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)

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

Table 2 -- Symptoms of Depression

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

Adapted from Alexopoulos et al, 2001.
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

<table>
<thead>
<tr>
<th>Preferred Tests</th>
<th>Other Tests That May Be Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Chemistry profile (electrolytes, blood urea nitrogen, creatinine, glucose)</td>
<td>- Electrocardiogram</td>
</tr>
<tr>
<td>- Complete blood count</td>
<td>- Folate level</td>
</tr>
<tr>
<td>- Serum levels of anticonvulsant or tricyclic antidepressant, if taking either</td>
<td>- Serum calcium level</td>
</tr>
<tr>
<td>type of medication</td>
<td>- Serum level of digoxin or theophyline, if taking either medication</td>
</tr>
<tr>
<td>- Thyroid function (T3, T4, TSH)</td>
<td>- Urinalysis</td>
</tr>
<tr>
<td>- Thyroid function (T3, T4, TSH)</td>
<td>- Vitamin B12 level</td>
</tr>
</tbody>
</table>

Adapted from Alexopoulos et al, 2001

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

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

Adapted from Alexopoulos et al, 2001

Figure 1 -- Major Depression

Depressed Mood

+ 4 symptoms
x 2 weeks

-- Weight loss or gain
-- Insomnia or hypersomnia
-- Psychomotor retardation (agitation)
-- Decreased energy
-- Guilt feelings
-- Inability to concentrate
-- Thoughts of death or suicide (life not worth living)

AND these symptoms:
-- Produce social impairment
-- Are not related to substance abuse
-- Are not related to bereavement

Loss of interest or pleasure

+ 4 symptoms
x 2 weeks

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

Table 8 -- Definition of Terms in Major Depressive Disorder

<table>
<thead>
<tr>
<th>Term</th>
<th>Extent of Symptom Reduction</th>
<th>Impact on Prognosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>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.</td>
<td>Relapse or recurrence of depression likely without ongoing treatment.</td>
</tr>
<tr>
<td>Remission</td>
<td>Complete resolution of all signs and symptoms of an acute depressive episode.</td>
<td>Risk of relapse or recurrence significantly reduced.</td>
</tr>
<tr>
<td>Recovery</td>
<td>Sustained remission of signs and symptoms of depression.</td>
<td>Risk of relapse or recurrence minimal.</td>
</tr>
<tr>
<td>Relapse</td>
<td>Return of signs and symptoms of an acute depressive episode that was brought to remission but not full recovery.</td>
<td></td>
</tr>
<tr>
<td>Recurrence</td>
<td>Development of a new episode of depression.</td>
<td></td>
</tr>
</tbody>
</table>

Frank E. Prien RF, Jarrett RB, et al. Arch Gen Psychiatry 1991
### Table 9 -- Phases of Depression Treatment

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

Adapted from Alexopoulos et al, 2001

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

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Preferred Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Psychotherapy</strong></td>
<td>• Cognitive-behavioral therapy</td>
</tr>
<tr>
<td></td>
<td>• Interpersonal therapy</td>
</tr>
<tr>
<td></td>
<td>• Problem-solving therapy</td>
</tr>
<tr>
<td></td>
<td>• Supportive therapy</td>
</tr>
<tr>
<td><strong>Psychosocial intervention</strong></td>
<td>• Bereavement groups</td>
</tr>
<tr>
<td></td>
<td>• Family counseling</td>
</tr>
<tr>
<td></td>
<td>• Participation in social events</td>
</tr>
<tr>
<td></td>
<td>• Psychoeducation</td>
</tr>
</tbody>
</table>

Adapted from Alexopoulos et al, 2001
<table>
<thead>
<tr>
<th>Agent</th>
<th>Adverse Effects</th>
<th>Advantages</th>
</tr>
</thead>
</table>
| Short-acting SSRIs (paroxetine, sertraline, citalopram) | • Insomnia  
• Agitation  
• Somnolence  
• Decreased appetite  
• Initial weight loss  
  --Specific agents have potential for interaction with components of cytochrome system | No significant effects on cardiovascular systems |
| Tricyclic antidepressants         | • Dry mouth  
• Blurred vision  
• Constipation  
• Urinary retention  
• Inhibition of sweating  
• Cognitive dysfunction | Secondary amines may result in fewer adverse effects such as postural hypotension, sedation, falls, cognitive dysfunction, acute confusion, and weight gain |
| Bupropion                         | • Seizures (in at-risk patients)  
• Little activity on serotonin or norepinephrine axes | No effect on weight  
Minimal interaction with cytochrome pathways |
| Venlafaxine                       | • Same as short-acting SSRIs  
• Risk of blood pressure elevation at higher doses (>150-225 mg/day) | Dual action on serotonin and norepinephrine axes |
| Methylphenidate                   | • Anxiety  
• Cardiac arrhythmia  
• Insomnia  
• Anorexia  
• Weight loss  
• Elevated blood pressure | Quick response (within hours or days) |
| Trazodone, nefazodone (direct serotonin agents) | • Sedation  
• Postural hypotension (at high doses)  
• Priapism (rare) | Additive effect when used with SSRI |
| Mirtazapine                       | • Increased appetite  
• Weight gain  
• Sedation  
• Somnolence  
• Interaction with certain cytochrome pathways | Combination SSRI and noradrenergic agent |

Adapted from Alexopoulos et al, 2001
## Table 14 -- Choice of Antidepressant

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Preferred Agents</th>
<th>Alternate Agents</th>
<th>Least Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSRIs</td>
<td>Citalopram</td>
<td>Fluoxetine</td>
<td>Nefazodone</td>
</tr>
<tr>
<td></td>
<td>Escitalopram</td>
<td></td>
<td>Trazodone</td>
</tr>
<tr>
<td></td>
<td>Paroxetine</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sertaline</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fluoxetine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCAs</td>
<td>Desipramine</td>
<td>Amitriptyline</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nortriptyline</td>
<td>Amoxapine</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Doxepin</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Imipramine</td>
<td></td>
</tr>
<tr>
<td>Tetracyclins</td>
<td>Mirtazapine</td>
<td></td>
<td>Maprotiline</td>
</tr>
<tr>
<td>MISC</td>
<td>Venlafaxine XR</td>
<td>Bupropion</td>
<td></td>
</tr>
<tr>
<td>MAO Inhibitors</td>
<td></td>
<td></td>
<td>Tranylcypromine</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Isocarboxazid</td>
</tr>
</tbody>
</table>

Adapted from AMDA Guidelines

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

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

Adapted from Alexopoulos et al, 2001
Appendix 1 -- Geriatric Depression Scale -- Short Form (GDS)

NAME __________________________________________ AGE _______ SEX_______ DATE_____________
WING _______ ROOM ________ PHYSICIAN ____________________ ASSESSER ___________________

SCORING SYSTEM
Answers indicating depression are highlighted. Each BOLD-FACED answer counts one (1) point.

1. Are you basically satisfied with your life? YES / NO
2. Have you dropped any of your activities and interests? YES / NO
3. Do you feel that your life is empty? YES / NO
4. Do you often get bored? YES / NO
5. Are you in good spirits most of the time? YES / NO
6. Are you afraid that something bad is going to happen to you? YES / NO
7. Do you feel happy most of the time? YES / NO
8. Do you often feel helpless? YES / NO
9. Do you prefer to stay in your room/facility, rather than going out and doing new things? YES / NO
10. Do you feel you have more problems with memory than most? YES / NO
11. Do you think it is wonderful to be alive? YES / NO
12. Do you feel worthless the way you are now? YES / NO
13. Do you feel full of energy? YES / NO
14. Do you feel that your situation is hopeless? YES / NO
15. Do you think that most people are better off than you? YES / NO

Score great than 5 = Probable Depression    SCORE _____________

Notes/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
Appendix 2 -- Cornell Scale for Depression in Dementia (CSDD)

NAME ____________________________________________ AGE _______ SEX ______ DATE ______________
WING ___________ ROOM __________ _______ PHYSICIAN ______________________ ASSESSER _________________

Ratings should be based on symptoms and signs occurring during the week before interview. No score should be
given if symptoms result from physical disability or illness.

SCORING SYSTEM
a = Unable to evaluate  0 = Absent  1 = Mild to intermittent  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

a 0 1 2 B. BEHAVIORAL DISTURBANCE
5. Agitation: restlessness, hand wringing, hair pulling
6. Retardation: slow movements, slow speech, slow reactions
7. Multiple physical complaints (score 0 if gastrointestinal symptoms only)
8. Loss of interest: less involved in usual activities (score only if change occurred acutely, i.e., in less than one month)

a 0 1 2 C. PHYSICAL SIGNS
9. Appetite loss: eating less than usual
10. Weight loss: (score 2 if greater than 5 pounds in one month)
11. 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 morning
13. Difficulty falling asleep: later than usual for this individual
14. Multiple awakening during sleep
15. Early morning awakening: earlier than usual for this individual

a 0 1 2 E. IDEATIONAL DISTURBANCE
16. Suicidal: feels life is not worthy living
17. Poor self-esteem: self-blame, self-depreciation, feelings of failure
18. Pessimism: anticipation of the worst
19. Mood congruent delusions: delusions of poverty, illness or loss

SCORE __________  Score greater than 12 = Probable depression

Notes/Current Medications:
___________________________________________________________________________________________________
___________________________________________________________________________________________________
___________________________________________________________________________________________________
___________________________________________________________________________________________________
___________________________________________________________________________________________________

Instructions for use:
1. The same CNA (certified nursing assistant) should conduct the interview each time to assure consistency in response.
2. The assessment should be based on the patient's normal weekly routine.
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"
   section.
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 ______________________ ASSESSER ___________________

INSTRUCTIONS FOR QUESTIONS: Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

Score:  
0 = Rarely or none of the time (less than 1 day)  
1 = Some or little of the time (1-2 days)  
2 = Occasionally or a moderate amount of time (3-4 days)  
3 = Most or all of the time (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 eating: my appetite was poor.
_____ 3. I felt that I could not shake off the blues even with help from my family or friends.
_____ 4. I felt that I was just as good as other people.
_____ 5. I had trouble keeping my mind on what I was doing.
_____ 6. I felt depressed.
_____ 7. I felt that everything I did was an effort.
_____ 8. I felt hopeful about the future.
_____ 9. I thought my life had been a failure.
_____ 10. I felt fearful
_____ 11. My sleep was restless.
_____ 12. I was happy.
_____ 13. I talked less than usual.
_____ 15. People were unfriendly.
_____ 16. I enjoyed life.
_____ 17. I had crying spells.
_____ 18. I felt sad.
_____ 19. I felt that people dislike me.
_____ 20. I could not get "going."

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 days  nearly every day

   b. Feeling down, depressed, or hopeless.
      
      not at all  several days  more than half the days  nearly every day

   c. Trouble falling asleep, staying asleep, or sleeping too much.
      
      not at all  several days  more than half the days  nearly every day

   d. Feeling tired or having little energy.
      
      not at all  several days  more than half the days  nearly every day

   e. Poor appetite or overeating.
      
      not at all  several days  more than half the days  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 days  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 days  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 days  nearly every day

   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 days  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 difficult  very difficult  extremely difficult