

ORGANIZATION NEWS

Highlights From the Rehabilitation Measures Database

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Measurement Characteristics and Clinical Utility of the Cardiac Depression Scale Among Adults With Cardiac Disease

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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.¹ Cardiac patients with depression are less likely to acknowledge their condition and have decreased motivation to follow recommended treatments, negatively affecting their recovery and overall quality of life.¹

The Cardiac Depression Scale (CDS) indexes the full spectrum of depressive symptoms in adults with cardiac disease.² The CDS is easy to administer, requiring only pencil and paper, and no special training is necessary.² 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.³ The CDS has excellent test-retest reliability and internal consistency, and for scores ≥ 95 excellent sensitivity and specificity.³⁻⁵ 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

1. Wise FM, Harris DW, Carter L. Validation of the Cardiac Depression Scale in a cardiac rehabilitation population. *J Psychosom Res* 2006;60:177-83.
2. Hare D, Davis C. Cardiac Depression Scale: validation of a new depression scale for cardiac patients. *J Psychosom Res* 1996;40:379-86.
3. Birks Y, Roebuck A, Thompson D. A validation study of the Cardiac Depression Scale (CDS) in a UK population. *Br J Health Psychol* 2004;9:15-25.
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.
5. Kiroopoulos L, Meredith I, Tonkin A, Clarke D, Antonis P, Plunkett J. Psychometric properties of the Cardiac Depression Scale in patients with coronary heart disease. *BMC Psychiatry* 2012;12:216.

This instrument summary is designed to facilitate the selection of outcome measures by trained clinicians. The information contained in this summary represents a sample of the peer-reviewed research available at the time of this summary's publication. The information contained in this summary does not constitute an endorsement of this instrument for clinical practice. The views expressed are those of the summary authors and do not represent those of authors' employers, instrument owner(s), the Archives of Physical Medicine and Rehabilitation, the Rehabilitation Measures Database, the United States Department of Education, or the Retirement Research Foundation. The information contained in this summary has not been reviewed externally.

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	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: <ul style="list-style-type: none"> To measure depression in adults with cardiac disease 																					
Required Equipment: <ul style="list-style-type: none"> Score sheet and pen 																					
Validity: <ul style="list-style-type: none"> <u>Criterion Validity:</u> <ul style="list-style-type: none"> Excellent correlation with the BDI^{2,3,5} Excellent correlation with anxiety and depression subscales of the HADS³ Excellent correlation with the STAI⁵ Excellent correlation with the GDS-SF¹ 			Reliability: <ul style="list-style-type: none"> Excellent test-retest reliability³ Excellent internal consistency^{2,3} 																		
Cut-Off Scores: <ul style="list-style-type: none"> Score > 100 indicates severe depression with 88% sensitivity and 84% specificity¹ Score of 90 indicates mild to moderate depression with 84% sensitivity and 78% specificity¹ 																					
Scoring: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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: <p>BDI: Beck Depression Inventory HADS: Hospital Anxiety and Depression Scale STAI: State Trait Anxiety Inventory GDS-SF: Geriatric Depression Scale - Short Form</p> <table border="1" data-bbox="884 1612 1398 1843"> <thead> <tr> <th colspan="3">Cut-off Criteria:</th> </tr> <tr> <th></th> <th>r</th> <th>ICC</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>< 0.4</td> </tr> </tbody> </table>				Cut-off Criteria:				r	ICC	Excellent	≥ 0.6	≥ 0.75	Adequate	0.31-0.59	0.40-0.74	Poor	≤ 0.3	< 0.4
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