**ABSTRACT:*** Major depression is a common illness in primary care that can be under-recognized. The United States Preventive Services Task Force guideline recommends screening for depression in adults when appropriate staff is in place to support depression care and follow-up. Two questions can be used to screen for depression. It is critical to determine the correct diagnosis to provide the optimal care to intervene in the 10% of patients with major depression at risk to commit suicide.

**Key words:** major depression, unipolar depression

Major depression is a common illness that affects 1 in 6 Americans during their lifetime.¹ This disabling condition impacts not only the individual, but also family, friends, and society. The annual cost of depression in the United States is estimated to be $83 billion.²

Depression is under-recognized and challenging to manage because of relapses and recurrences. Half of patients with a first episode of major depression will have a recurrence, 70% after a second episode and 90% after a third episode.

In this 2-part series, I will discuss screening, diagnosing and managing major depression in primary care. Here, I review the current United States Preventive Services Task Force (USPSTF) guideline for screening and the criteria for diagnosing major depression. In a coming issue, I will focus on the initial treatment options for primary care providers in caring for patients with major depression. The series will be case-based and utilize scenarios to answer a series of questions.

Our first patient is a 35-year-old single mother who has lost her job and reports that she feels tired, has no appetite, has difficulty in sleeping at night, is more forgetful, and does not enjoy her life.

**Question 1: How common is major depression in primary care?**

A. < 5%
B. 10%
C. 30%
D. 50%

**Answer: B. 10%**

Patients with multiple somatic complaints are commonly seen in primary care. They should be evaluated for medical conditions, substance abuse, and particular stressors that could contribute to their symptoms. If these have been excluded, consider the possibility of a depressive disorder. This includes major depression, bipolar disorder, minor depression, dysthymia, adjustment disorder with depressed mood, and bereavement. These disorders are clinical diagnoses. They are based on specific symptom-related criteria published in 2000 in the *Diagnostic and Statistical Manual of Mental Disorders IV Text Revision*
**Major Depression:**

Screening and Diagnosis in Primary Care

About 10% of outpatients seen by primary care providers meet DSM-IV-TR criteria for major depression; however, only half receive a diagnosis.4,6

**Question 2: What does the current USPSTF guideline state about screening adults for depression?**

A. Screen all adults  
B. Screen some patients  
C. Screen when systems are in place  
D. Do not screen adults  

**Answer: C. Screen when systems are in place**

**SCREENING**

The USPSTF guideline for screening for depression in adults was published in 2009.7 The task force’s review of the evidence favors screening adults for depression when staff-assisted depression care supports are in place to ensure the accurate diagnosis, effective treatment, and follow-up of patients. It does not support screening in general when no staff is available to help coordinate and provide care for patients with depression. The USPSTF defines staff-supported depression care supports as clinical staff who provide depression care, coordination, case management, or mental health treatment. This can range from a screening nurse in your office to special training for you and your staff or referral to a nurse specialist or behavioral therapist.

In 1995, the John D. and Catherine T. MacArthur Foundation organized a multidisciplinary group, including physicians from Harvard University, Duke University, Dartmouth University, and Cornell University, to develop a program to improve primary care management of depression. They created a Three Component Model (3CM) utilizing the USPSTF recommendations, National Institute of Mental Health guidelines, and available evidence to develop a model of care (Figure 1).8 Instead of the previous model of primary care provider referral to a psychiatrist, this model incorporates a care manager to support communication and follow-up for patients. The MacArthur Initiative on Depression and Primary Care provides practical online tools and resources to help enhance the management of depression in primary care.

**Question 3: How can you screen for major depression?**

A. Forms filled out by patients  
B. Asking two questions  
C. Genetic testing  
D. A and B  

**Answer: D. A and B**

Although screening for depression in primary care may one day involve genetic testing, it currently is not a standard of care in practice. There are, however, several tools to screen for depression. Some examples include the Center for Epidemiologic Studies Depression Scale, Beck Depression Inventory, Symptom-Driven Diagnostic System for Primary Care, Medical Outcomes Study depression measure, and Quick Diagnostic Interview Schedule. These case-finding instruments have sensitivities of 89% to 96% and specificities of 51% to 72% for diagnosing major depression. Many of these screening scales have 15 to 30 questions eliciting symptoms of depression, and it can be time-consuming to complete these forms. The

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Figure 1 – The MacArthur Three Component Model of Care (3CM) is shown here.8 In contrast to the previous model of referral to a psychiatrist (also shown here), 3CM incorporates a care manager to support communication and follow-up for patients. PCP, primary care provider; Psych, psychiatrist.
## Nine Symptom Checklist

Over the last 2 weeks, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

(For office coding: Total score ______ = _____ + _____ + _____)

If you checked off any problems, 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

**Scale**
- 5 – 9: Mild depression
- 10 – 14: Moderate depression
- 15 – 19: Moderate to severe depression
- ≥ 20: Severe depression

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From the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD PHQ). The PHQ was developed by Drs Robert L. Spitzer, Janet B. W. Williams, Kurt Kroenke, and colleagues. For research information, contact Dr Spitzer at rls@columbia.edu. PRIME-MD® is a trademark of Pfizer Inc. Copyright© 1999 Pfizer Inc. All rights reserved. Reproduced with permission.

Figure 2 – The Patient Health Questionnaire—9 (PHQ-9) can be used to screen for depression and to determine its severity. Adapted from Kroenke K et al. J Gen Intern Med. 2001.9
Patient Health Questionnaire–Nine (PHQ-9) has nine questions and can be filled out by patients (Figure 2). It has been found to be a reliable and valid instrument for screening and defining the severity of depression.9

A simple two-question case-finding instrument has been studied; positive responses to both questions resulted in a sensitivity of 96% and a specificity of 57% for major depression (Table 1).10 This may be a convenient way to screen for depression in a busy primary care office.

### DIAGNOSIS

**Diagnostic criteria.** While it may be helpful to consult a psychiatrist for the diagnosis of major depression, you can make the diagnosis by asking about specific symptoms in the history. Major depression is a clinical diagnosis based on a set of symptoms. The DSM-IV-TR criteria for diagnosing major depression are based on asking about nine specific symptoms that occur nearly every day over the same 2-week pe-

<table>
<thead>
<tr>
<th>Table 1 – Two-question screening tool for depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “During the past month, have you often been bothered by feeling down, depressed, or hopeless?”</td>
</tr>
<tr>
<td>• “During the past month, have you often been bothered by little interest or pleasure in doing things?”</td>
</tr>
</tbody>
</table>

Data from Whooley MA et al. J Gen Intern Med. 1997.10

<table>
<thead>
<tr>
<th>Table 2 – Nine symptoms and sample questions for diagnosis of major depression: “D Sig E Caps”11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptom</strong></td>
</tr>
<tr>
<td><strong>D:</strong> Depressed</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>S:</strong> Sleep</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>I:</strong> Interest</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>G:</strong> Guilt</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>E:</strong> Energy</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>C:</strong> Concentration</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>A:</strong> Appetite</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>P:</strong> Psychomotor</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>S:</strong> Suicidal</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Major depression = ≥ 5 symptoms (one must include depressed mood or loss of interest) for > 2 weeks.
period and represent a change from previous functioning. The nine symptoms include:
- Feeling sad or depressed mood.
- Sleep disturbance.
- Loss of interest or pleasure in doing things.
- Inappropriate guilt feelings.
- Fatigue or loss of energy.
- Difficulty in concentrating or indecisiveness.
- Change in appetite or weight (ie, defined as 5% change in body weight in 1 month).
- Psychomotor retardation or agitation.
- Recurrent thoughts of death or suicide.

Patients with major depression must have at least five of these nine symptoms. One of the symptoms must be a depressed mood or loss of interest or pleasure.

One method of remembering these symptoms is an abbreviation for prescribing “energy pills” to help treat patients with depression or “Sign for Energy Capsules” or “Sig E Caps.” Clearly, it is not appropriate to prescribe antidepressants for all patients with depression; however, this can be a helpful tool in remembering the questions to ask to determine the diagnosis. The mnemonic “Sig E Caps” was devised by Carey Gross, MD, at the Massachusetts General Hospital and refers to eight of the nine symptoms of depression. If we add the letter “D,” we have “D Sig E Caps,” all nine symptoms (Table 2).

### Table 3 – Sample questions for bipolar disorders

- “Have you gone through periods in which you felt the opposite of being depressed?”
- “Have there been times you felt high?”
- “Have there been times you have lots of energy?”
- “Have there been times you did not need sleep?”
- “Have there been times you thought you could do anything?”
- “Have there been times you spent too much money?”
- “Have there been times your thoughts went too fast for you to keep up with them?”
- “Have you gone through periods in which you felt the opposite of being depressed?”

### Table 4 – Differential of depressive disorders

<table>
<thead>
<tr>
<th>Depressive disorder</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major depression</td>
<td>Unipolar depression</td>
</tr>
<tr>
<td></td>
<td>≥ 5 of 9 (↓ mood/interest) × &gt; 2 wk</td>
</tr>
<tr>
<td>Minor depression</td>
<td>2 - 4 of 9 (↓ mood/interest) × &gt; 2 wk</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>Minor depression × 2 yr</td>
</tr>
<tr>
<td>Bipolar disorder type I</td>
<td>Mania</td>
</tr>
<tr>
<td>Bipolar disorder type II</td>
<td>Hypomania</td>
</tr>
<tr>
<td>Adjustment disorder with depressed mood</td>
<td></td>
</tr>
<tr>
<td>Bereavement</td>
<td></td>
</tr>
</tbody>
</table>


Question 4: How can you distinguish between major depression, bipolar disorder, minor depression, dysthymia, adjustment disorder, and bereavement?

A. History
B. Physical examination
C. Genetic testing
D. MRI

Answer: A. History

Differential diagnosis. The history is essential for primary care practitioners and psychiatrists in distinguishing the various depressive disorders. Major depression is also called unipolar depression. This is important to distinguish from bipolar disorders, in which patients have major depression with episodes of mania (bipolar I disor-
Table 5 – Suicide risk assessment

- Suicide/homicidal ideation, intent, plan, or action
- Access to means and lethality of means
- Psychotic symptoms/severe anxiety
- Family history of recent suicide
- Alcohol and substance abuse

Question 5: How common is suicide among patients with major depression?

A. < 5%
B. 10%
C. 30%
D. 50%

Answer: B. 10%

Assessment of Suicide Risk

About 10% of all patients with major depression will eventually commit suicide. Some of the risk factors include prior suicide attempts, hopelessness, living alone, psychotic symptoms, substance abuse, age-specific risk (ie, older white men, young black men), and family history of suicide attempts. Question all depressed patients specifically about thoughts of harm to self or others (Table 5). It is imperative to develop a safe treatment plan, which may range from continued primary care follow-up to immediate emergency department psychiatric referral.

REFERENCES:

8. MacArthur Initiative on Depression in Primary Care website: http://www.depression-primarycare.org/.