

Depression Screening in Cardiac Rehabilitation

AACVPR TASK FORCE REPORT

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The independent and potentially causal role of depression in the onset and progression of cardiovascular disease is becoming increasingly evident in the scientific literature, as it has been in clinical practice for some time. This burgeoning area of medical knowledge has unique features, in part, because it bridges 2 medical domains, mental health and physical health, which are often poorly integrated in traditional services. A comprehensive mind-body approach is a significant advance in the field of cardiac rehabilitation. The prognostic significance of depression in patients with cardiovascular disease appears to be so robust that it is imperative that healthcare professionals consider integrating screening and therapeutic protocols into all secondary prevention services. For that reason, a Task Force was appointed by the Board of the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) to develop a statement concerning screening for depression in cardiac rehabilitation and secondary prevention programs.

Depression is highly prevalent among patients after an acute myocardial infarction (AMI), with 20% to 45% suffering significant levels of depressive symptoms. Estimates of the prevalence of major depressive disorder, the most severe form of depression, range between 18% and 25%.^{1,2} Depression has now been clearly shown through many epidemiological and cohort studies to be a powerful, independent risk factor for cardiac mortality after an AMI or unstable angina. The risk is variably estimated at between 4- and 6-fold, and may be comparable to that of many traditional risk factors including hypertension, diabetes, and cigarette smoking.³⁻⁵ The impact of depression on the quality of life (QOL) and productivity of patients after an AMI is even

more impressive, with several studies suggesting that the impact of depression on QOL exceeds that of cardiac symptoms, ejection fraction, and coronary artery anatomy.^{6,7} Whether effective treatment of depression can diminish cardiac mortality or morbidity remains a question for future research. However, there are numerous biological links between depression and heart disease, some of which have been shown to be potentially reversible with appropriate treatment of depression.⁸⁻¹¹

Although not definitive, existing data do suggest that the treatment of depression in patients with coronary disease is appropriate because depression (1) causes suffering in a variety of contexts; (2) negatively affects treatment compliance; and (3) is associated with adverse clinical events. Furthermore, numerous effective treatments exist including a variety of empirically validated treatments and pharmacotherapy. Indeed, the selective serotonin reuptake inhibitors (SSRIs) class of antidepressants has been shown to be both effective and safe in post-AMI and unstable angina patients.¹² Cognitive behavioral therapy has also been shown to improve clinical depression, alone or with the use of SSRIs.¹³

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To ensure that depression in patients is not overlooked, and to possibly reduce the risk of mortality and morbidity in post-AMI, coronary artery bypass graft, and congestive heart failure patients with major or minor depression,³ assessment and appropriate treatment should begin as soon as possible after a cardiac event.

Unfortunately, numerous barriers exist to effective assessment and treatment of depression in the cardiac rehabilitation setting. Depression is greatly underrecognized and undertreated in the general medical population, and specifically in patients with cardiovascular disease.^{14,15} Despite the existence of reliable and well-validated screening instruments, healthcare professionals working in settings that treat patients with cardiovascular disease often do not routinely screen for depression, and if they do, it is unclear how effectively they use that information to provide more intensive evaluation and treatment. However, cardiac rehabilitation and secondary prevention programs are settings that may more easily facilitate attaining the goals of depression screening and treatment. Cardiac rehabilitation provides a unique opportunity to deliver an ongoing continuity of care for postcardiac event patients and lifestyle interventions particularly useful in ameliorating depression. The sense of community that patients often derive from participation in rehabilitation contributes to increased social support that may improve depression.¹⁶ Exercise therapy also has been shown to be effective in the treatment of depression.¹⁷ The opportunity for longitudinal follow-up over the period of cardiac rehabilitation, for example, 12 weeks or longer, allows not only for depression screening and therapeutic intervention, but the potential for rescreening weeks later. Rescreening aids in the measurement of participants' responses to therapy and assists providers in determining the need for maintaining or changing the current approach to treatment. Very often, the cardiac rehabilitation staff is experienced in assessing and treating other lifestyle issues that affect physical health, such as tobacco use, poor dietary habits, sedentary lifestyle, and nonadherence to prescribed medical therapies. The staff may also be trained to recognize depression and refer to appropriate health professionals when necessary.

A precedent for many of these recommendations is noteworthy. In New York State, a healthcare quality improvement organization (QIO), IPRO, in partnership with a number of hospitals and free-standing cardiac rehabilitation centers, recently completed a 2-year project focused on improving the management of depression in the cardiac rehabilitation setting.¹⁸ Together, the organizations embarked on an education and training strategy to promote statewide depression screening and management in cardiac rehabilitation centers. As a result, many centers started screening for depression and detecting those patients who were at risk. These centers subsequently developed processes to refer

patients directly to mental health resources, provide on-site care, or refer patients back to their primary care physicians. A hallmark of this project was that centers were not required to use a single assessment and intervention protocol because each center had its own special characteristics and circumstances. Rather, the project supported a variety of options. Participating centers also developed varying processes for managing patients with depression depending upon the nature of their referral relationships. Project data indicated that screening for depression and facilitating management of depression in the cardiac rehabilitation center setting is feasible and will likely significantly enhance overall cardiac care. The Center for Medicare and Medicaid Services (CMS) is currently considering making a similar project available to QIOs across the nation for further expansion of this effort.¹⁹ Providing a comprehensive approach to depression screening and treatment should furnish a valuable service to the cardiology community and establish an environment where patients can receive interventions that improve both their cardiac and mental health prognoses. Furthermore, data suggest that providing these services through cardiac rehabilitation programming is feasible and appropriate.

There is a significant opportunity to create a bridge between cardiac care and mental health by providing depression screening for all patients and intervention protocols for those who need treatment. The AACVPR recommends that appropriately trained healthcare professionals in the cardiac rehabilitation setting assess for depression using a valid and reliable screening tool and ask specific questions about depression as a part of the intake assessment and/or clinical interview. We also recommend that cardiac rehabilitation professionals communicate findings indicating possible clinical depression to referring physicians, facilitate referral of patients for appropriate treatment, and periodically reassess therapeutic progress. Psychosocial well-being is one of the key outcomes of cardiac rehabilitation, and appropriate intervention for depression is critical to optimizing patient outcomes.^{20,21}

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