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Detecting and Treating Depression in Adults

- **Many patients with depression seek medical care for other concerns, but depression remains undiagnosed.**
- **Primary care physicians can effectively detect and manage depression.**
- **Routinely screen adults for depression using the Patient Health Questionnaire-9 (PHQ-9).**
- **Engage patients in treatment planning and provide pharmacotherapy when appropriate (see page 6).**

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Depression is a major cause of morbidity and mortality that often goes untreated. Nearly 1 in 6 adults in the United States suffer from depression during their lifetimes.[1] Based on a population-based survey that included a clinical interview, only 55% of adults in New York City (NYC) with depression had ever been told by a provider that they have the illness and only 36% said they had recently been treated for depression.[2]

Certain groups, including people with certain medical conditions, people living in poverty, and postpartum women, are more at risk for depression (**Box 1**).[3-8] In NYC, people living at the highest level of poverty are more likely to have suffered from depression than those at higher income levels (18% vs 11%).[3] Estimates of the prevalence of depression range from 13% to 19% among postpartum women.[4]

Depression can be treated. Primary care is an ideal setting to identify and offer treatment for depression because most patients see a primary care physician (PCP), but don't access mental health services. In one national study, 78% of people with depression saw a PCP, while only 18% saw a mental health specialist.[9] A review of older patients who committed suicide showed that 58% had visited their PCP within the previous month and 77% had done so within the previous year.[10]

Barriers to screening may include inadequate physician training in diagnosing and managing mental health conditions and inadequate health plans. But underdiagnosis deprives patients of access to effective treatment.

New national guidelines recommend asking adults, including pregnant women and postpartum women, about depression.[11] Screen for depression using the Patient Health Questionnaire-9 (PHQ-9), at least annually or when clinically indicated. Work with the patient to develop the treatment plan—which may include both nonpharmacologic and pharmacologic approaches.

BE AWARE OF SIGNS AND SYMPTOMS OF DEPRESSION

There is a bidirectional relationship between depression and many medical conditions (**Box 2**)[12-18]; the health behaviors and physiological changes associated with depression increase the risk for chronic medical disorders, and biological changes and complications associated with chronic medical disorders may precipitate depressive episodes.[19,20]

When seeing a patient, especially patients with chronic or severe physical illnesses[12]:

- Be attentive to clues suggesting depression. These can include multiple (>5) medical visits per year, multiple unexplained symptoms, dampened affect, weight gain or loss, sleep disturbance, fatigue; complaints about memory/cognition, stress, or mood disturbance.
- Be aware that cultural experiences can affect patients' views of symptoms, diagnoses, and treatments.[12,21]
- Use an interpreter or interpretation service to overcome linguistic barriers.[12,21]

BOX 1. GROUPS AT HIGHER RISK FOR DEPRESSION[3-8]

- People living in poverty
- People in short-term financial distress
- Postpartum women
- People with chronic medical conditions and risk behaviors (**Box 2**)
- Lesbian, gay, bisexual, queer, transgender, and gender nonconforming individuals
- People who have
  - a family history of depression
  - a history of neglect or exposure to trauma

IDENTIFY DEPRESSION

Routinely screen adults for depression[11] using the PHQ-9 (**Box 3**),[12a,22] at least annually or when clinically indicated. The PHQ-9 is in the public domain and available in multiple languages (**Resources**). Explain that routine screening is now recommended because depression is very common and effective treatment is available, and offer to perform the screen.

If the patient gives a positive response to question 9 of the PHQ-9 or if you suspect suicidal thinking, assess and manage suicide risk.[12a,22]

When reviewing the responses to the PHQ-9 with the patient, ask about

- Other symptoms and history, including history of and treatment for depression and suicide attempts.
- Other mental health conditions (eg, anxiety).
- Medical conditions and medications that can cause or worsen depression.
- Alcohol and drug use (**Box 4**[23,24]).
- Family history of depression (including suicide attempts and treatment).

See **Boxes 5**[12a] and **6**[25,26] for management and counseling recommendations.

ASSESS AND MANAGE SUICIDE RISK

Depression is a risk factor for suicide (**Box 7**)[27]; the prevalence of suicidal ideation among people who suffered from major depression in the past year is 26%, as opposed to 2% among adults who did not suffer from major depression in the past year.[28] Knowing how to detect suicidal risk and when and how to intervene can be life-saving. Asking a patient about suicidal thoughts or plans does not initiate such ideas or foster action.

A positive response to item 9 on the PHQ-9 is associated with a higher risk of suicide attempts.[29] Conduct a suicide assessment (**Box 8**[25,26]) on any patient who answers "yes" to question 9, or whom you judge to be at possible risk, and intervene according to responses. See Intermountain Healthcare: Management of

BOX 2. SELECTED CONDITIONS AND BEHAVIORS ASSOCIATED WITH DEPRESSION[12-18]

- Alzheimer's disease
- Anxiety
- Asthma
- Cancer
- Cardiovascular disease
- Chronic pain
- COPD
- Coronary artery disease
- Diabetes
- Eating disorder
- HIV
- Hypertension
- Myocardial infarction
- Obesity
- PTSD
- Rheumatoid arthritis
- Sleep disorders
- Smoking
- Stroke
- Substance use (including alcohol)

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BOX 3. PATIENT HEALTH QUESTIONNNAIRE-9 (PHQ-9)[22]

Over the last 2 weeks, how often have you been bothered by any of the following problems? (use "✓" to indicate your answer)	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
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	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3
	add columns:		**+**	**+**
(Health care professional: For interpretation of TOTAL, please refer to **Box 5** on page 4.)	**TOTAL:**			
10. 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 _____

Source: www.integration.samhsa.gov/images/res/PHQ%20-%20Questions.pdf.
Note: For patients who give a positive response to question 9, assess and manage suicide risk (see page 2).

BOX 4. SCREENING FOR ALCOHOL AND DRUG USE[23,24]

Alcohol use[23]

Screen with the AUDIT. See *City Health Information:* Addressing Alcohol and Drug Use–An Integral Part of Primary Care for more information.

Drug use[24]

1. Ask "How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?"
2. If ≥1, screen with a clinical tool such as NIDA-Modified ASSIST. See *City Health Information:* Improving the Health of People Who Use Drugs for more information.

If a patient has co-occurring depression and substance use disorder or other mental health condition (eg, anxiety), refer to or co-manage with a mental health provider.[12]

Depression—2015 update and Suicide Risk Assessment Tools (**Resources**) for detailed guidance.

ENGAGE THE PATIENT IN TREATMENT PLANNING

Successful care of depression requires active engagement of patients and their families, beginning at diagnosis[12,19,30-33] (**Boxes 6** and **9**[12,33]). Collaborate with patients in developing or modifying the treatment plan[12,33] and educate them about diagnosis, prognosis, and treatment options. Explain costs, duration, side effects, and expected benefits of any medication. Also, determine whether psychotherapy is available and whether the patient prefers it.[12]

NONPHARMACOLOGIC APPROACHES

Nonpharmacologic therapies for depression include self-management strategies and psychotherapy.

Self-management strategies

***Physical activity*[34]:** Strongly recommend 30 minutes of moderate-intensity aerobic physical activity, 3 to 5 days a week,[12] and follow up at each visit. Examples of moderate-

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BOX 5. PHQ-9 SCORES TRANSLATED INTO DSM-5 DIAGNOSES AND PRACTICE[12a]

PHQ-9 Symptoms and Impairment	PHQ-9 Scores	Intensity	Initial Management	Next Steps
• 1-4 symptoms • Minimal functional impairment	5-9	Subclinical[a]	• Instruct the patient to call if they feel worse • Prescribe physical activity • Educate patient to schedule daily pleasurable activities	If no improvement in 1 month, consider referral to behavioral health for evaluation
• 2 symptoms • Score 2+ on Question 1 or 2 • Functional impairment	10-14	Mild Major Depression	All actions for Subclinincal Depression, plus • Psychotherapy, pharmacotherapy, or both	Consider weekly contact initially to ensure adequate engagement, then at least monthly
• ≥3 symptoms • Score 2+ on Question 1 or 2 • Functional impairment	15-19	Moderate Major Depression	All actions for Mild Major Depression	Initially consider weekly contact to ensure adequate engagement, then minimum every 2-4 weeks (unless in mental health treatment elsewhere)
• ≥4 symptoms • Score 2+ on Question 1 or 2 • Marked functional impairment • Motor agitation	≥20	Severe Major Depression	All actions for Moderate Major Depression: pharmacotherapy necessary; psychotherapy when patient is able to participate	Weekly contact until less severe (unless in mental health treatment elsewhere)

[a] Consider for persistent depressive disorder. Persistent depressive disorder is defined as low-level depression most of the day for more days than not for at least 2 years. Must include presence of at least 2 of the listed DSM-5 criteria affecting appetite, sleep, fatigue, self-esteem, concentration/decision-making, or hopelessness.[23] Initiate pharmacotherapy or refer to mental health specialty clinician for evaluation, or both.

Note: This table is designed to translate the PHQ-9 scores into DSM-5 categories; it does not directly correspond to the PHQ-9 Scoring Guide at www.integration.samhsa.gov/images/res/PHQ%20-%20Questions.pdf.

Adapted from Mitchell J, Trangle M, Degnan B, et al; Institute for Clinical Systems Improvement. *Adult Depression in Primary Care*. Updated September 2013. Bloomington, MN: Institute for Clinical Systems Improvement; 2013.

BOX 6. WHAT TO TELL PATIENTS ABOUT DEPRESSION[25,26]

- Depression is a common illness
- Don't feel ashamed or embarrassed about depression
- Treating depression works for many patients—it may take up to several months to a year
- Treatment for depression may improve your overall health
- The aim of treatment is remission—that means being mostly free of symptoms
- You and I will decide together what treatment to try
- Relapse is common; stick with the treatment plan even after you feel better. Treatment involves staying well, not just getting well
- Support from family and friends can help you follow the treatment plan and feel better
- Let me know right away if you begin to feel worse, or feel that you want to hurt yourself, especially if the thoughts are frequent or more intense
- If you are in crisis and need immediate help, call 800-273-TALK (8255) or 1-888-NYC-WELL (1-888-692-9355)
- If your life or someone else's is in immediate danger, call 911

BOX 7. SUICIDE RISK AND PROTECTIVE FACTORS[27,29]

Risk Factors

- Prior suicide attempts or self-injurious behavior
- Family history of suicide, suicide attempts, or psychiatric diagnoses, especially those requiring hospitalization
- Current/past psychiatric disorders, especially depression, bipolar disorder, psychotic disorders, alcohol/substance abuse, traumatic brain injury, posttraumatic stress disorder, personality disorders (co-occurring disorders and recent onset of illness increase risk)
- Inability to feel pleasure, impulsivity, command hallucinations, intoxication
- Events leading to humiliation, shame, or despair (eg, loss of relationship, health, or financial status—real or anticipated)
- Recent loss through death, divorce, or separation[12]
- Chronic medical illness (**Box 2**)
- Past or current abuse or neglect

Protective Factors

- Internal: ability to cope with stress; religious beliefs; frustration tolerance
- External: responsibility to children or pets; positive therapeutic relationships; social supports

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BOX 8. SUICIDE RISK ASSESSMENT AND INTERVENTION[25,26]

If a patient responds positively to item 9 on the PHQ-9 or you suspect the patient has suicidal thoughts, screen for suicide risk using the Columbia-Suicide Severity Rating Scale (C-SSRS) Quick Screen.

Questions	Answers	Risk Level	Actions based on positive responses (respond based on highest level of risk)
1. Have you wished you were dead or wished you could go to sleep and not wake up? 2. Have you actually had any thoughts of killing yourself?	Yes to 1 and no to 2	**Low**	• Consider referral to mental health or behavioral health provider • Consider patient education (see **page 3** and **Resources for Patients**) • Ask question 6 (response may increase risk category)
If No to 1 and Yes to 2 or Yes to both, ask 3-6			
3. Have you been thinking about how you might want to kill yourself?	Yes	**Moderate**	• Access risk factors and facilitate evaluation for inpatient admission, or complete safety plan with follow-up within 24-48 hours • Educate patient
4. Have you had these thoughts and had some intention of acting on them? 5. Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?	Yes to 4 and/ or 5	**High**	• Facilitate immediate evaluation by psychiatrist or psychiatric nurse practitioner • Educate patient
6. Have you ever done anything, started to do anything, or prepared to do anything to end your life?	If in the past 4 weeks	**High**	• Facilitate immediate evaluation for inpatient care • Educate patient
	If 1-12 months ago	**Moderate**	• Assess risk factors and refer to mental health or behavioral health provider and educate patient, emphasizing importance of reporting suicidal thinking
	If ≥1 year ago	**Low**	• Consider referral to mental or behavioral health provider and consider patient education

Adapted from Intermountain Health Care. Management of Depression—2015 Update. https://intermountainhealthcare.org/ext/Dcmnt?ncid=51061767.

BOX 9. ENGAGING PATIENTS IN TREATMENT PLANNING[12,33]

- Involve patients in deciding which form of treatment, ie, psychotherapy, pharmacotherapy, or both, to pursue[12]
- Suggest learning and using self-management skills such as journal writing and self-monitoring[12]
- Encourage use of support networks of family and friends for crisis intervention and relapse prevention[34]
- Encourage family or friends to attend appointments when appropriate[12]
- Schedule follow-up appointments and phone calls for the first 12 months of care[12]
- Establish a way to reach out if the patient drops out of care[12]

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intensity physical activity include walking briskly (3 miles per hour or faster, but not race-walking), water aerobics, bicycling, tennis (doubles), ballroom dancing, and gardening.[35] See **Resources for Patients** for information on exercise programs.

Behavioral changes[12]: While patients with depression struggle with an inability to feel pleasure, encourage those with mild to moderate depression to schedule daily activities such as outings or getting together with friends. This approach (behavioral activation) can help reduce depressive symptoms,[12,36,37] and for some patients the effect is comparable to pharmacotherapy after 4 months of treatment.[38]

Healthy sleep and nutrition: Recommend that patients get enough sleep on a regular basis, eat a healthy diet, and avoid alcohol to help reduce symptoms of depression.[6]

Self-management documentation: Self-monitoring such as journal-writing can improve outcomes.[12] Encourage patients to share their self-management documentation with you to maintain engagement.

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Psychotherapy[12]

Several psychotherapy modalities have proven benefits in treating depression:

- Cognitive behavioral therapy concentrates on identifying negative thought patterns and replacing them with positive thought patterns and rewarding activities.
- Interpersonal psychotherapy focuses on current problems and relationships.
- Psychodynamic psychotherapy/psychoanalysis is based on psychoanalytic theory and methods.[39] Treatment can be short- or long-term.[12]
- Problem-solving treatment teaches adaptive problem-solving attitudes and skills.[40]

PHARMACOLOGIC THERAPY

Several classes of medication are effective in treating depression[34,41-43] (**Table 1**[12,25,44-59]). In general, it is best to select initial treatment based on the patient's symptoms and the medication's side-effect profile (eg, sedating antidepressant for someone with insomnia). Also consider the patient's history of response to antidepressant medications, medication tolerability, cost, and medication interactions (see **Resources for Providers—Pharmacotherapy**).[33,41,43,60] If prescribing pharmacotherapy, remember that effectiveness of the trial depends on duration, adherence, and dosage[33] (**Table 2**[25,44-58]) and let the patient know what to expect when beginning the trial, including discussing potential side effects (**Box 10**[12,44-58]).

MONITOR RESPONSE AND ADJUST TREATMENT

Establish and maintain follow-up office, phone, or other contact (see **Box 5**) to monitor and reassure the patient.

BOX 10. WHAT TO TELL PATIENTS ABOUT PHARMACOTHERAPY FOR DEPRESSION[12,44-58]

- You may start to feel better after 4-8 weeks, but it usually takes 6-12 months to feel the full benefits
- You may feel side effects before your symptoms improve. Expect some discomfort before you feel the benefit of the medicine
- Some side effects may go away with time and some can be managed by changing the dosing or schedule
- We may have to adjust the dosage or try different medications to find the treatment that will give you the best response with the fewest side effects. It's important that you don't get discouraged
- Take the medication as prescribed, even after you feel better, to reduce the chance of relapse
- Do not stop taking your medicine suddenly. We need to reduce the dosage gradually in order to avoid or minimize withdrawal symptoms, especially if you've been taking the medication for 6 weeks or more

The goal of treatment is remission, or a score of <5 on the PHQ-9.[12] Full remission is defined as a 2-month period without major depressive signs or symptoms.[12] At each follow-up visit, use the PHQ-9 to assess response to treatment. To save time, the patient can complete the PHQ-9 before the visit. See **Resources for Providers—Pharmacotherapy** for guidance on switching medications.

Be aware that improvement with psychotherapy may be slower than with pharmacotherapy. It may take 8 to 10 weeks before response can be evaluated.[12] If improvement is not adequate after initial treatment and the patient has been seen at least once a week, consider switching to another psychotherapeutic approach and/or adding pharmacotherapy.[12]

PREVENT RELAPSE

To prevent relapse, continue pharmacotherapy after remission is achieved, based on the patient's history of major depression.[12]

- First episode: Continue for 4-9 months.
- Second episode: Continue for 2 years and discuss with the patient the possibility of withdrawing gradually.
- Persistent depressive disorder: Continue medication treatment indefinitely.

See **Resources for Providers—Depression Management** for further guidance.

SPECIAL CONSIDERATIONS

Pregnancy and breastfeeding

- Depression during or after pregnancy is very common.
- In addition to common signs and symptoms of depression, the mother may
  - fear that something bad will happen to the baby,
  - have thoughts that she may harm the baby herself,
  - have trouble feeling connected with the baby.

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COLLABORATIVE CARE FOR DEPRESSION

In the collaborative care model, primary care providers, case managers, and mental health providers work together to help patients with depression.

Collaborative care for depression

- Improves depression symptoms, adherence to treatment, and remission and recovery[61,62]
- Improves treatment engagement among underserved racial and ethnic groups[63]
- Significantly improves co-morbid depression and diabetes measures[64,65]

The best models involve care coordination and case management; regular/proactive monitoring and treatment; and regular psychiatric reviews and consultation for patients who do not show clinical improvement.[66]

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TABLE 1. FIRST-LINE ANTIDEPRESSANTS FOR ADULTS[12,25,44-59]

Class/Drug	Clinical Considerations (see product prescribing information for details)
Selective Serotonin Reuptake Inhibitors (SSRIs)	
Citalopram (Celexa®)*,[a] Escitalopram (Lexapro®) Fluoxetine (Prozac®) Paroxetine (Pexeva®, Paxil CR®) Sertraline (Zoloft®)	• Common side effects: headache, somnolence, insomnia, nausea, diarrhea, dry mouth, fatigue, sexual dysfunction, nervousness, agitation, restlessness, weight gain • Taper to reduce risk of discontinuation syndrome, particularly with paroxetine and sertraline (not necessary with fluoxetine) • Potentially lethal interaction with monoamine oxidase inhibitors (MAOIs). If MAOI treatment is considered, consult a drug information reference or psychiatrist for dosing, wash-out period, monitoring, and drug-drug and drug-food interactions
Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)	
Duloxetine (Cymbalta®)[b] Levomilnacipran (Fetzima®) Venlafaxine (Effexor XR®) Desvenlafaxine (Pristiq®) **Generic not available**	• Common side effects: nausea, dry mouth, headache, constipation, diarrhea, dizziness, drowsiness, insomnia, activation, dose-related increases in blood pressure, sexual dysfunction, weight gain • Increased risk of liver damage for patients with substantial alcohol use or preexisting liver disease • Do not use with an MAOI or within 14 days of stopping an MAOI. Allow 7 days after stopping the SNRI before starting an MAOI • Monitor blood pressure during dose titration and throughout treatment • Taper to reduce risk of discontinuation syndrome • May increase risk of bleeding events
Other Agents	
Bupropion HCl (Wellbutrin SR® or XL®),[c] dopamine-norepinephrine reuptake inhibitor	• Common side effects: agitation, dry mouth, constipation, headache/migraine, nausea/vomiting, dizziness, excessive sweating, tremor, insomnia, blurred vision, tachycardia, confusion, rash, hostility, cardiac arrhythmias, and auditory disturbance • May improve sexual desire • No weight gain and may help with weight loss • Useful as a smoking cessation agent
Mirtazapine (Remeron®), norepinephrine-serotonin release enhancer	• Common side effects: somnolence, dizziness, dry mouth, increased appetite, constipation, weight gain • Minimal sexual dysfunction • Do not use with an MAOI or within 14 days of stopping an MAOI
Vilazodone (Viibryd®), SSRI, 5HT1A receptor partial agonist **Generic not available**	• Common side effects: diarrhea, nausea, vomiting, insomnia, sexual dysfunction • May increase risk of bleeding events • Taper to reduce risk of discontinuation syndrome • Do not use with an MAOI or within 14 days of stopping an MAOI
Vortioxetine (Trintellix®), SSRI, 5HT3 receptor antagonist, 5HT1A agonist **Generic not available**	• Common side effects: nausea, constipation, vomiting, sexual dysfunction, headaches • Generally not used first-line • May increase risk of bleeding events • May be decreased to 5 mg/day if patients are intolerant to higher doses • May be discontinued abruptly if needed; taper recommended • Do not use with an MAOI or within 14 days of stopping an MAOI

CR, controlled release; XR, extended release; SR, sustained release; XL, extended release.

* Use of brand names is for informational purposes only and does not imply endorsement by the New York City Department of Health and Mental Hygiene.

[a] Avoid doses greater than 40 mg daily due to dose-dependent increased risk for QTc prolongation. Obtain ECG at baseline in patients with history of CHF, bradyarrhythmias, or concurrent administration of other QTc-prolonging medications. Check potassium and magnesium levels at baseline for patients at risk of electrolyte abnormalities.

[b] Hepatic function test at baseline.

[c] Bupropion IR is not recommended due to seizure risk and poor tolerability. Bupropion is contraindicated in patients with a history of seizure disorder or eating disorder (IR is highest risk).

Note: Angle-closure glaucoma has occurred in patients with untreated anatomically narrow angles treated with antidepressants.

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TABLE 2. ANTIDEPRESSANT AGENTS: DOSING RANGES AND GUIDELINES FOR MAJOR DEPRESSIVE DISORDER[25,44-58]

	Dose (once daily unless noted)			
Agent	**Start**	**Maintenance**	**Maximum**	**Comments**
Bupropion HCl (Wellbutrin SR®)	100 mg (not at nighttime)	100 mg, 2-3x/day	150 mg, 3x/day	Increase dose gradually to reduce seizure risk Caution with co-morbid anxiety
Bupropion HCl (Wellbutrin XL®)	150 mg (morning)	150-300 mg	450 mg	Increase dose gradually to reduce seizure risk Caution with co-morbid anxiety
Citalopram (Celexa®)[a]	10 mg/day for first 7 days	20-40 mg	40 mg	Dose 10 mg/day for 7 days, then increase to 20 mg Dose-dependent increased risk for QTc prolongation
Desvenlafaxine (Pristiq®)	50 mg, 1x/day	50 mg once daily	50 mg, 1x/day	**Generic not available.** Taper down with 25-mg dose when discontinuing
Duloxetine (Cymbalta®)	30-60 mg	30-60 mg	120 mg	
Escitalopram (Lexapro®)	10 mg	10-20 mg	20 mg	Allow at least ≥3 weeks at 10 mg/day before increasing
Fluoxetine (Prozac®)	10 mg/day for first 7 days (morning)	20-60 mg 1x/day (morning) or 2x/day (morning; noon)	80 mg	Dose 10 mg/day for first 7 days, then increase to 20 mg (morning) Also in once-weekly 90-mg capsule
Levomilnacipran (Fetzima®)	20 mg for first 2 days	40-120 mg	120 mg	Dose 20 mg for 2 days, then increase to 40 mg daily May increase by 40 mg every 2 days
Mirtazapine (Remeron®)	15 mg	15-45 mg, 1x/day	45 mg	Take at bedtime Titrate to effect and tolerability in intervals of 1-2 weeks Minimal sedating effect beyond 15 mg
Paroxetine (Pexeva®, Paxil CR®)	10 mg/day for first 7 days OR 25 mg (CR)	20-50 mg once daily (IR) OR 25-62.5 mg once daily (CR)	50 mg (IR) OR 62.5 mg (CR)	IR: 10 mg/day for 7 days, then increase to 20 mg/day, intervals no less than 1 week CR: 12.5-mg/day increments, 1- to 2-week intervals
Sertraline (Zoloft®)	25 mg/day for first 7 days	50-200 mg once daily	200 mg, 1x/day	Dose at 25 mg/day for 7 days, then increase to 50 mg/day
Venlafaxine (Effexor XR®)	37.5 mg/day for first 7 days	75-225 mg once daily	225 mg, 1x/day	Dose 37.5 mg/day for first 7 days, then increase to 75 mg, 1x/day Take with food. Taper down 75 mg/week to discontinue
Vilazodone (Viibryd®)	10 mg, 1x/day	40 mg, 1x/day	40 mg, 1x/day	**Generic not available**
Vortioxetine (Trintellix®)	10 mg, 1x/day	10-20 mg once daily	20 mg, 1x/day	**Generic not available** In patients taking 15-20 mg/day, decrease to 10 mg/day for 1 week, then discontinue

SR, sustained release; XL, extended release; CR, controlled release; IR, immediate release; XR, extended release.

[a] Obtain ECG at baseline in patients with history of CHF, bradyarrhythmias, or concurrent administration of other QTc-prolonging medications. Check potassium and magnesium levels at baseline for patients at risk of electrolyte abnormalities.

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- Postpartum depression can impact maternal care-taking behaviors, as well as the behavior, cognitive development, and physical health of the child.[4]
- If a patient is pregnant, planning to breastfeed, or is breastfeeding, stay current with research on risks and benefits of psychotropic medications or consult with an expert.[67]
- Help pregnant and breastfeeding patients assess the negative effects of depression on themselves and their families, as well as the risks and benefits of pharmacotherapy and other treatment options,[12] or refer to a specialized provider.

Older adults

- Older adults may be taking several medications, so interactions are an important consideration.
- Be aware that older patients may have to be treated longer to achieve remission.[12]

BOX 11. WHEN TO INVOLVE A MENTAL HEALTH SPECIALIST[12]

Refer to or co-manage with a mental health specialty clinician when needed[12]:

- High suicide risk
- Patient preference
- Signs and symptoms continue to interfere with work, school, family care, or other basic needs and relationships
- Other psychiatric disorders such as bipolar or substance abuse
- Complex psychosocial needs

Children, adolescents, and adults aged 18 to 24

- **Antidepressants carry an FDA-issued black box warning about increased risks of suicidal thinking and behaviors during initial treatment (generally first 1 or 2 months) of patients aged 24 and younger.**[68]
- If antidepressant medication is indicated in a young patient, start with a low dose and increase slowly, carefully monitoring the patient for new or worsening suicidal thoughts or behaviors.[68,69]

Some patients (**Box 11**[12]) may benefit from a referral to a mental health clinician who can consider additional strategies, such as psychotherapy, auxiliary medication, hospitalization, electroconvulsive treatment (ECT), or light therapy. Consider co-managing with the specialist if possible.

SUMMARY

Depression is a common and debilitating illness that can affect a patient's overall health. Be alert to risk factors for depression and use standardized tools to screen and diagnose. Engage the patient in developing the treatment plan, which may include a variety of modalities, and closely monitor response. ◆

HOW TO DETECT AND TREAT DEPRESSION IN PRIMARY CARE

- Screen with the PHQ-9
- Engage the patient in treatment planning
- Closely monitor progress
- Refer to or co-manage with a mental health specialist when necessary

REIMBURSEMENT FOR DEPRESSION-RELATED SERVICES

Depression (ICD-10: Z13.89)	Codes	Comments
Medicare	HCPCS: G0444	Annual depression screening, 15 min
Medicaid Fee For Service Medicaid Managed Care	HCPCS: G8431	Documented positive screen and follow-up plan
Aetna Commercial	HCPCS: G8510	Documented negative screen; no follow-up plan required
Emblem Commercial	CPT: 96127	Annual depression screening, 15 min, patients aged ≥12 years
Postpartum Depression Screening[a] (ICD-10: O90.6)		
Medicaid Fee for Service[b]	HCPCS: G8431 (HD)	Documented positive screen and follow-up plan
Medicaid Managed Care[c]	HCPCS: G8510 (HD)	Documented negative screen; no follow-up plan required
Prenatal Depression Screening	HCPCS: H1000, H1005	

[a] Postpartum maternal depression screening with a validated screening tool may be reimbursed up to 3 times in the first year of the infant's life. If screening is performed on the same day as the infant's primary care visit (E&M) by the infant's health care provider, one claim can be submitted for both services using the appropriate maternal "G" series code under the infant's Medicaid identification number. Alternatively, providers, **including pediatricians**, may bill this service separately under the mother's Medicaid identification number.
[b] Effective September 1, 2016.
[c] Effective November 1, 2016.

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RESOURCES FOR PROVIDERS

Depression Management

- American Psychiatric Association. Treating Major Depressive Disorder: A Quick Reference Guide: psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/mdd-guide.pdf
- Institute for Clinical Systems Improvement. Depression, Adult in Primary Care Guideline: icsi.org/guidelines__more/catalog_guidelines_and_more/catalog_guidelines/catalog_behavioral_health_guidelines/depression/
- Intermountain Health Care. Management of Depression—2015 Update: intermountainhealthcare.org/ext/Dcmnt?ncid=51061767

Depression Screening and Diagnosis

- Patient Health Questionnaire (PHQ-9): phqscreeners.com/select-screener/36
- DSM-5 Diagnostic criteria: healthyplace.com/depression/major-depression/mdd-dsm-criteria-for-major-depressive-disorder

Perinatal Depression Guidelines

- Nassau County Best Practices Task Force: ny2aap.org/pdf/NCPerinatalResourceGuideDec11.pdf

Suicide Risk Assessment Tools and Other Materials

- Western Interstate Commission and Suicide Prevention Resource Center. Suicide Prevention Toolkit for Primary Care Practices: sprc.org/settings/primary-care/toolkit
- Intermountain Healthcare. Suicide Prevention: intermountainhealthcare.org/ext/Dcmnt?ncid=526742474

Pharmacotherapy Resources

- Interactions Checkers
  - Prescribers' Digital Reference: pdr.net
  - Epocrates: online.epocrates.com/interaction-check (registration required)
- Choosing Antidepressants for Adults: ncbi.nlm.nih.gov/pubmed/21938806
- Switching Antidepressants
  - Health Alliance: healthalliance.org/media/Generics_antidepressants_comparison_chart.pdf (see page 2)
  - PsychiatryNet: wiki.psychiatrienet.nl/index.php/SwitchAntidepressants

Mental Health Referrals

- NYC Well: English: 1-888-NYC-WELL (1-888-692-9355), press 2
  Español: 1-888-692-9355, press 3
  中文: 1-888-692-9355, press 4
  Call 711 (relay service for deaf/hard of hearing)
  nycwell.cityofnewyork.us
  A 24-7 call, text, and chat line for people seeking suicide prevention and crisis counseling; substance use services; peer support; short-term counseling; assistance scheduling appointments or accessing other mental health services; follow-ups to ensure connection to care. Interpreters available in 200 languages
- Anxiety and Depression Association of America: treatment.adaa.org

RESOURCES FOR PATIENTS

Patient Education Materials

- New York City Department of Health and Mental Hygiene
  - Common Symptoms of Depression Fact Sheet: nyc.gov/assets/doh/downloads/pdf/csi/depressionkit-pt-symptoms-fact.pdf
  - Health Bulletin #34, Feeling Better: Depression: nyc.gov/assets/doh/downloads/pdf/public/dohmhnews10-04.pdf
- Agency for Health Care Research and Quality. Comparing Talk Therapy and Other Depression Treatments With Antidepressant Medicines: effectivehealthcare.ahrq.gov/topics/major-depressive-disorder/consumer
- National Institute of Mental Health. Depression: nimh.nih.gov/health/topics/depression/index.shtml
- National Alliance on Mental Illness. Depression: nami.org/Learn-More/Mental-Health-Conditions/Depression
- American Psychiatric Association. Help With Depression: psychiatry.org/patients-families/depression

Organizations and Support Groups

- Depression and Bipolar Support Alliance: dbsalliance.org
  Education, wellness, and peer support services to patients, family members, and clinicians
- Mood Disorders Support Group New York: mdsg.org
  Free, peer-run support groups in Manhattan
- Mental Health America: mentalhealthamerica.net/conditions/depression
- Suicide Prevention Resource Center: sprc.org/
- National Alliance on Mental Illness-New York: naminycmetro.org/

Crisis Hotlines

- NYC Well: English: 1-888-NYC-WELL (1-888-692-9355), press 2
  Español: 1-888-692-9355, press 3
  中文: 1-888-692-9355, press 4
  Call 711 (relay service for deaf/hard of hearing)
  nycwell.cityofnewyork.us
  A 24-7 call, text, and chat line for people seeking suicide prevention and crisis counseling; substance use services; peer support; short-term counseling; assistance scheduling appointments or accessing other mental health services; follow-ups to ensure connection to care. Interpreters available in 200 languages
- National Suicide Prevention Lifeline (24 hours a day/7 days a week): 800-273-TALK (800-273-8255)

Physical Activity

- NYC Health Department. Physical Activity for Older Adults: nyc.gov/site/doh/health/health-topics/physical-activity.page
- New York City Office of the Mayor. Shape Up NYC: https://www.nycgovparks.org/programs/recreation/shape-up-nyc
  Find a free fitness class

Postpartum Depression

- NYC Health Department: nyc.gov/site/doh/health/health-topics/post-partum-depression.page
- Medline Plus (in 14 languages): nlm.nih.gov/medlineplus/languages/postpartumdepression.html

Depression in Older Adults

- NYC Department for the Aging. ThriveNYC programs: nyc.gov/site/dfta/services/thrivenyc-at-dfta.page

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Have questions or comments about Depression?
E-mail
AskCHI@health.nyc.gov

E-mail *City Health Information* at: nycdohrp@health.nyc.gov
New York City Department of Health and Mental Hygiene. Detecting and treating depression in adults. *City Health Information.* 2016;35(1):1-12. Updated December 2018.

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