Depression is common in adult patients with cardiac disease, with approximately 1 in 3 individuals who survive an acute myocardial infarction having some form of depression. Depression in adults with cardiac disease is less likely to acknowledge their condition and have decreased motivation to follow recommended treatments, negatively affecting their recovery and overall quality of life.

The Cardiac Depression Scale (CDS) indexes the full spectrum of depressive symptoms in adults with cardiac disease. The CDS is easy to administer, requiring only pencil and paper, and no special training is necessary. The self-report test includes 26 items, with scores ranging from strongly disagree (1) to strongly agree (7) across a 7-point Likert scale. Items are summed for a total score ranging from a minimum of 26 to a maximum of 182; a higher score reflects more severe depressive symptoms. The CDS has excellent test-retest reliability and internal consistency, and for scores ≥95 excellent sensitivity and specificity. Early recognition and consequently early intervention has the potential to save lives; therefore, application of the CDS can identify patients with cardiac disease who may require further assessment and intervention.

This Rehabilitation Measures Database summary provides a review of the psychometric properties of the CDS in adult cardiac patients. A full review of the CDS as well as reviews of over 100 other instruments can be found at www.rehabmeasures.org. Please address correspondence to rehabmeasures@ric.org.

**BIBLIOGRAPHY**

4. Shi WY, Stewart AG, Hare D. Major depression in cardiac patients is accurately assessed using the Cardiac Depression Scale. Psychother Psychosom 2010;79:391-2.
Measure Name: Cardiac Depression Scale

Acronym: CDS

Summary Author: Flais, K; Combs-Miller, S

Population Reviewed: Adults with Cardiac Disease

Admin Time: 5 minutes

Items: 26

Score: 26/182 (min/max)

Training: None required

Purpose and Administration Instructions:

- To measure depression in adults with cardiac disease

Required Equipment:

- Score sheet and pen

Validity:

- Criterion Validity:
  - Excellent correlation with the BDI\(^2,3,5\)
  - Excellent correlation with anxiety and depression subscales of the HADS\(^3\)
  - Excellent correlation with the STAI\(^3\)
  - Excellent correlation with the GDS-SF\(^1\)

Reliability:

- Excellent test-retest reliability\(^3\)
- Excellent internal consistency\(^2,3\)

Cut-Off Scores:

- Score > 100 indicates severe depression with 88% sensitivity and 84% specificity\(^1\)
- Score of 90 indicates mild to moderate depression with 84% sensitivity and 78% specificity\(^1\)

Scoring:

- A self-report with 26 items each scored on a seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7)
- Items are summed for a total score with minimum score of 26 and maximum score of 182
- Items 2, 4, 12, 15, 19, 20 and 23 are reverse scored (1 = 7, 2 = 6, 3 = 5, 4 = 4, 5 = 3, 6 = 2, 7 = 1)
- A higher total score reflects more severe depressive symptoms

Considerations:

- The test indexes the full spectrum of depressive symptoms in adults with cardiac disease
- The test has excellent psychometric properties of reliability, sensitivity, specificity and validity
- The test is easy to administer and no special training in necessary
- Standard error of measurement and normative data is not established

Abbreviations:

| BDI: Beck Depression Inventory |
| HADS: Hospital Anxiety and Depression Scale |
| STAI: State Trait Anxiety Inventory |
| GDS-SF: Geriatric Depression Scale - Short Form |

Cut-off Criteria:

<table>
<thead>
<tr>
<th>Correlation Type</th>
<th>0.75</th>
<th>0.40-0.74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>≥ 0.6</td>
<td>≥ 0.75</td>
</tr>
<tr>
<td>Adequate</td>
<td>0.31-0.59</td>
<td>0.40-0.74</td>
</tr>
<tr>
<td>Poor</td>
<td>≤ 0.3</td>
<td>&lt; 0.4</td>
</tr>
</tbody>
</table>