

Algorithm A: Assessment and Diagnosis

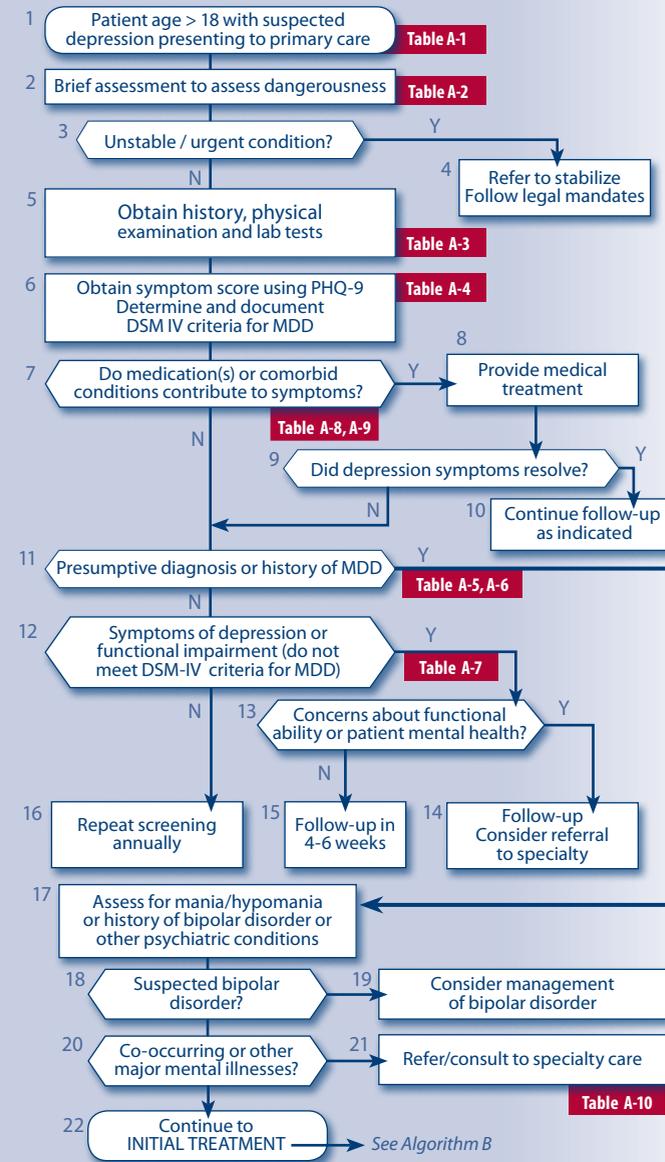


TABLE A-1	Screening for Depression (PHQ-2)	
	<i>Over the last two weeks, have you been bothered by any of the following problems?</i>	
	Yes	No
	Little interest or pleasure in doing things?	✓
	Feeling down, depressed, or hopeless?	✓
	<i>If the patient responded "yes" to either question, consider asking more detailed questions or using PHQ-9 patient questionnaire. (Table A-4)</i>	
	<i>If the patient's response to both questions is "no", the screen is negative.</i>	

TABLE A-2	Assessment for Dangerousness
<b>1. Assess Threat to SELF</b>	
<i>ASK THE QUESTIONS:</i>	
	Are you feeling hopeless about the future/present?
	<i>IF YES ASK:</i>
	Have you had thoughts about taking your life?
	<i>IF YES ASK:</i>
	When did you have these thoughts and do you have a plan to take your life?
	Have you ever had a suicide attempt?
<b>2. Assess Threat to OTHERS</b>	
	a. Assess whether the patient has an active plan and method/means (e.g., weapons in the home)
	b. Assess whom the patient wishes to harm
	c. Assess whether the patient has ever lost control and acted violently
	d. Assess seriousness/severity of past violent behavior

TABLE A-3	Clinical Assessment of the Patient with MDD
	<ul style="list-style-type: none"> <li>Medical history</li> <li>Physical examination</li> <li>Mental status examination (MSE)</li> <li>Relevant laboratory tests</li> <li>Psychosocial history</li> <li>Drug inventory, including over-the-counter (OTC) drugs and herbals</li> <li>Comorbid conditions</li> </ul>

TABLE A-4	Patient Health Questionnaire (PHQ-9)					
	<i>Over the last 2 weeks, how often have you been bothered by any of the following?</i>					
		Not at all	Several days	More than half the days	Nearly every day	
	1	0	1	2	3	
	2	0	1	2	3	
	3	0	1	2	3	
	4	0	1	2	3	
	5	0	1	2	3	
	6	0	1	2	3	
	7	0	1	2	3	
	8	0	1	2	3	
	9	0	1	2	3	
	<b>Total Score</b> ____ = + +					
	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?		<input type="checkbox"/> Not difficult at all <input type="checkbox"/> Somewhat difficult <input type="checkbox"/> Very difficult <input type="checkbox"/> Extremely difficult		
	<small>PHQ was developed by Drs. Spitzer, Williams, Kroenke and colleagues. PRIME-MD® is a trademark of Pfizer inc. Copyright© 1999 Pfizer Inc. All rights reserved. Reproduced with permission.</small>					

TABLE A-5	Symptom Severity Classification		
	Severity Level	(PHQ-9) Total Score	Functional Impairment
	Mild	5-14	Mild
	Moderate	15-19	Moderate
	Severe	≥ 20	Severe
	<b>Modifiers</b>		
	Complications	Co-occurring post traumatic stress disorder (PTSD), substance use disorder (SUD), psychosis, suicide risk, mania, significant social stressors, war related conditions	
	Chronicity	More than 2 years of symptoms despite treatment	

The PHQ-9 assessment tool combined with a clinical interview should be used to obtain the necessary information about symptoms, symptom severity, and effects on daily functioning that is required to diagnose MDD based on DSM-IV-TR criteria.

TABLE A-6	DSM-IV Diagnostic Criteria for MDD
	<i>MDD diagnosis is based on the following list of symptoms, and requires the presence of symptom 1, 2, or both; and at least 5 of 9 symptoms overall; these symptoms must persist for at least 2 weeks</i>
	1. Depressed mood nearly every day for most of the day, based on self-report or observation of others
	2. Marked reduction or loss of interest or pleasure in all, or nearly all, activities for most of the day, nearly every day
	3. Significant non-dieting weight loss or weight gain (> 5% change in body weight)
	4. Insomnia or hypersomnia nearly every day
	5. Psychomotor agitation or retardation (should be observable by others)
	6. Fatigue/loss of energy nearly every day
	7. Feelings of worthlessness or excessive/inappropriate guilt (possibly delusional) nearly every day
	8. Diminished cognitive function (reduced ability to think or concentrate, or indecisiveness) nearly every day
	9. Recurrent thoughts of death and/or suicide, suicide planning, or a suicide attempt

TABLE A-7	Nomenclature for Clinical Depressive Conditions		
	DSM-IV-TR	Diagnostic Criteria	Duration
	Major Depression	At least 5 depressive symptoms* (must include either depressed mood or anhedonia)	≥ 2 weeks
	Dysthymia	3 or 4 dysthymic symptoms <sup>§</sup> (must include depressed mood)	≥ 2 years
	Depression NOS	<b>Variables:</b> all included disorders must cause clinically significant impairment of daily functioning but fail to meet the classification for major depression or dysthymia. <b>Example:</b> minor depression with 2 to 4 depressive symptoms	≥ 2 weeks

\* Depressive symptoms - See Table A-4  
 § Dysthymic symptoms are generally the same as major depressive symptoms, with the addition of feeling of hopelessness and the omission of suicidal ideation.

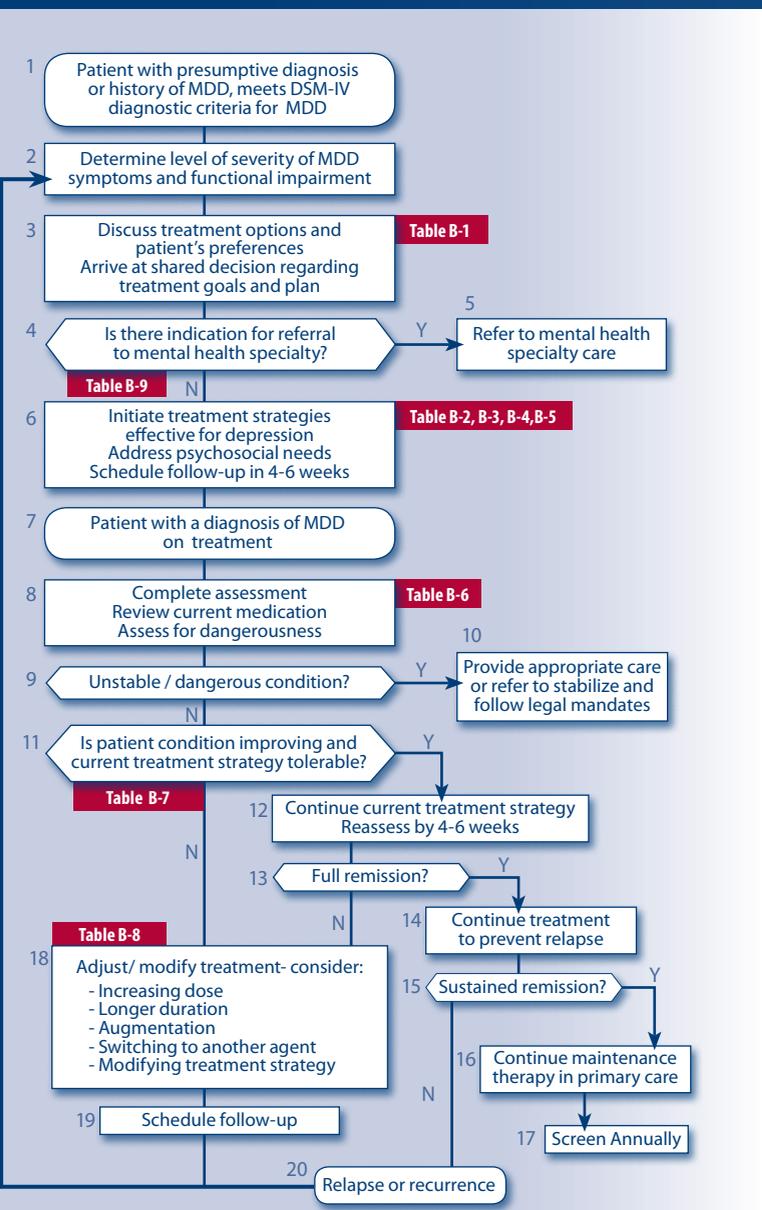
TABLE A-8	Pathobiologies Related to Depression	
	Pathology	Disease
	Cardiovascular	Coronary artery disease; Congestive heart failure; Stroke; Vascular dementias
	Chronic Pain	Fibromyalgia; Low back pain; Bone pain
	Degenerative	Hearing loss; Neurodegenerative diseases (i.e. Alzheimer's, Parkinson's, Huntington's)
	Immune	HIV; Multiple sclerosis; Systemic lupus erythematosus; Sarcoidosis
	Metabolic/Endocrine (including renal and pulmonary)	Malnutrition; Vitamin deficiencies; Hypo/hyperthyroidism; Addison's disease; Diabetes Mellitus; Hepatic disease (cirrhosis); COPD; Asthma; Kidney disease
	Neoplasms	Of any kind, especially pancreatic or CNS
	Trauma	Traumatic Brain Injury; Amputation; Burn injuries

TABLE A-9	Medication Induced Depression			
	Class	Association	Class	Association
	ACE-inhibitors	+/-	Lipid-lowering agents	+/-
	Barbiturates	+	NSAIDs	+
	Benzodiazepines	+	Progesterone implants	+/-
	Beta-blockers	+/-	Reserpine, Clonidine, Methyl dopa	+
	Calcium channel blockers	+/-	Selective estrogen receptor modulators	+/-
	Interferon-α	+/-	Topiramate	+
	Interleukin-2	+	Varenicline (Chantix)	+

TABLE A-10	Indications for Referral to Mental Health
	<ul style="list-style-type: none"> <li>Evidence of psychotic features, past mania or hypomania</li> <li>History of/Potential for Suicide/Violence</li> <li>Unclear diagnosis (PTSD, SUD)</li> <li>Signs of comorbid psychiatric conditions</li> <li>Unable to treat patient in primary care</li> <li>Need for psychosocial interventions</li> <li>Patient preference</li> </ul>



**Algorithm B: Treatment, Re-assessment and Follow-up**



**TABLE B-1 Shared Decision & Treatment Plan**

Present Treatment Options	<ul style="list-style-type: none"> <li>Present feasible treatment options</li> <li>Describe pros/cons of each approach</li> </ul>
Discuss with Patient	<ul style="list-style-type: none"> <li>Side effect profiles for antidepressants</li> <li>Availability of psychological counseling</li> <li>Description of psychological counseling</li> </ul>
Elicit Patient Preference	<ul style="list-style-type: none"> <li>Ask patient for their treatment preference</li> </ul>

**TABLE B-2 Treatment Strategies**

Severity	PHQ Score Functional Impairment	Initial Treatment Strategies
Mild	5-14 Mild	<ul style="list-style-type: none"> <li>Watchful waiting</li> <li>Supportive counseling</li> <li>If no improvement after one month, consider antidepressant or brief psychotherapy counseling</li> </ul>
Moderate	15-19 Moderate	<ul style="list-style-type: none"> <li>Start with monotherapy of either antidepressants or psychotherapy, or a combination of both</li> </ul>
Severe	> 20 Severe	<ul style="list-style-type: none"> <li>May start with monotherapy of either antidepressants or psychotherapy;</li> <li>Should emphasize combination of both or multiple drug therapy</li> </ul>
Complicated	Co-occurring PTSD, SUD, mania, or significant social stressors	<ul style="list-style-type: none"> <li>Start with combination of medications and somatic interventions</li> </ul>
Chronicity	> 2 years of symptomatology despite treatment	<ul style="list-style-type: none"> <li>For Mild: start with monotherapy (antidepressants or psychotherapy), or a combination of both</li> <li>For Mod/Severe: combination or multiple drug therapy</li> </ul>

- Treatment Strategy Options Include:**
- Psychoeducation and self-management (provide to all MDD patients)
  - Watchful waiting
  - Monotherapy (psychotherapy or pharmacotherapy)
  - Combination psychotherapy and antidepressants
  - Treatment of complex patients
  - Somatic treatment
  - Inpatient and residential

**TABLE B-3 Psychoeducation and Self-Management**

*Collaboratively choose one or two goals at a time.*

<b>Nutrition</b>	Maintain a balanced diet.
<b>Exercise</b>	Strong evidence shows that exercise often has significant anti-depressant effects.
<b>Bibliotherapy</b>	Use of self-help texts.
<b>Sleep Hygiene</b>	Education on sleep hygiene should be included for patients exhibiting sleep disturbance.
<b>Tobacco Use</b>	Tobacco use has been demonstrated to impact the recovery of depression. Referral or treatment of nicotine dependence should be considered.
<b>Caffeine Use</b>	Excessive caffeine use may exacerbate some symptoms of depression.
<b>Alcohol Use and Abuse</b>	Even low levels of alcohol use have been demonstrated to impact recovery of depression; patients should be advised to abstain until symptoms remit.
<b>Pleasurable Activities</b>	Behavioral activation has been shown to have significant antidepressant effects.

**TABLE B-4 First-Line Treatment Options**

**Psychotherapies**

- Cognitive Behavioral Therapy (CBT)**
- Interpersonal Therapy (IPT)**
- Problem Solving Therapy (PST)**

Recommended for patients who:

- Prefer psychological counseling.
- Had a previous good response to psychological counseling.
- Cannot tolerate medications.
- Have a prior course of illness that is chronic or characterized by poor inter-episode recovery.

May be helpful for patients who:

- Have partial response to full dose of an antidepressant;
- Have personality disorders; and/or
- Have complex psychosocial problems.

**TABLE B-4 Pharmacotherapy Antidepressants**

- SSRIs**
- SNRIs**
- Bupropion**
- Mirtazapine**

- No evidence that any one medication is better than another  
- Select based on side effects, cost, and availability

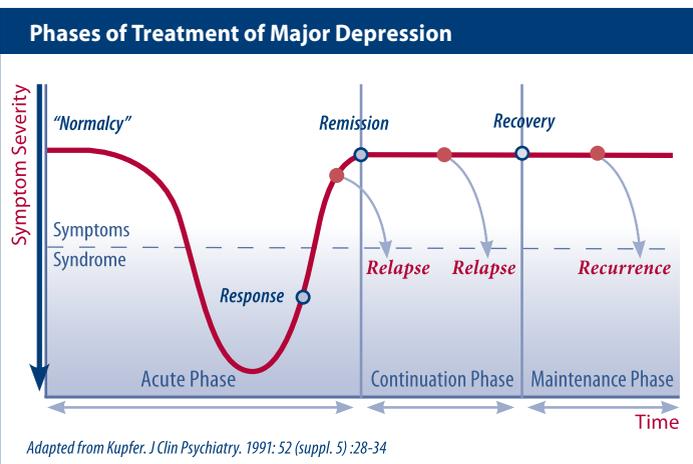
**TABLE B-5a Antidepressant Dosing and Monitoring**

Class	Agent	Initial Dose		Titration Schedule <sup>†</sup>	Maximum Dose/Day	Renal		Hepatic	
		Initial Dose	Titration Schedule <sup>†</sup>			Renal	Hepatic		
SSRIs	Citalopram	20 mg once a day	weekly	60 mg	60 mg	Avoid: CrCl < 20 ml/min	↓ dose 10 mg	↓ dose 10 mg	↓ dose 50%
	Escitalopram	10 mg once a day	weekly	40 mg	40 mg	Avoid: CrCl < 20 ml/min	↓ dose 50%	↓ dose 50%	↓ dose 50%
	Fluoxetine	20 mg once a day	every 2 weeks	80 mg	80 mg	No change	Avoid	Avoid	Avoid
	Fluoxetine Weekly	90 mg once a week	NA	90 mg	90 mg	Avoid	10 mg	10 mg	12.5 mg
	Paroxetine	20 mg once a day	weekly	50 mg	50 mg	Avoid	10 mg	10 mg	12.5 mg
SNRIs	Paroxetine CR	25 mg once a day	weekly	62.5 mg	62.5 mg	Avoid	10 mg	10 mg	12.5 mg
	Sertraline	50 mg once a day	weekly	200 mg	200 mg	Avoid if CrCl < 30	Avoid	Avoid	Avoid
DNRI	Duloxetine	60 mg as a single or divided dose	NA	60 mg	60 mg	CrCl = 10-70, ↓ dose 50%			
	Venlafaxine IR	37.5 mg twice a day	weekly	225-375 mg	225 mg	CrCl = 10-70, ↓ dose 50%			
	Venlafaxine XR	75 mg once a day	weekly	225 mg	225 mg	CrCl = 10-70, ↓ dose 50%			
aSSAs	Bupropion IR	100 mg twice a day	weekly	450 mg	450 mg	Has not been studied			
	Bupropion SR	150 mg once a day	weekly	400 mg	400 mg	Has not been studied			
	Bupropion XR	150 mg once a day	weekly	450 mg	450 mg	Has not been studied			
TCAs	Trazodone	50 mg three times a day	weekly	600 mg	600 mg	No change	No change	No change	No change
	Mirtazapine	15 mg daily at bedtime	weekly	45 mg	45 mg	No change	No change	No change	No change
TCAs	Nortriptyline	25 mg once a day or divided	weekly	150 mg	150 mg	No change	No change	No change	No change
	Desipramine	75 mg once a day or divided	weekly	300 mg	300 mg	No change	No change	No change	No change

<sup>†</sup>Recommended minimum time between dose increases; Duloxetine, Escitalopram, Fluoxetine, Paroxetine CR are not on the VA National Formulary. All antidepressants listed are FDA Pregnancy Category C, except paroxetine which is Category D. Desipramine and Nortriptyline have not been assigned a pregnancy category by FDA.

**TABLE B-5b Consider Medication Side Effects**

Category	Drug	Anticholinergic Activity (muscarinic)	Sedation (H1)	Orthostatic Hypotension (alpha)	Cardiac Effects	GI Effects	Seizures	Weight Gain	Sexual Dysfunction
SSRIs	Citalopram	0	0/+	0	0	+++	0	0	+++
	Escitalopram	0	0/+	0	0	+++	0	0	+++
	Fluoxetine	0	0/+	0	0/+	+++	0/+	0/+	+++
	Paroxetine	0/+	0/+	0	0	+++	0	0/+	+++
	Sertraline	0	0/+	0	0	+++	0	0	+++
SNRIs	Duloxetine	0	0/+	0/+	0/+	+++	0	0/+	+++
	Venlafaxine	0	0	0	0/+	+++	0	0	+++
NDRIs	Bupropion	0	0	0	0	++	+++	0	0
NaSSAs	Mirtazapine	0	+++	0/+	0	0/+	0	0/+	0



**TABLE B-6 Assessment of Treatment Response**

- Symptom severity (PHQ-9) and risk for suicide
- Tolerability to treatment (Adverse effects)
- Adherence to treatment
- Medical problems influencing recovery
- Psychosocial barriers to therapy
- Reevaluate diagnosis and appropriate treatment

**TABLE B-7 Assess Treatment Response with PHQ-9\***

Onset Response to Treatment	Minimal clinically significant: a change in PHQ-9 score of 25% Response to treatment: improvement in PHQ-9 score of 50% from baseline
Full Remission	PHQ-9 score of 4 or less, maintained for at least 1 month
Recovery	PHQ score of 4 or less, maintained for at least 6 months

\*For other assessment tools see Full Guideline

**TABLE B-8 Treatment Response and Follow-up**

Step	Patient Condition	Options	Reassess <sup>†</sup>
1	Initial Treatment	See Table B-2	2 weeks*
2	Non response to initial low dose*	<ul style="list-style-type: none"> <li>Increase dose</li> <li>Consider longer duration</li> <li>Switch</li> <li>Consider referral to specialty care</li> </ul>	4 to 6 weeks
3	Failed second trial of antidepressant	<ul style="list-style-type: none"> <li>Switch</li> <li>Augment or combine</li> <li>Consider referral to specialty care</li> </ul>	8 to 12 weeks
4	Failed 3 trials including augmentation	<ul style="list-style-type: none"> <li>Re-evaluate diagnosis and treatment</li> <li>Consider referral to specialty care</li> </ul>	12 to 18 weeks

\* If treatment is not tolerable, switch to another antidepressant.  
<sup>†</sup>Cumulative time from initial treatment.

**TABLE B-9 Indications for Referral to Specialty**

- Evidence of psychotic features, past mania or hypomania (Bipolar)
- Complicated depression with comorbidity (PTSD, SUD)
- Treatment resistance
- Primary care out of comfort zone
- Patient request