Depression in Adults: Diagnosis & Treatment Guideline Supplement

References and supporting documents used to develop the guideline and supplement are available at: http://www.healthteamworks.org/guidelines/depression.html.

SECTION 1: Screening and Monitoring Instruments

The PHQ2/9 can be effectively used to screen for depression with adolescents, adults, and seniors. The additional screens offer greater sensitivity for select populations and psychiatric conditions.

PHQ-2/9 (Patient Health Questionnaire)

PHQ-2: The first two questions of the PHQ-9 are recommended as the first step to screen for current depression. It can be administered orally or self-administered on a written form. It may be scored as a "yes/no" questionnaire or using a Likert scale to assess symptom frequency.

Scoring the PHQ-2:

A positive score is:

1. "Yes" to either question; *or*
2. A score >3 using the Likert scale (which is aligned with the PHQ-9 scoring criteria):
   Over the past two weeks, how often have you been bothered by any of the following problems?

1. Little interest or pleasure in doing things.
0 = Not at all
1 = Several days
2 = More than half the days
3 = Nearly every day

2. Feeling down, depressed, or hopeless.
0 = Not at all
1 = Several days
2 = More than half the days
3 = Nearly every day

Total point score:_____

A patient with a positive PHQ-2 should complete the full PHQ-9.

PHQ-9: This 9-item questionnaire to assess symptoms of depression during the past two weeks scores each of the 9 DSM-IV criteria and is derived from the Primary Care Evaluation of Mental Disorders (PRIME-MD) diagnostic tool. The PHQ-9 is available in more than 80 languages and no permissions or cost are required to use it. Download at: http://www.phqscreeners.com

The PHQ-9 can also be downloaded at: http://www.healthteamworks.org/guidelines/depression.html

Recommended use:

- To assess symptoms and functional impairment and make a tentative diagnosis of depression
- To assess severity of depressive symptoms and assist with treatment planning
- To monitor treatment effectiveness
- May be self-administered on a written form or administered orally by a member of the healthcare practice team

Scoring the PHQ-9:

- Instructions are included on the PHQ-9 form.
- It is simple to score by hand and can be embedded in an EHR.
- Question #9 (about self harm) should always be reviewed *before the patient leaves the clinic*.

Depression in Adults: Diagnosis & Treatment Guideline Supplement

References and supporting documents used to develop the guideline and supplement are available at: http://www.healthteamworks.org/guidelines/depression.html.

Suicide Risk Assessment

The **S**uicide **A**ssessment **F**ive-step **E**valuation and **T**riage (**SAFE-T**) was adapted from the American Psychiatric Association Practice Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviors and developed with funding from SAMHSA.

Available free at: http://www.stopasuicide.org/downloads/Sites/Docs/SAFE-T_One_Page_Final.pdf

Edinburgh Postnatal Depression Scale

The 10-question Edinburgh Postnatal Depression Scale (EPDS) is a validated screening tool to identify patients at risk for perinatal depression. It is available in multiple languages.

To download the scale in English: http://www.aap.org/practicingsafety/toolkit_resources/module2/epds.pdf
Spanish version: http://steppingup.washington.edu/keys/documents/EPDSSpan.pdf

Geriatric Depression Scale

This questionnaire was developed as a basic screening measure for depression in older adults. It is in the public domain and available in multiple languages.

Download at: http://www.stanford.edu/~yesavage/GDS.html

Cornell Scale for Depression in Dementia

Depression and dementia frequently co-occur. This screening tool assesses signs and symptoms, and utilizes a comprehensive interviewing and observational approach that derives information from the patient and the informant.

To download the scale and a guide to administration and scoring:
http://healthteamworks-media.precis5.com/depression-in-dementia-cornell-scale

Assessment of Bipolar Disorder

Patients with bipolar disorder are more likely to seek care for their depressive states than for their manic or hypomanic states. Differentiating between unipolar depression and bipolar depression is important because starting antidepressant medication in a person who has bipolar depression can be destabilizing (it may contribute to increased anxiety /hypermania) and because failure to detect the bipolar depression means that the person is less likely to receive the appropriate treatment for that condition. The initial assessment of depression should include questions about a history of bipolar depression/mania. The MDQ is a screening tool for bipolar disorder. Note that there is a cost associated with using the MDQ. For additional information and to order copies go to: www.jblearning.com.

To view the MDQ go to: http://www.dbsalliance.org/pdfs/MDQ.pdf

Assessment of Generalized Anxiety Disorder (GAD)

The GAD-7 is from the **Prim**ary Care **E**valuation of **M**ental **D**isorders (PRIME-MD), a diagnostic tool containing modules on 12 different mental health disorders.

It can be downloaded and used at no cost from: http://www.phqscreeners.com/

Screening Brief Intervention Referral to Treatment (SBIRT) Guideline

This guideline summarizes screening and appropriate intervention for risky/unhealthy use of alcohol, tobacco, and illicit or prescription drugs.

Developed by HealthTeamWorks and available at: http://www.healthteamworks.org/guidelines/sbirt.html

Post Traumatic Stress Disorder Screening

The Primary Care PTSD Screen (PC-PTSD) is a 4-question screening tool designed for use in primary care and other settings and is also currently used to screen veterans for PTSD at the VA. The introductory (first) question cues the respondent to traumatic events that they may have experienced. In most cases, the screen should be considered "positive" if a patient answers "yes" to any of the three items. Individuals with a positive screen should be assessed with a structured assessment such as the Posttraumatic Stress Disorder Checklist for Civilians (PCL-C).

PC-PTSD: http://www.ptsd.va.gov/professional/pages/assessments/pc-ptsd.asp
PCL-C in English (includes scoring info.): http://www.pdhealth.mil/guidelines/downloads/PCL_Primer.pdf
PCL-C in Spanish: http://healthteamworks-media.precis5.com/pcl-spanish

PTSD CheckList – Civilian Version (PCL-C)

The PCL is a standardized self-report rating scale for PTSD comprising 17 items that correspond to the key symptoms of PTSD. Two versions of the PCL exist: 1) PCL-M is specific to PTSD caused by military experiences and 2) PCL-C is applied generally to any traumatic event. The PCL can be easily modified to fit specific time frames or events. For example, instead of asking about "the past month," questions may ask about "the past week" or be modified to focus on events specific to a deployment.

How is the PCL completed?
- The PCL is self-administered
- Respondents indicate how much they have been bothered by a symptom over the past month using a 5-point (1–5) scale, circling their responses. Responses range from 1 Not at All – 5 Extremely

How is the PCL Scored?
1) Add up all items for a total severity score, *or*
2) Treat response categories 3–5 (Moderately or above) as symptomatic and responses 1–2 (below Moderately) as non-symptomatic, then use the following DSM criteria for a diagnosis:
- Symptomatic response to at least 1 "B" item (Questions 1–5),

- Symptomatic response to at least 3 "C" items (Questions 6–12), and
- Symptomatic response to at least 2 "D" items (Questions 13–17)

Are Results Valid and Reliable?
Two studies of both Vietnam and Persian Gulf theater veterans show that the PCL is both valid and reliable

Adverse Childhood Experiences

The Adverse Childhood Experiences (ACE) Study is an ongoing collaboration between the Centers for Disease Control and Prevention and Kaiser Permanente. It is analyzing the relationship between multiple categories of childhood trauma and health and behavioral outcomes later in life. To read about the study: http://www.acestudy.org/

What's an ACE?

Growing up experiencing any of the following conditions in the household prior to age 18:
1. Recurrent physical abuse
2. Recurrent emotional abuse
3. Contact sexual abuse
4. An alcohol and/or drug abuser in the household
5. An incarcerated household member
6. Someone who is chronically depressed, mentally ill, institutionalized, or suicidal
7. Mother is treated violently
8. One or no parents

The ACE Study used a simple scoring method to determine the extent of each study participant's exposure to childhood trauma. Exposure to one category (not incident) of ACE, qualifies as one point. When the points are added up, the ACE Score is achieved.

The ACE study found that persons who had experienced four or more categories of childhood exposure, compared to those who had experienced none, had 4- to 12-fold increased health risks for alcoholism, drug abuse, depression, and suicide attempt; a 2- to 4-fold increase in smoking, poor self-rated health, ≥50 sexual intercourse partners, and sexually transmitted disease; and a 1.4- to 1.6-fold increase in physical inactivity and severe obesity. The number of categories of adverse childhood exposures showed a graded relationship to the presence of adult diseases including ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease (1998; American Journal of Preventive Medicine).

To access the ACE score calculator: http://healthteamworks-media.precis5.com/ace-score-calculator

Resources for Adolescent Depression Screening and Assessment

Recommended screening tools:
1. ***G**uidel**i**nes for **A**dolescent **D**epression in **P**rimary **C**are (**GLAD-PC**)*
   http://www.thereachinstitute.org/files/documents/GLAD-PCToolkit.pdf

2. *Teen Screen National Center for Mental Health Checkups*
   For information about the Center: http://www.teenscreen.org
   For screening tools and a pocket guide with information on reimbursement and tips for making mental health referrals: http://www.teenscreen.org/programs/primary-care

SECTION 2: Demographic and Psychosocial Considerations in Depression Care

Psychosocial stressors

- Serious adverse events – especially involving loss of a major relationship or role may trigger a major depressive disorder (particularly true for initial episodes of depression).
- Lower socioeconomic status, living alone, unemployment, urbanization, and violent trauma may increase the risk of major depression.

Gender

- **Depression disproportionately affects women.**
  - » Consider the role of hormonal fluctuations in depressive symptoms in premenopausal women.
  - » Consider the potential for oral contraceptive interactions with antidepressants.
  - » The perimenopausal transition is a high risk period for new onset major depressive disorder.
  - » Consider SSRI or SSNI to decrease somatic symptoms in perimenopausal women.
- **Gender-specific antidepressant risks:**
  - » Priapism in men treated with trazodone
  - » Anticholinergic side effects in benign prostatic hypertrophy
  - » Specific effects on libido in both genders
  - » Ejaculatory dysfunction associated with antidepressants
  - » TCA dosage may need to be higher in women who take oral contraceptives

Bereavement

Bereavement can trigger major depression but normal grief should not be confused with depression.
- Acute grief usually resolves after a period of about 6 months.
- Complicated grief may warrant treatment with psychotherapy and/or medication.

Comorbid medical considerations

- Consider **medical and medication causes** of depressive symptoms.
- Treated or untreated **hypertension** may affect the choice of antidepressant.
- Depression increases the risk of **cardiovascular disease**.
- Patients with depression have a higher mortality rate after **myocardial infarction**.
- The risk of depression increases in the weeks and months following a **stroke**.
- Major depressive disorder occurs in 40-50% of patients with **Parkinson's disease**.
- Major depressive disorder increases the risk of unprovoked seizures in patients with **epilepsy**.
- Major depressive disorder may be more common in patients with **obesity** (especially women). Consider the potential for weight gain with certain antidepressants. Address how depressive symptoms affect efforts to

follow a healthy diet and exercise plan.
- Depression may lead to poor treatment plan adherence in patients with **diabetes**.
- **Sleep apnea** may contribute to depressive symptoms, especially in patients who are obese, report excessive daytime sleepiness, or who have treatment-resistant depression.
- Rates of depression are increased in patients with **HIV infection**.
- **Pain syndromes** frequently co-occur with depression; more than half of depressed individuals report some type of pain.
- Depression commonly co-occurs with **dementia**; mood symptoms may precede cognitive symptoms.
- Depression is associated with worse functional outcomes in **hip fracture** recovery.

Older Age

- Older adults may report more vegetative signs and cognitive disturbance and less subjective dysphoria.
- Older adults may be more sensitive to antidepressant medication side effects.
- Generally start with a lower dose of antidepressant medication.
- Consider renal and hepatic function when prescribing antidepressant medications.
- *Suicide risk is higher in older adults with major depression. Elderly white men have the highest rates of completed suicides.*

Pregnancy/Postpartum

During the pregnancy and postpartum periods **10-15%** of women will experience a major depressive disorder.

- *50% of pregnancies in the U.S. are unplanned.*
- Untreated postpartum depression places both the mother and infant at risk and is associated with significant long-term effects on child development and behavior.
- Planning depression treatment during the perinatal period requires an individualized risk/benefit discussion.
- Depression focused psychotherapy such as Interpersonal Therapy (IPT) or Cognitive Behavioral Therapy (CBT) is recommended for treatment of depression during pregnancy; however medication should not be avoided if symptoms are intolerable.
- The American Academy of Pediatrics' (AAP's) Committee on the Psychosocial Aspects of Child and Family Development recommends that pediatric providers should integrate screening for postpartum depression into well-child visits.
- The MedEd Postpartum Depression (PPD) website offers information on all aspects of perinatal depression care, including patient/family education materials: http://www.mededppd.org/default2.asp
- Medication choices for pregnancy/postpartum: http://healthteamworks-media.precis5.com/depression-pregnancy-med-chart

Cultural considerations

- Consider language barriers and the importance of accurate, sensitive interpreter services.
- Culture may influence expression of depression symptoms – particularly somatic and psychomotor symptoms.
- In some cultures depression symptoms may be more likely to be attributed to physical illnesses.
- Ask the patient, "How do you understand what you are experiencing?"
- There is greater stigma associated with a depression diagnosis and with receiving services from a psychiatrist

and/or mental health professional in some cultures.

Additional information on treatment considerations and recommendations: **American Psychiatric Association (APA) Practice Guideline for the Treatment of Patients With Major Depressive Disorder** (available on the HealthTeamWorks website: http://healthteamworks-media.precis5.com/apa-depression-guideline-2010)

SECTION 3: Prepare your practice for effective depression care

Primary care and mental health are inseparable. Recognizing depression or other mental health conditions must begin with symptom identification and diagnosis. Screening is one important way to identify possible depression; however, screening alone does not lead to positive clinical outcomes. The United States Preventive Services Task Force (USPSTF) recommends screening for depression in primary care *when there are staff assisted mechanisms in place for accurate diagnosis, treatment and follow-up* (B Grade recommendation).

Implement staff assisted mechanisms for diagnosis, treatment and follow-up:

1. **Assemble a practice team.**
   Include one or more clinicians and practice support staff.

2. **Develop an operational plan.**
   - Determine ***who*** will receive screening: All patients? All new patients? All patients in for a health maintenance visit? Select populations? Only when depression suspected?
   - Determine ***how*** to administer and document the PHQ-2/9: Self-administered on a written form? Orally administered? Using an electronic tool or EHR?
   - Determine ***where*** to administer the PHQ-2/9: Waiting room? Exam room?
   - Determine ***who*** will help coordinate depression care and how that will happen: See next section for more information

3. **Design a workflow for depression diagnosis, treatment and follow-up.**
   Assign specific responsibilities to different members of the practice team, such as:
   - Administer screening and assessment questionnaires to patients, including scoring the PHQ-9 and entering the information into an EHR.
   - Compile patient education resources.
   - Maintain adequate supplies of PHQ- 2/9 forms, depression tracking logs, and patient education materials.
   - Maintain accurate information about options for referral to specialists, mental health services and community support services.
   - Compile information about health plan depression care coverage.
   - Provide education about depression, healthy lifestyle and depression treatment to patients and family members.
   - Assist with scheduling and communication about appointments with the primary care clinician, psychiatrist, and/or behavioral health providers.
   - Carry out structured protocols to monitor depressive symptoms (with the PHQ-9), adherence to treatment and referrals, and medication side effects. This may be done by telephone in some cases. Establish a clear process for documentation and communication with the providers.
   - Consider using a registry or EHR registry functionality to track patients who have a diagnosis of depression.

4. **Establish relationships with mental health providers.**
   Establish relationships with mental health providers in your medical neighborhood to promote collaboration and communication. Suggestions:
   - Invite mental health providers to visit the primary care practice to introduce themselves and their specific expertise.
   - Identify referral options for specific patient demographics, such as older adults, postpartum patients, or patients with specific language and cultural needs.
   - Establish referral and communication protocols that address confidentiality, sharing of information, and bidirectional communication. Note that mental health providers will need to address state and federal confidentiality and privacy requirements.

Sample workflow coming soon (check HealthTeamWorks website).

SECTION 4: Mental health services and benefits information

Assess benefits information:

Health plans often specify "in network" mental health providers and parameters of the services that will be covered (such as number of visits, emergency care, and inpatient services).

- Compile and maintain a list of available and most accessible mental/behavioral health therapists and psychiatrists in your region.
- Include information about language, insurance options, and accessibility for patients with disabilities, and providers that work with adolescents.

Resources:

- To identify the **Community Mental Health Center** in a catchment area and identify resources for behavioral health and psychiatric services: go to the Colorado Behavioral Healthcare Council's website: www.cbhc.org. Click on "About Us" and drop down to "Community Mental Health Centers List". An individual who has **private health insurance** has the option of pursuing treatment with anyone credentialed with that insurance company. Patients should contact their insurance company to identify a provider in their geographical area (this will frequently include the local mental health centers).
- An individual who has **Behavioral Health Medicaid** must go through the organization that manages Medicaid (the BHO) for their catchment area. That information is available at: www.cbhc.org. Click "About Us".
- An individual who is **uninsured** must go to community agencies that accept uninsured patients. A list of these resources is frequently available through the mental health agency in your catchment area.
- Additional resources may be accessed through the **community hospitals** in your area.

SECTION 5: Helping individuals change behaviors

The way we interact with individuals about behavior change has a significant impact on whether each person will actually be motivated to take steps that will improve their health and well being. *Empathy is at the core of effective conversations about behavior change*. A motivational interviewing approach collaborates with an individual to help them connect to their own intrinsic motivation and best reasons to change.

Ambivalence about change is completely normal. And change is not a linear process, but most often a set of steps and setbacks before actual change is accomplished. In conversations about change, it is important to "roll" with any resistance that comes up. The idea is to let the patient argue for change, not you! First, the provider demonstrates *genuine curiosity* about an individual's values, priorities, strengths, fears, and past successes and challenges. Then, the provider helps the person develop goals and a plan that is congruent with their readiness, abilities, assets, resources and priorities.

Specific techniques and examples:

Ask permission to give feedback and advice.

Examples:

» "Would it be alright if I gave you some feedback/education about how alcohol could be related to the depression?"

» "Could we talk about diet, exercise and sleep as part of your treatment plan for depression?"

Open-ended questions.

Examples:

» "What do you already know about depression?"

» "What concerns do you have about the treatment options we've discussed?"

Affirmations (of core values and strengths).

Examples:

» "Your health is very important to you."

» "You really care about being responsible and available to your family."

Reflections (of verbal and nonverbal statements about health, behaviors, and feelings).

Examples:

» "You feel worried about what your family will think about a diagnosis of depression."

» "You feel that taking a medication for depression is a sign of weakness."

» "It just feels overwhelming to have to do so many things to take care of your health."

Ruler questions

Examples:

» "On a scale from 0-10, how important is it to you to begin to get some exercise every day as a way to help treat the depression?"

» ***Followed by:*** "So, why a 4 and not a lower number?"

This is to get the individual talking about their desire, ability, reasons, or need to change.

» "On a scale from 0-10, how confident do you feel that you will be able to take the next steps and begin to get some exercise every day as a way to help manage the depression?"

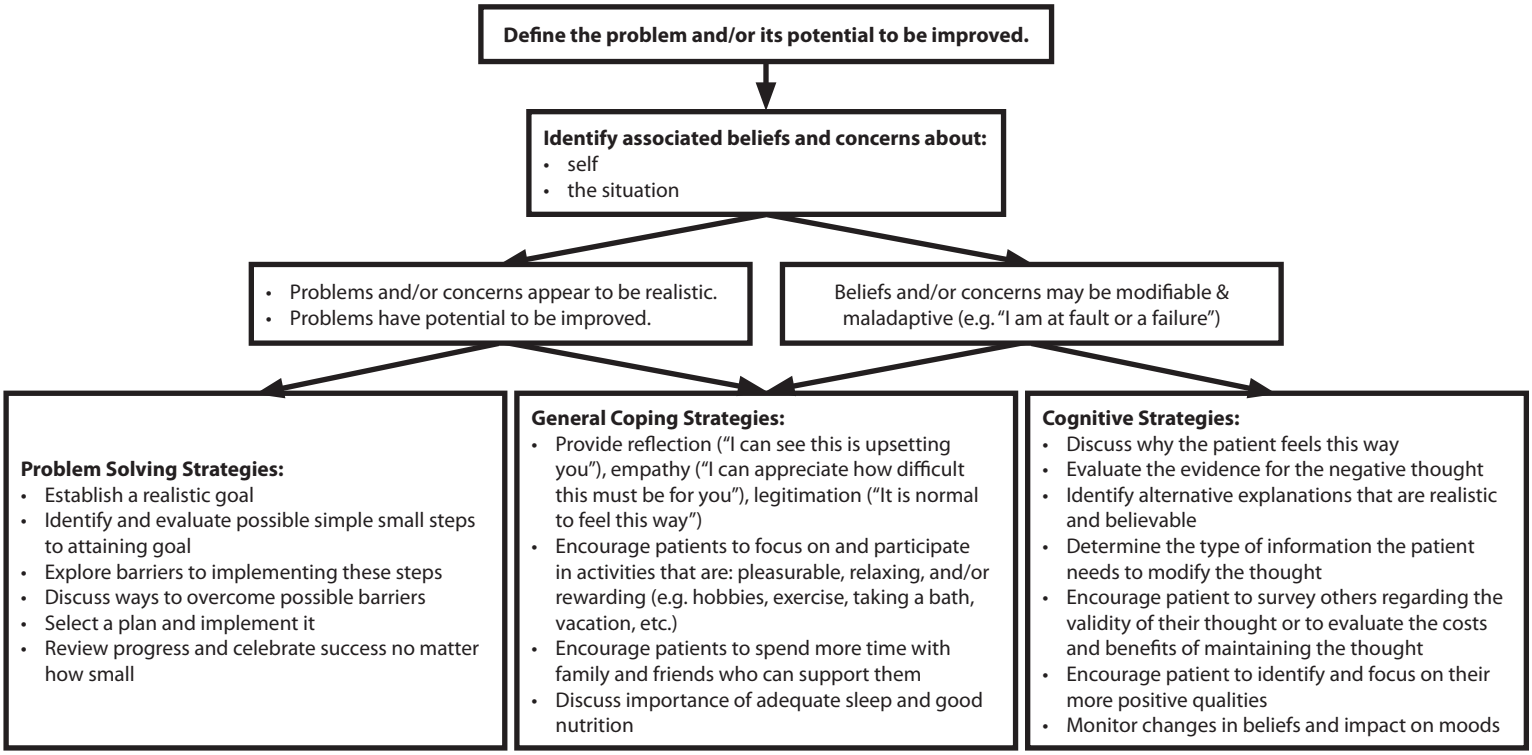
» ***Followed by:*** "What would help you to feel more confident about taking the next step and starting to exercise?"

This is in order to identify concrete ways to help the individual set goals and make a plan.

SECTION 6: Brief supportive counseling in primary care

Brief supportive counseling interactions, lasting only a few minutes, can be carried out by different members of a practice team (including lay health workers). In the interaction the practitioner explores the context and stressors related to an individual's current problem(s), the physical and emotional effects, and then helps the individual solve problems and adopt healthy self-care practices.

Problem Focused Counseling Guideline



Reference: Brody DS, Thompson TL, Larson DB, et al Strategies for Counseling Depressed Patients by Primary Care Physicians. J or General In Med 1994; 9:569-575.

SECTION 7: Co-occurring Psychiatric and Dependence Disorders

Tobacco dependence

- Patients with a history of major depressive disorder may be at risk for recurrence when they attempt tobacco cessation.
- Use the **PHQ-9** to monitor depressive symptoms throughout the process of tobacco cessation.
- Develop a tobacco cessation plan that also addresses depressive symptoms.
- Buproprion and nortriptyline increase tobacco cessation by about two-fold.
- Provide education about the temporary risk of depression relapse, the importance of tobacco cessation, and available support services and treatments.
- Multiple methods are more effective than single methods for tobacco cessation (e.g. QuitLine services + medication).

Substance abuse

- Frequently co-occurs with depression
- It may be difficult to distinguish substance-induced depressive disorder from major depressive disorder.
- Use the HealthTeamWorks **Screening Brief Intervention Referral to Treatment (SBIRT) Guideline**: http://www.healthteamworks.org/guidelines/sbirt.html to assess the use of alcohol, illicit and prescription drugs.
- Current recommendation: Treat both disorders simultaneously and actively (SAMHSA).
- These patients are more likely to require inpatient treatment.
- There is a greater risk of suicide in these patients.
- These patients are less likely to adhere to treatment.
- Substance abuse treatment options in CO: www.LinkingCare.org *(CO Division of Behavioral Health web portal)*

Anxiety disorders

- The most commonly co-occurring disorders in patients with major depression (may co-occur in ~60% of patients with depression)
- Treatment:
  - » Both anxiety and depression may respond to antidepressant medication.
  - » TCAs and SSRIs may initially worsen rather than alleviate anxiety. Introduce medication at a low dose and advise the patient about possible initial increased anxiety symptoms.
  - » Adjunctive medication (e.g., benzodiazepines) may be necessary.
  - » Psychotherapies- in particular CBT and IPT may be useful (see psychotherapy section for more information).

Dysthymic disorder

- A chronic mood disorder with symptoms that fall below the threshold for major depressive disorder
- May co-occur with major depression ("double depression")
- Treatment: Similar as for major depression; may respond best to medication + therapy

Dementia

- All patients with dementia should be screened for depression (if cognitive status allows).
- Carefully monitor pharmacotherapy in patients with dementia.
- Antidepressants are likely to be efficacious even though they are unlikely to improve cognition.
- Antidepressants with the least anticholinergic effects are recommended.
- ECT may be helpful for some patients with co-occurring depression and dementia.
- For current criteria and guidelines for Alzheimer's Disease diagnosis: http://www.alzheimersanddementia.org/content/ncg

Eating disorders

- Eating disorders are common in patients with major depression.
- SSRIs are the best studied medications for the treatment of eating disorders. Fluoxetine has the most evidence for the treatment of bulimia nervosa.
- Antidepressants may be less effective in patients who are severely underweight or malnourished.

For additional information on treatment considerations and recommendations see the ***American Psychiatric Association (APA) Practice Guideline for the Treatment of Patients With Major Depressive Disorder*** available on the HealthTeamWorks website: http://healthteamworks-media.precis5.com/apa-depression-guideline-2010.

SECTION 8: Complementary and Alternative Medicine (CAM)

"CAM is a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine." (*NIH National Center for Complementary and Alternative Medicine*).

Complementary therapies refer to those that are not considered mainstream but are consistent with Western biomedical concepts.
Alternative therapies are more philosophically separate from traditional Western medical practice.
Integrative medicine incorporates standard Western medicine and CAM to use all therapies that are considered appropriate for an individual's needs.

- Currently at least 40% of adult Americans use at least one CAM treatment annually and major depressive disorder was the most common diagnosis associated with CAM use in one study.
- Clinicians should routinely ask patients about CAM treatments they may be using to treat depressive symptoms since patients may not disclose use of nonconventional treatments.
- Consider that in some patients use of CAM modalities that may not be efficacious may delay initiation of other efficacious depression treatment(s).

A resource for checking the quality of supplements is the **Natural Medicines Comprehensive Database**: http://naturaldatabase.com. Use of this database requires a subscription.

The PDR publishes a guide on herbs and supplements.

Direct patients to select supplements with the GMP and/or USP stamps to insure quality.

5-HTP and tryptophan

Evidence is lacking on the effectiveness of tryptophan for depression. It was banned by the FDA in 1989 due to an outbreak of Eosinophilia-Myalgia Syndrome (EMS). Some studies suggest that 5-HTP may be an effective treatment for depression (perhaps comparable to prescription antidepressants); other studies have not found a benefit. It can have serious adverse effects just like prescription antidepressants. There is also concern regarding possible contaminants. Potential dangers may outweigh any possible benefits.

Acupuncture

Acupuncture is part of traditional Chinese medicine. There is significant variation in acupuncture techniques.

- Evidence for the efficacy of acupuncture as a primary treatment for depression is inconclusive.
- This is a challenging modality to study adequately in randomized control trials.

Exercise

Exercise is well established for its contribution to overall health.

- Aerobic and nonaerobic exercise have positive effects on mood in men and women across a wide age range.
- Exercise may help prevent depressive symptoms during the antepartum or postpartum period.
- Exercise may also help prevent relapse and recurrence of depression.

Folate

Folate has been studied as a predictor of antidepressant medication response and as an adjunctive treatment.

- Higher folate levels at treatment baseline appear to be associated with better response to antidepressants.
- Folate is a low-risk intervention with general health benefits, including protection against neural tube defects in early pregnancy.
- There is no evidence about the efficacy of folate as a monotherapy for antepartum or postpartum depression, or for depression during the menopausal transition.

Light therapy

Bright light therapy is an evidence-based, effective, and well tolerated treatment for seasonal affective disorder.

- The mechanism is unclear but appears to involve the serotonergic neurotransmitter system.
- In general, this may be a reasonable treatment option for nonseasonal depression.
- Light therapy may hasten the response to antidepressant medication.
- Greater intensity of light is associated with efficacy.
- Monitor for mania and hypomania during initiation of light therapy.
- More research is needed in order to determine the efficacy of this method for nonseasonal depressive conditions specific to women (PMS, antepartum and postpartum depression, postmenopausal transition

depressive symptoms).
- The preferred apparatus is a commercially produced fluorescent box with a light intensity of 10,000 lux.
  - » To use: sit in front of the downward tilted box situated 12-14 inches from the eyes.
  - » The starting dose is 10,000 lux for 30 minutes in the morning.

Mindfulness and other mind-body therapies

- Mindfulness-based cognitive therapy may decrease symptoms of depression and anxiety and shows promise for preventing depression relapse and recurrence.
- Other mind-body therapies that show promise in the treatment or depression and anxiety and may play promote overall health include meditation, Qigong, Tai Chi, yoga, and biofeedback and neurofeedback.

Omega-3 fatty acids

Generally recommended as an adjunctive therapy since the health benefits, especially for cardiovascular health, are established, and individuals with psychiatric disorders may be at greater risk for obesity and metabolic problems than the general population.

- Adjunctive EPA, or the combination of EPA and DHA (what is found in most commercial brands) appears most useful for depressive disorders.
- Dosages from 1-9 grams have been studied and the evidence supports lower doses.
- Omega-3 fatty acid supplementation is a reasonable augmentation strategy in depression treatment.
- Evidence is sparse concerning Omega-3 fatty acids for PMS, antepartum and postpartum depression, or depressive symptoms during the menopausal transition.

S-adenosyl methionine (SAMe)

SAMe is a naturally occurring molecule. Cerebrospinal fluid levels of SAMe are lower in individuals with severe major depressive disorder compared with control subjects.

- Some data support the efficacy and tolerability of SAMe in patients with major depressive disorder.
- More research is needed to determine the comparative efficacy of SAMe to standard antidepressants.
- Available preparations are not regulated by the FDA and formulations may vary widely.
- SAMe may be effective for treatment of depressive symptoms during the menopausal transition.
- Safety and efficacy of SAMe for antepartum depression or in women who are breastfeeding has not been adequately studied.

St. John's Wort

St. John's Wort is a plant that is widely used to treat depressive symptoms.

- There is conflicting evidence for the effectiveness of St. John's Wort.
  - » The available evidence suggests that it may be superior to placebo in major depression, similarly effective as standard antidepressants, and have fewer side effects than standard antidepressants.

» Overall, studies show greater support for benefits in mild-moderate depressive disorder and less consistent findings in patients with more severe symptoms.

- *Drug-drug interactions are an important consideration*. The efficacy of some medications may be decreased by St. John's Wort, including antiretroviral medications, immunosuppressants, antineoplastic agents, anticoagulants, oral contraceptives, and hormone replacement therapy.
- St John's Wort is excreted in breastmilk at levels comparable with other antidepressants.

SECTION 9: Evidence-based mental health therapies for depression

	Cognitive/ behavioral therapies (CBT)	Interpersonal psychotherapy (IPT)	Problem-solving therapy (PST)	Couples/Family therapy	Psychodynamic therapy
Focus	How thoughts and beliefs influence depression and a person's behaviors. Usually short term.	How relationships and interpersonal events affect the onset or maintenance of depression. Usually short term.	Resolving everyday problems that may contribute to depression. Brief, structured treatment. Combines elements of CBT and IPT.	How relationships with family/ significant others can be a resource to help resolve depression. Family/significant others included in therapy.	On the etiology of psychological vulnerability that may lead to depression stemming from development and conflict throughout the life cycle.
Process	Recognize and change distorted beliefs and dysfunctional thinking to be more adaptive and healthy; change behaviors and solve problems that may contribute to depression.	Recognize and change patterns of social functioning that cause problems. Explore issues that may contribute to depression: grief, role transitions, interpersonal deficits or conflicts.	Improve ability of an individual to understand and cope with stressful life experiences, and resolve problems constructively.	Identify difficulties and conflicts that may contribute to depression and find ways to resolve w/ effective communication. Improve relationships to support depression treatment.	Address conflicts related to guilt, shame, interpersonal relationships, management of anxiety, and repressed or socially unacceptable impulses.

SECTION 10: Recommended patient education books and online resources

Important components of depression care:

- To help patients and their families understand and accept a diagnosis of depression.
- To activate patients to seek help, adhere to treatment recommendations, and practice healthy behaviors that can promote recovery.

Web sites:

1. **The MacArthur Initiative Depression Tool Kit**: http://www.depression-primarycare.org
2. **Medicine Plus Depression Tutorial**: http://www.nlm.nih.gov/medlineplus/tutorials/depression/htm/index.htm
3. **Depression Awareness Recognition and Treatment Program of the National Institute of Mental Health**: http://www.nimh.nih.gov/publicat/index.cfm
4. **National Foundation for Depressive Illness**: http://www.depression.org
5. **Mental Health America**: http://www.mentalhealthamerica.net/
6. **E-Couch**: http://ecouch.anu.edu.au/welcome
7. **MoodGym**: *Free online self help program; teaches cognitive behavior therapy skills*: http://www.moodgym.anu.edu.au/welcome
8. **National Mental Health Alliance**: http://www.nami.org

Self-help manuals and books:

Cognitive and behavior oriented self-help books have been shown to significantly improve symptoms of depression for up to 2 years. Recommended resources:

1. **Burns DD: Feeling Good The New Mood Therapy. Avon Books 1999.**
   Updated version; teaches a cognitive therapy approach to combating depression. Includes techniques to identify and combat faulty thinking, self assessment techniques, self help forms and charts and a section on medication.

2. **Hayes SC: Get Out of Your Mind and Into Your Life: The New Acceptance and Commitment Therapy. New Harbinger 2005.**
   A five-step plan for coping with painful emotions such as anxiety and depression. Patients learn to engage with painful thoughts and feelings through step-by-step acceptance and mindfulness.

3. **McKay M, Fanning P and David M: Thoughts and Feelings: Taking Control of Your Moods and Your Life: A Workbook of Cognitive Behavioral Techniques. New Harbinger 2007.**
   Offers a simple and easy to understand discussion on how to use the principles of cognitive behavioral therapies to control anxiety and depression and enhance self-esteem.

4. **Lewinsohn P: Control Your Depression (revised). Simon and Schuster 2010.**
   A classic text that helps patients identify specific areas related to their depression. Provides instruction on self control strategies, relaxation techniques, social skills training, and modification of self-defeating thinking patterns.

5. **Katon W, Ludman E, Simon G: The Depression Helpbook. Bull Publishing Co. 2008.**
   Explains what causes depression, how to recognize it, and how to make decisions about treatment. Integrates pharmacologic and psychotherapeutic approaches; emphasizes self-care strategies to help develop confidence in one's ability to manage depression.