

Section 4 – ADDENDUM

**HEADSSS Psychological Interview** *Updated 2015*

**Identify and Treat Adolescent Depression** *Updated 2010*

**Patient Health Questionnaire Modified for Teens  
(PSC-Y)** *Updated 2015*

**Pediatric Symptoms Checklist for Teens  
(PHQ-9 Modified)** *Updated 2015*

**Informed Consent and Agreement to HIV  
Testing-English & Spanish** *Updated 2007*

# HEEDSSS 3.0

## The psychosocial interview for adolescents updated for a new century fueled by media

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The HEEDSSS psychosocial interview is a practical, time-tested strategy that pediatricians can use to evaluate how their teenaged patients are coping with the pressures of daily living, especially now in the context of electronic and social media.

For most teenagers, a psychosocial history is at least as important as the physical exam. This essential psychosocial history can be obtained using the HEEDSSS method of interviewing adolescents. The HEEDSSS interview focuses on assessment of the **H**ome environment, **E**ducation and employment, **E**ating, peer-related **A**ctivities, **D**rugs, **S**exuality, **S**uicide/depression, and **S**afety from injury and violence (Table 1).<sup>1,2</sup>

Because adolescence is a time of growth and development when threats to health can arise, these threats are often related to physical and social exploration. For example, sexual exploration may lead to sexually transmitted infections or unintended pregnancies. Experimentation with drugs or alcohol is another cause of morbidity and mortality that is

implicated in deadly motor vehicle crashes in the age group. In fact, unintentional injuries, homicide, and suicide are among the leading causes of adolescent deaths in the United States, and are the top 3 causes for those aged 15 years and older.<sup>3</sup>

Moreover, consequences of adolescents' stressors may include obesity, eating disorders, depression, or other mental health problems. These issues are not easily identified or addressed using a strictly physiologic orientation.

Without an adequate psychosocial history, one is unlikely to spot problems early enough to significantly reduce adolescent morbidity and mortality. The HEEDSSS interview is a practical, time-tested strategy that physicians can use to obtain a "psychosocial review of systems" for adolescent patients.

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Since the second version of HEEADSSS was created in 2004, nearly all teenagers have obtained access to the Internet and three-quarters of them use cell phones and send text messages.<sup>4-7</sup> This utilization of media profoundly affects the lives of adolescents; media may now contribute to 10% to 20% of any specific health problem.<sup>7</sup> Thus, questions on new media use are critically important and are included in this HEEADSSS 3.0 update. In addition, this update emphasizes a strengths-based approach to the adolescent interview to foster patient-physician rapport and successful interventions.

### How to use the psychosocial screen

You should begin spending time alone with your patients at whatever age they first exhibit the psychosocial changes associated with puberty. Generally, it is preferable to conduct the psychosocial interview when the adolescent is relatively well.<sup>8</sup> Nonetheless, situations of crisis or illness may sometimes facilitate effective history taking because vulnerability may foster trusting relationships. At every visit, the adolescent should be assessed for new stressors and overall well-being.

### Working with parents

If the parents are present, first introduce yourself to the adolescent to make clear that the teenager is the patient. Then try having the adolescent introduce the other people in the room. Parents, family members, or other involved adults should not be present during the HEEADSSS interview because a parent's presence is likely to limit how much sensitive information the patient will provide. Allowing a parent to sit in on the interview also makes it more difficult to exclude him or her at subsequent visits when the patient may have more private issues to discuss.

This does not mean that parents should be ignored. Before asking adults to leave the room, always ask whether they have any concerns and assure them of further interaction once the interview is over. Be certain to explain the purpose, such as: "We speak privately with our patients about stressors that may appear during adolescence so they can practice taking responsibility for their health care needs." With explanation, adults accept the need for confidential care.<sup>9</sup>

## DISCUSSING CONFIDENTIALITY

**You may say, for example:** "During this visit, I'll ask you some very personal questions to best help you. I promise that whatever you say will be kept private between us, and not be passed along to your parents or anybody else outside this office, unless you give permission."

**Clinicians may end the introduction with:**

"The only exception would be in a circumstance in which a disclosure to someone is required by law." Some specify the circumstances (eg, the patient is planning to kill or seriously injure himself or someone else; or the patient is experiencing, or is planning to commit, physical or sexual abuse or neglect).

**Other clinicians prefer a nonqualified ending:**

"If you tell me something that is so bad for your health that I think it is best to get somebody else involved in your care, like a parent or another doctor, I will tell you that. If you disagree, then together we can discuss the way to proceed." This method reinforces the strength of the physician-patient relationship.

Each physician must determine what limits on confidentiality are prescribed by the laws of the particular state in which the physician practices.<sup>3</sup> State-by-state confidentiality guidelines are available from the Guttmacher Institute ([www.guttmacher.org](http://www.guttmacher.org)) and from the National Center for Adolescent Health and Law ([www.adolescenthealthlaw.org](http://www.adolescenthealthlaw.org)).

#### REFERENCE

<sup>3</sup>Guttmacher Institute. State policies in brief. An overview of minors' consent law. [http://www.guttmacher.org/statecenter/spibs/spib\\_OMCL.pdf](http://www.guttmacher.org/statecenter/spibs/spib_OMCL.pdf). Updated December 1, 2013. Accessed December 4, 2013.

### Making a good beginning

Starting the interview with nonthreatening conversation about the patient's hobbies or current events may help to ease anxiety, foster rapport and trust, and encourage disclosure. Then you might say: "I would like to take a few minutes to see how you are handling stress and whether your behaviors are safe."<sup>10,11</sup> Once young people start talking, they are likely to keep talking. You will succeed better, however, if you explain the concept and limitations of confidentiality as part of this initial conversation.<sup>12,13</sup> (See "Discussing confidentiality," above.)

The beauty of HEEADSSS is that by using the acronym, you can naturally proceed from very important but usually less threatening questions

**TABLE 1** The HEEADSSS psychosocial interview for adolescents

	<b>Potential first-line questions</b>	<b>Questions if time permits or if situation warrants exploration</b>
<b>Home</b>	<p>Who lives with you? Where do you live?            What are relationships like at home?            Can you talk to anyone at home about stress? (Who?)            Is there anyone new at home? Has someone left recently?            Do you have a smart phone or computer at home? In your room? What do you use it for? (May ask this in the activities section.)</p>	<p>Have you moved recently?            Have you ever had to live away from home? (Why?)            Have you ever run away? (Why?)            Is there any physical violence at home?</p>
<b>Education and employment</b>	<p>Tell me about school.            Is your school a safe place? (Why?) Have you been bullied at school?            Do you feel connected to your school? Do you feel as if you belong?            Are there adults at school you feel you could talk to about something important? (Who?)            Do you have any failing grades? Any recent changes?            What are your future education/employment plans/goals?            Are you working? Where? How much?</p>	<p>How many days have you missed from school this month/quarter/semester?            Have you changed schools in the past few years?            Tell me about your friends at school.            Have you ever had to repeat a class/grade?            Have you ever been suspended? Expelled? Have you ever considered dropping out?            How well do you get along with the people at school? Work?            Have your responsibilities at work increased?            What are your favorite subjects at school? Your least favorite subjects?</p>
<b>Eating</b>	<p>Does your weight or body shape cause you any stress? If so, tell me about it.            Have there been any recent changes in your weight?            Have you dieted in the last year? How? How often?</p>	<p>What do you like and not like about your body?            Have you done anything else to try to manage your weight?            Tell me about your exercise routine.            What do you think would be a healthy diet? How does that compare to your current eating patterns?            What would it be like if you gained (lost) 10 lb?            Does it ever seem as though your eating is out of control?            Have you ever taken diet pills?</p>
<b>Activities</b>	<p>What do you do for fun? How do you spend time with friends? Family? (With whom, where, when?)            Some teenagers tell me that they spend much of their free time online. What types of things do you use the Internet for?            How many hours do you spend on any given day in front of a screen, such as a computer, TV, or phone? Do you wish you spent less time on these things?</p>	<p>Do you participate in any sports?            Do you regularly attend religious or spiritual activities?            Have you messaged photos or texts that you have later regretted?            Can you think of a friend who was harmed by spending time online?            How often do you view pornography (or nude images or videos) online?            What types of books do you read for fun?            How do you feel after playing video games?            What music do you like to listen to?</p>
<b>Drugs</b>	<p>Do any of your friends or family members use tobacco? Alcohol? Other drugs?            Do you use tobacco or electronic cigarettes? Alcohol? Other drugs, energy drinks, steroids, or medications not prescribed to you?</p>	<p>Is there any history of alcohol or drug problems in your family?            Does anyone at home use tobacco?            Do you ever drink or use drugs when you're alone? (Assess frequency, intensity, patterns of use or abuse, and how patient obtains or pays for drugs, alcohol, or tobacco.)            (Ask the CRAFFT questions in Table 5, page 25.)</p>

**Potential first-line questions**

*Questions if time permits or if situation warrants exploration*

**Sexuality**

Have you ever been in a romantic relationship? Tell me about the people that you've dated.  
 Have any of your relationships ever been sexual relationships (such as involving kissing or touching)?  
 Are you attracted to anyone now? OR: Tell me about your sexual life.  
 Are you interested in boys? Girls? Both? Not yet sure?

Are your sexual activities enjoyable?  
 Have any of your relationships been violent?  
 What does the term "safer sex" mean to you?  
 Have you ever sent unclothed pictures of yourself on e-mail or the Internet?  
 Have you ever been forced or pressured into doing something sexual that you didn't want to do?  
 Have you ever been touched sexually in a way that you didn't want?  
 Have you ever been raped, on a date or any other time?  
 How many sexual partners have you had altogether?  
 (Girls) Have you ever been pregnant or worried that you may be pregnant?  
 (Boys) Have you ever gotten someone pregnant or worried that might have happened?  
 What are you using for birth control? Are you satisfied with your method?  
 Do you use condoms every time you have intercourse? What gets in the way?  
 Have you ever had a sexually transmitted infection or worried that you had an infection?

**Suicide/ depression**

Do you feel "stressed" or anxious more than usual (or more than you prefer to feel)?  
 Do you feel sad or down more than usual?  
 Are you "bored" much of the time?  
 Are you having trouble getting to sleep?  
 Have you thought a lot about hurting yourself or someone else?  
 Tell me about a time when someone picked on you or made you feel uncomfortable online.  
 (Consider the PHQ-2 screening tool [Table 6, page 26] to supplement.)

Tell me about a time when you felt sad while using social media sites like Facebook.  
 Does it seem that you've lost interest in things that you used to really enjoy?  
 Do you find yourself spending less time with friends?  
 Would you rather just be by yourself most of the time?  
 Have you ever tried to kill yourself?  
 Have you ever had to hurt yourself (by cutting yourself, for example) to calm down or feel better?  
 Have you started using alcohol or drugs to help you relax, calm down, or feel better?

**Safety**

Have you ever been seriously injured? (How?) How about anyone else you know?  
 Do you always wear a seatbelt in the car?  
 Have you ever met in person (or plan to meet) with anyone whom you first encountered online?  
 When was the last time you sent a text message while driving?  
 Tell me about a time when you have ridden with a driver who was drunk or high. When? How often?  
 Is there a lot of violence at your home or school? In your neighborhood? Among your friends?

Do you use safety equipment for sports and/or other physical activities (for example, helmets for biking or skateboarding)?  
 Have you ever been in a car or motorcycle accident? (What happened?)  
 Have you ever been picked on or bullied? Is that still a problem?  
 Have you gotten into physical fights in school or your neighborhood? Are you still getting into fights?  
 Have you ever felt that you had to carry a knife, gun, or other weapon to protect yourself? Do you still feel that way?  
 Have you ever been incarcerated?

Abbreviations: CRAFFT, Car, Relax, Alone, Forget, Friends, Trouble; HEEADSSS, Home, Education and employment, Eating, Activities, Drugs, Sexuality, Suicide/depression, Safety; PHQ-2, Patient Health Questionnaire 2.  
 Adapted from Goldenring JM, et al<sup>1</sup>; Goldenring JM, et al.<sup>2</sup>

**TABLE 2** Characteristics of resilient teenagers

<b>Home</b>	Connected, caring parents or family members Acceptance of responsibility Chores Care of siblings or other relatives
<b>Education and employment</b>	Better than average school performance Feelings of connection to school Limited employment (<20 hr/wk) Strong participation in extracurricular, school-related activities, including sports
<b>Activities</b>	Leadership among peers Religious affiliation
<b>Drugs</b>	Pledge to abstain Refusal skills
<b>Sexuality</b>	Pledge to abstain Refusal skills Consistently responsible sexual behavior
<b>Suicidality</b>	No personal history of attempted suicide No family history of attempted or accomplished suicide Access to a confidant Successful coping skills Substance free
<b>Safety</b>	Seat belt and helmet use Conflict resolution skills Substance free Refusal to ride in cars with potentially intoxicated driver

Goldenring JM, et al<sup>1</sup>; Ginsburg KR<sup>10</sup>; Resnick MD, et al.<sup>14</sup>

to those most often considered highly personal. Nothing about the HEEADSSS interview, however, including the order of questioning should ever be treated rigidly. Although teenagers typically feel comfortable progressing in the order of the acronym, be aware of clues from the chief complaint or previous interactions that would modify your approach. For example, the home environment may be much more stressful to some adolescents than any issues they may have about sexuality.

Remember to search for the patient's strengths because positive attributes suggest the presence of resilience.<sup>8,10,11</sup> In fact, some experts recommend

first screening for markers of strength and resiliency to use throughout the rest of the visit (Table 2).<sup>1,10,14</sup> Consider: "To help me get to know you, tell me something about yourself that makes you proud" or "Tell me how your friends describe you."<sup>10</sup> This may be postponed when patients are anxious to address their psychosocial concerns; however, positive factors may mitigate risks or point to productive interventions or an improved outlook.<sup>10,11,14</sup>

While counseling about risks you have uncovered, be certain to assess the patient's readiness to change, the context of the patient's situation, opportunities to praise the patient for significant accomplishments or avoiding risks, and implementation of patient-created solutions and coping strategies (Table 3).<sup>1,10,14</sup>

### Consider starting at Home

Questions about the teenager's home environment are generally expected and are a good beginning for the psychosocial interview. Instead of making assumptions, ask open-ended questions if possible (Table 4).<sup>1</sup> It is a mistake, for example, to say "Tell me about your mom and dad," which assumes that the patient lives with 2 parents and that the parents are of different genders. Rather, start by asking "Where do you live?" or "Tell me about your living situation." Then ask: "Who lives with you?" These questions allow the adolescent to describe what is most important in his or her home setting.

Proceed by asking what relationships are like at home and whether there has been a recent change: moving, running away, divorce, or having someone join or leave the household. Such events are often extremely stressful to teenagers, who prefer a stable environment in which to undertake the developmental tasks of adolescence, such as separating from parents, connecting with peers, and developing a positive self-image.

Because media-related morbidity can be reduced by enlisting parental supervision, it is important to screen for the patient's home use (especially bedroom use) of computers, TVs, video games, smart phones, or other media devices.<sup>7</sup> (See "Screening for media use and misuse," page 24.)

It is extremely useful to ask in whom the teenager trusts to confide. Connection to supportive

**TABLE 3** A strengths-based approach

*When talking to adolescents, search for positives in the history. Approaches based on risk factors alone may induce feelings of shame and deter patient engagement. It also sets low expectations—absence of risk factors does not equate to success. Here are some tips:*

- 1 Identify strengths early** so that they can be “built on” when motivating the patient to change or when encouraging ongoing success. An alternative acronym, SSHADESS, accounts for this strategy.<sup>10</sup>
- 2 Look for examples of past difficulties that your patient has successfully overcome.** The ability to adapt to and overcome adversity is known as resilience and is highly protective against a wide range of bad outcomes.
- 3 Praise** when praise is warranted! Many adolescents, especially those at high risk, never hear any praise from adults!
- 4 Use reflective listening and pause.** This allows the teenager time to confirm and expand on his or her thoughts.
- 5 Create a comfortable, trusting, nonjudgmental setting** that communicates respect. Consider: “I want you to feel comfortable coming to me for health information and comfortable telling me what is going on in your life.”
- 6 Share your concerns.** It is acceptable to gently challenge your patient by saying, for example, “I’m worried that daily marijuana use may be a barrier to your achieving your goal of serving in the military.”

Abbreviation: SSHADESS, Strengths, School, Home, Activities, Drugs/substance abuse, Emotion/depression, Sexuality, Safety.  
Goldenring JM, et al<sup>1</sup>; Ginsburg KR<sup>10</sup>; Resnick MD, et al.<sup>14</sup>

adults—parents or others—is highly protective against many health risks and high-risk behaviors.<sup>14</sup> It is also important to remember to praise solid relationships with adults and assumption of responsibilities at home.

### E is for Education and Employment

Most young people expect questions about their education and are seldom threatened by them. A common error is to ask “How are you doing in school?” Invariably, the patient will simply answer “fine” or “good,” necessitating additional

questioning. Instead, try asking: “Tell me about school. What do you like about it, and what don’t you like?”

Search for the patient’s degree of connectedness to the school and education; high connectedness predicts lower rates of substance use, early sexual initiation, violence, school absenteeism, and other causes of adolescent morbidity.<sup>14</sup> Connectedness is specifically increased not only by educational commitment and adult mentorship but also by peer group belonging and a safe environment.<sup>15</sup> Be certain to inquire about involvement in extracurricular activities and occurrences of bullying.

Ask specifically about academic performance (generally measured by grades). Declining academic performance correlates highly with psychosocial problems, such as drug use or suicide risk, and may indicate an underlying learning or attention disorder.

When an adolescent lives in a high-risk environment, begin the school section of the interview by ascertaining whether he or she regularly attends school. In some inner-city areas, the absenteeism rate for teenagers ranges from 15% to 40%.<sup>16</sup> It also may be helpful to check how many schools and new sets of friends the student has adapted to in recent years. This is particularly important in military families for whom moving is often a way of life.<sup>17</sup>

The older the teenager, the more you should expect him or her to have some plans for future education or employment. Ask teenagers who are employed part time whether the work is intrusive and if economic circumstances necessitate it. Working more than 20 hours a week has been associated with negative outcomes of emotional distress and substance use.<sup>14</sup> When interviewing adolescents who are employed full time, inquire about their strengths and weaknesses on the job, satisfaction level, nature of relationships at work, goals, and recent or frequent changes in employment.

Again, remember to look for and praise successes at school and at work. Such successes include not only academic ones but also leadership and achievement in extracurricular school activities or in the workplace.

**TABLE 4** Opening lines, poor and better

Category	Poor	Better
Home	"Do you get along with your mom and dad?"	"Where do you live and who lives there with you? (No assumptions made.)"
Education	"How are you doing in school?"	"Tell me about school." <b>OR:</b> "What do you enjoy about school? What do you dislike? (Open-ended; harder to answer "OK.")"
Eating	"What do you eat?"	"Tell me what you think about your weight and shape." <b>OR:</b> "Tell me about what you like and don't like about your body." (Open-ended; can't answer "OK.")
Activities	"Do you have any activities outside school?"	"What do you and your friends like to do for fun?" (Open-ended.)
Drugs	"Do you use drugs?"	"What kinds of drugs have you seen around your school or at parties?" <b>OR:</b> "Do any of your friends use drugs or alcohol?" (Less personal; eases into a difficult discussion.)
Sexuality	"Have you ever had sex?"	"You told me you've been going out with Steve for the past 3 months. Has your relationship become sexual?" (Context makes question seem less intrusive.) <b>OR:</b> "Are you attracted to anyone currently?" (Nonjudgmental.)

From Goldenring JM, et al.<sup>1</sup>

## E is also for Eating

Adolescents often have unhealthy eating habits, and the prevalence of obesity and eating disorders continues to increase, so questions about nutrition are important. Aim to help all adolescents develop healthy eating (and exercise) habits that can be maintained over a lifetime.

Obesity, which greatly increases the likelihood of developing diabetes and heart disease, is now clearly recognized to begin in childhood and adolescence.<sup>18</sup> Sedentary adolescents often snack continually during the time that they spend in front of media devices, compounding their risk. Simple strategies, such as recommending appropriate portion sizes, eliminating sugared soda and fast food, and limiting screen time, can be helpful in improving adolescent eating habits and overall health.<sup>7,19</sup>

Physicians should also attempt to identify adolescents whose eating habits may signal body image or self-esteem problems, psychologic distress, or depression. Frequent dieting, compulsive exercise, and purging are all of concern. At least half of normal-weight young women surveyed in the United States believe they are overweight.<sup>20</sup>

Use this question, for example: "As I ask all my patients—does your weight or body shape cause you

any stress? If so, tell me about it." Then follow with specific questions about diet, eating habits, nutritional knowledge and beliefs, and pathologic dieting behaviors. Remember how much eating and exercise behaviors are influenced by genetic inheritance and by behavior modeled in the family or media. In 2010, there were at least 100 easily discoverable pro-anorexia websites encouraging and guiding disordered eating behaviors.<sup>21</sup> Media "apps" for calorie counting are widely available and these can be used to increase health and/or contribute to pathologic behavior.

Remember, of course, to praise good diet and exercise choices whenever you find them.

## Looking at peer-related Activities

When adolescents or young adults are not at home, in school, or at work, they tend to be with their peers. As a prelude to more sensitive HEEADSSS questions, it is wise to have the patient tell you about what things he or she really enjoys. Adolescents derive much of their identity and self-esteem from peer activities.

Begin by asking: "Tell me what you do with your friends" or "What do you do for fun?" Be concerned about teenagers who cannot readily name friends or describe their activities beyond "hanging out." They may be at higher risk than teenagers who

## SCREENING FOR MEDIA USE AND MISUSE

Improved media access can lead to positive, prosocial outcomes such as empathy, acceptance of diversity, social group acceptability, and respect for the elderly.<sup>a,b</sup> Clinicians are now also faced with identifying how the concerning aspects of the media age—cyberbullying, sexting, driving while texting, online solicitation, Internet addiction (eg, video games), and media-related depression (eg, Facebook depression), to name a few—are affecting virtually every aspect of adolescent patients’ psychosocial and physical well-being.

Adolescents now spend 7 to 11 hours per day with different media, far from the maximum 1 to 2 hours typically recommended.<sup>c</sup> One quarter of teenagers are “cell-mostly” Internet users, stating that they mostly go online from their cell phones.<sup>c</sup> This suggests an unprecedented level of unsupervised Internet access. One-quarter of adolescents experience electronic bullying and one-third text while driving.<sup>d,e</sup> Those bullied online are more likely to report pervasive fear (in multiple environments) than those traditionally bullied.<sup>f</sup> In addition, pornography is available by typing a few key words into a search engine. Failing to identify associated risk behaviors will miss opportunities to improve health outcomes.

Try to add “media” or “Internet” literacy in discussion with parents and patients. This can include topics such as co-viewing to foster communication and accurate interpretation of content, as well as setting limits (eg, parental controls, time using media, or access to media in one’s bedroom).

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talk about specific activities with friends, such as sports, dancing, hobbies, games, or even shopping. Adolescents who say they are “bored all the time” may be depressed.

Ask teenagers about the nature and quantity of their use of television, computers, video games, and mobile media devices. Nearly one-third of high school students surveyed in a large nationwide study played video or computer games for 3 hours or longer on the average school day.<sup>22</sup> You may uncover a lack of parental connection and control, an avoidance of homework or family/peer interaction, or addictive behavior. Seek the specifics when interviewing an adolescent who endorses constant text messaging or social media posting. This behavior may be detrimental (eg, leading to sexting, texting while driving, or media-related depression) and/or it may be protective (as when used to connect with a health peer group that is otherwise unavailable).

### On to Drugs

The drug history is sensitive. For patients in early adolescence, approach the topic obliquely: “We talked about what you and your friends do to have fun. Do any of your friends use drugs or alcohol (or get drunk or high)?” Young adolescents who would not readily talk about their own drug or alcohol use are often very willing to tell about such behavior by their friends. Next you might ask: “Tell me about a time that you felt pressured by friends to use drugs or alcohol, if any.” The answer may lead to a discussion of specific circumstances and types of substances tried.

You may be able to ask older adolescents about drugs more directly. To elicit the most information, you need to know the latest trends of substance use within the patient’s specific community. Substances used may include, for example, new synthetic cannabinoids, caffeine-containing energy drinks, anabolic steroids, and prescription medications such as opioids, benzodiazepines, and stimulants.

Also, ask specifically about tobacco and cigarettes, including electronic cigarettes (inhaled doses of nicotine), because many teenagers do not consider chewing tobacco or smoking to be a form of drug use. Be sure to find out whether the adolescent drives while under the influence of drugs or alcohol and/or rides with drivers who are intoxicated.

Explaining harms—without also evaluating readiness to change, acknowledging perceived benefits to substance use, using motivational interviewing techniques, and establishing trust and rapport—will likely not suffice to induce behavioral change. CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble) is a brief, validated, office-friendly screening test useful in initially assessing the substance-using teenager (Table 5).<sup>23</sup>

The goal of obtaining a drug history is usually to have the adolescent reveal the nature of problematic substance use to his or her parents or guardians (with your facilitation, if the patient desires) so that these caregivers can provide the patient with a more robust support system and foster additional treatment. Alternatively, substance use can remain confidential as long as there is no clear and immediate threat to the patient.

### Sexuality

The sexual history may be the most sensitive part of the interview. It may benefit rapport to seek permission before proceeding: “Do you mind if I ask you a few more personal questions to learn how I can best assist you?” It is also helpful to expressly acknowledge the discomfort most patients feel about discussing this topic. Say, for example: “I know that this may be embarrassing for you, but I ask these questions of all my teenaged patients to make sure I can give my best advice.”

Especially with younger adolescents, you might observe: “Tell me about any of your friends who are starting to be in romantic relationships.” To older adolescents, simply say: “Tell me about any romantic relationships you’ve been involved in.” The open-endedness of such questions allows adolescents to tell whether they are having relationships with people of the same sex, the opposite sex, or both.

From asking about relationships, it is a short step to asking about sexual relationships: “Since sexual activity can affect your health, please tell me whether any of your relationships involved kissing or touching.” If so, inquire about other sexual behaviors. Whether to screen for sexually transmitted infections, pregnancy, abuse, and other sequelae of sexual activity depends on the details.

Ask patients about their knowledge of fertility,

**TABLE 5** The CRAFFT questions

*Two or more “Yes” answers suggest high risk of a serious substance-use problem or a substance-use disorder.*

- C** Have you ever ridden in a **Car** driven by someone who was high or had been using drugs or alcohol?
- R** Do you ever use alcohol or drugs to **Relax**, feel better about yourself, or fit in?
- A** Do you ever use drugs or alcohol when you are **Alone**?
- F** Do you **Forget** things you did while using drugs or alcohol?
- F** Do your family and **Friends** ever tell you that you should cut down your drinking or drug use?
- T** Have you ever gotten into **Trouble** while using drugs or alcohol?

Abbreviation: CRAFFT, Car, Relax, Alone, Forget, Friends, Trouble.  
Knight JR, et al.<sup>23</sup>

contraception, and sexually transmitted infections, given that many teenagers use the Internet and social media as their primary sex educators. You might add: “Many people do not have anyone knowledgeable to talk to about sex. We’re always happy to answer any questions you have.” And remember, adolescents may forgo contraceptive or reproductive services if they think (rightly or wrongly) that parental notification is mandatory.<sup>12,13</sup>

Do not assume that adolescents who are having sexual experiences are comfortable about it. You may say: “Some of my patients tell me they feel pressured or coerced into having sex. Have you ever felt this way?” Sometimes, you can serve as a trustworthy adult who gives adolescents permission to avoid sexual activity until they are more comfortable with engaging in it. A history of abuse (if any) may not come out in the first interview, but the very fact that you show interest establishes rapport and may lead the patient to reveal the facts at a later time.

In today’s Internet-linked world, sexual materials of all kinds are easily available. You may wish to ask teenagers about what sexual information and materials they have accessed online and how much and how often. Again, some experimentation with this is likely normal, but excessive use of such sites or accessing unusual or violent sexual content may

**TABLE 6 Patient Health Questionnaire 2**

*A score of 3 or greater has good sensitivity and specificity for detecting major depression in adolescents.*

OVER THE PAST 2 WEEKS, HOW OFTEN HAVE YOU BEEN BOTHERED BY ANY OF THE FOLLOWING?	NOT AT ALL	SEVERAL DAYS	MORE THAN HALF THE DAYS	NEARLY EVERY DAY
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3

Richardson LP, et al.<sup>25</sup>

indicate a risky behavior.<sup>7</sup>

Sometimes the greatest impediment to obtaining an adequate sexual history is a physician's own discomfort with sexuality. With practice, these questions become easier to ask without appearing judgmental. You can offer advice and personal opinions, but only if the teenager solicits them and only if you clearly label them as such.

### Screening for *Suicide and depression*

Adolescents should be screened for depression when systems are in place to ensure accurate diagnosis, psychotherapy, and follow-up.<sup>24</sup> Teenagers often exhibit depression as boredom, irritability, anxiety, moodiness, sleep disturbance, and social withdrawal. Many are more willing to admit to "stress" than to overt depression or sadness. The Patient Health Questionnaire 2 (PHQ-2), a 2-item survey, may be used as an initial screening tool for depression in adolescents at each visit (Table 6).<sup>25</sup>

When depression seems likely, ask directly and clearly about self-harm. Asking about suicidal behavior does not precipitate or trigger it, and clinicians should not be reluctant to question patients unambiguously: "You've told me that you've been feeling bad lately. Have you felt so bad that you've thought seriously about harming yourself?" Adolescents attempt suicide more often than we realize, so physicians should not be surprised if a teenager has contemplated or even attempted it. Past suicide attempts are a strong risk factor for future attempts and future suicide. The clinical question is: How serious is the ideation, planning, or actual behavior?

Pay attention to sexual orientation. A recent study

found that lesbian, gay, and bisexual (LGB) adolescents were more likely than heterosexual teenagers to have attempted suicide in the previous 12 months (21.5% vs 4.2%, respectively).<sup>26</sup> The likelihood of attempting suicide was 20% higher for LGB teenagers in unsupportive environments than in supportive environments. Sexual minority adolescents benefit greatly from clinician-provided support, as well as a safe place for asking questions.

Some adolescents who are not contemplating suicide nevertheless harm themselves. Teenagers who engage in cutting describe it as a mood-stabilizing behavior; in these situations a careful risk assessment is important.

### S for Safety

Injuries, suicide, and homicide—the major causes of morbidity and mortality in adolescents—are a constant environmental reality for many young people. Antecedents such as bullying, domestic and school violence, gang involvement, sexual abuse, online solicitation, and access to weapons must be identified in the psychosocial history. Family violence, which increases the risk for teenaged violence several-fold, occurs in all social and economic classes, as does dating violence, which is reported by as many as 25% of teenaged and young adult women.<sup>27,28</sup>

Proceed to questions about the threats most prevalent in the patient's community. In some settings, these threats may be school violence and guns; in other settings, these may be sports injuries, sexual violence, or risk taking related to motor vehicles. Then ask about any other threats. Avoid letting assumptions based on the patient's racial, ethnic, or socioeconomic status lead you to skip taking parts of the history.

Find out what strategies the patient uses for self-protection, conflict resolution, and avoidance of violence. (No gangs? How about local bullies? Is there an abusive partner or parent?) Know the school-based and community organizations in your area that offer programs on conflict resolution and violence avoidance so that you can make specialized referrals. Many young people respond to violence with violence because that is all they know from their homes, streets, and media. Before offering concrete solutions, ask adolescents whether they can think of ways to avoid violence using their reported strengths.

### Wrapping it up

You may end the psychosocial interview by asking adolescents to tell you in whom they can trust and confide if they have problems. Emphasize that your approach is nonjudgmental and that you welcome

future visits. You may say: “I’m here for you, and I want you to feel comfortable confiding in me. If you have something personal to talk about, I’ll try to give you my best advice and answer your questions.”

Many adolescents do not recognize dangerous behavior patterns as dangerous because they see their activities not as problems but as solutions. Your challenge is to explore these behaviors and the context in which the adolescent lives, and to develop realistic solutions with patient buy-in.<sup>10,11</sup> Depending on the nature of the risk factors identified and the intervention to be established, you can either extend the initial visit or arrange a follow-up.

Finally, by now you may be overwhelmed by the amount of issues to be covered in this interview and wonder how to do this in a limited time. Of course, you cannot cover every aspect in a single visit, but your goal is to establish an effective

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relationship in each case and leave the remaining questions for a later visit. You should feel free to add or remove priority questions based on the needs of your patient population. In other words, make HEEADSSS your own.

Try getting into the HEEADSSS of your adolescent patients. Your effort may have a lifelong impact. 📺

### Dedication

This manuscript is dedicated to the memory of David Rosen, MD, and Eric Cohen, MD, for their significant contributions to previous versions of the HEEADSSS psychosocial history and to the field of adolescent medicine.

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# IMPROVING EARLY IDENTIFICATION & TREATMENT OF ADOLESCENT DEPRESSION: CONSIDERATIONS & STRATEGIES FOR HEALTH PLANS



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## INTRODUCTION

According to a review by the National Adolescent Health Information Center, the most common mental health disorder among adolescents is depression with over 25 percent of adolescents affected by at least mild symptoms.<sup>1</sup> Mental health problems pose significant financial and social burdens on the individual as well as on families and society. Adolescents with unidentified mental disorders are in poorer physical health and engage in more risky behaviors than their peers, such as unsafe sexual activity, fighting and weapon carrying.<sup>2</sup> These youths are also at the highest risk for committing suicide; studies indicate that 90 percent of teens who die by suicide were suffering from an identifiable mental disorder at their time of death, typically depression.<sup>3</sup> Early identification and treatment can prevent the loss in productivity and high medical costs of depressed individuals, as well as the associated burdens on family members and caregivers.

Unfortunately, depression and other mental disorders often go undiagnosed in adolescence despite the availability of screening tools proven effective in identifying adolescent depression during the primary care visit. With symptoms of nearly three-fourths of all lifetime diagnosable mental health disorders beginning by age 24, it is critical to identify mental health disorders as early in life as possible.<sup>4</sup> The adolescent well-care visit is when most adolescents receive their health care and thus is an opportune time to conduct mental health screenings for this population.

The evidence and support for adolescent mental health screening in primary care is stronger than ever. In light of the benefits associated with early intervention and the existence of effective treatment options, both

the Institute of Medicine (IOM) and the United States Preventive Services Task Force (USPSTF) have recently recommended that physicians in primary care settings screen adolescents for major depressive disorder. Easy and accurate screening tools exist, and behavioral health vendors, health plans and primary care providers are working together to implement screening during adolescent primary care visits. Health plans are in a unique position to support the integration of screening into a primary care visit by training physicians to use screening tools, reimbursing them for the time required to conduct a screening, and coordinating referrals for further treatment.

In this issue brief we review the prevalence of adolescent depression, consequences of unidentified depression, costs of screening and treatment, and recommendations and tools for primary care providers to identify and treat adolescent depression. Finally, we share opportunities for health plans to support providers in identifying and treating adolescent depression.

## PREVALENCE OF ADOLESCENT DEPRESSION

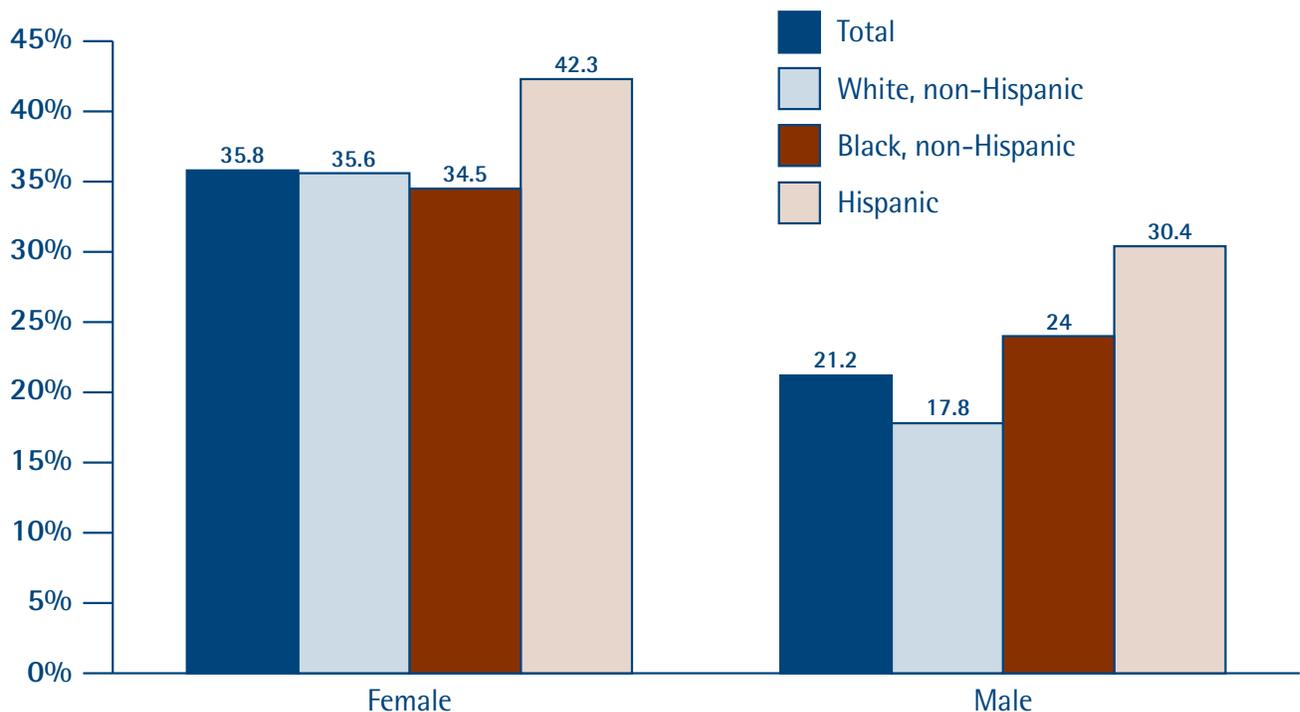
Depression is one of the most widely reported mental disorders among adolescents. Depression is associated with several risk behaviors and suicide, the third leading cause of mortality for 15 to 24 year olds. As such, it is one of the most studied mental health conditions. Although prevalence statistics vary depending on the population, symptoms or severity examined, it is estimated that over 25 percent of adolescents are affected by at least mild symptoms.<sup>5</sup> In this section we review some of the data most commonly used to describe adolescent depression prevalence.

The Centers for Disease Control and Prevention's (CDC) Youth Risk Behavior Surveillance System (YRBSS) is a national school-based survey that provides one of the broadest measurements of depression in adolescents. The survey asks, "Have you ever felt so sad or hopeless almost everyday for two weeks in a row that you couldn't do some of your usual activities?" Results from the 2007 survey indicate that 36 percent of females and 21 percent of males felt this degree of sadness or hopelessness (Figure 1). Hispanic students were more likely to report this level of sadness than their non-Hispanic white or black peers.

There are numerous risk factors for depression including genetic and sociodemographic characteristics. Studies have found that genetic factors, such as parental depression, predict child and adolescent depression.<sup>6</sup> However, environmental influences have also been determined to be significant, along with a combination of environmental and genetic factors. Gender, family

structure, parental education and race are also associated with differing levels of risk for depression. The relationship between these characteristics and the prevalence of depression in high school students was examined in a study that utilized AddHealth data, which is the largest, most comprehensive survey of adolescents to date. Severity levels of symptoms were identified as minimal, mild, moderate and severe using the Center for Epidemiological Studies – Depression Scale. Those with moderate and severe symptoms are typically labeled as having depression. This study revealed that in 1995 females were more than twice as likely as males to have depression; depression was almost twice as prevalent in adolescents whose mothers did not graduate from high school than among those with mothers with higher levels of education; and depression was 1.5 times more likely for adolescents living with a single parent than for those living with both parents. This study found that white students were 25 percent more likely to have depression than non-white students.<sup>7</sup>

FIGURE 1: SADNESS OR HOPELESSNESS WHICH PREVENTED USUAL ACTIVITIES BY GENDER AND RACE/ETHNICITY, HIGH SCHOOL STUDENTS, 2007



Source: Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System 2007.

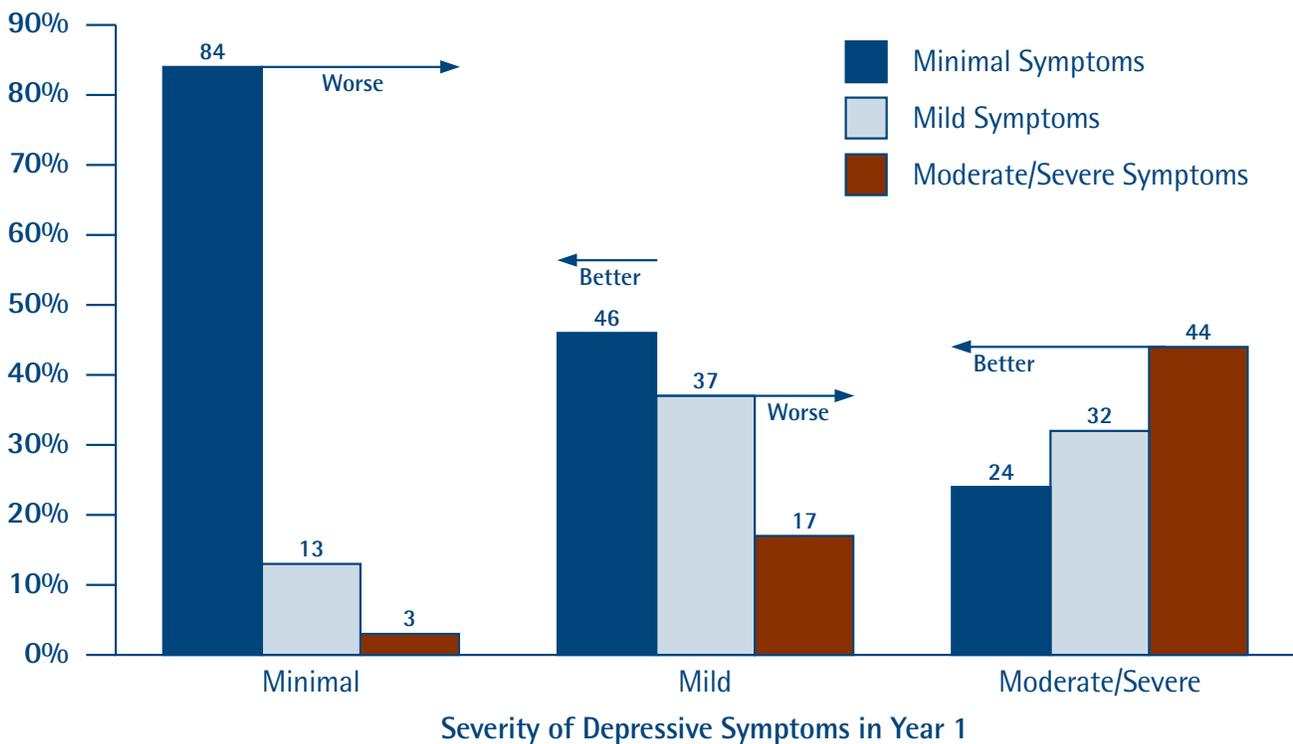
This study also surveyed these students one year later to examine the continuance of depressive symptoms over time. Although depressive symptoms were stable for many, the severity of depression symptoms changed for others and included both improvements and deteriorations in severity (Figure 2).

The Substance Abuse and Mental Health Services Administration's (SAMHSA) National Survey on Drug Use and Health (NSDUH) measures the prevalence of major depressive episode (MDE) among youth aged 12 to 17. MDE is diagnosed when a teen experiences a period of two weeks or longer characterized by persistent depressed mood or loss of interest or pleasure and at least four other behavioral symptoms, such as changes in sleep, eating, concentration and self-worth.<sup>8</sup> In 2007 more than 8 percent of adolescents (approximately two million) experienced at least one MDE with females more than twice as likely as males and older adolescents more likely than their younger peers to report MDE (Figure 3). Of all adolescents with MDE, females were

more likely than males to report severe impairment.<sup>9</sup> Severe impairment is assessed through the Sheehan Disability Scale (SDS) which measures impairment in a person's daily functioning due to MDE. Adolescents aged 12 to 17 are asked to assess (on a 0 to 10 scale) the level of interference caused by MDE to (1) chores at home, (2) school or work, (3) close relationships with family, and (4) social life; ratings of 7 or greater are classified as severe impairment.

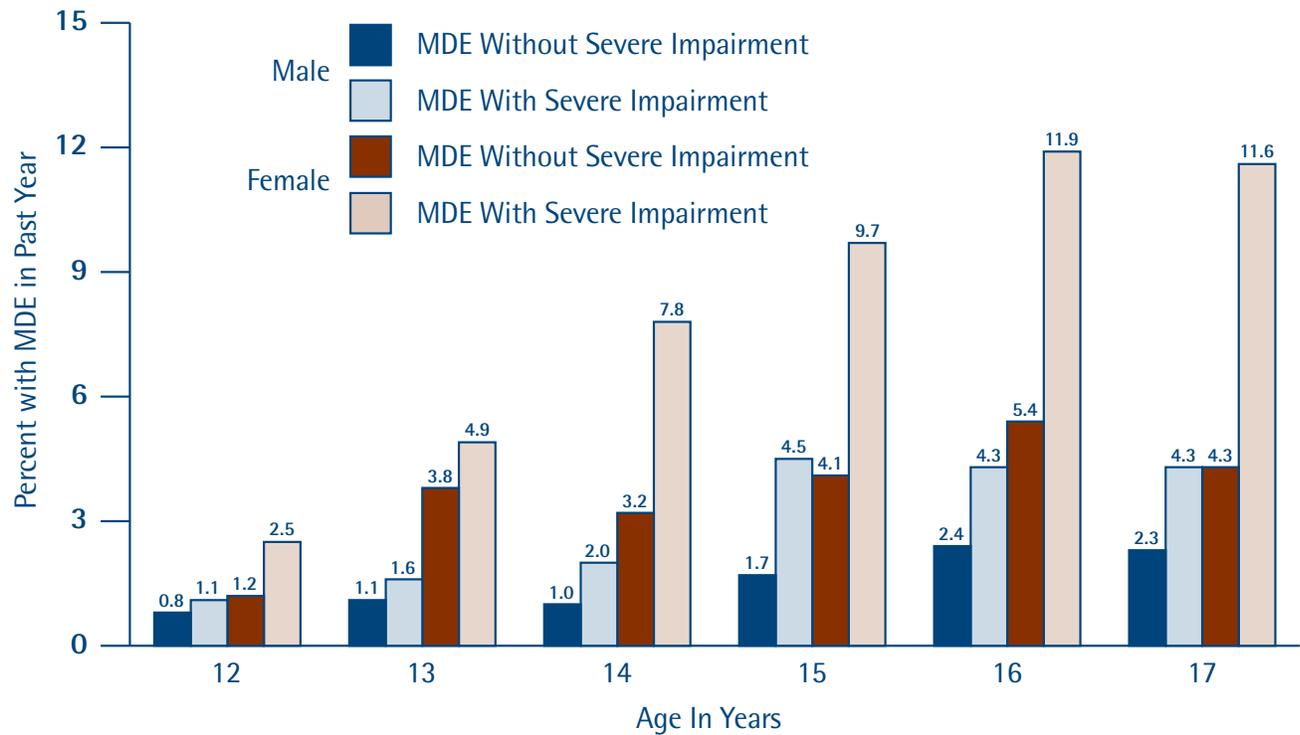
Depression frequently co-occurs with other mental health disorders. The 1990-92 National Comorbidity Survey revealed that 77 percent of 15 to 24 year olds diagnosed with major depression had at least one other psychiatric diagnosis as well. Among those with multiple diagnoses, 40 percent had anxiety disorders, 12 percent had addictive disorders, and 25 percent had conduct disorders.<sup>10</sup> For more than two-thirds of these adolescents and young adults, the diagnosis of major depression occurred after the diagnosis of another psychiatric disorder.

FIGURE 2: SEVERITY OF DEPRESSIVE SYMPTOMS ONE YEAR LATER



Source: AddHealth data in Rushton, Forcier and Scheckman, 2002.

FIGURE 3: MAJOR DEPRESSIVE EPISODE BY SEVERE IMPAIRMENT, AGE AND GENDER, 2007



Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. Detailed Tables of 2007 National Survey on Drug Use and Health.

### IDENTIFICATION & TREATMENT OF ADOLESCENT DEPRESSION

A lack of identification through screening as well as a lack of treatment among those diagnosed with depression are two well-known issues in the field of adolescent mental health. According to the 2001-2002 National Ambulatory Medical Care Survey (NAMCS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS) which track care given in physician offices, emergency rooms and outpatient departments, physicians reported depression as a diagnosis in 2.8 million adolescent outpatient visits. These visits accounted for 2.9 percent of all outpatient visits by 15 to 17 year olds and 2.0 percent for 11 to 14 year olds. Given the prevalence of depressive symptoms among adolescents, these rates indicate that only a small proportion of the adolescent population is seeking care for depressive symptoms or being screened or diagnosed with depression in the outpatient setting, which is where most adolescents receive care.

A recent study by Ozer et al. examined the rates of provider screening for adolescent depression in California. Using data from the 2003 California Health Interview Survey, they found that just under one-third (31.2 percent) of California adolescents ages 12 to 17 said they had talked to their providers about their emotions or mood. Females were more likely to report being screened for emotional distress than males (37.5 percent versus 25.1 percent, respectively). These screening rates were consistent with a second dataset used in this study from a sample of California pediatric clinics in which 34 percent of teens reported that their doctors discussed their emotions with them (36.4 percent of females and 30.4 percent of males).

Data from SAMHSA's NSDUH indicate only approximately two of every five adolescents who experience MDE receive treatment for depression. Moreover, this rate varies according to gender, geographic region, health insurance coverage and overall health (Figure 4). Females, those living in the Northeast, those covered

**FIGURE 4: ADOLESCENTS WITH AT LEAST ONE MDE RECEIVING TREATMENT IN THE PAST YEAR, BY DEMOGRAPHIC, GEOGRAPHIC AND HEALTH CHARACTERISTICS, 2007**

Characteristic	Percent of Adolescents with MDE in Past Year	Percent of Adolescents with MDE who Received Treatment for Depression
<b>Total</b>	<b>8.2</b>	<b>38.9</b>
<b>Gender</b>		
Male	4.6	36.7
Female	11.9	39.9
<b>Geographic Region</b>		
Northeast	7.9	46.2
Midwest	8.5	37.9
South	8.0	37.4
West	8.3	37.0
<b>Health Insurance</b>		
Private	8.1	40.6
Medicaid/CHIP	8.2	42.9
Other	9.5	*
None	7.5	17.2
<b>Overall Health</b>		
Excellent	5.4	31.7
Very Good	8.2	38.3
Good	11.3	42.1
Fair/Poor	15.0	50.9

Source: Substance Abuse and Mental Health Services Administration, Office of Applied Studies Detailed Tables of 2007 National Survey on Drug Use and Health.

\*Data are suppressed because of low precision.

by health insurance and those in fair or poor health are more likely to receive treatment.

When mental health issues go untreated, they are more likely to result in hospitalization which can be very costly. In 2006 there were 67,404 hospital stays involving a principal diagnosis of affective disorders for children and adolescents aged 10 to 17 (**Figure 5**). These cases accounted for 7.5 percent of all hospital stays for adolescents. Two of every five (42 percent) of these stays were via admissions from the emergency department, indicating a patient in crisis. The mean charge per hospital stay for these adolescents was \$13,397, with higher mean charges for younger ages and for Medicaid patients. Total charges for all

inpatient care to this population were approximately \$903 million in 2006; private payers were charged nearly \$374 million. Clearly there are large savings to be had through effective prevention and management of adolescent depression before inpatient care is needed.

The dominant forms of treatment for adolescents with depression are psychotherapy and pharmacotherapy (**Figure 6**). According to the 2007 NSDUH, 94 percent of adolescents treated for MDE saw or spoke with a medical doctor or other professional about depression; of these, 41 percent utilized prescription medication in addition to counseling. Another 6 percent were treated with prescription medication but received no counseling.<sup>14</sup>

**FIGURE 5. INPATIENT CARE FOR ADOLESCENTS WITH PRINCIPAL DIAGNOSIS OF AFFECTIVE DISORDERS, 2006**

	Inpatient Stays	Percent Admitted through ER	Mean Charge per Stay	Total Charges, All Stays (\$ in millions)
All Adolescents (ages 10-17)	67,404	42.0%	\$13,397	\$903.0
Ages 10-14	28,658	41.3%	\$14,596	\$418.3
Ages 15-17	38,746	42.5%	\$12,509	\$484.7
Medicaid	29,329	41.2%	\$15,241	\$446.9
Privately Insured	31,383	41.9%	\$11,903	\$373.6
Other Payer	4,441	*	\$12,149	\$54.0
Uninsured	2,000	59.3%	\$11,578	\$23.2

Source: Authors' calculations from the Healthcare Cost and Utilization Project (HCUP) Kids' Inpatient Database, Agency for Healthcare Research and Quality. Accessed through HCUPnet at <http://hcupnet.ahrq.gov/>

\*Data are suppressed because of low precision.

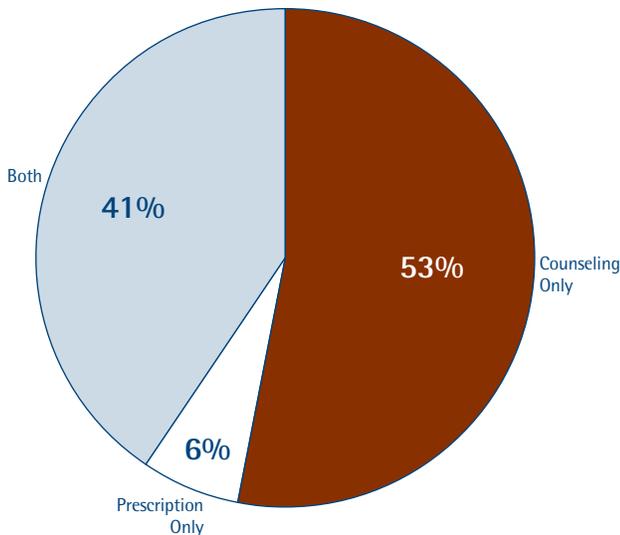
### ADOLESCENT DEPRESSION & LINK TO SUICIDE RISK

Suicide is the third most common cause of death among adolescents in the U.S. following unintentional injuries and homicides. Suicide accounts for approximately 4,500 deaths a year in youth ages 12 to 24.<sup>15</sup> In 2007 nearly 7 percent of high school students attempted suicide at least once. More than one-third of these students required treatment by a doctor or nurse for an injury, poisoning or overdose resulting from the suicide attempt.<sup>16</sup>

The risk of suicide is greatly increased by depression and other psychological disorders. Some studies indicate that 90 percent of teens who die by suicide were suffering from an identifiable mental disorder at the time of their deaths<sup>17</sup> and approximately 95 percent of all suicides occur among people with a psychological disorder.<sup>18</sup>

Although depression is a major risk factor for suicide, there is concern that antidepressants may increase the risk of suicide, particularly for adolescents. In February 2005 the Food and Drug Administration (FDA) issued a "black box" warning about the increased risk of suicidal thinking and behavior for pediatric patients taking antidepressants. The FDA extended this warning to young adults aged 18 to 24 in 2007.<sup>19</sup> Immediately following these warnings, as expected, there was a dramatic decrease in the utilization of antidepressants.

These FDA warnings have had unintended consequences on depression diagnosis. Research has shown that these black box warnings were followed by declines in depression diagnosis for both youths and adults. In 2007 diagnoses by primary care practitioners of new episodes of depression for children were 44 percent lower than would have been predicted based on historical trends prior to the

**FIGURE 6: TREATMENT FOR ADOLESCENT DEPRESSION**

Source: SAMHSA Office of Applied Studies, 2007 NSDUH

black box warning. Diagnoses for young adults were 37 percent lower, and diagnoses for adults were 29 percent lower than predicted.<sup>20</sup> While reasons for this decline have not been established and could be the result of fewer people presenting with symptoms during provider visits, the decline may stem from provider reluctance to make a diagnosis and prescribe antidepressants.

A recent study by FDA researchers confirms that the risk of suicidal behavior is greatly increased by the use of antidepressants for people under 25, with no similar increase for those aged 25 to 64. The study did, however, reveal differences in risks associated with the use of specific antidepressants. For example, the risk of suicidal behavior for those taking Zoloft (sertralene) was lower than among those taking a placebo, whereas use of Lexapro and Celexa seemed to increase risk.<sup>21</sup> Thus, the full association between antidepressant use and suicidal behavior remains unclear.

## RECOMMENDATIONS AND TOOLS FOR ADOLESCENT DEPRESSION SCREENING

There is strong evidence that a brief standardized depression screening instrument is well-accepted in

primary care practice. One study found that using a screening instrument, which took an average of 4.6 minutes for the patient to complete, was met with little resistance by patients and parents and was well perceived and accepted by providers. This finding confirms the recommendations of many respected professional organizations and other institutions that support mental health screening during the primary care visit. **Table 1** reviews the current recommendations specific to screening for adolescent depression.

A multitude of tools exist for primary care providers to screen adolescents for depression during the primary care visit. As part of their recommendation to screen adolescents for major depressive disorder (MDD), the USPSTF concluded that the Patient Health Questionnaire for Adolescents (PHQ-A) and the Beck Depression Inventory-Primary Care Version (BDI-PC) have successfully identified adolescents with MDD in primary care settings.<sup>29</sup> The state of Massachusetts, which recently mandated screening for children and adolescents under age 21 in its Medicaid program (MassHealth), requires that physicians use one of six approved tools when screening for depression in adolescents.<sup>30</sup> Other states may have adopted or recommended other tools for use in screening adolescents for depression. **Table 2** includes descriptions of a variety of screening tools applicable to the adolescent population, including the two instruments recommended by the USPSTF and the six tools approved by MassHealth. See **Appendix One** for more information on how to access these screening tools.

## MANAGING & TREATING ADOLESCENT DEPRESSION

Following a diagnosis of depression, there is some evidence that interventions within primary care can lead to improvements in adolescent depression.<sup>38</sup> Primary care providers who offer modest levels of support, such as brief interventions consisting of as few as one to three meetings, can improve adolescent depression.<sup>39</sup> A review of the literature conducted for the USPSTF found that selective serotonin reuptake inhibitors (SSRIs), psychotherapy alone, and treatment that combines psychotherapy with pharmacotherapy have all been proven effective in reducing depressive symptoms among adolescents. However, treatment with SSRIs is

TABLE 1. RECOMMENDATIONS RELATED TO ADOLESCENT DEPRESSION SCREENING

Organization	Recommendation
U.S. Preventive Services Task Force (USPSTF) <sup>23</sup>	Recommends screening of adolescents (12 to 18 years of age) for major depressive disorder (MDD) when systems are in place to ensure accurate diagnosis, psychotherapy (cognitive-behavioral or interpersonal), and follow-up. Risk factors for MDD include parental depression, having co-morbid mental health or chronic medical conditions, or having experienced a major negative life event. Grade B recommendation. <sup>1</sup>
American Academy of Pediatrics (AAP) Bright Futures <sup>24</sup>	Recommends annual confidential screening and referral for emotional and behavioral health problems for adolescent patients.
Institute of Medicine (IOM) "Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities" <sup>25</sup>	Recommends that the Federal government expand prevention and early identification of mental, emotional and behavioral disorders in young people through a national research plan to learn how to implement evidence-based prevention and screening.
American Academy of Pediatrics (AAP)/ American Academy of Child and Adolescent Psychiatry (AACAP) Joint Task Force <sup>26</sup>	Supports the emerging use of standardized screening tools by paying for mental health screening at routine visits and paying for the administration, scoring and interpretation of standardized mental health-assessment instruments.
Society for Adolescent Medicine (SAM) <sup>27</sup>	Supports the availability of a comprehensive range of mental health services and stresses the importance of early identification and appropriate treatment without delay.
Guidelines for Adolescent Depression in Primary Care (GLAD-PC) <sup>28</sup>	<ol style="list-style-type: none"> <li>1. Patients (aged 10 to 21) with depression risk factors (such as history of previous episodes, family history, other psychiatric disorders, substance abuse, trauma, psychosocial adversity, etc.) should be identified and systematically monitored over time for the development of a depressive disorder.</li> <li>2. Primary care clinicians should evaluate adolescents at high risk for depression and those who present with emotional problems as the chief complaint. Clinicians should use standardized depression tools to aid in the assessment.</li> <li>3. Depression assessment should include direct interviews with the patients and families/caregivers and evaluation of functional impairment in different domains and the presence of other existing psychiatric conditions.</li> </ol>

**TABLE 2. SELECTED SCREENING TOOLS FOR ADOLESCENT DEPRESSION**

Screening Tool	Description
BDI®-FastScreen for Medical Patients (previously known as the Beck Depression Inventory-Primary Care version or BDI-PC) <sup>31</sup>	<ul style="list-style-type: none"> <li>• Used to detect depressive symptoms</li> <li>• Completed by patient</li> <li>• Seven items, takes less than five minutes to complete</li> <li>• USPSTF found this tool to identify MDD accurately among teens aged 12 to 17 in primary care settings</li> </ul>
Center for Epidemiologic Study Depression Scale [CES-D] <sup>32</sup>	<ul style="list-style-type: none"> <li>• Measures depressive feelings and behaviors over the past week</li> <li>• Self-report</li> <li>• 20 questions, takes about five minutes to complete</li> </ul>
Child Behavior Checklist [CBCL], Youth Self-Report [YSR] and Adult Self-Report [ASR] <sup>33</sup>	<ul style="list-style-type: none"> <li>• The Achenbach System is a set of tools that screens for social, emotional and behavioral status. The various tools cover screening from 1½ years through adulthood. The system also offers the possibility of multi-informant assessment.</li> <li>• The CBCL has two forms: CBCL/1½ -5 years, commonly called the "CBCL preschool" screen; and CBCL/6-18 years, often called the "CBCL school age" screen</li> <li>• The YSR screens from 11 through 18 years</li> <li>• The ASR screens from 18 through 59 years</li> <li>• Forms are completed by parents (CBCL preschool and school-age forms) or by the patient (YSR and ASR)</li> <li>• There are over 100 questions and time for completion varies, but can be up to 20 minutes</li> <li>• Scoring by staff can take several minutes</li> <li>• All are MassHealth Approved Screening Tools</li> </ul>
Patient Health Questionnaire for Adolescents [PHQ-A] <sup>34</sup>	<ul style="list-style-type: none"> <li>• Designed to assess anxiety, mood, eating and substance use disorders</li> <li>• To be completed by the adolescent aged 13 to 18</li> <li>• 83 questions but takes only a few minutes to complete</li> <li>• USPSTF found this tool to identify MDD accurately among teens aged 13 to 18 in primary care settings</li> </ul>
Patient Health Questionnaire 9: Depression Screener [PHQ-9] <sup>35</sup>	<ul style="list-style-type: none"> <li>• Screens for depression in young adults 18 years and older</li> <li>• One-page questionnaire that can be completed by the young adult in about five minutes and then quickly scored by staff</li> <li>• Endorsed by TeenScreen, National Center for Mental Health Checkups at Columbia University</li> <li>• MassHealth Approved Screening Tool</li> </ul>
Pediatric Symptom Checklist and Pediatric Symptom Checklist-Youth Report (PSC & Y-PSC) <sup>36</sup>	<ul style="list-style-type: none"> <li>• The PSC is completed by parents of children 4 to 16 years old.</li> <li>• The Y-PSC is completed by youths from 11 to 18+ years of age.</li> <li>• Both versions are 35-item questionnaires that can be completed in about five to 10 minutes, then quickly scored by staff.</li> <li>• Endorsed by TeenScreen National Center for Mental Health Checkups at Columbia University</li> <li>• Both are MassHealth Approved Screening Tools</li> </ul>
Strengths and Difficulties Questionnaire [SDQ] <sup>37</sup>	<ul style="list-style-type: none"> <li>• Brief behavioral screening questionnaire</li> <li>• Self-report version to be answered by young people aged 11 to 16</li> <li>• 25 questions</li> </ul>

associated with a small increase in risk for suicidality and should be considered only if clinical monitoring is possible.<sup>40</sup> The USPSTF stresses the importance of screening adolescents for mental disorders only when psychotherapy is available as a treatment option in order to prevent primary care providers from relying on pharmacotherapy alone.

While evidence about the effectiveness of specific interventions in the primary care setting is still limited, the Guidelines for Adolescent Depression in Primary Care (GLAD-PC) have emerged as an important first step in guiding primary care providers as they address adolescent depression. **The GLAD-PC recommendations for initial management of depression are:**<sup>41</sup>

1. Clinicians should educate and counsel families and patients about depression and options for management of the disorder. Clinicians should also discuss limits of confidentiality with the adolescent and family.
2. Clinicians should develop a treatment plan with patients and families and set specific treatment goals in key areas of functioning, including home, peer and school settings.
3. The primary care clinician should establish relevant links/collaboration with mental health resources in the community, which may include patients and families who have dealt with adolescent depression and are willing to serve as resources to other affected adolescents and their families.
4. All management should include the establishment of a safety plan, which includes restricting lethal means, engaging a concerned third party, and developing an emergency communication mechanism should the patient deteriorate, become actively suicidal or dangerous to others, or experience an acute crisis associated with psychosocial stressors, especially during the period of initial treatment when safety concerns are highest.

Primary care practices that identify adolescent depression may benefit from GLAD-PC's recommendations related to treatment and ongoing management. **GLAD-PC's treatment recommendations are:**<sup>42</sup>

1. After initial diagnosis, in cases of mild depression, clinicians should consider a period of active support and monitoring before starting other evidence-based treatment.
2. If a primary care clinician identifies an adolescent with moderate or severe depression or complicating factors/conditions such as coexisting substance abuse or psychosis, consultation with a mental health specialist should be considered. Appropriate roles and responsibilities for ongoing management by the primary care and mental health clinicians should be communicated and agreed upon. The patient and family should be consulted and approve the roles of the primary care and mental health professionals.
3. Primary care clinicians should recommend scientifically tested and proven treatments (i.e., psychotherapies such as cognitive behavioral therapy or interpersonal psychotherapy and/or antidepressant treatment such as SSRIs) whenever possible and appropriate to achieve the goals of the treatment plan.
4. Primary care clinicians should monitor for the emergence of adverse events during antidepressant treatment (SSRIs).

**GLAD-PC's recommendations for the ongoing management of adolescent depression in primary care are:**<sup>43</sup>

1. Systematic and regular tracking of goals and outcomes from treatment should be performed, including assessment of depressive symptoms and functioning in several key domains: home, school and peer settings.
2. Diagnosis and initial treatment should be reassessed if no improvement is noted after 6 to 8 weeks of treatment. Mental health consultation should be considered.
3. A mental health consultation should be considered for patients who achieve only partial improvement after primary care diagnostic and therapeutic approaches have been exhausted (including exploration of poor adherence, comorbid disorders, and ongoing conflicts or abuse).

4. Primary care clinicians should actively support depressed adolescents who are referred to mental health providers to ensure adequate management. Primary care clinicians may also consider sharing care with mental health agencies/professionals when possible. Appropriate roles and responsibilities regarding the provision and coordination of care should be communicated and agreed upon by the primary care clinician and mental health specialist.

## **PREVENTING SUICIDE & MANAGING SUICIDE ATTEMPTS**

Suicide ideation and attempts are common among adolescents with depression. GLAD-PC recommends that all providers managing adolescent depression develop an emergency communication plan, establish a safety plan, and obtain information from a third party.<sup>44</sup> This preparation and monitoring are even more critical for youths taking antidepressants given the FDA's black box warning. The frequency of monitoring has been controversial, with the FDA calling for at least weekly face-to-face contact during the first four weeks, followed by biweekly visits for the next four weeks, then a 12 week visit, and as clinically indicated beyond 12 weeks. While no empirical evidence has been found to support weekly face-to-face visits, GLAD-PC recommends that providers develop a regular and frequent monitoring schedule and obtain input from the patient and family to ensure compliance with the monitoring strategy.<sup>45</sup>

In addition to their role in preventing suicide, primary care providers should also be involved in treating an adolescent following a suicide attempt. Prior to discharge from the hospital, a comprehensive treatment plan should be developed that includes specific follow-up care involving both mental health and primary care clinicians. Any medication prescribed following a suicide attempt must be managed and monitored by the prescribing provider to assess continued suicidal risk. Complicating these treatment requirements, adolescents who have attempted suicide are a difficult group to engage after hospitalization, often failing to keep their outpatient appointments.<sup>46</sup> A close relationship between a primary care provider and an adolescent can help facilitate recovery and prevent another suicide attempt.

## **BARRIERS TO IDENTIFYING & TREATING ADOLESCENT DEPRESSION IN PRIMARY CARE**

Despite the known benefits of early identification and treatment, as well as the multitude of available screening tools, barriers and challenges to identifying and treating adolescent depression in primary care persist. These challenges include adolescent and parental concerns, organizational and individual physician barriers, workforce shortages, coding and reimbursement limitations in private and public insurance, and a lack of research supporting primary care screening and interventions.

### **Adolescent and Parental Barriers**

The Teen Depression Awareness Project studied the perceived barriers to adolescent depression care as reported by adolescents and their parents. The barriers to care mentioned most often by adolescents and parents were other responsibilities at school, recreational activities, needing to babysit or difficulty getting time off work. Adolescents also mentioned concerns about the perceived stigma of receiving mental health care and feeling uncomfortable talking with anyone about their feelings. Parents and adolescents alike reported access to health care as a barrier, specifically a lack of transportation to a provider's office or inconvenient office hours. Parents also noted concern regarding insurance coverage for depression screening and care.<sup>47</sup>

### **Organizational and Physician Barriers**

In addition to these patient and parent concerns, a survey of pediatric practices found organizational and individual physician barriers prevented providers from diagnosing or intervening when responding about their most recent case of child or adolescent depression. Organizational barriers reported most commonly were inadequate time to obtain patient history and provide counseling and education. Physician barriers to providing depression care were their perceptions of having inadequate training to diagnose, counsel and treat child or adolescent depression. Ambiguity over their level of responsibility for identifying and treating

depression is also a barrier. While nearly all pediatricians felt it was their responsibility to recognize depression in children and adolescents, only about one quarter reported it was their responsibility to treat depression in this age group. The limited use of screening tools among pediatricians also continues to be a barrier. The practices surveyed reported that depression diagnoses among children and adolescents were primarily the result of an expressed parental concern; only 40 percent reported the use of some type of screening questionnaire or tools to identify depression.<sup>48</sup>

## Workforce Barriers

Shortages of primary care providers and mental health professionals are also identified as barriers to screening and treating adolescents for depression. The lack of access to primary care providers, especially in rural areas, prevents many adolescents from receiving care. Shortages of mental health professionals, particularly child and adolescent psychiatrists, impede providers from making referrals following a diagnosis. Even when referrals are made, the fact that most are not followed through to completion by the patient or parent represents a further challenge. Providers have expressed reluctance to refer adolescents to community resources, where many services are not evidence-based, there are usually long waiting lists, and patients often find there is a stigma attached to this type of care. Furthermore, few providers and primary care practices are equipped to develop and maintain the linkages with the community resources necessary to provide a continuum of care for adolescents diagnosed with depression.<sup>49</sup>

## Coding and Reimbursement Barriers

Financial barriers also restrict the ability of primary care providers to identify and treat adolescent depression. Limits placed on the length of provider visits for reimbursement purposes hinder the ability of providers to address mental health concerns within a primary care visit. Primary care providers are already encouraged and often required to provide a large number of preventive services in their short visit time; screening for depression is another responsibility added to their already constrained time with an adolescent.<sup>50</sup> While screening is generally covered

by private insurance, providers and office staff often face difficulties coding for the extended visit time required for screening and further assessment of those who screen positive. Screening primarily occurs during a well visit or sports physical, and most health plans reimburse for only one code associated with these visits. In 2003 the Centers for Medicare and Medicaid Services (CMS) approved two CPT codes – 96110 and 96111 – for developmental and behavioral screening in pediatrics; however these codes are usually rejected when appended to a well visit claim.<sup>51</sup> These codes can be used at a sick visit, but this requires a provider to bring in an adolescent for a separate visit and results in an additional co-payment for the visit.

Mental health carve-outs and their restrictions on recognized providers often prevent primary care providers from billing for mental health services. These plans generally reimburse only mental health professionals for mental health treatment, effectively placing limitations on the amount of treatment that can be provided by primary care setting physicians. Benefit packages also may limit the number of outpatient visits for mental health services, making it extremely difficult for patients to follow through with referrals and treatment. It can also be challenging to use other office staff to administer screenings or otherwise aid in the screening and referral process since non-physician staff are often not reimbursed for their time. The CMS-approved CPT code 96110 includes reimbursement to pay for cost of the screening tool and for non-physician office staff to administer and score the tool, however, as mentioned earlier, it is difficult to use this code in conjunction with a well visit.

There is also a lack of support and reimbursement for collaborative care between primary care providers and mental health professionals, whether through a phone consultation or co-location of mental health services in the primary care practice. Even when primary care and mental health services are co-located, there is often a further barrier of restrictions on billing for same day services.

For adolescents with public insurance, the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program requires screening and testing of all Medicaid children for mental and emotional issues and requires that services be provided if a need is detected.<sup>52</sup>

However, studies have shown that only 60 percent of states reimburse for the use of standardized screening tools and 40 percent of providers report low screening rates and a reluctance to screen.<sup>53</sup>

## Research Barriers

While the USPSTF recommendation reviewed the current research and found that certain screening tools were effective in adolescents, this evidence is not as robust as it needs to be. More research is needed to support the widespread use of these and other screening tools and to determine effective interventions to treat depression in the primary care setting. Overall evidence on the cost-effectiveness of depression screening and other preventive interventions in primary care also continues to be limited. One study in the adult population found that primary care depression screening costs an average of \$7 per visit but yielded many false positives that resulted in additional burdens to the primary care practice staff and specialty care systems.<sup>54</sup> Screening of adolescents for depression is far from a universal practice for primary care providers, pointing to the need for more research on the cost-effectiveness of screening the adolescent population.

## OPPORTUNITIES FOR HEALTH PLANS TO SUPPORT IDENTIFICATION & TREATMENT OF ADOLESCENT DEPRESSION

### Opportunities to Support Adolescents, Parents and Primary Care Providers

Health plans can offer support to adolescents, their parents and primary care providers in order to improve the identification and treatment of adolescent depression in the primary care setting. Findings from the Teen Depression Awareness Project suggest that providers can target communications to adolescents and parents to address concerns, needs and priorities for depression care.<sup>55</sup> Health plans can support providers in this effort by arming them with communications tools, such as brochures or other materials, to help them engage adolescents and their parents in this dialogue. Health plans can also

target communications directly to adolescents and their parents about the signs of depression and the importance of seeking care.

Provider training and education is another way health plans can help. Such assistance could include resources and support to train providers, other health professionals or office staff to administer screening tools and training and easy access to tools to improve physicians' ability to deliver mental health services to adolescents in the primary care setting, such as those materials developed by the TeenScreen Primary Care Program. Support and training related to managing medication use among adolescents diagnosed with depression is especially critical. To further promote appropriate management and treatment of depression in primary care, health plans can promote the use of the GLAD-PC guidelines.

### Opportunities to Reduce Financial Barriers

Reimbursement for the time required to administer a screening tool and further assess adolescents who screen positive during a primary care visit is a vital strategy for improving screening rates. The TeenScreen Primary Care Program has identified a number of codes and combinations of codes that can be used to bill for screening and recommends that providers consult their coding and billing department to determine the best codes to use in their practices.<sup>56</sup> TeenScreen is working with health plans across the country to implement coding for screenings in primary care, help providers understand how to code for mental health checkups, and help with referrals to mental health specialists by giving providers detailed resources and instructions. Several health plans participating in TeenScreen's pilot program have agreed to reimburse for the use of the CPT 91110 code to cover a routine mental health checkup in primary care without a second co-payment. They are also recognizing the use of '25' in the modifier field to allow providers to bill for additional time for further evaluation of an adolescent. Health plans can pilot the TeenScreen Primary Care Program within their network of primary care providers, and providers and plans can obtain implementation materials directly from the program free of charge. See Figure 7 for more information on the TeenScreen Primary Care Program.

## FIGURE 7. TEENSCREEN NATIONAL CENTER FOR MENTAL HEALTH CHECKUPS AT COLUMBIA UNIVERSITY

The TeenScreen National Center for Mental Health Checkups at Columbia University (TeenScreen) is dedicated to early identification of mental illness in adolescents and prevention of teen suicide. The center promotes greater access to youth mental health checkups across the nation and evidence-based screenings provided as part of routine care in adolescent primary care offices, schools and other settings serving youth. TeenScreen was established in 1991 and is at the forefront of the adolescent mental health screening movement. There are currently more than 700 active TeenScreen sites located in 43 states.

Originally focused on partnering with schools, TeenScreen launched a primary care initiative in 2008 that aims to integrate mental health checkups into routine adolescent primary care. TeenScreen Primary Care conducts demonstration projects and research studies in 20 states through partnerships with health plans, hospitals, health centers and medical providers. In working with health and behavioral health plans, TeenScreen reaches out to network primary care providers to encourage their implementation of mental health screening, establishes a coding and reimbursement mechanism for providers and health plans, and develops a facilitated mental health referral system for adolescents identified through screening. The TeenScreen Primary Care Quick Start Guide is a comprehensive resource available for providers to assist with the implementation of mental health checkups in a primary care setting. Other materials available include a Pocket Guide for providers and a Teen Brochure that contains an evidence-based screening questionnaire and information about mental health screening.

By creating reimbursement and referral mechanisms with health plans, TeenScreen is targeting the primary barrier preventing providers from incorporating mental health screenings into routine care. Reimbursement codes and procedures are customized for participating plans, with reimbursement provided for administration and scoring of the questionnaire and/or for physician time for post-screening evaluation. TeenScreen also customizes a referral mechanism for participating health plans to help the primary care provider make a referral to a mental health professional after a positive screen. This process involves providing the primary care provider with a toll-free number for the behavioral health plan that providers and/or parents can call to obtain a timely appointment with a mental health professional. All calls to the number are answered by a licensed, master's level clinical care manager who conducts a risk rating assessment, determines the appropriate level of care, and assists the family in obtaining a timely appointment with a mental health provider. In the case of an emergency, the clinical care manager will secure and confirm that the patient can be seen immediately by a licensed mental health professional or in a local emergency department. The care manager then follows up within one hour of the appointment to confirm that the patient arrived at the appointment.

TeenScreen partnered with ValueOptions, a behavioral health plan, and is working with two of its managed care organizational partners – EmblemHealth in New York and Kaiser Permanente in southern Colorado. In the spring and summer of 2009, three outreach letters were mailed to approximately 8,000 pediatricians in the EmblemHealth network. As a result of this outreach, screening implementation materials were ordered by 543 providers who have so far requested 68,020 screening questionnaires for their patients. TeenScreen conducted a smaller pilot project with Kaiser Permanente in southern Colorado. Pediatricians and family physicians in Kaiser's network volunteered to participate after an introductory presentation by TeenScreen. Through September 2009, screening implementation materials have been distributed to 41 providers who so far have requested 6,400 screening questionnaires for their patients.<sup>62</sup>

More information on TeenScreen in Primary Care is available at: <http://www.teenscreen.org/teenscreen-primary-care>.

Reimbursement for non-physician staff to administer screenings and facilitate referrals can also help improve screening rates and alleviate the burden from the primary care provider. Kelleher and Gardner further suggest that innovative financing mechanisms, such as global payment for case management of an adolescent with depression, could also be a useful strategy to ensure appropriate management of depression by the primary care provider.<sup>57</sup>

### Opportunities to Support Innovations in Care

Health plans may be able to spur the use of innovations in care for depression in the primary care setting. Kelleher and Gardner suggest that providers could use technology that helps lower the cost of assessment and communication with adolescents to improve early identification of depression.<sup>58</sup> Plans can provide or reimburse for the use of technologies, such as electronic screening tools or email consultations within an electronic medical record. Reimbursing for the use of tele-psychiatry would help providers and adolescents in rural and other areas where access to adolescent psychiatrists is limited. Reimbursement for collaborative care, such as phone consultations between primary care providers and mental health professionals, has the potential to improve care delivery to adolescents. The Massachusetts Child Psychiatry

Access Project, described in Figure 8, is an example of how consultation models can increase access to mental health care for children and adolescents who otherwise may have gone without appropriate care.<sup>59</sup> Primary care providers may be more willing to screen when they know they have resources available if they need additional assistance in making a diagnosis or developing a treatment plan.

Pay-for-performance initiatives, proven effective for improving the quality and frequency of screening and treatment for some disease conditions, could be applicable to depression screening. Rosenthal and Frank reviewed the literature on paying for quality and found some research that points to improvements in screening procedures through pay-for-performance initiatives, although the evidence of success in the primary care setting is limited.<sup>60</sup> Plans could explore including depression screening within their pay-for-performance initiatives and offer bonuses to providers who comply with screening guidelines.

### Opportunities to Support Additional Research

The successful implementation of any of the above strategies by health plans will likely continue to

#### **FIGURE 8. MASSACHUSETTS CHILD PSYCHIATRY ACCESS PROJECT (MCPAP)**

The Massachusetts Child Psychiatry Access Project (MCPAP) is a statewide project that assists pediatric primary care providers in delivering mental health care to children and adolescents. Providers can access six mental health teams, comprised of child psychiatrists, therapists and a care coordinator. These teams provide phone consultations, diagnostic evaluations and care coordination to find available mental health providers for referrals. They also offer education and training to primary care providers. Since December 2007, Medicaid providers in Massachusetts have been mandated to screen children and adolescents for mental health disorders using MassHealth-approved screening tools. MCPAP teams are available to help primary care physicians utilize standardized behavioral health screening tools in their practices. MCPAP teams can also provide assistance for any clinical questions that arise from performing a depression screening, including how to manage positive screens, make the appropriate diagnosis, coordinate follow-up care and provide information about the availability of behavioral health resources for referral.

MCPAP has interacted with more than 32,000 primary care providers since its inception in 2004, and over 9,000 patients have been reached. Participating providers have reported substantial improvements in their ability to address the mental health needs of their child and adolescent patients. More information on MCPAP is available at: <http://www.mcpap.com>.

be dependent on the evidence of effectiveness of primary care interventions. Stein, Zitner and Jensen call for additional research to build the evidence base of effective mental health screening tools and interventions in primary care.<sup>61</sup> Plans can support research evaluating the cost-effectiveness of screening and other primary care interventions, which may also lead to better reimbursement in the future for services shown to be cost-effective.

## CONCLUSION

Allowing adolescent depression to continue to go undiagnosed has huge consequences for the future health of our nation. The common prevalence of depression among adolescents and the lifelong physical, social and financial consequences of living with untreated depression point to the importance of identifying depression as early as possible. Since health plans largely adhere to the recommendations of the USPSTF for clinical preventive services in making coverage decisions, the recent recommendations from the IOM and USPSTF that primary care physicians screen adolescents for mental health disorders are a positive step toward improved screening rates. The Paul Wellstone and Pete Domenici Mental Health Parity & Addiction Equity Act of 2008 is also expected to have a beneficial impact on coverage and reimbursement for mental health services as health plans begin to address these new parity requirements. The availability of accurate screening tools, combined with these recent recommendations and legislation, point toward increased support for mental health screening in primary care and the potential for screening rates to improve in future years. It will be vital, however, to continue to develop evidence and support for strategies and tools that primary care providers can use to provide effective treatment to adolescents diagnosed with depression. In order to access mental health treatment, adolescents, parents and primary care providers must first overcome the barriers preventing adolescents from being screened for depression and receiving treatment when diagnosed with depression, allowing them access to the most appropriate care. Encouraging screening, providing a billing and reimbursement mechanism, and facilitating referrals to mental health professionals are all strategies that health plans can support in order to have a significant impact on improving early identification and treatment of depression among adolescents.

## APPENDIX ONE: HOW TO ACCESS SELECTED SCREENING TOOLS

Screening Tool	Cost	Contact
BDI®-FastScreen for Medical Patients	\$105 for complete kit (manual and pad of 50 record forms)	<a href="http://www.becksscales.com">www.becksscales.com</a>
Center for Epidemiologic Study Depression Scale [CES-D]	Free	<a href="http://cooccurring.org/public/document/ces-d.pdf">http://cooccurring.org/public/document/ces-d.pdf</a> <a href="http://cooccurring.org/public/document/usingmeasures.pdf">http://cooccurring.org/public/document/usingmeasures.pdf</a>
Child Behavior Checklist [CBCL], Youth Self-Report [YSR] and Adult Self-Report [ASR]	<ul style="list-style-type: none"> <li>• CBCL (includes the YSR) - \$395.00 for computer-scored or approximately \$300.00 for hand-scored kit</li> <li>• ASR - \$245.00 for computer-scored or \$230.00 for hand-scored kit</li> </ul>	<a href="http://www.aseba.org/">http://www.aseba.org/</a>
Patient Health Questionnaire for Adolescents [PHQ-A] and Patient Health Questionnaire 9: Depression Screener [PHQ-9]	Free	<p>The PHQ-A is a comprehensive screen for a range of mental health disorders. A copy can be obtained by contacting Jeffrey G. Johnson, PhD, Associated Professor of Clinical Psychology, Epidemiology of Mental Disorders, Columbia University at (212) 543-5523 or <a href="mailto:jjj2@columbia.edu">jjj2@columbia.edu</a>.</p> <p>In order to screen for depression in the primary care setting, TeenScreen has adopted a version of the PHQ-9 modified for adolescents. A copy can also be obtained from TeenScreen.</p> <p>Contact TeenScreen at (212) 265-4426 or through their website at: <a href="http://www.teenscreen.org/checkups-in-primary-care">http://www.teenscreen.org/checkups-in-primary-care</a></p>
Pediatric Symptom Checklist and Pediatric Symptom Checklist-Youth Report (PSC & Y-PSC)	Free	<a href="http://www2.massgeneral.org/allpsych/psc/psc_home.htm">http://www2.massgeneral.org/allpsych/psc/psc_home.htm</a>
Strengths and Difficulties Questionnaire [SDQ]	Free	<a href="http://www.sdqinfo.com/b3.html">http://www.sdqinfo.com/b3.html</a>

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# A Survey From Your Healthcare Provider – PSC-Y

Name		Date	ID	
Please mark under the heading that best fits you or circle Yes or No		Never 0	Sometimes 1	Often 2
-	1. Complain of aches or pains			
-	2. Spend more time alone			
-	3. Tire easily, little energy			
●	4. Fidgety, unable to sit still			
-	5. Have trouble with teacher			
-	6. Less interested in school			
●	7. Act as if driven by motor			
●	8. Daydream too much			
●	9. Distract easily			
-	10. Are afraid of new situations			
▲	11. Feel sad, unhappy			
-	12. Are irritable, angry			
▲	13. Feel hopeless			
●	14. Have trouble concentrating			
-	15. Less interested in friends			
■	16. Fight with other children			
-	17. Absent from school			
-	18. School grades dropping			
▲	19. Down on yourself			
-	20. Visit doctor with doctor finding nothing wrong			
-	21. Have trouble sleeping			
▲	22. Worry a lot			
-	23. Want to be with parent more than before			
-	24. Feel that you are bad			
-	25. Take unnecessary risks			
-	26. Get hurt frequently			
▲	27. Seem to be having less fun			
-	28. Act younger than children your age			
■	29. Do not listen to rules			
-	30. Do not show feelings			
■	31. Do not understand other people's feelings			
■	32. Tease others			
■	33. Blame others for your troubles			
■	34. Take things that do not belong to you			
■	35. Refuse to share			
◆	36. During the past three months, have you thought of killing yourself?		Yes	No
◆	37. Have you ever tried to kill yourself?		Yes	No

**FOR OFFICE USE ONLY**

- Plan for Follow-up  Annual screening  Return visit w/ PCP  Referred to counselor  
 Parent declined  Already in treatment  Referred to other professional

TS _____
Q 36 or Q 37=Y ◆ TS ≥ 30

## Administering, Scoring and Interpreting the PHQ-9 Screening Questionnaire

### Administering

- The youth self-report version of the Pediatric Symptom Checklist (PSC-Y) can be used with patients between the ages of 11 and 18 and takes less than five minutes to complete and score.
- The PSC-Y can be administered and scored by a nurse, medical technician, physical assistant, physician or other office staff.
- Patients should be left alone to complete the PSC-Y in a private area, such as an exam room or private area of the waiting room.
- Patients should be informed of their confidentiality rights before the PSC-Y is administered.
- It is recommended that parents are informed that a mental health checkup will be administered as part of the exam.
- The American Academy of Pediatrics and U.S. Preventive Service Task Force recommend that depression screening be conducted annually.

### Scoring

- **Each item on the PSC-Y is scored as follows:**  
 Never =0  
 Sometimes=1  
 Often=2
- **To calculate the score, add all of the item scores together:**  
 Total Score= \_\_\_\_\_ (range 0-70)  
 If items are left blank, they are scored as 0.  
 If four or more items are left blank, the questionnaire is considered invalid.  
 Note if either suicide question has been endorsed (Questions 36 and 37).
- **Score is positive if: Total Score  $\geq$ 30**  
**OR**  
 Recent suicidal ideation is reported (Q36)  
**OR**  
 Past suicide attempt is reported (Q37)

### Interpreting the Screening Results

- Patients that score positively on their PSC-Y should be evaluated by their primary care provider (PCP) to determine if the symptoms endorsed on the questionnaire are significant, causing impairment and warrant a referral to a mental health specialist or follow-up treatment by the PCP.
- For patients who score negatively on the PSC-Y, it is recommended that the PCP briefly review the symptoms marked as “sometimes” and “often” with the patient.
- The questionnaire indicates only the likelihood that a youth is at risk for a significant mental health problem or suicide; its results are not a diagnosis or a substitute for a clinical evaluation

The symbols on the questionnaire and below represent the different problem areas that are covered on the PSC-Y and lists out the items that correspond with problem areas. Though this does not affect the overall score, the purpose of this breakdown is to help guide the discussion with and evaluation of patients after screening and allows the PCP to focus on the main problem areas identified by the PSC-Y.

Individual Problem Areas (For Interpretation Only)			
Internalizing Problems (i.e. Depression or Anxiety) 	Attention Problems (i.e. ADHD) 	Externalizing Problems (e.g. Conduct Disorder, Oppositional Defiant Disorder) 	Suicidality (if either question is endorsed, further assess for suicidal thinking and behavior and depression) 
<ul style="list-style-type: none"> <li>• Feel sad, unhappy</li> <li>• Worry a lot</li> <li>• Feel hopeless</li> <li>• Seem to be having less fun</li> <li>• Down on yourself</li> </ul>	<ul style="list-style-type: none"> <li>• Fidgety, unable to sit still</li> <li>• Distract easily</li> <li>• Act as if driven by motor</li> <li>• Daydream too much</li> <li>• Have trouble concentrating</li> </ul>	<ul style="list-style-type: none"> <li>• Fight with other children</li> <li>• Tease others</li> <li>• Do not listen to rules</li> <li>• Do not understand other people’s feelings</li> <li>• Blame others for your troubles</li> <li>• Take things that do not belong to you</li> </ul>	<ul style="list-style-type: none"> <li>• Recent suicide ideation</li> <li>• Prior suicide attempt</li> </ul>
Non-Categorizing Items			
<ul style="list-style-type: none"> <li>• Complain of aches or pains</li> <li>• Spend more time alone</li> <li>• Tire easily, little energy</li> <li>• Do not show feelings</li> <li>• Have trouble with teacher</li> </ul>	<ul style="list-style-type: none"> <li>• Less interested at school</li> <li>• Are afraid of new situations</li> <li>• Are irritable, angry</li> <li>• Less interested in friends</li> <li>• Absent from school</li> </ul>	<ul style="list-style-type: none"> <li>• School grades dropping</li> <li>• Visit doctor with doctor finding nothing wrong</li> <li>• Have trouble sleeping</li> <li>• Feel that you are bad</li> </ul>	<ul style="list-style-type: none"> <li>• Want to be with parent more than before</li> <li>• Take unnecessary risks</li> <li>• Get hurt frequently</li> <li>• Act younger than children your age</li> </ul>

# A Survey From Your Healthcare Provider — PHQ-9 Modified for Teens

Name \_\_\_\_\_ Clinician \_\_\_\_\_

Medical Record or ID Number \_\_\_\_\_ Date \_\_\_\_\_

**Instructions:** How often have you been bothered by each of the following symptoms during the past two weeks?  
For each symptom put an "X" in the box beneath the answer that best describes how you have been feeling.

	(0) Not At All	(1) Several Days	(2) More Than Half the Days	(3) Nearly Every Day
1. Feeling down, depressed, irritable, or hopeless?				
2. Little interest or pleasure in doing things?				
3. Trouble falling asleep, staying asleep, or sleeping too much?				
4. Poor appetite, weight loss, or overeating?				
5. Feeling tired, or having little energy?				
6. Feeling bad about yourself — or feeling that you are a failure, or that you have let yourself or your family down?				
7. Trouble concentrating on things like school work, reading, or watching TV?				
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you were moving around a lot more than usual?				
9. Thoughts that you would be better off dead, or of hurting yourself in some way?				

10. In the **past year** have you felt depressed or sad most days, even if you felt okay sometimes?  Yes  No

11. If you are experiencing any of the problems on this form, how **difficult** have these problems made it for you to do your work, take care of things at home or get along with other people?  
 Not difficult at all  Somewhat difficult  Very difficult  Extremely difficult

12. Has there been a time in the past month when you have had serious thoughts about ending your life?  Yes  No

13. Have you **ever**, in your **whole life**, tried to kill yourself or made a suicide attempt?  Yes  No

FOR OFFICE USE ONLY Score \_\_\_\_\_

Q. 12 and Q. 13 = Y or TS ≥ 11

## Administering, Scoring and Interpreting the PHQ-9 Screening Questionnaire

### Administering

- The Patient Health Questionnaire Modified for Teens (PHQ-Modified) can be used with patients between the ages of 12 and 18 and takes less than five minutes to complete and score.
- The PHQ-9 Modified can be administered and scored by a nurse, medical technician, physical assistant, physician or other office staff.
- Patients should be left alone to complete the PHQ-9 Modified in a private area, such as an exam room or private area of the waiting room.
- Patients should be informed of their confidentiality rights before the PHQ-9 Modified is administered.
- The American Academy of Pediatrics and U.S. Preventive Service Task Force recommend that depression screening be conducted annually.

### Scoring

- **For every X:**
  - Not all =0
  - Several days=1
  - More than half the days=2
  - Nearly every day=3Add up all “X” ed boxes on the screen
- **Defining a Positive Screen on the PHQ-9 Modified:**
  - Total scores  $\geq 1$  are positive
- **Suicidality:**
  - Regardless of the PHQ-9 Modified total score, endorsement of serious suicidal ideation OR past suicide attempt (question 12 and 13 on the screen) should be considered a positive screen.

### Interpreting the Screening Results

- Patients that score positively on the questionnaire should be evaluated by their primary care provider (PCP) to determine if the depression symptoms they endorsed on the screen are significant, causing impairment and/or warrant a referral to a mental health specialist or follow-up treatment by the PCP.
- It is recommended that the PCP inquire about suicidal thoughts and previous suicide attempts with all patients that score positive, regardless of how they answered these items on the PHQ-9 Modified.
- For patients who score negative on the PHQ-9 Modified, it is recommended that the PCP briefly review the symptoms marked as “more than half days” and “nearly every day” with the patient.
- The questionnaire indicates only the likelihood that a youth is at risk for depression or suicide; its results are not a diagnosis or a substitute for a clinical evaluation.

### Depression Severity

- The overall score on the PHQ-9 Modified provides information about the severity of depression, from minimal depression to severe depression.
- The interview with the patient should focus on their answers to the screen and the specific symptoms with which they are having difficulties.
- Additional questions on the PHQ-9 Modified also explore persistent depressive disorder, impairment of depressive symptoms, recent suicide ideation and previous suicide attempts.
- Interpretation of Total Score

Total Score	Depression Severity
1-4	Minimal depression
5-9	Mild depression
10-14	Moderate depression
15-19	Moderately severe depression
20-27	Severe depression



