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Reframing the Key Questions Regarding Screening for Suicide Risk

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In this issue of *JAMA**, the US Preventive Services Task Force (USPSTF) updates earlier recommendations, endorsing screening for depression in adults while finding insufficient evidence to support screening for suicide risk. Our views regarding those recommendations are informed by our work in suicide prevention research and quality improvement (GS, JR, UW), clinical practice (GS, UW), lived experience of suicidal ideation (UW), and experience of family suicide loss (JR).

The renewed recommendation for depression screening is expected and should cause little controversy. As documented in the accompanying evidence review*, evidence since 2016 only strengthens the arguments for the accuracy of commonly used screening questionnaires and the effectiveness of specific interventions, including antidepressant medications and specific psychotherapies, for people identified by screening.

In contrast, the finding that evidence is insufficient to support screening for suicide risk will likely meet objections. Improved identification of suicide risk is recommended by the Surgeon General's office[1], advocacy organizations[2], and accreditation bodies[3]. To reconcile disparate recommendations, we should consider developments since 2014 that affect context. First, use of standard depression questionnaires for screening and assessing treatment outcomes is now widespread. USPSTF recommends depression screening for all adults. The Centers for Medicare and Medicaid (CMS) Quality Payment Program assesses and rewards use of standard depression questionnaires for both screening and monitoring outcomes for all adults receiving depression treatment. Specific measures endorsed by USPSTF and CMS, including Patient Health Questionnaire (PHQ-9) or Edinburgh Postnatal Depression Scale, include specific questions regarding suicidal ideation. Rather than recommending *whether* clinicians should ask about suicidal ideation, we must recommend *how* they respond to the answers. Second, health systems are exploring, and sometimes implementing, prediction models using records data to identify people at high risk for suicidal behavior[4, 5]. Screening to identify suicide risk can now include more than questionnaires.

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Considering these developments, we could reframe the key questions addressed by the USPSTF evidence review: Do either suicidal ideation reported on depression screening questionnaires or risk scores computed from health records data accurately predict subsequent suicidal behavior? Does clinical intervention for people identified either by screening questionnaires or by risk scores reduce risk of subsequent suicidal behaviors?

Like the USPSTF recommendation, we use the term “screening”. But the goal of questionnaires and risk scores is not to detect some hypothesized latent state of “suicidality” but to accurately predict future self-harm or suicide attempt. And the effectiveness of intervention should be evaluated by reduction in subsequent suicidal behavior rather than effect on suicidal ideation.

Regarding predictive accuracy of self-report questionnaires and records-based risk scores, evidence is reasonably clear – at least among people with known mental health conditions. Outpatients reporting suicidal ideation “nearly every day” in response to the 9th item of the PHQ-9 depression questionnaire have a 3.5% risk of self-harm or suicide attempt over the following 24 months days, 10 times the rate for all outpatients[6]. Mental health clinic patients with a computed risk score above the 95th percentile have a 5% risk of self-harm in the next 90 days[7]. Some might still question whether those risk levels or positive predictive values warrant intervention, but that depends on the effectiveness and safety of the intervention offered. As a comparison, medical interventions are commonly considered appropriate among patients at lower predicted risk of cardiovascular or thromboembolic cerebrovascular events.

We should clarify that our key question regarding intervention effectiveness specifically concerns effectiveness among people identified by screening. Consistent evidence supports the effectiveness of specific psychotherapy treatments for people with recent suicidal behavior who have already chosen to engage in treatment[8, 9]. But that evidence may not apply to people identified by screening who have lower average risk and may have lower interest in treatment.

Evidence regarding the effectiveness of interventions based on screening questionnaires is less clear. One randomized pragmatic trial of low-intensity outreach programs for people identified by responses to PHQ-9 depression questionnaires found no reduction in risk of subsequent self-harm compared to care as usual[10]. A before-after evaluation of systematic suicide risk screening in emergency departments linked to brief interventions and follow-up telephone calls did find a significantly lower rate of subsequent suicide attempts[11].

Evidence regarding effectiveness of intervention based on risk scores is sparse. No randomized comparisons are available. A difference-in-difference observational evaluation of the Veterans Health Administration’s REACH VET program, which used computed risk scores to prompt outreach and care coordination, found modest reductions in psychiatric hospitalizations and self-harm events[5].

Whether or not to implement records-based risk scores and associated outreach interventions is a question for healthcare organizations rather than individual clinicians. Given sparse

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evidence, some health systems will choose to act, and some will wait for more evidence. And, pending further evidence, either decision is reasonable.

In contrast, insufficient evidence regarding effectiveness of interventions based on screening questionnaires creates a dilemma for health systems and individual clinicians. Following USPSTF recommendations, health systems and clinicians will increasingly screen for depression using questionnaires that ask directly about suicidal ideation. And up to 5% of outpatients will report suicidal ideation "more than half the days" or "nearly every day"[6]. Health systems are unlikely to recommend that clinicians ignore those responses, regardless of the strength of evidence for subsequent intervention.

Clinicians who are unprepared to assess or address risk of self-harm may respond to reports of suicidal ideation either with silence or fearful over-reaction. Patients encountering either of those extremes may be less likely to disclose risk or collaborate in effective treatment. Specific training resources, such as those developed by the National Action Alliance for Suicide Prevention Zero Suicide initiative (https://zerosuicide.edc.org/resources/trainings-courses), can support more effective responses.

If clinicians can expect to encounter reports of suicidal ideation – which do predict subsequent suicidal behavior - we should consider what responses are prudent. We should certainly avoid responses that are stigmatizing, coercive, or even dangerous – such as involuntary treatment or "welfare checks" by armed law enforcement. No screening questionnaire or risk score is accurate enough to justify those potential harms. Law enforcement responses may be especially dangerous for people of color. Unfortunately, health system and clinician responses to reports of suicidal ideation can be overly influenced by concerns regarding blame and liability. More restrictive or coercive interventions, even if intended to increase short-term safety, may undermine trust and have negative unintended long-term consequences.

A just culture for suicide prevention in health care would focus on consistent use of optimal care processes rather than determining fault for adverse outcomes. Those processes might include non-demanding communication of concern and collaborative development of safety plans that address reducing access to means of self-harm. Outreach and offers of care must be based in humility, respect for autonomy, and a spirit of collaboration.

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