The primary care clinician has many first line options in actively providing care for the depressed child or adolescent:

- The diagnosis of depression can be made with a good behavioral history (see behavioral interview module) and the use of depression questionnaires several of which are displayed in the depression questionnaires module.

- The next step after diagnosing childhood or adolescent depression is to provide education to the child and family about depression.

  a. Depression is an illness (analogous to other forms of chronic disease with both exacerbations and remissions)
     i. Typical course is 9 months
     ii. 20-40% relapse in 2 years, 70% relapse in adulthood
  b. Interpersonal therapy (IT) has been shown to be effective in treating depression in adolescents and cognitive behavioral therapy (CBT) have both been shown to be effective in treating depression in both children and adolescents.
  c. SSRIs are the first line of pharmacologic treatment for depression. Fluoxetine has FDA approval for depression in children age 7 years and above and Escitalopram is approved for children age 12 years and above.
  d. Seasonal affective disorder may be helped with a light box
     i. (Addendum 3)
  e. The goals of treatment are to:
     i. Shorten the acute episode and minimize impairment
     ii. Facilitate remission and recovery
     iii. Prevent recurrence
  f. Address perpetuating factors:
     i. Family discord and personal stressors can exacerbate depression
ii. Discourage harsh punishments, which can exacerbate depression

g. Review the risks of suicide: (see below)
   i. need for close parental supervision
   ii. keep medications and firearms locked up, or remove firearms from the house

• The basics: nutrition, exercise and sleep
  a. Emphasize the need for good nutrition
  b. Fish oil supplementation may be helpful
  c. Daily exercise may improve mood
  d. Ensure adequate sleep: recommended average sleep times (adapted from Ferber, “solving your child’s sleep problems”)
     i. >/= 17 years old: 8 ¼ hours minimum
     ii. 14-17 years old: 8 ½ to 9 hours
     iii. 9-14 years old: 9-10 hours
     iv. 5-9 years old: 10-11 hours

• Limit the amount of dysfunction caused by the depressive episode at school and home
  a. Keep teachers informed regarding the diagnosis and alert them to depression symptoms such as irritability which may be misinterpreted as disruptive behavior
  b. Consider working with the school to develop a 504 classroom accommodation plan
  c. Improve communication in the home and avoid arguments caused by a child with a depressed or irritable mood (see family and communication module)

• Help the patient to cope with depression
  a. Encourage the patient to list out and prioritize the things that are most bothering them and help them to problem solve how they will deal with these issues.
  b. Try to identify situations or stressors that lead to low mood and try to avoid them or learn to respond to them in a different way.
  c. Recount positive events that have happened during the day
The practitioner can also instruct parents to have their children tell them 1-2 good things for every bad thing that they mention.

d. Journaling may be helpful for adolescents; writing down concerns as well as writing something positive on a daily basis may help to put things into perspective.
e. Help the patient identify supportive family and friends that they are comfortable turning to when needed.

- **Normalize activities**
  a. Encourage activity and monitor mood
     i. avoid letting the patient stay home alone
     ii. make sure they go out and participate in fun activities or things that they do well
     iii. have them document their mood on a scale from 1-10 before and after the activity

- **Encourage positive and pro-social behaviors**
  a. Encourage the patient to do something good for someone else (help others) in a situation where they can receive praise
     i. Help a neighbor carry something, rake a lawn, shovel snow, walk a dog, watch a child (if mature enough), volunteer
  b. If the family has a pet, encourage the patient to take a more active role in caring for it (especially walking for exercise and daylight, or giving comfort to the pet)

- **Family Interventions**
  a. Help parents understand that depression and the resulting behavior is not a choice their child is making that can be easily changed with logic or punishments
  b. Encourage marriage counseling if there is parental discord
  c. Identify parental depression and encourage treatment
  d. Improve communication in the family (see family and communication module)
• Manage daily behavior
   a. Limit internet use and watch for cyberbullying and sexting
   b. Provide positive reinforcement for all positive behaviors (e.g. helping around the house, acting nicer to a sibling, re-engaging with school work, returning to sports, etc.) - start with 1-2 behaviors at a time
   c. Avoid punishment or harsh consequences
      i. Depressed children are more sensitive to criticism and negative consequences
      ii. Reframe the time out method as “quiet time to cool off”, rather than as a punishment (use with 1, 2, 3 Magic technique - see discipline module)

• Establish a safety plan
   a. Inquire about suicidality in front of the parents to set an example for them and also inquire with the patient alone.
      i. Assess for suicidal ideation: “Do things ever get so bad you have thought about killing yourself?”
      ii. Does the patient have a plan? “What have you thought about doing?” and if so, assess means to stated plan.
      iii. Assess for history of suicide attempt and parents’ response
   b. Suicide contract (no evidence this works)
   c. Remove weapons (firearms), medications and alcohol from the home
   d. If the patient has a plan and/or history of suicide attempt, consider immediate referral for psychiatric care

• Identify and address co-existing problems
   a. Is there an underlying learning disability? A child who claims that he/she is no good at school may be the resultant cognitive distortion of a depressed and perfectionistic child or it may be a youth with a learning disability that has never been diagnosed.
   b. Identify and treat co-morbidities: 40%-90% have one comorbid disorder, 20%-50% have >=2 comorbid disorders
      i. MDD follows dysthymia or anxiety disorders
      ii. MDD precedes substance abuse disorders and conduct disorder
c. **Identify and address social skills deficits** - does the child have difficulty with peer interactions?
   Parents can:
   i. Help improve play skills if needed (teach skills, rules of the game, encourage practice, supervise 1:1 interactions)
   ii. Plan activities that are attractive to other children

   d. Relaxation training such as deep breathing, progressive muscle relaxation, and visual imagery may be helpful in reducing co-existing anxiety (see anxiety module)

   - **Help the patient to identify and address cognitive distortions**
   Some patients view their lives through a filter of cognitive distortions that lead to self-defeating, erroneous perceptions and conclusions. Patients with depression often have a pessimistic view that “anything that can go wrong, will go wrong”. They may predict negative outcomes regardless of contrasting evidence. This in turn may lead to a self-fulfilling prophecy of negative outcomes which further reinforces the belief that things always go wrong.
   
   There are several common cognitive distortions seen in depressed patients:
   a. **Overgeneralization** (i.e. “I can’t make friends”, “I always mess up”, “No one cares about me”, “I can never be happy”)
      i. The practitioner can help patients to [*recognize*] when they are overgeneralizing
      ii. The practitioner can [*challenge*] such thinking by asking questions such as “What evidence do you have that you always mess up? “Do you have any evidence to the contrary, that you can do things successfully?” “Can you think of a time when you did something well?”
      iii. The practitioner can also instruct parents to have their children tell them 1-2 good things for every bad thing that they mention (and provide positive reinforcement for this)
   b. **All or Nothing Thinking**: Patients with depression may place themselves in either/or categories. Failing a test makes them totally stupid, not being athletic makes them a total wimp, and being teased makes them a total loser.
i. The practitioner (Addendum 2) can help the patient see finer gradations by drawing a line and placing extremes at the end points (i.e. total jock on the right and total wimp on the left). The patient can specifically list the criteria that defines each extreme and place people he knows (including himself) somewhere along the line. This helps patient attain a more realistic assessment of how they actually fit in with peers.

c. Internal attributions for failures and external attributions for success: A depressed girl may blame herself for the fact her team lost a lacrosse game. However, when her team wins, she downplays her part in the victory.
   i. The practitioner can challenge the patient by asking if there is an alternate explanation or a different way to look at the situation
   ii. The practitioner can help the patient create a “responsibility pie”. (Addendum 1) The patient is asked to list all things that could have contributed to the outcome and divide them up in a circle, assigning a larger chunk of the circle to the things they deem most responsible for a given outcome. Older children can subdivide a circle drawn on paper, younger children may want to cut up different size wedges to create a circular pie.

- Assist families in seeking mental health resources in the community and work to collaborate with mental health consultants. (see Making a Mental Health Referral module)
  a. Mental health referrals are appropriate if:
     i. patient has moderate to severe depression
     ii. patient is suicidal or engaging in risk taking behavior
     iii. parents are displaying significant marital discord or psychopathology
     iv. practitioner is not comfortable managing the patient
     v. patient or family request a referral
     vi. patient is not responding to brief primary care interventions
ADDENDUM

Cognitive Therapy techniques adapted from: Friedberg & McClure “Clinical Practice of Cognitive Therapy with Children and Adolescents” The Guilford Press 2002

Addendum 1: “Responsibility Pie” (Friedberg & McClure pg 141).

Reasons the team lost the lacrosse game:

Before: “It’s all my fault”

After:

My fault
 /
Other team had good defense

Goalie let puck past

(Child is asked to create a responsibility pie including various reasons their team lost. A similar pie could be created for a child who feels they are responsible for their parents’ divorce. The pie provides an opportunity for the child to examine patterns of self-blame and attain a more realistic assessment of their role in events around them.)

Addendum 2: All or nothing vs. Gradations (Friedberg & McClure)

<table>
<thead>
<tr>
<th>Total wimp: picked last for gym</th>
<th>Me: not picked last, not captain</th>
<th>Total jock: picked captain</th>
</tr>
</thead>
</table>

(Child is asked to place themselves and people they know along the continuum between extremes and attain a more realistic assessment of how they actually fit in with peers)
Addendum 3: Light Therapy and Seasonal Affective Disorder
(Saeed & Bruce “Seasonal Affective Disorder” American Family Physician 1998)

- 10,000-lux light box directed toward the patient at a downward slant.
- The patient's eyes should remain open throughout the treatment session, although staring directly into the light source is not advised.
- Start with a single 10- to 15-minute session per day, gradually increasing the session's duration to 30 to 45 minutes.
- Ninety minutes a day is the conventional daily maximum duration of therapy, although there is no reason to limit the duration of sessions.
- Commercially available fixtures are recommended over homemade devices to reduce electric risks associated with poor-quality construction. Commercial fixtures also include features designed to protect the eyes, such as light dispersion and screens that eliminate ultraviolet (UV) rays.
- Fluorescent light is preferred over incandescent because the small point source of the latter is more conducive to retinal damage. Use of "full-spectrum" light appears to be unnecessary.
Evidence-based Treatment: Treatment of Adolescent Depression Study (TADS)

Rates of response:
- 71% for combination Fluoxetine and CBT
- 61% Fluoxetine alone
- 43% CBT alone
- 35% placebo

Improvement in suicidal ideation
- Greatest for the combination of Fluoxetine and CBT
- Least for Fluoxetine: Fluoxetine however did not appear to increase SI

Benefit to risk ratio:
- 17:1 for the combination of Fluoxetine and CBT
- 5:1 for Fluoxetine alone

Role of Pharmacotherapy

1. Initiation
   a. Fluoxetine - 10mg for 1 week, then 20mg for 3 weeks
   b. Monitoring: weekly x 4 weeks, every 2 weeks for next month, and end of 12th week
   c. Minimal/no response: total trial should not exceed 4-8 wks
      i. Rule out non-compliance, medical illness, psychosocial stressors, rapid metabolizer
      ii. Change SSRI or refer to a child/adolescent psychiatrist
   d. Partial response: trial up to 12 weeks
      i. Increase dose if necessary (max 40 mg per day)

2. Acute Treatment phase should continue until symptoms resolve (not just improved)
   a. Continue to monitor for suicidality, mania, treatment response monthly

3. The patient is in remission when symptoms resolved- continue treatment for 6-12 months
   a. Continue to monitor for suicidality, mania, treatment response

4. Maintenance (for patients with recurrent or chronic MDD)
   a. Continue to monitor for suicidality, mania, treatment response

5. Discontinuing
   a. Discontinue meds during a stress-free time in school/life such as during the summer vacation
   b. After the patient has been in remission for 6-12 months
c. Taper no more than 25% per week

d. Monitor q 2-4 months; relapse is most likely in the first 8 months

e. Watch for recurrence

f. Teach patients and family to monitor for symptomatic response and relapse

6. Side Effects

a. Activation (agitation, disinhibition)

b. GI Symptoms (nausea, vomiting, diarrhea, abdominal pain)

c. Sexual side effects (delays in ejaculation, diminished libido)

d. P-450 interaction

   i. More with fluoxetine

   ii. Less with escitalopram

e. Bipolar Switching (patient may develop manic symptoms that begin after medication has been effective)

f. Suicidality 1.8X increased risk

   i. 3-4% drug, 2% placebo

   ii. Mostly ideation and threats, few attempts, no completions

g. Withdrawl symptoms

Withdrawl symptoms may occur in patients who abruptly stop medication. Symptoms include dizziness, electric shock like sensations, sweating, nausea, insomnia, tremors, confusion and nightmares.

Younger individuals metabolize SSRIs more quickly and may develop withdrawal symptoms particularly if they forget a dose or are taking too low of a dose.
References for Parents

- [www.parentsmedguide.org](http://www.parentsmedguide.org) (American Academy and Child Adolescent Psychiatry guide to use of antidepressants in children and adolescents with aggression)


Reference for Clinicians


- [www.glad-pc.org](http://www.glad-pc.org) (depression tool kit for pediatric primary care practitioners)