Youth Mental Health Screening and Linkage to Care

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One Mind, in partnership with Meadows Mental Health Policy Institute, convened several virtual meetings of mental health researchers, clinicians, and other stakeholders in 2020 to identify first steps toward creating an initiative for early screening and linkage to care for youths (individuals in early adolescence through early adulthood, ages 10–24 years) with mental health difficulties, including serious mental illness, in the United States. This article synthesizes and builds on discussions from those meetings by outlining and recommending potential steps and considerations for the development and integration of a novel measurement-based screening process in youth-facing school and medical settings to increase early identification of mental health needs and linkage to evidence-based care. Meeting attendees agreed on an initiative incorporating a staged assessment process that includes a first-stage brief screener for several domains of psychopathology. Individuals who meet threshold criteria on the first-stage screener would then complete an interview, a second-stage in-depth screening, or both. Screening must be followed by recommendations and linkage to an appropriate level of evidence-based care based on acuity of symptoms endorsed during the staged assessment. Meeting attendees proposed steps and discussed additional considerations for creating the first nationwide initiative for screening and linkage to care, an initiative that could transform access of youths to mental health screening and care.

As with other forms of illness, intervening early in the course of a mental health condition is associated with better outcomes (1–3). However, early intervention requires early detection, and mental health concerns are often misdiagnosed or undiagnosed. Even among youths endorsing mental health concerns, it has been reported that less than one-third receive mental health services (4, 5). Several barriers to care currently exist, including a previous lack of government investment in youth mental health care, as well as limited utilization of potentially important tools, including preventive initiatives and online tools. These barriers may be even more pronounced in historically marginalized communities (6). Because of such limited access to or utilization of care among those with an indicated need within the current mental health care landscape, prospects of early intervention before or even within several months of developing a diagnosable disorder are generally inadequate.

To better understand and develop a plan to address barriers to early identification of mental health difficulties, including serious mental illness (e.g., psychotic symptoms, depression, and suicidality), among youths, One Mind in partnership with the Meadows Mental Health Policy Institute convened a series of virtual meetings. (Further descriptions of the partner groups, the meeting attendees, and the virtual meetings are included in the online supplement to this article.) The meetings included clinicians, researchers, and other stakeholders who identified potential first steps toward an initiative for early screening and linkage to care for youths with mental health concerns in the United States. Discussions included the development of an initiative with a staged assessment process, including a first-stage brief universal screener for several domains of psychopathology. Meeting attendees agreed that screening must be followed by recommendations for linkage to an appropriate level of evidence-based care. Considerations included addressing health inequities, validating adapted screening measures, reducing time and resource burdens for providers, and developing a collaborative network.
researchers, persons with lived experience, educators, and community leaders, who were asked to share their knowledge and insights into early identification via screening as a window to intervention. Recognizing the wealth of work and collaboration on these issues that has already been undertaken in other countries (7–10), the meetings aimed to work toward making early detection of mental health difficulties and linkage to care a reality for youths throughout the United States. The meetings centered on beginning discussions for the development and integration of a measurement-based care tool in youth-facing settings to increase early identification of mental health needs and linkage to evidence-based care.

This article aims to synthesize these discussions, which were framed around the need for evidence-based screening and linkage to care for youths and young adults living with mental health concerns and the value of learning from and building on existing programs across multiple settings. Although health care has traditionally been divided between pediatric and adult populations, meeting attendees generally agreed that it is important to develop inclusive initiatives for those in early adolescence and young adults, with an initial target age range of 10–24 years, given that this range is generally regarded as a period of heightened risk for emerging mental health concerns (11). (See the online supplement for information on a survey assessing agreement among meeting attendees regarding proposed initiatives.) Locations for screening outside traditional specialty psychiatric and mental health programs were of particular interest and included school, online, and medical settings (e.g., pediatric primary care, inpatient care, and emergency departments). Conditions targeted for screening included psychosis spectrum symptoms, as well as depression, anxiety, suicidality, and mania symptoms. Further, attendees agreed that screening must be followed by linkage to an appropriate level of evidence-based care (12).

It is more critical than ever to develop and implement an initiative for screening and linkage to care in the United States. During the COVID-19 pandemic, some youths, especially those already at risk (13), have experienced significant increases in reported mental health concerns, leading medical associations such as the American Academy of Pediatrics to declare a national emergency regarding youth mental health (14). These increases are above already high levels of positive symptom screens in primary care settings; even when screening targets only depressive symptoms, 56.4% of youths screen positive (15). These concerning statistics were part of the impetus for the current increase in funding for improved access to child and adolescent mental health care (16). The meeting attendees, recognizing these significant concerns, focused on developing specific steps toward creating an approach for pediatric settings (e.g., primary care and schools) to respond to increasing mental health concerns in young people. This approach has the potential both to enhance access to mental health resources for youths and to reduce burden for providers by establishing an approach for handling mental health concerns.

With the overarching aim of improving and expanding early identification of youths who are experiencing mental health concerns (1–3, 17), this article summarizes areas of general consensus among meeting attendees in their discussions and initial considerations for building and integrating the first initiative for nationwide screening and linkage to care. Because many health systems in the United States face challenges in providing quick and appropriate mental health resources and care after screening, we propose creating an efficient online platform for screening that can be used in a range of systems, with the capacity to connect need with recommendations for appropriate resources and care (e.g., medical and some school settings). This platform would include an existing general screening measure that would be expanded—and validated—to comprehensively probe a wider range of mental health symptoms. On the basis of initial screening results (especially for symptom distress and impairment), recommendations would be provided for one or more additional second-stage interviews, linkage-to-care options, or both (see figure in the online supplement).

Here, we review previous work on screening and linkage to care and then discuss the need for the convened series of virtual meetings, followed by recommendations based on input from these meetings. These recommendations include adapting existing screening measures and developing a staged assessment process for screening mental illness symptoms among youths in the period of early adolescence to early adulthood, continuing to develop a collaborative network for this initiative, and organizing online mental health resources.

WHAT HAS PREVIOUSLY WORKED IN THE UNITED STATES?

Youth Screening Tools
Systematically surveying a population via mental health screening can provide several benefits, including affording opportunities for prevention, offering a safe place to talk, signaling that mental health is important, reducing stigma, and beginning the process of detecting and treating mental health conditions. Throughout U.S. schools and primary care settings, strides have been made in developing and disseminating screening and assessment tools for early detection of mental illness (the American Academy of Pediatrics has compiled a list of several screening tools [https://downloads.aap.org/AAP/PDF/MH_ScreeningChart.pdf]; a table in the online supplement lists previous and current U.S. screening efforts) (12, 18–25). These tools were developed to screen for many domains of maladaptive behaviors and psychopathology, including general symptoms, anxiety, depression, suicidality (23, 26–28), and psychosis spectrum symptoms (29, 30). These existing tools can serve as a foundation for or provide a template to facilitate implementation of the current screening and linkage-to-care approach.
Staged Assessment Approaches

Several screening initiatives have incorporated staged approaches for assessing mental illness symptoms, including psychotic symptoms (31). According to clinical staging theories, the earliest mental health difficulties tend to be nonspecific symptoms that develop into a range of disorders (17, 32). In staged assessment approaches, only individuals meeting a specified threshold on an initial screener progress to the next stage of assessment, such as a more comprehensive interview (1). For example, researchers have developed a staged approach to assessing suicide risk in pediatric hospital settings that includes an initial symptom assessment, followed by a full suicide-risk assessment if warranted (33). Staged assessment efforts offer several important benefits. For instance, given the relatively low base rates of psychotic and other serious mental disorders, only youths meeting threshold criteria would be asked to complete a more comprehensive assessment, providing more effective resource utilization and reducing burden (34). Furthermore, previous staged assessment efforts have helped mitigate safety concerns by inviting individuals who endorse severe symptoms to complete a more comprehensive and presumably more accurate assessment of acuity and level of care needed.

Linkage-to-Care Efforts

Although screening is important, meeting attendees agreed that it must be followed by recommendations for evidence-based care for individuals endorsing elevations in symptoms (see table in the online supplement for several examples of linkage-to-care initiatives) (12, 35, 36). Previous work indicates that screening provided with sensitive feedback and support can offer improved linkage to care and clinical outcomes (20, 37, 38), including reduced duration of untreated illness and fewer hospitalizations (39). Previously incorporated beneficial components of the linkage-to-care process include incorporating knowledge of local resources, sharing information with treatment programs, and ensuring continuity between screening and further assessment or treatment.

Staged Linkage-to-Care Models

Previous initiatives have indicated that staged-care models, including multiple options for care based on an individual’s needs, have the potential to improve the efficiency of therapy (40, 41). In staged care, an individual is linked to a level of care that is appropriate for the individual’s symptom severity (2). In tier 1 (mild symptoms), an individual may be given options for care that include education or mental health apps. In tier 2 (moderate symptoms), the individual may be offered options that include therapy, pharmacological management of symptoms, or coordinated specialty care. In tier 3 (critical symptoms), individuals may be linked to a mental health provider in their geographic area for more immediate triage of symptoms and potential linkage to crisis services. Several advances have been made in the development and feasibility of stratified risk protocols for suicidality (42). Previous research indicates that regardless of intervention type, flexible treatment models engaging family and other supports are imperative if screening efforts are to result in successful engagement in care (43, 44).

WHAT IS NEEDED?

Meeting attendees identified several gaps and barriers to early detection and linkage to care for mental health concerns, such as psychosis spectrum symptoms and symptoms of mania, depression, suicidality, and anxiety. The aim was to identify mental health concerns before the development of diagnosable disorders (see the online supplement for additional considerations).

Developing Collaborative Efforts

One identified gap is the system fragmentation that has prevented previous initiatives for youth mental health screening from taking hold within existing educational and health care systems. The United States health care system has no nationwide tool or mechanism for screening across domains of mental health symptoms (45). Delegating early detection of mental health concerns to psychiatrists and mental health specialists limits the capacity for large-scale screening, because many people never seek care and others do not get connected to specialists. Collaborative efforts that build on previous screening efforts and expand to other settings will be critical (46).

Addressing Limitations to Screening

Meeting attendees identified several limitations to current screening initiatives. One possibility for improving a nationwide screening initiative is to ensure that first-stage assessment screening tools are efficient, do not require extensive training to implement (47), and, unlike many existing tools, effectively screen for serious mental health concerns, including mania and psychosis spectrum symptoms (48). The previous lack of inclusion of psychosis spectrum symptoms in screening efforts seems particularly relevant, given the significant functional impairment associated with untreated psychosis and the fact that as many as 96% of individuals who experience early symptoms of psychosis are not identified (49). Several psychosis screening tools could aid in early psychosis identification efforts (50). Any screening and linkage-to-care initiatives should include broad assessment of mental health symptoms to incorporate the heterogeneity and fluidity of symptoms and trajectories across development.

Barriers to Implementation of Linkage to Care

It has been reported that 56%–79% of youths with mental health symptoms are not currently receiving mental health care (see figure in the online supplement) (51, 52) because most youths who screen positive for mental health concerns do not receive help, do not follow up on referrals, do not
continue with specialty care, or do not have access to mental health care. The meeting attendees identified several interrelated treatment barriers for youths and young adults who might benefit from early intervention. First, access to services is often limited because many programs are restricted geographically, are available only to those with certain types of insurance, or are fully subscribed and cannot accept new clients. Second, cultural attitudes and stigma contribute to high rates of either service nonutilization or early dropout (19, 53). Stigma can be particularly challenging for individuals experiencing psychotic symptoms, which may be associated with negative perceptions that can hinder care seeking (54). Third, it can be very challenging for youths and families to navigate the mental health care system for services. Even when services are available, considerable financial resources may be required to access them, especially for individuals with inadequate insurance coverage. Fourth, instead of encouraging psychological interventions, the health care system has historically relied heavily on pharmaceuticals, which can involve adverse effects that may lead to treatment dropout (55, 56). Additionally, U.S. health care systems are riddled with inequities, wherein access to or quality of care varies by race, ethnicity, and socioeconomic factors (57). Each concern outlined above is often even greater in historically marginalized communities.

ADDRESSING BARRIERS TO SCREENING AND LINKAGE TO CARE: RECOMMENDATIONS

Meeting attendees began to develop several recommendations for an initiative for screening and linkage to care. (See figure in the online supplement for an overview of the initiative.)

Developing Collaborative Efforts
As noted, development and implementation of a screening and linkage-to-care online platform will require numerous national, state, and community collaborative partnerships to leverage existing programs across a geographic region. The partnerships will involve schools, medical settings (e.g., primary care, inpatient care, and emergency departments), and other community programs. Other experts will be needed to expand on the knowledge and skills of the current panel that developed these recommendations. It will also be important to reduce barriers for professionals, such as reducing impediments to reimbursement for providers in the collaborative network (e.g., bundled payment models to incentivize screening and linkage to care and full reimbursement for screening and assessment). Table 1 presents additional details and several important considerations for an initiative that seeks to improve mental health screening and linkage for youths.

Adapting Existing Screeners
One potential avenue to reach as many youths as possible is to incorporate a staged assessment by using an online platform introduced in primary care or school settings. A staged approach is needed to balance sensitivity and specificity of screening for mental health concerns. Incorporating multiple stages of screening will aid in specificity, because each successive stage of screening will provide a more comprehensive assessment of endorsed mental health concerns, reducing the rate of individuals who meet the threshold for requiring linkage to care. Screening for a wide array of symptoms is important to identify individuals experiencing a variety of mental health concerns (58). It will also be critical for first-stage screening to assess distress and impairment to avoid excessive rates of meeting screener thresholds and to mitigate issues that arise when screening focuses on a specific diagnosis, given the fluid nature of youth mental health concerns (32). In the first stage, an initial screener could be utilized for several psychopathology domains (see figure in the online supplement). Computerized adaptive testing could be incorporated to improve efficiency and reduce burden (25, 59). Individuals who meet threshold criteria on the initial screener could receive recommendations for a second-stage in-depth screening or for an interview, which could be administered online or in person. Several tools already exist that could be adopted as a first-stage measure to examine symptoms of individuals ages 10–24. The Pediatric Symptom Checklist (PSC) (27) is one of the most widely used screens, covering a range of psychopathology domains. Other potential measures may require shortening to function as brief first-stage screeners—for example, the Child Behavior Checklist (CBCL) (60), the Behavior Assessment System for Children (61), and the Kiddie-Computerized Adaptive Tests (25). Although these existing screeners have been developed for youths, several have been used also in adult populations (e.g., PSC) or have versions that can be used for young adults (e.g., the adult version of the CBCL is the Adult Self-Report) (60).

One possible way to leverage existing tools is to adapt a brief symptom checklist, such as the PSC, that has been implemented in many nonspecialty settings to ascertain clinically relevant information from youths (e.g., distress or impairment) related to experiences of depression, anxiety, mania, suicidality, and psychosis. Additional content considerations may include important contextualizing factors, such as stressors.

Inclusion of Psychosis Spectrum Symptoms
Given the paucity of psychosis spectrum symptom coverage in measures such as the PSC, one possibility is for youths to complete an additional psychosis symptom screener after the initial screener, such as the extensively validated brief version of the Prodromal Questionnaire—Brief (29, 30, 62), the Prime Screen (63), or a brief two-item psychosis screen (64). Alternatively, adding psychosis spectrum questions to existing screening tools may help identify youths with these symptoms. Those who meet threshold criteria for the psychosis domain could receive a recommendation for an

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TABLE 1. Considerations and operational challenges in the development of a nationwide initiative for youth mental health screening and linkage to care

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<thead>
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<th>Challenge</th>
<th>Additional considerations</th>
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<tr>
<td>Screening and linkage to care</td>
<td>The screening and linkage-to-care initiative will require building partnerships with care providers in many settings (e.g., school and medical settings and local health and mental health departments) across the United States. Once the screening process indicates that a youth would benefit from care at a level beyond online resources (see figure in the online supplement), the online portal should provide recommendations for providers in the collaborative network. Development of this effort will likely necessitate starting with initial piloting sites and scaling up to locations across the country, as in other large-scale screening and linkage-to-care programs (e.g., the Early Psychosis Intervention Network). This initiative would require a fundraising effort, likely from a federal agency (e.g., Substance Abuse and Mental Health Services Administration [SAMHSA] or NIH).</td>
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<td>Collaborative efforts</td>
<td>The initiative will require resources and staff to maintain the online portal, including updating educational content, linkage-to-care resources, mental health tools, and recommendations for care.</td>
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<td>Continuity of care</td>
<td>The initiative will need to address how to handle continuity-of-care issues, such as when youths move out of the area, or other interruptions to screening or linkage. Continuity of care will be especially important in school settings, where the screening and linkage process can be interrupted by the end of the school year. During the first stage of the proposed project, screening with an adapted first-stage screener will take place in sites that are already conducting screening; such sites will already have procedures for continuity of and linkage to care. Several strategies could be adopted, such as developing care navigator services and developing procedures for secure access to protected health information within the screening and linkage portal.</td>
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<td>Outreach and engagement</td>
<td>The initiative will require extensive efforts to inform and engage providers, the public, and relevant government agencies (see the online supplement for additional information about potential education initiatives). Although outreach will be an important part of the initiative, providers in locations with an existing screening process may already be familiar with general screeners (e.g., the Pediatric Symptom Checklist). Additional funding will be required to develop, host, and maintain an online portal for screening and mental health resources (e.g., educational materials, mental health tool kits, therapeutic tools, caregiver navigators, and recommendations for care); however, because routine psychosocial screening is now the standard of care in pediatrics and in many educational settings, some aspects of the initiative, including first-stage screening, could be launched with little extra cost if the newly developed screener were substituted for, or used to supplement, measures already in use in settings where screening is routinely conducted. In other settings, additional investment could be justified by the promise of early identification leading to potential prevention of functional impairment and of more serious mental health care needs, both of which will reduce future costs to the system.</td>
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<td>Resources</td>
<td>Several obstacles unique to each setting will be encountered. For example, in primary care, obstacles will include dealing with insurance, payment, and time constraints. For schools, unique constraints will include being bounded by the school year and added logistic hurdles in terms of coordinating with caregivers.</td>
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<td>Ethics</td>
<td>The ethics of screening and linking to care in non–help-seeking contexts must be considered. It is possible that youths who meet thresholds for mental health concerns may experience distress from either unexpected results or the stigma associated with mental illness (36). However, the burden of untreated mental health concerns outweighs these concerns. A nationwide screening effort also may help reduce stigma. Regardless, continued advocacy for stigma reduction is needed.</td>
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<td>Setting</td>
<td>For youths ages &lt;18, a parent or guardian will need to provide consent for screening. Consent in school settings will require logistic considerations different from those in medical settings. Although regulations vary widely from state to state and even among school districts, some secondary schools now ask parents to sign blanket consents that permit screening at any time during the school year. The screening program will also need to be sensitive to the complex challenges for youths in foster care.</td>
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<td>Large age range</td>
<td>Validation will be required to ensure that any screener is adapted across different age ranges. For the first-stage screener, different versions may be required for different age groups (e.g., ages 10–12 years vs. 22–24 years). Some items, especially psychosis spectrum symptom items, may need to vary according to the age of the individual completing the screening (see more details about screening in the online supplement). Some psychosis spectrum questionnaires, including the Prodromal Questionnaire–Brief, have versions for youths as young as 9 (62).</td>
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<tr>
<td>Consent</td>
<td>For youths ages &lt;18, a parent or guardian will need to provide consent for screening. Consent in school settings will require logistic considerations different from those in medical settings. Although regulations vary widely from state to state and even among school districts, some secondary schools now ask parents to sign blanket consents that permit screening at any time during the school year. The screening program will also need to be sensitive to the complex challenges for youths in foster care.</td>
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<td>Incorporating multiple informants</td>
<td>Information from caregivers about a youth’s symptoms may also be needed to guide the process, particularly for younger individuals. Screening initiatives will ideally incorporate both youth and caregiver reports of mental health concerns. However, the addition and validation of caregiver reports and procedures would ideally occur once a first-stage screening tool is completed. These approaches may differ depending on the age range. Even for young adults completing screening measures, reports by caregivers or significant others could strengthen the screening and care linkage process.</td>
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<td>Privacy</td>
<td>It is important to consider issues related to privacy, including the issue of individuals who are unsure of confidentiality limits. Concerns can arise regarding whether responses can be shared with family members, school staff, or even law enforcement. These issues require upfront efforts to ensure privacy and a safe place to discuss symptoms, as well as discussions of confidentiality boundaries. Additionally, all screening data will need to be housed securely, such as in a HIPAA-compliant, cloud-based, online format. Protections would also need to be in place regarding access to any information on the online portal. Collaboration with one of the many companies that provide screening platforms that are fully secure and compliant will be an essential part of the initiative.</td>
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<td>Safety concerns</td>
<td>It is necessary to ensure that procedures are in place for addressing safety concerns (e.g., symptom acuity). It may be necessary to validate a screening measure with and without suicide-risk items. At least initially, screening with the new instrument will take place in locations that are already screening and that therefore have procedures and resources for handling safety concerns. As the initiative expands, procedures and staff will need to be in place for addressing mandated reporting issues, including reports of abuse and neglect and concerns regarding danger to self or others. Reporting requirements will vary by state. For immediate concerns about suicidal ideation and behavior, procedures will be required for contacting caregivers and linking to crisis resources. Protocols for secondary assessment of suicide and self-harm risk have been developed and shown to be feasible within diverse settings (33, 41).</td>
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<td>Inclusivity considerations</td>
<td>Tool development and validation procedures will need to address concerns and procedures for creating validated language translations, ensuring reasonable reading level of items, including audio capabilities, using culturally sensitive techniques, and identifying and screening individuals with intellectual and developmental disabilities (see more details about screening in the online supplement).</td>
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<td>Logistic issues</td>
<td>Logistic hurdles will need to be addressed according to setting, system, and population variables. Ideally, school settings would initiate the screening process at least once per year during the school year, and medical settings would initiate the screening process at annual visits. Procedures will need to be in place to avoid youths’ completion of multiple assessments within short periods.</td>
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<td>Developing second-stage screening efforts</td>
<td>After developing a first-stage screening measure, second-stage screening would be determined and updated according to additional discussions and available science. Some second-stage assessments could be integrated into the online portal, although some second-stage interviews likely will require trained interviewers, necessitating recommendations for appropriate in-person assessments.</td>
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<td>Linkage to care</td>
<td>The initiative will create recommendations regarding how to overcome issues of limited resources for addressing concerns, such as limited availability of specialty clinics for addressing psychosis spectrum symptoms in certain U.S. regions, especially rural settings (SAMHSA has funded 21 pilot sites recommending staged-care models for addressing these symptoms, although evidence for these models is still emerging). The increased use of telehealth during the pandemic indicates that telehealth may be a viable tool for improving access to care in rural, frontier, or other communities with limited mental health services, although telehealth use may involve overcoming licensure issues when conducted across state lines. Over time, the initiative may need to work with communities to organize training sessions to fill needs for evidence-based care. Furthermore, especially for youths experiencing mental health concerns without a diagnosable condition, there may be a paucity of evidence-based care. Evidence suggests that cognitive-behavioral therapy may mitigate such distress. Additional research will be required to develop other evidence-based care for subthreshold mental health concerns.</td>
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<td>Lack of available evidence-based care</td>
<td>Online resources will be available for anyone accessing the online portal, but specific resource recommendations will be provided for individuals linked to tier 1 (mild symptoms) care on the basis of screening responses (see figure in the online supplement). Discussions and resources will need to be dedicated to adapting online psychoeducation, mental health tool kits, resources for reducing stigma, and other therapeutic resources for the online portal (see table in the online supplement for examples of currently available online mental health tool kits).</td>
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<tr>
<td>Logistic issues</td>
<td>Several additional logistic issues will need to be worked out as the program is piloted at each additional site, such as ensuring that telehealth options or providers that are geographically proximal are available to youths referred for services, supporting families with multiple youths in need of services, ensuring that wait times for care are not prohibitively long, and addressing reimbursement issues.</td>
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These additional considerations were not fully addressed during the virtual meetings and will require further discussion to develop procedures and recommendations.
interview assessment of psychosis spectrum symptoms (65). Although the meeting attendees generally agreed on the importance of incorporating psychosis spectrum items into the initial screener, it will be important to ensure appropriate threshold criteria, examine symptoms in the context of distress and impairment, and thoroughly examine psychosis spectrum symptoms in second-stage screening to minimize the risk for false positives (31).

Validation Efforts for the Adapted Screener
To enhance and ensure generalizability of an expanded screener with additional queries, the screener would benefit from validation in a large general population sample of youths from early adolescence through early adulthood (see table in the online supplement). It will be important to validate the screener by using a sample that is demographically diverse in terms of race, ethnicity, sex, and age. Measurement strategies that are not sensitive to cultural and racial-ethnic differences have the potential to over-, under-, or misdiagnose individuals from already marginalized groups. Another consideration will be whether such a measure can validly assess psychopathology from early adolescence through early adulthood. After the development of the adapted screener, additional validation efforts could build toward establishing thresholds that incorporate distress and impairment specifically for the adapted measure. Efforts would include administering the screener alongside clinical interviews to examine the sensitivity and specificity of the tool for detecting individuals with clinically relevant mental health concerns. It will be essential to examine whether thresholds for different domains need to be normed for characteristics such as age, sex, race, and ethnicity (50, 66). It is likely that thresholds will vary depending on setting (67), although research is needed to determine whether this is necessary.

Developing a Screening and Linkage-to-Care Platform
Screening must be followed by effective linkage to care. Several possibilities exist for a screening and linkage-to-care approach. Given the urgency of the problem, it may be useful to create online platforms tailored to communities and containing an online screening portal (see Table 1 for logistic and ethical hurdles), access to psychoeducational materials, and links to care resources, incorporating progress made by previous initiatives (e.g., by the National Alliance on Mental Illness and treatment locator and access lines created by agencies and organizations such as the Substance Abuse and Mental Health Services Administration and Mental Health America; see table in the online supplement).

Utilizing staged-care models as a template could help facilitate implementation of linkage-to-care efforts. In terms of using a staged-care model on the basis of the screening results, the platform would offer resources that are appropriate for the level of symptom severity (see figure in the online supplement). One option recently discussed is the possibility of creating a youth mental health service that acts as an entry point for all help-seeking youths (68). Ideally, this care entry point would flexibly address changes in youth mental health concerns, incorporating a staged approach that can address a range of mental health concerns. For individuals identified without a diagnosable condition but who are experiencing distress or impairment, evidence indicates that certain treatments, such as cognitive-behavioral therapy, can target emotional distress.

To reduce burden and increase accessibility, it also will be important to include as many online resources as possible (Table 1) (see table in the online supplement for examples of currently available online tool kits). About 90% of adolescents experiencing significant depressive symptoms currently seek information online (69). Further, recent evidence indicates that youths are increasingly more comfortable with engaging in mental health services online than in person (70). In an online survey, 72% of youths indicated interest in accessing online therapy if they were experiencing mental health difficulties (71), although interest does not necessarily translate to engagement in online treatments (72). The COVID-19 pandemic has further highlighted the potential value of online technologies to meet the mental health needs of the community, especially underserved and remote communities (73). Of course, it will be critical to continue to include recommendations for in-person services for those for whom face-to-face screening and care may promote engagement or for those without access to stable Internet service or to computers and telephones.

Whenever possible, youths should be linked to appropriate evidence-based care with demonstrated benefits (Table 1) (37). Further, research should examine whether linking to care is more challenging outside a care context (e.g., in educational settings). Additionally, a youth mental health platform should ideally include options for affordable care for individuals without adequate insurance coverage or financial resources. Other considerations for scaling up the linkage-to-care program include having uniform training procedures and adequate resources; monitoring outcomes, including cost-effectiveness of the program; and attending to unique barriers encountered at individual sites (Table 1) (see the online supplement for additional considerations, including the importance of educational initiatives and measuring outcomes) (74, 75).

CONCLUSIONS
Improving screening and linkage-to-care efforts in the United States is more important than ever, given increasing mental health concerns associated with the COVID-19 pandemic. Despite this need, over the course of a series of virtual meetings, attendees consistently reported major gaps in our ability to implement and sustain a nationwide screening and linkage-to-care initiative. One of these gaps is the need for a more comprehensive yet efficient screening measure. This initial screener could be incorporated into a staged screening process that includes second-stage
in-depth screening and interviewing and linkage to care for individuals experiencing more severe symptoms (see figure in the online supplement). To identify mental health concerns as early as possible, it will be important to initiate screening in settings that have not traditionally been focused on identifying mental health concerns (e.g., schools and pediatricians’ offices), potentially by using an online platform through which individuals with screening results indicating an elevated risk for mental problems could be referred for additional assessment.

Another identified gap is the need to develop a linkage-to-care system, including evidence-based resources and providers in a community and piloting a staged linkage-to-care model using these resources (see figure in the online supplement). Under such a model, attention would be needed to such issues as consent, adequate coverage of psychosis spectrum symptoms, safety concerns (e.g., acuity of symptoms), health inequities, reduction of provider burden, developmental and cultural differences, development of online tools, and creation of payment models (Table 1). The meeting attendees also emphasized the importance of creating collaborative efforts and building on previous work.

The mental health experts who attended the virtual meetings began the development of a U.S.-based screening and linkage-to-care initiative. They discussed only some of the important issues that need to be addressed for such an initiative, and their recommendations are just the first of many steps needed to develop and implement such a screening tool (see the online supplement for an assessment of members’ agreement regarding proposed initiatives). One immediate first step is to further expand the collaborative network and to expand discussions regarding the development of the screening and linkage-to-care initiative (see table in the online supplement). A second step is to adapt and validate a screening measure or measures targeting a broad range of mental health symptoms, including psychosis spectrum symptoms, and to ensure validity in early adolescent and young adult populations to support a staged assessment process. A third step is to organize currently available online mental health resources for eventual inclusion as resources in an online portal for screening and linkage to care. Additional steps will evolve from the results from these initial steps.

Although developing a nationwide screening and linkage-to-care approach in the United States is a massive undertaking, the meeting attendees identified initial steps for a pathway addressing current structural and systemic problems in the youth mental health system. As we have noted, numerous challenges and details must be considered in the development of this initiative (Table 1). Pilot-testing, validation, and implementation studies will be required to overcome obstacles and to reduce the burden on providers. In addition to the potential for significantly improving youth mental health, having a system to screen and link to care will alleviate the burden on providers, who need efficient and effective steps for responding to youth mental health concerns.

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