary care patients who report past-year cannabis use was 19% (4% daily), with 2% reporting any other drug use. Among patients reporting daily cannabis use, 30% reported ≥2 DSM-5 symptoms on the checklist, consistent with mild to severe DUDs.[18] Among those reporting other drug use, the proportion reporting ≥2 symptoms of DUD ranged from 27–79%, increasing as the frequency of drug use increased.[18] A further benefit of the checklist is that primary care clinicians can use patient-reported symptoms to initiate patient-centered conversations, as in: “You noted that you have been trying to cut down but been unable, can you tell me about that?” Unlike when secondary screens are used for assessment,[1] the checklist allows providers to more efficiently discuss, diagnose DUDs, and assess severity with patients. A pilot study suggested this process might increase diagnosis and/or treatment of DUDs.[8] Of note, cannabis and drug screening were implemented as part of an implementation trial,[8,17] yet were sustained because patients, staff, and providers voiced benefits of normalizing discussion of drug use in primary care. In February 2020, more than 18 months after the trial’s active implementation ended, 91% of all primary care patients seen had completed annual cannabis and drug use screening, with 78% and 73% of those with high-risk cannabis and drug use, respectively, completing checklists.

In conclusion, the new USPSTF recommendation for drug screening was not based on evidence that screening alone or interventions in individuals identified by screening improves outcomes. Nevertheless, the recommendation highlights the validity of brief screens and the effectiveness of treatments for DUDs, especially for opioid and cannabis use disorders. Implementation research suggests that very brief screens followed by assessment of DSM-5 symptoms may increase discussions wanted by both patients and providers. Although future research must determine whether routine screening and assessment improve patient outcomes, screening for drug use seems like a small but necessary step toward integrating care for DUDs into medical settings.

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