



## School-Based Health Center/Medicaid Program Guidelines for the Management of Depression

### ***Introduction***

According to a New Mexico study entitled, “*Behavioral Health Needs and Gaps in New Mexico*” (New Mexico Human Services Department, New Mexico Department of Health, Presbyterian *Salud!*, Lovelace Community Health Plan, and Cimarron Health Plan, 2002), 18,594 children and adolescents (ages 9 through 17) have a severe emotional disturbance. The same study reported that school-based health services “provide opportunities for access to services for children/adolescents who can or will not or who have parents who can or will not seek services in other ways”. The SBHC/Medicaid Program Advisory Board recognized such an opportunity through the program and included coverage of 10 behavioral health services.

In addition, the Board recognized treatment of depression, in particular, as a priority. To assist SBHC staff in responding to depression among the children and adolescents seen in SBHCs, the following guidelines were developed for the identification and treatment of depression or, when medically indicated, for referral to treatment outside of the SBHC. All Medicaid members who present to a SBHC for care and who have a diagnosis of depression should have a plan of care in place at the SBHC in accordance with these guidelines.

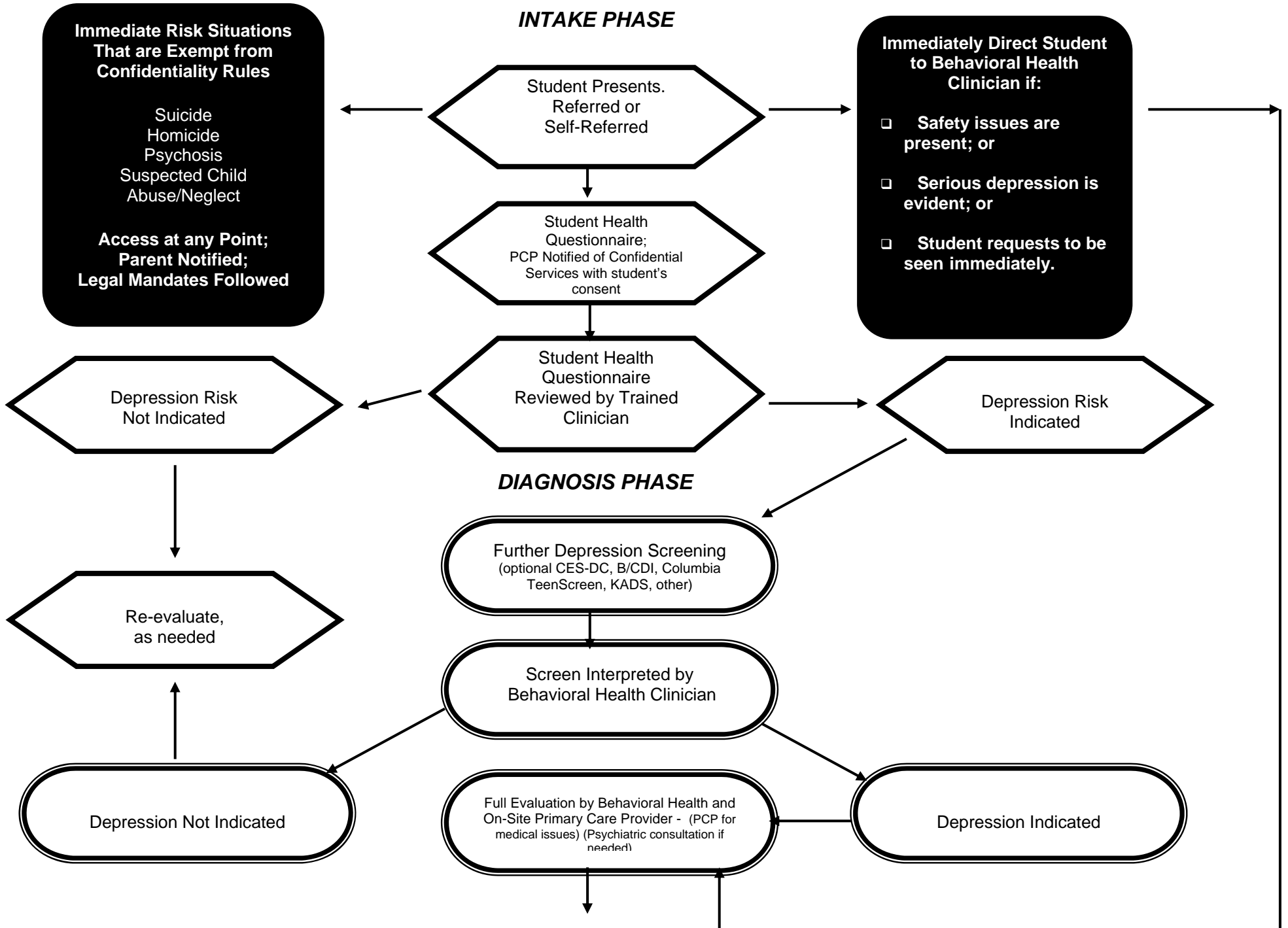
These guidelines include the following documents:

- Depression Assessment and Treatment Flow Chart
- Texas Children’s Medication Algorithm Project (TCMAP) Strategies for the Treatment of Childhood Major Depression
- Antidepressant Requirements and Guidelines.
- Antidepressant Doses for Acute Treatment of Major Depressive Disorder
- Table of Terms
- Legend/Glossary

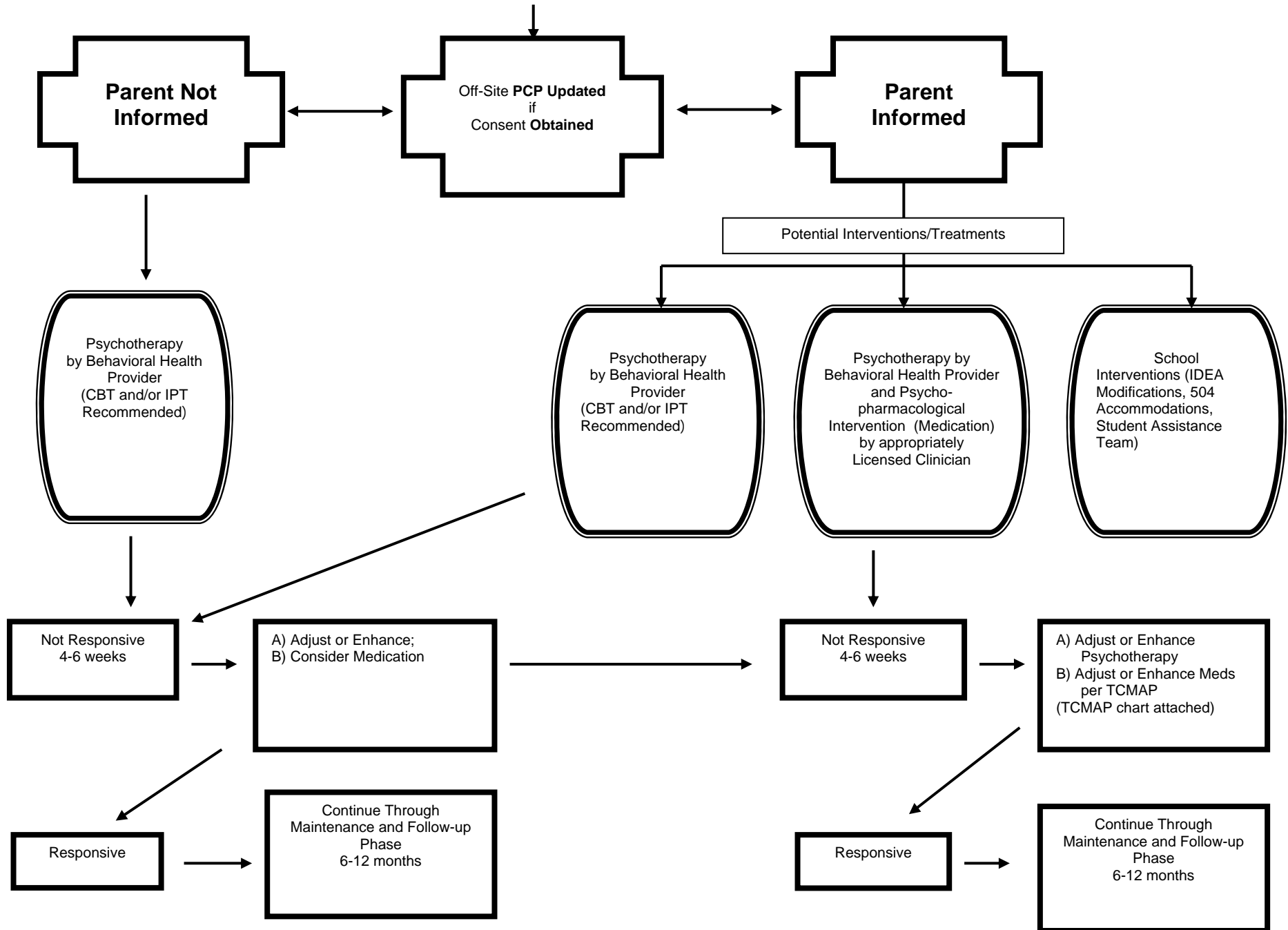
### ***Psychiatric Comorbidity***

The current revision encourages providers to consider co-occurring psychiatric disorders. When assessing a student with a depressive disorder, also evaluate for the possibility of posttraumatic stress, other anxiety, attention-deficit/hyperactivity, eating, and/or substance use disorders.

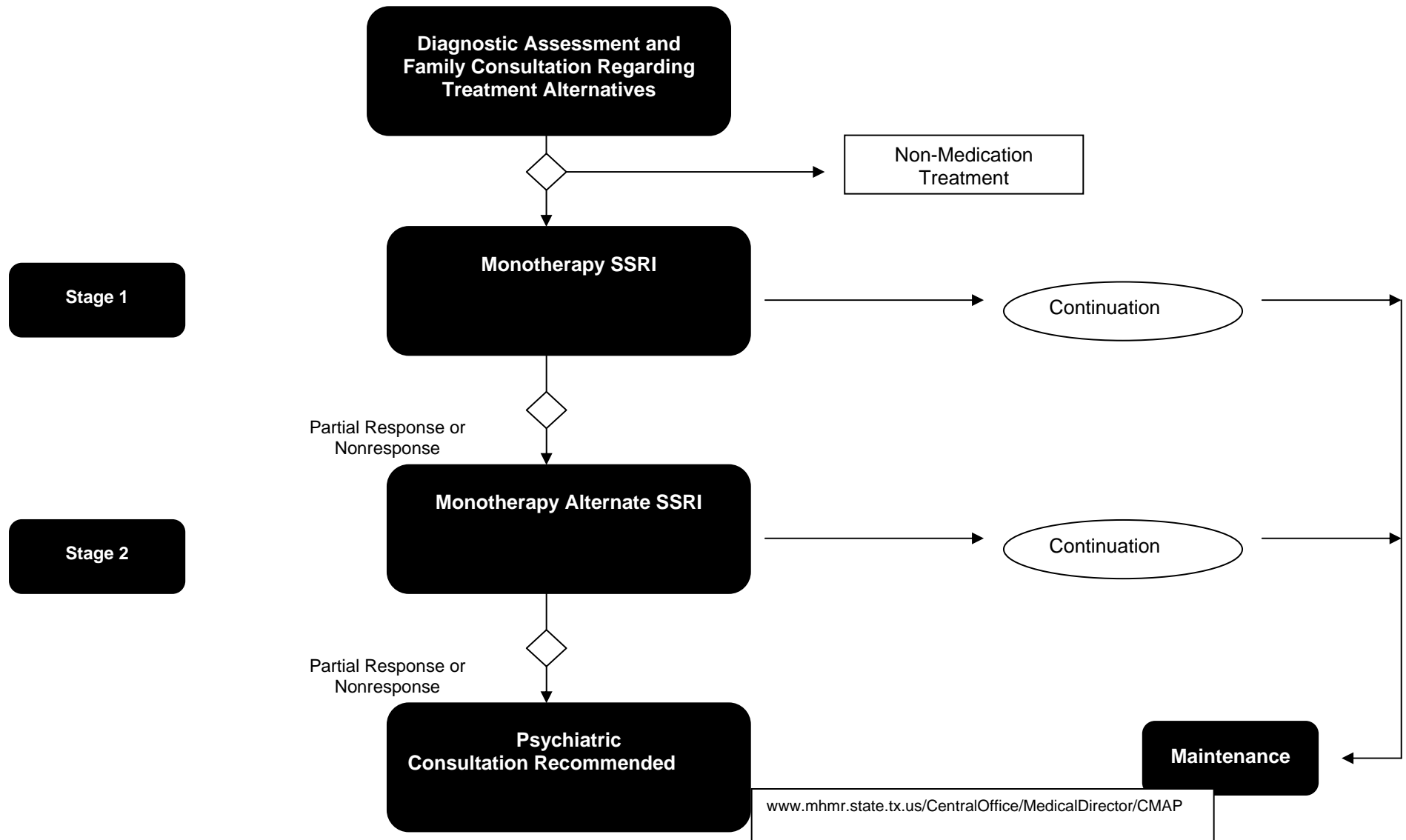
# DEPRESSION ASSESSMENT AND TREATMENT FLOW CHART



### INTERVENTION/TREATMENT PHASE



# Texas Children's Medication Algorithm Project (TCMAP) Strategies for the Treatment of Childhood Major Depression<sup>1</sup>



## **Antidepressant Requirement and Guidelines**

### **Requirements**

Before prescribing any psychotropic medication, the following needs to be discussed (as applicable) before informed consent is obtained:

Indications, Alternatives, and potential Benefits vs. Risks/untoward effects (IABR).

FDA Approved versus Off-Label prescription of psychotropic medications in the Standard of Care:

Fluoxetine is the only medication that is currently approved by the US FDA for pediatric depression. “Off-label” prescribing of the other listed antidepressants (except nefazadone) has become the standard of care. This is due to the limited clinical research (double blind studies) in pediatric psychopharmacology. Consequently, clinical acumen has been established from conclusions of the limited number of trials and extrapolations from FDA-approved indications, for adults and youth, that have been found to be clinically efficacious in youth.

The distinction between FDA-approved and off-label prescribing needs to be explained to students and their parents/guardians during the informed consent process. So does harmfulness, including the increased risk of suicidal thinking and behavior in youth associated with prescribed antidepressants, which is controversial and inconclusive. Balance risk with clinical need and emphasize the need for on-going clinical monitoring (follow-up visits and provider availability) and parent/family observation for clinical worsening, suicidality or unusual changes in behavior.

### **Guidelines**

SSRIs (sertraline, escitalopram, citalopram, fluoxetine) are preferable first choice for depression associated with substantial anxiety and comorbid/coexisting with an anxiety disorder (PTSD, GAD, Panic Disorder, Social Phobia, OCD, Anxiety NOS).

Venlafaxine (Effexor), a SNRI (serotonin-norepinephrine reuptake inhibitor), also has been effective treatment for both domains. Venlafaxine has been associated with sustained hypertension in some patients.

Initiate SSRI prescription at lower dose (e.g. sertraline 12.5mg child, 25 mg. adolescent) q AM. In the absence of interfering or very bothersome side effects, can advance to initial target dose (25 mg for child; 37.5 – 50mg for adolescent) q AM after 4 days to 1 week. If interfering or very bothersome daytime sedation develops, change to qHS (after skipping next morning’s dose). Taken at bedtime, sedative effects can improve sleep. When advancing an SSRI to higher doses, it is important to monitor for signs/symptoms of serotonin syndrome. Fluoxetine (Prozac) tends to be less calming for many youth, apparently, at least in part, due to its long half-life (increasing accumulation, cleared less quickly over time).

Bupropion (Wellbutrin), any preparation, has been found to be effective for melancholic depression, characterized by very low energy motivation, little positive affective reactivity, much difficulty concentrating, but not much associated anxiety. Novelty-seeking youth, such as those with dramatic personality traits and disruptive behaviors, have benefited from bupropion. BID dosing for the SR (sustained release) preparation is recommended to have approximately 8 hrs between doses, lending it to before and after school administration. Advise against administration after 5pm to avoid insomnia.

Reserve prescribing benzodiazepines for short term treatment of acute/severe anxiety, agitation, and/or insomnia. Choose SSRI to treat anxiety instead.

Both trazodone (Desyrel) at bedtime, for sleep, and buspirone (Buspar) BID or TID, for anxiety, can potentially augment the antidepressant and anti-anxiety efficacy of a daily SSRI regimen.

## Antidepressant Doses for Acute Treatment of Major Depressive Disorders for use with TCMAP

	Usual daily dose range (mg/kg/day)	Children (<45kg)		Adolescents (and Children >45kg)		Usual dose schedule
		Target dose to achieve by week 4 (mg/day)	Dose titration for partial or non-responders (mg/day)	Target dose to achieve by week 4 (mg/day)	Dose titration for partial or non-responders (mg/day)	
<b>SSRI</b>						
Fluoxetine (Prozac) <sup>1</sup>	0.5-1.0	5-20	30-40	10-20	30-40	qd
Sertraline (Zoloft)	1.5-3.0	25-75	100-200	50-100	150-200	qd
Escitalopram (Lexapro) <sup>1</sup>	N/A	5-10	10-20	5-10	10-20	qd
Nefazodone (Serzone) <sup>2</sup>	4-8	50-200	250-400	150-400	500-600	bid
Venlafaxine (Effexor)	1-3	25-100	150	37.5-225	375 max dose	bid-tid (conventional)
Venlafaxine Extended Release (Effexor XL)	1-3	25-100	150	37.5-225	225 max dose	qd (extended release)
<b>Other Antidepressant</b>						
Bupropion (Wellbutrin)	3-6 <sup>3</sup>	50-200	250	75-300	450 (conventional) <sup>3a</sup>	bid-tid (conventional) <sup>3a</sup>
Bupropion SR sustained release	3-6 <sup>3,4</sup>	50-200	250	75-300	400 (sustained release) <sup>3b</sup>	Bid (sustained release) <sup>3b</sup>
Bupropion XL extended release	3-6 <sup>3</sup>	50-200	250	75-300	450 (extended release) <sup>3c</sup>	q AM (extended release) <sup>3c</sup>

1. Higher doses of fluoxetine (Prozac) and escitalopram (Lexapro) have safely resulted in greater efficacy. This has become the standard of care in more intensive treatment settings.
2. Nefazodone: Due to the small possibility of hepatic failure, which could lead to the need for a liver transplant, or even death, Bristol-Myers Squibb discontinued the sale of Serzone in the US. (May 2004) following discontinuation in some other countries. Consequently, nefazodone prescribing is not recommended except in cases of refractory depression that has not responded to numerous trials of the other antidepressants. Several generic formulations of nefazodone are still available.
3. Bupropion doses (any preparation) above 6 mg/kg/day increases seizure risk.
  - 3a. Bupropion conventional tablets should be given  $\leq$  150mg/dose.
  - 3b. Bupropion sustained release (SR) tablets may be given as 200mg/dose max.
  - 3c. Bupropion extended release (XL) tablets, 450mg/dose max.
4. Sustained release bupropion (SR) tablets may be halved prior to administration; however, partial tablets will degrade upon prolonged atmospheric exposure.

The recommendations in this table do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

### Antipsychotic Doses for Treatment of Psychotic Depression for use with TCMAP

<i>Antipsychotic</i>	<b>Children (&lt;45kg)</b>		<b>Adolescents (and Children &gt;45kg)</b>		<i>Usual dose schedule</i>
	<i>Usual target dose</i>	<i>Dose titration for partial or non-responders</i>	<i>Usual target dose</i>	<i>Dose titration for partial or non-responders</i>	
Risperidone (Risperdal)	0.5-2	4	1-4	6	q HS-bid bed time X2
Haloperidol (Haldol)	0.5-3	5	1-5	10	q HS-bid

### Doses for Adjunct Medication in Depression for use with TCMAP

<i>Adjuncts for associated symptoms</i>	<i>Options</i>	<i>Medication</i>	<i>Usual dose range (mg/day)</i>	<i>Usual dose schedule</i>
Insomnia	Benzodiazepine	Lorazepam (Ativan)	0.5-2	qHS (not for chronic use; taper after 1-2 weeks)
	Antihistamine	Diphenhydramine (Benadryl)	25-100	
	Antidepressants	Trazodone (Desyrel)	25-100	
Anxiety (Alternative to SSRI)	Benzodiazepine	Lorazepam (Ativan)	0.5-6	bid-tid
		Clonazepam (Klonopin)	0.25-60	
	Serotonin 1A partial agonist	Buspirone (Buspar)	15-60	
Extrapyramidal Symptoms	Antihistamine	Diphenhydramine (Benadryl)	100-200	qd- tid

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care.

Variations, taking into account individual circumstances, may be appropriate.

All from Texas Children's Medication Algorithm Project

<b>Phases</b>	
Acute/Initial	The evidence for efficacy of pharmacotherapy for childhood mood disorders is less than that for adult disorders; thus, for nonpsychotic depression, psychotherapy is the first step. Medication is added if a high suicide potential exists, psychotic symptoms are present, or if symptoms do not improve in 4-6 weeks.
Continuation	Given the high rate of relapse and recurrence of depression, continuation therapy is recommended for all patients for at least 6-12 months. During the continuation phase, patients typically are seen at least monthly.
Maintenance	This phase may extend from 1 year to indefinitely, and it is typically conducted in at least monthly or quarterly visits.

<b>Table of Terms</b>		
<b>Term</b>	<b>Definition</b>	<b>Clinical Course</b>
Response	Significant improvement of depressive symptoms during the initial or acute treatment phase (3 months)	
Remission	A period of at least 2 weeks and less than 2 months with no more than 1 clinically significant symptom	Approximately 90% remit 1-2 years after onset.
Partial Remission	A period of at least 2 weeks and less than 2 months with more than 1 clinically significant symptom but fewer symptoms than the full syndrome.	
Recovery	An asymptomatic period of 2 months or more.	
Relapse	An episode of depression during the period of remission.	Approximately 40-60% experience a relapse.
Recurrence	The emergence of symptoms of MDD during the period of recovery (a new episode).	20-60% probability of recurrence 1-2 years after remission.
The median duration of a major depressive episode for clinically referred youth is 7-9 months		

Adapted from: Practice Parameters for the Assessment and Treatment of Children and Adolescents with Depressive Disorder, *J Am Acad Child Adolesc Psychiatry*, 1998 October Supplement

<b>Legend/Glossary</b>	
B/CDI	Beck/Children's Depression Inventory
CES-DC	Center for Epidemiological Studies Depression Scale for Children
CBT	Cognitive-Behavioral Therapy
IPT	Interpersonal Psychotherapy
KADS	Kutcher Adolescent Depression Scale
SSRI	Selective Serotonin Reuptake Inhibitor
TCMAP	Texas Children's Medication Algorithm Project