

# Measuring distress after Spontaneous Coronary Artery Dissection: the Cardiac Distress Inventory for SCAD (CDI-SCAD)

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## Abstract

**Background:** With its unexpected onset, uncertain optimal management and relatively high recurrence rate, Spontaneous Coronary Artery Dissection (SCAD) is a highly distressing cardiac event. Currently no measure of SCAD-specific distress exists. Previously we developed the Cardiac Distress Inventory (CDI), which is now endorsed by ACRA and the ESC and has been translated into seven languages. This study aimed to develop a SCAD-specific version of the CDI: the CDI-SCAD.

**Methods:** A set of 48 SCAD-related distress items was compiled following focus groups with 30 SCAD survivors. A sample of 277 SCAD survivors responded to the 48-item pool and provided sociodemographic and psychological data. A two-stage psychometric evaluation of the 48 items used exploratory factor analysis to extract the factors and Rasch analysis to confirm dimensionality within factors. The methods followed those used to develop the original CDI instrument.

**Results:** Psychometric analysis resulted in the identification of 40 items across four subscales to form the CDI-SCAD. The sub-scales were: Uncertainty and confusion (15 items), Identity and role challenges (9 items), Health system challenges (9 items), and Emotional challenges (7 items). All sub-scales had acceptable model fit. Macdonald's omega reliability coefficients ranged from .84 to .95. The sub-scales had low to moderate correlations with existing anxiety and depression instruments, indicating good discriminant validity.

**Conclusions/Implications:** The CDI-SCAD provides a SCAD-specific measure of distress that can be used in both clinical and research settings. Individual subscales or the full CDI-SCAD could be used to assess or monitor specific areas of distress in clinical practice.