### **Table 1 -- Observations Suggestive of Depression**

- Cognitive patterns related to items in Section B of the Minimum Data Set (MDS 2.0\*)
- ♦ History of depression or other psychiatric disorder
- ♦ Mood and behavior patterns (MDS Section E)
- ♦ Nutritional problems (MDS Section K-4)
- ♦ Weight changes (MDS Section K-3)

**Table 2 -- Symptoms of Depression** 

Most Important	<ul> <li>Depressed mood most of the day, almost every day (by either subjective report [feels sad or empty] or observation made by others [appears tearful])</li> <li>Diminished interest or pleasure in most activities, most of the time</li> <li>Thoughts of death or suicide</li> </ul>
Important	<ul> <li>Difficulty making decisions</li> <li>Feelings of helplessness</li> <li>Feelings of worthlessness or hopelessness</li> <li>Inappropriate feelings of guilt</li> <li>Psychomotor agitation or retardation not attributable to other causes</li> <li>Social withdrawal, avoidance of social interactions or going out</li> </ul>
Sometimes Helpful (These symptoms tend to be more common among older individuals in general.)	<ul> <li>Appetite changes</li> <li>Morning sluggishness and lack of energy that improves markedly later in the day</li> <li>Change in ability to think or concentrate</li> <li>Change in activities of daily living (ADLs)</li> <li>Family history of mood disorders</li> <li>Fatigue or loss of energy, worse than baseline</li> <li>Insomnia or hypersomnia nearly every day</li> <li>Increased complaints of pain</li> <li>Preoccupation with poor health or physical limitations</li> <li>Weight loss or gain</li> </ul>

<sup>\*</sup>Future versions of the MDS may contain different section numbers and/or cross references.

#### **Table 3 -- Some Risk Factors for Depression**

- ♦ Alcohol or substance abuse
- Current use of a medication associated with a high risk of depression (see Table 5)
- Hearing or vision impairment severe enough to affect function
- ♦ History of attempted suicide
- ♦ History of psychiatric hospitalization
- ♦ Medical diagnosis or diagnoses associated with a high risk of depression (see Table 6)
- New admission or change in environment
- New stressful losses, including loss of autonomy, loss of privacy, loss of functional status, loss of body part, or loss of family member or friend
- Personal or family history of depression or mood disorder

**Table 4 -- Laboratory Tests for Evaluating Possible Depression** 

<b>Preferred Tests</b>	Other Tests That May Be Considered
<ul> <li>Chemistry profile (electrolytes, blood</li> </ul>	Electrocardiogram
urea nitrogen, creatinine, glucose)	Folate level
<ul> <li>Complete blood count</li> </ul>	Serum calcium level
<ul> <li>Serum levels of anticonvulsant or</li> </ul>	• Serum level of digoxin or theophyline, if
tricyclic antidepressant, if taking either	taking either medication
type of medication	Urinalysis
<ul> <li>Thyroid function (T3, T4, TSH)</li> </ul>	Vitamin B12 level
Adapted from Alexanoules et al. 2001 <sup>5</sup>	

Adapted from Alexopoulos et al, 2001<sup>5</sup>

### **Table 5 -- Medications That May Cause Symptoms of Depression**

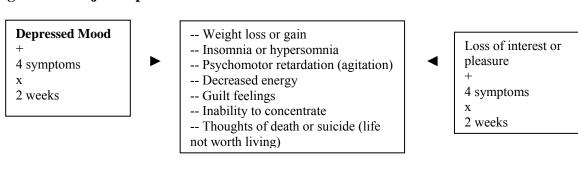
- Anabolic steroids
- Anti-arrhythmic medications (e.g., amiodarone, mexiletine)
- Anticonvulsant medications
- Barbiturates
- Benzodiazepines
- Carbidopa or levodopa
- Certain beta-adrenergic antagonists (e.g., propranolol)
- Clonidine
- Cytokines (specifically IL-2)
- Digitalis preparations
- Glucocorticoids
- H2 blockers
- Metoclopramide
- Opioids

**Table 6 -- Important Comorbid Conditions** 

Most Important	Alcohol dependency
Wost Important	Cerebrovascular diseases
	Medications that can cause mood disorders
	• Neurodegenerative disorders (e.g., Alzheimer's disease, Parkinson's
	disease, multiple sclerosis)
	Substance abuse
Important	• Cancer
	Chronic obstructive pulmonary disorder
	Chronic pain
	Congestive heart failure
	Coronary artery disease
	• Diabetes
	Electrolyte imbalance
	Endocrine disorders (thyroid)
	Head trauma
	Metabolic problems (e.g., B12, folate deficiency)
	Myocardial infarction
	Orthostatic hypotension
	Physical, verbal, emotional abuse
	Schizophrenia

Adapted from Alexopoulos et al, 2001<sup>5</sup>

Figure 1 -- Major Depression



### AND these symptoms:

- -- Produce social impairment
- -- Are not related to substance abuse
- -- Are not related to bereavement

Source: DSM-IV

# Table 7 -- Some Clinical Situations in Which Consultation With a Psychiatric Specialist May Be Helpful

- Bipolar depression
- Depression with comorbid alcohol dependency or substance abuse
- Depression with comorbid dementia
- Depression with suicide ideation
- Double depression (major depression and dysthymia)
- Dysthymic disorder
- Evaluation to determine if depression requires treatment
- Severe, uncomplicated, nonpsychotic unipolar depression
- Psychotic depression

Adapted from Alexopoulos et al, 2001<sup>5</sup>

Table 8 -- Definition of Terms in Major Depressive Disorder

Term	<b>Extent of Symptom Reduction</b>	Impact on Prognosis		
Response	Positive effect from adequate treatment with at least a 50% reduction in signs and symptoms of acute depressive episode, provided that adequate medication, appropriate psychotherapy, or both are provided.	Relapse or recurrence of depression likely without ongoing treatment.		
Remission	Complete resolution of all signs and symptoms of an acute depressive episode.	Risk of relapse or recurrence significantly reduced.		
Recovery	Sustained remission of signs and symptoms of depression.	Risk of relapse or recurrence minimal.		
Relapse	Return of signs and symptoms of an acute depressive episode that was brought to remission but not full recovery.			
Recurrence	Development of a new episode of			
	depression.			

Frank E. Prien RF, Jarrett RB, et al. Arch Gen Psychiatry 1991

**Table 9 -- Phases of Depression Treatment** 

Phase	Duration	Goal				
Acute	About 3 months	To achieve complete recovery from signs and				
		symptoms of acute depressive episode (i.e.				
		remission).				
Continuation	4-6 months	To prevent relapse as patient's depressive				
		symptoms continue to decline and his or her				
		functionality improves.				
Maintenance	3 months or longer,	To prevent recurrence of a new depressive				
	depending on patient's needs	episode.				

Adapted from Alexopoulos et al, 2001<sup>5</sup>

**Table 10 -- Most Common Psychosocial Interventions for Depression** 

Intervention	Preferred Techniques
Psychotherapy	Cognitive-behavioral therapy
	Interpersonal therapy
	Problem-solving therapy
	Supportive therapy
<b>Psychosocial intervention</b>	Bereavement groups
	Family counseling
	Participation in social events
A 1 4 10 A1 1 4 1 20015	Psychoeducation

**Table 11 -- Categories of Antidepressant Agents** 

Agent	Adverse Effects	Advantages
Short-acting SSRIs	Insomnia	No significant effects on cardiovascular
(paroxetine, sertraline,	Agitation	systems
citalopram)	Somnolence	
	Decreased appetite	
	Initial weight loss	
	Specific agents have	
	potential for interaction with	
	components of cytochrome	
	system	
Tricyclic	Dry mouth	Secondary amines may result in fewer
antidepressants	Blurred vision	adverse effects such as postural hypotension,
	Constipation	sedation, falls, cognitive dysfunction, acute
	Urinary retention	confusion, and weight gain
	<ul> <li>Inhibition of sweating</li> </ul>	
	Cognitive dysfunction	
Bupropion	Seizures (in at-risk patients)	No effect on weight
	• Little activity on serotonin or	Minimal interaction with cytochrome
	norepinephrine axes	pathways
Venlafaxine	Same as short-acting SSRIs	Dual action on serotonin and norepinephrine
	Risk of blood pressure	axes
	elevation at higher doses	
	(>150-225 mg/day)	
Methylphenidate	Anxiety	Quick response (within hours or days)
	Cardiac arrhythmia	
	Insomnia	
	Anorexia	
	Weight loss	
	Elevated blood pressure	
Trazodone,	Sedation	Additive effect when used with SSRI
nefazodone (direct	• Postural hypotension (at high	
serotonin agents)	doses)	
	• Priapism (rare)	
Mirtazapine	Increased appetite	Combination SSRI and noradrenergic agent
	Weight gain	
	Sedation	
	Somnolence	
	Interaction with certain	
	cytochrome pathways	

**Table 14 -- Choice of Antidepressant** 

Drug Class	Preferred Agents	Alternate Agents	Least Preferred
SSRIs	Citalopram Escitalopram Paroxetine Sertaline	Fluoxetine	Nefazodone Trazodone
TCAs	Despiramine Nortriptyline		Amitriptyline Amoxapine Doxepin Imipramine
Tetracyclics	Mirtazapine		Maprotiline
MISC	Veniafaxine XR	Bupropion	
MAO Inhibitors			Tranylcypromine Isocarboxazid

Adapted from AMDA Guidelines

**Table 15 -- Doses of Antidepressants That are Likely to be Adequate** 

	Average Starting	Average Target Dose After	Usual Final Acute
Antidepressant	Dose (mg/day)	6 Weeks (mg/day)	Dose (mg/day)
Bupropion SR	100	150 - 300	300 - 400
Citalopram	10 - 20	20 - 30	30-40
Desipramine	10 - 40	50 - 100	100 - 150
Escitalopram	10	10	10 - 20
Fluoxetine	10	20	20 - 40
Fluvoxamine	25 - 50	50 - 200	100 - 300
Mirtazapine	7.5 - 15	15 - 30	30 - 45
Nortriptyline	10 - 30	40 - 100	75 - 125
Paroxetine	10 - 20	20 - 30	30 - 40
Sertraline	25 - 50	50 - 100	100 - 200
Venlafazine XR	25 - 75	75 - 200	150 - 300

### **Appendix 1 -- Geriatric Depression Scale -- Short Form (GDS)**

NA	ME		AGE	SEX	DATE	
WII	NG ROOM	_ PHYSICIAN		ASSESSE	R	
	ORING SYSTEM swers indicating depression a	re highlighted. Eac	ch BOLD-FACE	ED answer cou	ınts one (1) point.	,
1.	Are you basically satisfied wi	th your life?				YES / <b>NO</b>
2.	Have you dropped any of you	r activities and intere	ests?			YES / NO
3.	Do you feel that your life is e	mpty?				YES / NO
4.	Do you often get bored?					YES / NO
5.	Are you in good spirits most of	of the time?				YES / <b>NO</b>
6.	Are you afraid that something	g bad is going to happ	pen to you?			YES / NO
7.	Do you feel happy most of the	e time?				YES / <b>NO</b>
8.	Do you often feel helpless?					YES / NO
9.	Do you prefer to stay in your	room/facility, rather	than going out a	nd doing new	things?	YES / NO
10.	Do you feel you have more pr	roblems with memory	y than most?			YES / NO
11.	Do you think it is wonderful t	to be alive?				YES / <b>NO</b>
12.	Do you feel worthless the way	y you are now?				YES / NO
13.	Do you feel full of energy?					YES / <b>NO</b>
14.	Do you feel that your situation	n is hopeless?				YES / NO
15.	Do you think that most people	e are better off than y	you?			YES / NO
Sco	re great than 5 = Probable D	epression	SCORE	·		
Not	es/Current Medications:					

### **Instructions for use: (Short Form Geriatric Depression Assessment Tool)**

- 1. The same CNA or caregiver should administer this test each time.
- 2. Choose a quiet place, preferably the same location each time the test is administered.
- 3. The administration of this test should not be immediately after some mental trauma or unsteady period.
- 4. Speak in a soft pleasant tone.
- 5. Answer all questions by circling the answer (yes or no) to the question.
- 6. Add the total number of **BOLD FACED** answers circled and record that number in the "SCORE" box.
- 7. Scores totaling five points or more indicate probable depression.

A 30-item version of the GDS is also available. Address inquiries regarding this scale to:

Jerome A. Yesavage, M.D.

Director, Psychiatric ICU

Veterans Administration Medical Center

3801 Miranda Avenue

Palo Alto, CA 94304

NAME	AGE	SEX _	DATE	
WING ROOM PHYSICIAN		A	ASSESSER	
Ratings should be based on symptoms and signs occurring given if symptoms result from physical disability or illness		e week befo	re interview. No sco	re should be
SCORING SYSTEM  a = Unable to evaluate	ild to interm	ittent	2 - Severe	
a 0 1 2 A. MOOD-RELATED SIGNS  1. Anxiety: anxious expression, rumination, worrying 2. Sadness: sad expression, sad voice, tearfulness 3. Lack of reaction to present events 4. Irritability: annoyed, short tempered				
6. Agitation: restlessness, hand wringing, hair pulling 6. Retardation: slow movements, slow speech, slow reactio 7. Multiple physical complaints (score 0 if gastrointestinal s 8. Loss of interest: less involved in usual activities (score o	symptoms on		cutely, i.e., in less than	n one month)
a 0 1 2 C. PHYSICAL SIGNS  D. Appetite loss: easting less than usual  O. Weight loss: (score 2 if greater than 5 pounds in one mo  1. Lack of energy: fatigues easily, unable to sustain activities				
a 0 1 2 D. CYCLIC FUNCTIONS  12. Diurnal variation of mood: symptoms worse in the morr  13. Difficulty falling asleep: later than usual for this individ  14. Multiple awakening during sleep  15. Early morning awakening: earlier than usual for this ind	ual			
<ul> <li>6. Suicidal: feels life is not worthy living</li> <li>7. Poor self-esteem: self-blame, self-depreciation, feelings</li> <li>8. Pessimism: anticipation of the worst</li> <li>9. Mood congruent delusions: delusions of poverty, illness</li> </ul>				
SCORE Score greater than 12 = Probable d	epression			
Notes/Current Medications:				
Instructions for use:				
1. The same CNA (certified nursing assistant) should conduct	ct the intervie	ew each time	e to assure consistency	y in response

- 3. If uncertain of answers, questioning other caregivers may further define the answer.4. Answer all questions by placing a check in the column under the appropriately numbered answer.

(a = unable to evaluate, 0 = absent, 1 = mild to intermittent, 2 - severe)

- 5. Add the total score for all numbers checked for each question.
- 6. Place the total score in the "Score" box and record any subjective observation notes in the "Notes/Current Medications"
- 7. Scores totaling twelve (12) points or more indicate probable depression.

### **Appendix 3 -- Center for Epidemiologic Studies of Depression Scale (CES-D)**

NAME			AGE	SEX	DATE	
WING	ROOM	PHYSICIAN		ASS	SESSER	
	TIONS FOR QUESTIC Lave felt this way durin	ONS: Below is a list of ag the past week.	the ways you n	night have fo	elt or behaved. P	lease tell me how
Score:	0 = Rarely or none of	the time (less than 1 da	y)	1 = So	me or little of the	time (1-2 days)
	2 = Occasionally or a	moderate amount of tir	me (3-4 days)	$3 = \mathbf{M}\mathbf{c}$	ost or all of the ti	me (5-7 days)
During the	past week:					
1.	I was bothered by	things that usually don't	bother me.			
2.	I did not feel like e	ating: my appetite was	poor.			
3.	I felt that I could no	ot shake off the blues ev	en with help fro	m my family	or friends.	
4.	I felt that I was just	t as good as other people	e.			
5.	I had trouble keepi	ng my mind on what I w	vas doing.			
6.	I felt depressed.					
7.	I felt that everythin	g I did was an effort.				
8.	I felt hopeful about	t the future.				
9.	I thought my life h	ad been a failure.				
10.	I felt fearful					
11.	My sleep was restle	ess.				
12.	I was happy.					
13.	I talked less than u	sual.				
14.	I felt lonely.					
15.	People were unfrie	ndly.				
16.	I enjoyed life.					
17.	I had crying spells.					
18.	I felt sad.					
19.	I felt that people di	slike me.				
20.	I could not get "go	ing."				

Although not designed for clinical diagnosis, the CES-D scale is based on symptoms of depression as seen in clinical cases. Seventy percent of patients with known depressions, but only 21 percent of the general population scored at or above an arbitrary cutoff score of 16.

Adapted from: Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measurement 1977 (Summer); 1:385-401.

## **Appendix 4 -- Patient Health Questionnaire (PHQ-9): Nine-Symptom Checklist**

Patient Name				Date		
1.		Over the last two weeks, how often have you been bothered by any of the following problems? Read each item carefully and circle your response.				
	a.	Little interest or pleasure in doing things.				
		not at all	several days	more than half the day	ys nearly every day	
	b.	b. Feeling down, depressed, or hopeless.				
		not at all	several days	more than half the day	ys nearly every day	
	c. Trouble falling asleep, staying asleep, or sleeping too much.					
		not at all	several days	more than half the day	ys nearly every day	
	d.	d. Feeling tired or having little energy.				
		not at all	several days	more than half the day	ys nearly every day	
	e. Poor appetite or overeating.					
		not at all	several days	more than half the day	ys nearly every day	
	f.	Feeling bad about yourself, feeling that you are a failure, or feeling that you have let yourself or your family down.				
		not at all	several days	more than half the day	ys nearly every day	
	g.	Trouble concentrating on things such as reading the newspaper or watching television.				
		not at all	several days	more than half the day	ys nearly every day	
	h.	Moving or speaking so slowly that other people could have noticed, or being so fidgety or restless that you have been moving around a lot more than usual.				
		not at all	several days	more than half the day	ys nearly every day	
	i.	i. Thinking that you would be better off dead or that you want to hurt yourself in some way.				
		not at all	several days	more than half the day	ys nearly every day	
2.		If you checked off any problem on this questionnaire so far, 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 o	lifficult very diff	icult extremely difficult	