

# Screening for Depression in Children and Adolescents: US Preventive Services Task Force Recommendation Statement

Albert L. Siu, MD, MSPH, on behalf of the US Preventive Services Task Force

**DESCRIPTION:** This article describes the update of the 2009 US Preventive Services Task Force (USPSTF) recommendation on screening for major depressive disorder (MDD) in children and adolescents.

**METHODS:** The USPSTF reviewed the evidence on the benefits and harms of screening, accuracy of primary care–feasible screening tests, and benefits and harms of treatment with psychotherapy, medications, and collaborative care models in patients aged 7 to 18 years.

**POPULATION:** This recommendation applies to children and adolescents aged  $\leq 18$  years who do not have an MDD diagnosis.

**RECOMMENDATION:** The USPSTF recommends screening for MDD in adolescents aged 12 to 18 years. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up (B recommendation). The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for MDD in children aged  $\leq 11$  years (I statement).

The US Preventive Services Task Force (USPSTF) makes recommendations about the effectiveness of specific preventive care services for patients without related signs or symptoms. It bases its recommendations on the evidence of both the benefits and harms of the service and an assessment of the balance. The USPSTF does not consider the costs of providing a service in this assessment.

The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision-making to the specific patient or situation. Similarly, the USPSTF notes that policy and coverage decisions involve considerations in addition to the

evidence of clinical benefits and harms.

## SUMMARY OF RECOMMENDATIONS AND EVIDENCE

The USPSTF recommends screening for major depressive disorder (MDD) in adolescents aged 12 to 18 years. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up (B recommendation).

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for MDD in children aged  $\leq 11$  years (I statement).

## abstract

*Department of Geriatrics and Palliative Medicine, Mount Sinai School of Medicine, New York, New York*

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Address correspondence to USPSTF Senior Project Coordinator, 5600 Fishers Ln, Rockville, MD 20857. E-mail: coordinator@uspstf.net

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## **RATIONALE**

### **Importance**

Depression is a leading cause of disability in the United States. Children and adolescents with MDD typically have functional impairments in their performance at school or work, as well as in their interactions with their families and peers. Depression can also negatively affect the developmental trajectories of affected youth. MDD in children and adolescents is strongly associated with recurrent depression in adulthood; other mental disorders; and increased risk for suicidal ideation, suicide attempts, and suicide completion.

In nationally representative US surveys, ~8% of adolescents reported having major depression in the past year. Little is known about the prevalence of MDD in children. Among children and adolescents aged 8 to 15 years, 2% of boys and 4% of girls reported having MDD in the past year.

### **Detection**

The USPSTF found adequate evidence that screening instruments for depression can accurately identify MDD in adolescents aged 12 to 18 years in primary care settings. The USPSTF found no studies of screening instruments for depression in children aged  $\leq 11$  years in primary care (or comparable) settings and concludes that the evidence is inadequate.

### **Benefits of Early Detection and Intervention and Treatment**

The USPSTF found no studies that directly evaluated whether screening for MDD in adolescents in primary care (or comparable) settings leads to improved health and other outcomes. However, the USPSTF found adequate evidence that treatment of MDD detected through screening in adolescents is associated with moderate benefit (eg, improved depression severity, depression

symptoms, and/or global functioning scores).

The USPSTF found no studies that directly evaluated whether screening for MDD in children aged  $\leq 11$  years in primary care (or comparable) settings leads to improved health and other outcomes, and found inadequate evidence on the benefits of treatment in children detected through screening.

### **Harms of Early Detection and Intervention and Treatment**

The USPSTF found no direct evidence on the harms of screening for MDD in adolescents. Medications for the treatment of depression, such as selective serotonin reuptake inhibitors (SSRIs), have acknowledged harms. However, the magnitude of harms of pharmacotherapy is small if patients are closely monitored, as recommended by the US Food and Drug Administration (FDA). The USPSTF found adequate evidence on the harms of psychotherapy and psychosocial support in adolescents and estimates that the magnitude of these harms is small to none. The USPSTF found inadequate evidence on the harms of screening for or treatment of MDD in children aged  $\leq 11$  years.

### **USPSTF Assessment**

The USPSTF concludes with moderate certainty that screening for MDD in adolescents aged 12 to 18 years has a moderate net benefit. The USPSTF concludes that the evidence on screening for MDD in children aged  $\leq 11$  years is insufficient. Evidence is lacking, and the balance of benefits and harms cannot be determined.

## **CLINICAL CONSIDERATIONS**

### **Patient Population Under Consideration**

The present recommendation applies to children and adolescents aged  $\leq 18$

years who do not have a diagnosis of MDD. This recommendation focuses on screening for MDD and does not address screening for other depressive disorders, such as minor depression or dysthymia.

### **Assessment of Risk**

The USPSTF recommends screening for MDD in all adolescents but notes that several risk factors might help identify patients who are at higher risk for MDD. The causes of MDD are not fully known and likely involve a combination of genetic, biologic, and environmental factors. Risk factors for MDD in children and adolescents include female gender, older age, family (especially maternal) history of depression, previous episode of depression, other mental health/behavioral problems, chronic medical illness, overweight and obesity, and, in some studies, Hispanic race/ethnicity. Other psychosocial risk factors for MDD include childhood abuse or neglect, exposure to traumatic events (including natural disasters), loss of a loved one or romantic relationship, family conflict, uncertainty about sexual orientation, low socioeconomic status, and poor academic performance.

### **Screening Tests**

Numerous instruments have been developed for use in primary care and have been used in adolescents. Two of the most often studied instruments are the Patient Health Questionnaire for Adolescents (PHQ-A) and the primary care version of the Beck Depression Inventory (BDI). Data on the accuracy of MDD screening instruments in younger children are limited.

### **Screening Intervals**

The USPSTF found no evidence on appropriate or recommended screening intervals, and the optimal screening interval is unknown. Repeat screening may be most productive in adolescents with risk

factors for MDD. Opportunistic screening may be appropriate for adolescents, who can have infrequent health care visits.

### **Treatment or Interventions**

Treatment options for MDD in children and adolescents include pharmacotherapy, psychotherapy, collaborative care, psychosocial support interventions, and complementary and alternative medicine approaches. Fluoxetine is approved by the FDA to treat MDD in children aged  $\geq 8$  years, and escitalopram is approved to treat MDD in adolescents aged 12 to 17 years. The FDA has issued a boxed warning for antidepressant agents, recommending that patients of all ages who start antidepressant therapy be monitored appropriately and observed closely for clinical worsening, suicidality, or unusual changes in behavior.<sup>1</sup> Collaborative care is a multicomponent, health care system-level intervention that uses care managers to link primary care providers, patients, and mental health specialists.

### **Suggestions for Practice Regarding the I Statement**

In deciding whether to screen for MDD in children aged  $\leq 11$  years, primary care providers may want to consider the following issues.

#### *Potential Preventable Burden*

Little is known about the prevalence of MDD in children aged  $\leq 11$  years. The mean age of onset of MDD is  $\sim 14$  to 15 years. Early onset is associated with worse outcomes. The average duration of a depression episode in childhood varies widely, from 2 to 17 months.

#### *Potential Harms*

The USPSTF found inadequate evidence regarding the harms of screening for MDD in children. The USPSTF concludes that MDD screening itself is unlikely to be associated with significant harms,

aside from opportunity costs, labeling and potential stigma associated with a positive screening result, and referral for further evaluation and treatment.

Based on a previous review, the USPSTF concludes that the use of SSRIs in children is associated with harms, specifically risk for suicidality. Evidence on the harms of psychotherapy and the combination of psychotherapy and SSRIs in children is limited. Newer studies do not provide much additional evidence on treatment harms in children and adolescents but do not suggest more risks. Only 4 studies examined the harms of treatment with SSRIs in children and adolescents. These studies found no increased risk for suicidality associated with the use of antidepressant therapy. However, risk for rare events could not be precisely determined because the studies had limited statistical power. No trials of psychotherapy or combined interventions in children examined harms.

#### *Current Practice*

The USPSTF found no evidence on the current frequency of or methods used in primary care for screening for MDD in children.

### **Additional Approaches to Prevention**

The Community Preventive Services Task Force recommends collaborative care for the management of depressive disorders, based on strong evidence of effectiveness in improving depression symptoms, adherence and response to treatment, and remission and recovery from depression. Information on this topic and other related recommendations from the Community Preventive Services Task Force is available at [www.thecommunityguide.org/mentalhealth/index.html](http://www.thecommunityguide.org/mentalhealth/index.html).

### **Useful Resources**

In a separate recommendation statement, the USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for suicide risk in primary care settings, including among adolescents (I statement). Other USPSTF recommendations on mental health topics pertaining to children and adolescents, including illicit drug and alcohol use, can be found on the USPSTF Web site ([www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org)).

### **OTHER CONSIDERATIONS**

#### **Implementation**

Many different screening tools are available to identify depression in children and adolescents, and some have been used in primary care. The number of items, administrative time to complete screening, and appropriate ages for screening vary. Screening positive on an initial screening test does not necessarily indicate the need for treatment. Screening is usually conducted in 2 phases: the initial screening is followed by a second phase in which skilled clinicians take into account contextual factors surrounding the patient's current situation, either through additional probing or a formal diagnostic interview. In instances in which treatment is recommended, treatment can be initiated by the screening provider or through referral to another set of treatment providers. Screening negative on a screening test, however, does not always preclude referral when clinical judgment or parental concerns suggest otherwise.

The USPSTF recommends that screening be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up. Depression can be managed in the primary care or specialist setting or managed

collaboratively in both settings. Treatment options for depression include pharmacologic, behavioral, multimodal, and collaborative care models, some of which require coordination. Finally, inadequate support and follow-up may result in treatment failures or harms, as indicated by the FDA boxed warning. “Adequate systems in place” refers to having systems and clinical staff to ensure that patients are screened and, if they screen positive, are appropriately diagnosed and treated with evidence-based care or referred to a setting that can provide the necessary care. These essential functions can be provided through a wide range of arrangements related to clinician types and settings.

### Research Needs and Gaps

The systematic evidence review identified several critical research gaps, including the need for studies of screening for and treatment of MDD in children aged <11 years. Large, good-quality randomized controlled trials (RCTs) are also needed to better understand the overarching effects of screening for MDD on intermediate and long-term health outcomes. It would be helpful to quantify the proportion of screen-detected subjects who are treated or referred, as well as their willingness and ability to obtain assessment and treatment.

The systematic review had eligibility requirements that excluded studies with subjects who had comorbid disorders. Children and adolescents with MDD more often have comorbid conditions than children and adolescents without MDD, particularly in primary care settings. This factor underscores the importance of additional research in child and adolescent populations that are similar to populations found in primary care settings; the goal is to study the effects of comorbid conditions on screening accuracy,

type of MDD treatment selected, and benefits and harms.

For treatment of MDD, research needs include well-designed studies of psychotherapy and combined treatments, as well as studies of the benefits and harms of other treatments (eg, non-SSRI medications, complementary/alternative modalities). For rare events, meta-analyses are needed that include only children and adolescents with MDD and focus on current FDA-approved medications. Studies with long-term follow-up are also needed.

## DISCUSSION

### Burden of Disease

Although it is normal for children and adolescents to experience occasional feelings of sadness and other symptoms of depression, children and adolescents with MDD experience 1 or more major depressive episodes, lasting at least 2 weeks, that cause significant functional impairment across social, occupational, or educational domains. In some children and adolescents with MDD, these symptoms may present as periods of disruptive mood and irritability rather than as a sad mood and may last for weeks, months, or even years. MDD is associated with significant morbidity and mortality. Morbidity in children and adolescents may be demonstrated through decreased school performance, poor social functioning, early pregnancy, increased physical illness, and substance abuse. Depressed adolescents have more psychiatric and medical hospitalizations than adolescents who are not depressed. Children with depressive disorders have increased health care costs (including general medical and mental health care) compared with children without mental health diagnoses or children with other mental health diagnoses (except

conduct disorder). MDD also increases the risk for suicide. Ten percent of children aged 5 to 12.9 years and 19% of adolescents aged 13 to 17.9 years with MDD attempt suicide.<sup>2</sup>

The mean age of onset of MDD in childhood and adolescence is ~14 to 15 years, and onset is earlier in girls than in boys. In 2 nationally representative US surveys, ~8% of adolescents reported having MDD in the past year. Little is known about the prevalence of MDD in children. The 2005 NHANES found that among children and adolescents aged 8 to 15 years, 2% of boys and 4% of girls reported having MDD in the past year. However, the prevalence of depression in primary care settings is often higher in studies with community samples of children and adolescents. Only 36% to 44% of children and adolescents with depression receive treatment, suggesting that the majority of depressed youth are undiagnosed and untreated.<sup>3</sup>

### Scope of Review

The USPSTF commissioned a systematic evidence review to update the 2009 USPSTF recommendation on screening for child and adolescent MDD among primary care populations.<sup>3,4</sup> To focus on the population most likely to benefit from screening and intervention, the scope of the review was narrowed to focus on screening for and treatment of MDD. In addition, studies of paroxetine were excluded because of the 2003 FDA recommendation that this agent not be used to treat MDD in children and adolescents because of reports of possible suicidal ideation and suicide attempts in children and adolescents taking paroxetine for depression. As a result, a number of studies included in the 2009 review were not included in the current review. The USPSTF examined the evidence on the benefits and harms of screening, the accuracy of primary



care–feasible screening tests, and the benefits and harms of treatment with psychotherapy, medications, and collaborative care models in patients aged 7 to 18 years. Treatment studies were limited to those that were implemented in primary care settings or received referrals from primary care settings to ensure that the population was similar to populations that would be identified through screening.

### Accuracy of Screening Tests

The USPSTF found 5 good- or fair-quality studies regarding the accuracy of MDD screening instruments in children and adolescents. One study recruited adolescents from a primary care setting and compared the PHQ-A with a full diagnostic interview by a mental health professional. Four studies recruited adolescents from school settings and compared the screening test with a diagnostic interview or different depression screening test. One study evaluated the BDI, 1 study evaluated the Center for Epidemiologic Studies Depression Scale (CES-D), 1 study evaluated the BDI and the CES-D, and 1 study evaluated the Clinical Interview Schedule–Revised. No studies included children aged <11 years.

The PHQ-A study had the highest positive predictive value.<sup>5</sup> The authors did not report a diagnostic cutoff score but reported sensitivity for a positive test of 73% and specificity of 94%. Results were not stratified according to age, gender, or ethnicity. The 2 BDI studies reported sensitivity ranging from 84% to 90% and specificity ranging from 81% to 86% when a cutoff score of 11 was applied.<sup>6,7</sup> One study<sup>7</sup> reported a higher area under the curve for male subjects than for female subjects, but neither of the BDI studies reported results according to age or ethnicity.

The CES-D studies used different diagnostic cutoff scores.<sup>7,8</sup> One study enrolled a slightly younger

population than the other (range of 11 to 15 years vs average age of >16 years). Sensitivity ranged from 18% to 84% and specificity ranged from 38% to 83%, depending on the cutoff score used. Results according to gender were inconsistent, and neither study stratified results according to age or ethnicity. One study evaluated the Clinical Interview Schedule–Revised.<sup>9</sup> The mean age was 15.7 years, and sensitivity and specificity were 18% and 97%, respectively. The study did not report other outcomes or stratify results according to age, race, or ethnicity.

### Effectiveness of Treatment

The USPSTF found 8 fair- or good-quality RCTs that reported health outcomes in children or adolescents with MDD detected through screening who were treated with SSRIs (4 RCTs), psychotherapy (2 RCTs), SSRIs combined with psychotherapy (1 RCT), or collaborative care (1 RCT). The majority of trials were restricted to adolescents aged 12 to 14 years and older; only 2 of the SSRI trials included children aged 7 or 8 years. Trial outcomes included treatment response, which was defined differently across studies; symptom severity; and global functioning. Depression outcomes were reported after 8 to 12 weeks of SSRI treatment or psychotherapy; the collaborative care study reported outcomes at 52 weeks.

#### SSRIs

One good-quality study ( $N = 221$ ) compared fluoxetine with placebo in adolescents aged 12 to 17 years.<sup>10–12</sup> Two fair-quality studies ( $N = 268$  and  $316$ , respectively) compared escitalopram with placebo in children and adolescents<sup>13</sup> and adolescents only.<sup>14</sup> One fair-quality study ( $N = 178$ ) compared citalopram with placebo in children and adolescents.<sup>15</sup> The absolute difference in response favored SSRIs in all 4 studies, ranging from 2.4%

to 25%, and was significant in 2 of the 4 trials. When other outcomes, such as symptom severity or global functioning, were reported, they also favored the SSRI group. One trial examined the efficacy of escitalopram according to age group (children versus adolescents) and found that escitalopram was superior to placebo in improving depression symptoms, depression symptom severity, and global functioning in adolescents but not in children.<sup>13</sup> No trials examined efficacy across gender or race/ethnicity subgroups.

#### Psychotherapy

Two studies evaluated the benefits of cognitive behavioral therapy (CBT) compared with placebo (waitlist control or clinical monitoring) in adolescents with MDD and reported nonsignificant improvements in response (43.2% vs 34.8%) or recovery (odds ratio [OR], 2.15 [95% confidence interval (CI), 0.87–5.33]).<sup>10,11,16</sup> Results for remission (16% vs 17%) were not significantly different between the CBT and placebo groups.

#### SSRIs Combined With Psychotherapy

One CBT study also included an arm that compared CBT plus fluoxetine with placebo.<sup>10</sup> The CBT plus fluoxetine group showed a 71% response rate versus a 35% response rate in the placebo group, which received a placebo drug and weekly clinical monitoring ( $P = .001$ ).

#### Collaborative Care

One recent RCT ( $N = 101$ ) evaluated a 12-month collaborative care intervention in adolescents aged 13 to 17 years who screened positive for depression (60% with MDD) in 9 primary care clinics within 1 health system.<sup>17</sup> The intervention was based on the Improving Mood–Promoting Access to Collaborative Treatment model and was adapted for adolescents. Patients randomly assigned to the collaborative care group had an initial in-person

session that included their parents, choice of treatment type(s), and regular follow-up with depression care managers (28% received psychotherapy alone, 4% received pharmacotherapy alone, and 54% received both). Patients randomly assigned to the usual care control group received screening results and could access mental health services through the usual health care system. Compared with the control group, patients in the collaborative care group had greater reductions in depressive symptoms at 6 and 12 months (8.5- and 9.4-point reductions on the Children's Depression Rating Scale-Revised, respectively;  $P < .0001$  for interaction), better response rates ( $\geq 50\%$  score reduction from baseline) at 12 months (OR, 3.3 [CI, 1.4–8.2]) and 6 months (not significant), and a higher likelihood of remission at both 6 months (OR, 5.2 [CI, 1.6–17.3]) and 12 months (OR, 3.9 [CI, 1.5–10.6]).

### **Potential Harms of Screening and/or Treatment**

The USPSTF found no direct evidence regarding the harms of screening for MDD in adolescents or children.

#### **SSRIs**

Five SSRI trials reported on harms and found no significant differences between intervention groups, although none of the studies was powered to detect these differences. Four trials reported on suicidality (this analysis included worsening suicidal ideation or a suicide attempt; no completed suicides were reported): 2 with escitalopram, 1 with citalopram, and 1 with fluoxetine. No studies found significant differences, although none of the studies was sufficiently powered for this outcome. No studies examined subgroup differences in harms. The USPSTF found no evidence on the long-term ( $>12$  weeks) effects of SSRIs.

#### **Psychotherapy**

One CBT trial reported on harms.<sup>10</sup> No apparent differences were found in harms-related, suicide-related, or psychiatric adverse events in the CBT versus placebo groups.

#### **SSRIs Combined With Psychotherapy**

The same trial also reported on the harms of CBT plus fluoxetine versus placebo.<sup>10</sup> No apparent differences were found.

#### **Collaborative Care**

The single trial of collaborative care found no differences in the number of psychiatric hospitalizations between the intervention and control groups (6% vs 4%).<sup>17</sup> More patients in the control group experienced an emergency department visit with a primary psychiatric diagnosis than in the intervention group (10% vs 2%). However, this study was not powered to detect differences.

### **Estimate of Magnitude of Net Benefit**

The USPSTF found adequate evidence that screening test results can be used to accurately identify MDD in adolescents. The USPSTF also found adequate evidence that treatment of adolescents identified through screening is associated with beneficial reductions in MDD symptoms. Although the data are limited, the USPSTF concludes that the evidence on the frequency of medication-related adverse events in adolescents is adequate to estimate that the magnitude of harms of pharmacotherapy is small if patients are closely monitored. The USPSTF concludes that the evidence on the harms of psychotherapy and collaborative care in adolescents is adequate to estimate that the magnitude of harms is small to none. Therefore, the USPSTF concludes with moderate certainty that screening for MDD in adolescents aged 12 to 18 years is associated with moderate net benefit.

The USPSTF found inadequate evidence that screening tests can accurately identify MDD in children and inadequate evidence on the effectiveness of treatment of children identified through screening. As a result, the USPSTF concludes that the evidence is insufficient to make a recommendation regarding screening for MDD in children aged 7 to 11 years.

### **Response to Public Comment**

A draft version of this recommendation statement was posted for public comment on the USPSTF Web site from September 8, 2015, to October 5, 2015. A number of comments focused on the phrase “adequate systems.” Some commenters requested a more detailed definition of what constitutes an “adequate system” for screening, others recommended removing the conditional term “when,” and others recommended that the requirement for adequate systems be stronger. To clarify the recommendation, the USPSTF separated the recommendation into 2 statements: 1 to support screening and 1 to explain how screening should be implemented. The USPSTF also revised the section on implementation to clarify that a range of staff types, organizational arrangements, and settings can support the goals of depression screening.

### **UPDATE OF PREVIOUS USPSTF RECOMMENDATION**

In 2009, the USPSTF recommended screening for MDD in adolescents (aged 12–18 years) when systems are in place to ensure accurate diagnosis, psychotherapy (CBT or interpersonal), and follow-up, and concluded that the evidence was insufficient to make a recommendation regarding children (aged 7–11 years). The current recommendation reaffirms these positions but removes the mention



### Screening for Depression in Children and Adolescents: Clinical Summary

Population	Adolescents aged 12 to 18 y	Children aged ≤11 y
Recommendation	Screen for major depressive disorder (MDD), with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up. Grade: B	No recommendation. Grade: I (insufficient evidence)

Risk Assessment	Risk factors for MDD include female sex, older age, family (especially maternal) history of depression, prior episode of depression, other mental health/behavioral problems, chronic medical illness, overweight and obesity, and, in some studies, Hispanic race/ethnicity. Other psychosocial risk factors include childhood abuse or neglect, exposure to traumatic events (including natural disasters), loss of a loved one or romantic relationship, family conflict, uncertainty about sexual orientation, low socioeconomic status, and poor academic performance.	
Screening Tests	The most often studied instruments are the Patient Health Questionnaire for Adolescents and the primary care version of the Beck Depression Inventory.	
Screening Interval	The optimal timing and interval for screening for MDD is not known. Opportunistic screening may be appropriate for adolescents, who may have infrequent health care visits.	
Treatment and Interventions	Treatment options for MDD include pharmacotherapy, psychotherapy, collaborative care, psychosocial support interventions, and complementary and alternative medicine approaches.	
Balance of Benefits and Harms	Screening for MDD in adolescents aged 12 to 18 y is of moderate net benefit.	The evidence on screening for MDD in children aged ≤11 y is insufficient, and the balance of benefits and harms cannot be determined.
Other Relevant USPSTF Recommendations	The USPSTF has made recommendations on screening for suicide risk in adolescents, adults, and older adults. Other USPSTF recommendations on mental health topics pertaining to children and adolescents, including illicit drug and alcohol use, can be found on the USPSTF Web site ( <a href="http://www.uspreventiveservicestaskforce.org">www.uspreventiveservicestaskforce.org</a> ).	

For a summary of the evidence systematically reviewed in making this recommendation, the full recommendation statement, and supporting documents, please go to [www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org).

#### FIGURE 1

Screening for Depression in Children and Adolescents: Clinical Summary.

of specific therapies in recognition of decreased concern over the harms of pharmacotherapy in adolescents when patients are adequately monitored (Fig 1).

#### RECOMMENDATIONS OF OTHERS

The American Academy of Pediatrics' Bright Futures program recommends screening annually in child and adolescent patients for emotional and behavioral problems.<sup>18</sup> Medicaid's child health component (the Early and Periodic Screening, Diagnostic, and Treatment program) recommends screening to detect physical and mental conditions at periodic, age-appropriate intervals and, if risk is identified, to follow up with diagnostic and treatment coverage.<sup>19</sup> The

Canadian Task Force on Preventive Health Care states that there is insufficient evidence to recommend for or against screening for depression in children or adolescents in primary care settings.<sup>20</sup>

#### APPENDIX: MEMBERS OF THE USPSTF

Members of the USPSTF at the time this recommendation was finalized were as follows: Albert L. Siu, MD, MSPH, Chair (Mount Sinai School of Medicine, New York, and James J. Peters Veterans Affairs Medical Center, Bronx, NY); Kirsten Bibbins-Domingo, PhD, MD, MAS, Co-Vice Chair (University of California, San Francisco, San Francisco, CA); David C. Grossman, MD, MPH, Co-Vice Chair (Group Health Research Institute,

Seattle, WA); Linda Ciofu Baumann, PhD, RN, APRN (University of Wisconsin, Madison, WI); Karina W. Davidson, PhD, MASc (Columbia University, New York, NY); Mark Ebell, MD, MS (University of Georgia, Athens, GA); Francisco A.R. García, MD, MPH (Pima County Department of Health, Tucson, AZ); Matthew Gillman, MD, SM (Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA); Jessica Herzstein, MD, MPH (independent consultant, Washington, DC); Alex R. Kemper, MD, MPH, MS (Duke University, Durham, NC); Alex H. Krist, MD, MPH (Fairfax Family Practice, Fairfax, and Virginia Commonwealth University, Richmond, VA); Ann E. Kurth, PhD, RN, MSN, MPH (New York University,

New York, NY); Douglas K. Owens, MD, MS (Veterans Affairs Palo Alto Health Care System, Palo Alto, and Stanford University, Stanford, CA); William R. Phillips, MD, MPH (University of Washington, Seattle, WA); Maureen G. Phipps, MD, MPH (Brown University, Providence, RI); and Michael P. Pignone, MD, MPH (University of North Carolina, Chapel Hill, NC).

A list of the current USPSTF members is available at [www.uspreventiveservicestaskforce.org/Page/Name/our-members](http://www.uspreventiveservicestaskforce.org/Page/Name/our-members).

### ABBREVIATIONS

BDI: Beck Depression Inventory  
CBT: cognitive behavioral therapy  
CES-D: Center for Epidemiologic Studies Depression Scale  
CI: confidence interval  
FDA: US Food and Drug Administration  
MDD: major depressive disorder  
OR: odds ratio  
PHQ-A: Patient Health Questionnaire for Adolescents  
RCT: randomized controlled trial  
SSRI: selective serotonin reuptake inhibitor  
USPSTF: US Preventive Services Task Force

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