Charlson Comorbidity Index

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Charlson Comorbidity Index
Chart review version

Components of classical Charlson Comorbidity Index

1. Has the patient had a myocardial infarction? (MI)
   ___ No
   ___ Yes

Criteria: Myocardial infarction includes patients with one or more definite or probable myocardial infarction. These patients should have been hospitalized for chest pain or an equivalent clinical event and have had electrocardiographic and/or enzyme changes. Patients with electrocardiographic changes alone who have no clinical history are not designated as having had an infarction.

2. Has the patient been hospitalized or treated for heart failure? (CHF)
   ___ No
   ___ Yes

Criteria: Congestive heart failure includes patients who have had exertional or paroxysmal nocturnal dyspnea and who have responded symptomatically (or on physical examination) to digitalis, diuretics, or afterload reducing agents. It does not include patients who are on one of those medications but who have had no response and no evidence of improvement of physical signs with treatment.

3. Does the patient have peripheral vascular disease? (PVD)
   ___ No
   ___ Yes

Criteria: Peripheral vascular includes patients with intermittent claudication or those who had a bypass for arterial insufficiency, those with gangrene or acute arterial insufficiency, and those with a treated or untreated thoracic or abdominal aneurysm (6 cm or more).

4. Has the patient had a CVA or transient ischemic disease? (CVA)
   ___ No
   ___ Yes

Criteria: Cerebrovascular disease includes patients with a history of a cerebrovascular accident with minor or no residua, and patients who have had transient ischemic attacks. If the CVA resulted in hemiplegia, code only hemiplegia.

5. Does the patient have hemiplegia? (PLEGIA)
   ___ No
   ___ Yes

Criteria: This includes patients with a hemiplegia or paraplegia, whether it occurred as a result of a cerebrovascular accident or other condition.

6. Does the patient have asthma, chronic lung disease, chronic bronchitis or emphysema? (COPD)
   ___ No
   ___ Yes

Criteria: Pulmonary disease includes patients with asthma, chronic bronchitis, emphysema, and other chronic lung disease who have ongoing symptoms such as dyspnea or cough, with mild or moderate activity. This includes patients who are dyspneic with slight activity, with or without treatment and those who are dyspneic with moderate activity despite treatment, as well as patients who are dyspneic at rest, despite treatment, those who require constant oxygen, those with CO2 retention and those with a baseline PO2 below 50 tor.

7. Does the patient have diabetes that requires treatment? (DM)
   ___ No
   ___ Yes

Criteria: Diabetes includes all patients with diabetes treated with insulin or oral hypoglycemic, but not diet alone. Diabetes during pregnancy alone is not counted.

7a. Does the patient have end organ damage from diabetes? (DM ENDOrgan)
   ___ No
   ___ Yes

Criteria: This includes patients with retinopathy, neuropathy, or nephropathy attributable to diabetes.

8. Does the patient have moderate or severe renal disease? (RENAL)
   ___ No
   ___ Yes

Criteria: Moderate renal insufficiency includes patients with a serum creatinine >3 mg/dl. Severe renal disease includes patients on dialysis, those who had a transplant, and those with uremia.
9. Does the patient have a chronic liver disease? (MILD LIVER)
   ___ No
   ___ Yes

Criteria: Mild liver disease consists of chronic hepatitis (B or C) or cirrhosis without portal hypertension.

9a. Does the patient have moderate to severe liver disease? (SEVERE LIVER)
   ___ No
   ___ Yes

Criteria: Moderate liver disease consists of cirrhosis with portal hypertension, but without bleeding. Severe liver disease consists of patients with ascites, chronic jaundice, portal hypertension or a history of variceal bleeding or those who have had liver transplant.

10. Has the patient had gastric or peptic ulcers? (ULCER)
    ___ No
    ___ Yes

Criteria: Peptic ulcer disease includes patients who have required treatment for ulcer disease, including those who have bled from ulcers.

11. Has the patient had cancer (other than basal cell skin cancer)? (CANCER)
    ___ No
    ___ Yes
    If yes, which:
    ___ Lymphoma?
    ___ Leukemia?
    ___ Solid tumor (which?)

Criteria: Lymphoma includes patients with Hodgkin's lymphoma, lymphosarcoma, Waldenstrom's macroglobulinemia, myeloma, and other lymphomas. Leukemia includes patients with acute and chronic myelogenous leukemia, acute and chronic lymphocytic leukemia, and polycythemia vera. Solid tumor consists of patients with solid tumors without documented metastases, including breast, colon, lung, prostate, and a variety of other tumors.

11a. Has the patient had a metastatic solid tumor? (METASTASES)
    ___ Breast
    ___ Colon
    ___ Prostate
    ___ Lung
    ___ Melanoma
    ___ Other

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Criteria: Metastatic cancer includes patients with metastatic solid tumors, including breast, lung, colon and other tumors

12. Does the patient have Alzheimer's, dementia from any etiology or any serious cognitive impairment? (DEMENTIA)
   ___ No
   ___ Yes

Criteria: Dementia includes patients with moderate to severe chronic cognitive deficit resulting in impaired function from any cause.

13. Does the patient have any rheumatic or connective tissue disease? (RHEUMATIC)
    ___ No
    ___ Yes

Criteria: Rheumatologic disease includes patients with systemic lupus erythematosus, polymyositis, mixed connective tissue disease, rheumatoid arthritis, polymyositis, polymyalgia rheumatica, vasculitis, sarcoidosis, Sjogrens syndrome or any other systemic vasculitis

14. Does the patient have HIV or AIDS? (HIV)
    ___ No
    ___ Yes

Criteria: Acquired immune deficiency syndrome includes patients with definite or probable AIDS, i.e. AIDS related complex, and those who are HIV positive and asymptomatic.

Additional components of Charlson Comorbidity Index adapted to predict cost

15. Does the patient have hypertension? (HBP)
    ___ No
    ___ Yes

Criteria: Hypertension includes patients who have systolic pressures >140 mm Hg and/or diastolic pressures >90 mm Hg if without diabetes or renal disease, as well as controlled hypertensives, or patients with diabetes or renal disease who have systolic pressures >140 mm Hg or diastolic pressures >80 mm Hg.

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16. Has the patient had decubitus ulcers, peripheral skin ulcers or repeated episodes of cellulitis? (SKINULCER)
   ____ No
   ____ Yes

Criteria: Partial thickness loss of skin over legs or back with open ulcers or two or more episodes of cellulitis requiring treatment with antibiotics, regardless of etiology.

17. Does the patient have depression? (DEPRESSION)
   ____ No
   ____ Yes

Criteria: Patients who are currently receiving treatment for depression, whether pharmacologic or psychotherapy, or cognitive behavioral therapy, or notes indicating that the patient has probable or definite depression.

18. Is the patient on warfarin or coumadin? (WARFARIN)
   ____ No
   ____ Yes

**Conditions that are not assigned weights**

- Angina includes patients with chronic exertional angina, those who had coronary artery bypass graft, and those initially admitted with unstable angina.
- Arrhythmia includes patients with chronic atrial fibrillation or flutter, sick sinus syndrome, or ventricular arrhythmias requiring chronic treatment.
- Valvular disease includes patients with hemodynamically significant aortic stenosis and/or insufficiency, those with significant mitral stenosis and/or insufficiency, and those with prosthetic aortic or mitral valves, asymmetric septal hypertrophy requiring treatment, or tricuspid insufficiency.
- Other neurologic conditions includes patients with Parkinson’s disease, uncontrolled seizures, or syncope without an identified cause or treatment.
- Other endocrine includes patients with hypopituitarism, adrenal insufficiency, and recurrent acidosis.
- Inflammatory bowel disease includes patients with ulcerative colitis or regional enteritis.
- Gastrointestinal bleeding includes those who have had bleeding requiring transfusions from causes other than ulcer disease.
- Coagulopathy includes patients with a circulating anticoagulant, or other coagulopathy.
<table>
<thead>
<tr>
<th>Condition</th>
<th>Variable name</th>
<th>Points</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Myocardial infarction</td>
<td>MI</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Congestive heart failure</td>
<td>CHF</td>
<td>1</td>
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<tr>
<td>Peripheral vascular disease or bypass</td>
<td>PVD</td>
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<tr>
<td>Cerebrovascular disease or transient ischemic disease</td>
<td>CVA</td>
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<td>CVA only</td>
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<tr>
<td>Hemiplegia</td>
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<td>If hemiplegia, do not count CVA separately</td>
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<td>Pulmonary disease/ asthma</td>
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<tr>
<td>Diabetes</td>
<td>DM</td>
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<tr>
<td>Diabetes with end organ damage</td>
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<td>If end organ damage, do not count DM separately</td>
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<tr>
<td>Renal disease</td>
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<td>Mild liver disease</td>
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<td>Severe liver disease</td>
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<tr>
<td>Gastric or peptic ulcer</td>
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<tr>
<td>Cancer (lymphoma, leukemia, solid tumor)</td>
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<td>Nonmetastatic cancer only</td>
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<td>Metastatic solid tumor</td>
<td>METASTASES</td>
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<td>If Metastatic, do not count cancer separately</td>
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<tr>
<td>Dementia or Alzheimer's</td>
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<td>Rheumatic or connective tissue disease</td>
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<td>HIV or AIDS</td>
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<td>Hypertension</td>
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<tr>
<td>Skin ulcers/ cellulitis</td>
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<td>Depression</td>
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<tr>
<td>Warfarin</td>
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