EPIDEMIOLOGY
- Minor depression: 15% of older people
- Major depression: 6%–10% of older adults in primary care clinics; 12%–20% of nursing home residents; 11%–45% of hospitalized older adults
- Bipolar disorder: Common among aged psychiatric patients; does not “burn out” in old age
- Suicide:
  - Older age associated with increasing risk of suicide
  - One fourth of all suicides occur in people ≥ 65 years
  - Risk factors: depression, physical illness, living alone, white male, alcoholism
  - Violent suicides (e.g., firearms, hanging) are more common than nonviolent methods among older adults, despite the potential for drug overdosing

SCREENING
- Geriatric Depression Scale
  - Yes/No format
  - Lacks suicidal ideation query
  - Not useful for assessing treatment response
- 9-item Patient Health Questionnaire (PHQ-9)
  - 9 items cover diagnostic criteria for major depression
  - Initial 2 questions can be used for screening
  - Serial administrations may assess response to treatment
  - Not reliable in patients with moderate to severe dementia

<table>
<thead>
<tr>
<th>PHQ-9 SCORE</th>
<th>DEPRESSION SEVERITY</th>
<th>CLINICAL RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>5–9</td>
<td>Mild to moderate</td>
<td>If not currently treated, rescreen in 2 weeks. If currently treated, optimize antidepressant</td>
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<tr>
<td>10–14</td>
<td>Major depressive disorder</td>
<td>Start antidepressant therapy; obtain psychiatric consultation if suicidality or psychosis suspected</td>
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DIFFERENTIAL DIAGNOSIS
- Side effects of drugs for other illnesses may be confused with depressive symptoms
- **Medical illness can mimic depression**: thyroid disease, conditions that promote apathy, fatigue, diminished appetite, disturbed sleep
- **Dementia has overlapping symptoms**: impaired concentration, loss of interest, apathy, psychomotor retardation; sleep disturbance
- **Bereavement**: most disturbing symptoms resolve in 2 months; no marked functional impairment
- **Bipolar disorder**:
  - Elevated, irritable, or expansive mood persisting for at least 1 week, plus 3 of the following: inflated self-esteem, grandiosity; hypersexuality; marked increase in activity; markedly decreased need for sleep; pressured speech; racing thoughts, flight of ideas; distractibility
  - Grandiose or paranoid delusions may be present
  - Older patients are more likely to have an admixture of depression that presents as irritability
  - Refer to a psychiatrist due to frequency of recurrence, psychosis, and suicidality
- **Psychotic depression**:
  - Patients have sustained paranoid, guilty, or somatic delusions
  - Among older patients, most commonly seen in those needing inpatient psychiatric care
  - In primary care, may be seen when patients exhibit unwarranted suspicions, somatic symptoms, or physical preoccupations

HPI
- Inquire about DSM-IV diagnostic criteria for major depression
  - Five or more of the following symptoms have been present during the same 2-week period and represent a change from previous functioning and **at least one of the symptoms is either depressed mood or anhedonia**: depressed mood; anhedonia; insomnia or hypersomnia; appetite changes or unintentional weight changes; psychomotor agitation or retardation; loss of energy; feelings of worthlessness or guilt; difficulty concentrating or making decisions; recurrent thoughts of suicide or death
  - Diagnosis in older patients is difficult because they often report somatic symptoms and less often report depressed mood; they may present with “masked” depression with preoccupation with physical concerns

AGS Geriatric Evaluation and Management Tools (Geriatrics E&M Tools) support clinicians and systems that are caring for older adults with common geriatric conditions.
**MANAGEMENT PRINCIPLES**

- **Acute phase**: Patient begins taking antidepressants to achieve remission of depressive symptoms
- **Continuation phase**: Once remission of symptoms is achieved, patient remains on antidepressants at therapeutic doses for an additional 6 months to maintain symptom-free state (prevent relapse)
- **Maintenance phase**: Patient remains on antidepressants at therapeutic doses to prevent future recurrence of depression. The duration of maintenance therapy should be based on the frequency and severity of previous depressive episodes and may need to be lifelong. Maintenance treatment (≥3 years) is provided to patients with bipolar disorders or a history of depression complicated by psychosis, suicidality, or recurrent episodes.

**PHARMACOLOGIC MANAGEMENT**

**First-line therapy: Selective serotonergic reuptake inhibitors (SSRIs)**
- Side effects: anxiety, agitation, nausea and diarrhea, sexual effects, pseudo-parkinsonism, increases warfarin effect, other drug interactions, hyponatremia/syndrome of inappropriate antiuretic hormone secretion; falls and fractures in nursing home residents

**Second-line therapy: bupropion** (150–300 mg/day)
- Increases activity of dopamine/norepinephrine
- Generally safe, well tolerated
- Side effects: insomnia, anxiety, tremor, myoclonus; associated with 0.4% risk of seizures

**Second-line therapy: venlafaxine** (75–300 mg/day)
- Acts as SSRI at low doses; at higher doses, as SNRI
- Effective for major depression and generalized anxiety
- Side effects: nausea, hypertension, sexual dysfunction

**Second-line therapy: duloxetine** (20–60 mg/day)
- Equally SSRI and SNRI
- Effective for major depression and FDA-approved for neuropathic pain
- Precautions: drug interactions, chronic liver disease, alcoholism, serum transaminase elevation

**Second-line therapy: mirtazapine** (15–45 mg at night)
- Norepinephrine, 5-HT2, and 5-HT3 antagonist
- May be used for patients with depression and dementia, nighttime agitation, weight loss
- Side effects: weight gain, increased appetite
- Soluble tablet that dissolves in the mouth (not sublingual)

**Monoamine oxidase inhibitors**
- Use if patient is resistant to other antidepressants
- Side effects: orthostatic hypotension, falls
- Life-threatening hypertensive crisis if taken with tyramine-rich foods, cold remedies
- Fatal serotonin syndrome possible if taken with SSRI, meperidine

**Tricyclic antidepressants**
- Nortriptyline and desipramine most appropriate for older patients
- For severe depression with melancholic features; avoid if patient has conduction disturbance, heart disease, intolerance to anticholinergic side effects

**MANAGEMENT OF PARTIAL RESPONSE OR NONRESPONSE**

- Only 50% of patients with major depressive disorder fully respond to initial treatment
- Another 1/3 recover with antidepressant switch, addition of a second antidepressant, or psychotherapy
- Of those who recover, 40%–60% experience recurrence, depending on severity of first episode and persistence of symptoms
- Most common prescribing error is not reaching the recommended dose in first 2 weeks
- For nonresponse or intolerance, switch to another SSRI or another drug class
- For partial response to an SSRI, add bupropion or buspirone

**ELECTRO-CONVULSIVE THERAPY (ECT)**

- Effective for treatment of major depression and mania
- First-line treatment if patient is at serious risk of suicide, or for life-threatening refusal of food, fluids, medications
- Standard for psychotic depression in older adults; response rate 80%
- Anterograde amnesia improves rapidly after treatment
- Retrograde amnesia is more persistent; may lose total recall of events prior to treatment
- Lasting effects not shown in longitudinal studies
- Right unilateral treatment: fewer side effects but less effective than bilateral
- **Contraindications:**
  - Increased intracranial pressure
  - Recent myocardial infarction or stroke and unstable coronary artery disease increase risk of complications
- Continue pharmacotherapy following completion of ECT treatment
- May use maintenance ECT to prevent relapse