Title: Implementation of a Depression Screening Tool for Patients with Cardiovascular Disease in the Primary Care Setting

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**Background:** Patients with cardiovascular disease (CVD) have a two-fold increased risk of depression as compared to patients without CVD. According to the American Heart Association (AHA, 2016), there is no gold-standard procedure for screening for depression in cardiovascular patients. Screening for depression varies greatly across specialties and practices, often leaving a gap for detection and treatment of depression in cardiac patients. There are many depression screening tools available; however, the AHA recommends use of the patient health questionnaire (PHQ) screening tool. The PHQ-2 and PHQ-9 questionnaires are the most brief, sensitive, and specific depression screening tool for patients with cardiovascular disease.

**Method:** A quality improvement study was designed and implemented to determine the usability of the PHQ screening tool in primary care and to compare the results of the screening tools between practices. A descriptive pre-test and post-test survey design was conducted to compare findings from two primary care settings, which utilized the PHQ depression screening tool to screen for depression in cardiovascular patients. A total of 60 charts were audited, 30 charts from each practice. A retrospective chart review was conducted at completion of the study in order to compare the results of depression screenings and implemented treatments between the two practices.

**Results:** Of the 60 audited charts, 51 patients were screened for depression by their primary care provider. After frequency distributions were calculated, it was noted that 29% of the sample population had depressive symptoms. This data is consistent with the evidence-based literature that demonstrates that patients with cardiovascular disease are at high risk for depression and should be routinely screened for depression in their primary care homes as recommended by the American Heart Association (2016). Each of these patients (n=15) who screened positive for depression was started on treatment for depression at
the time of the initial depression screening visit.

**Implications:** Findings from the quality improvement project underscored the need for primary care providers to utilize the PHQ screening tool as the standard for screening in patients with CVD due to the incidence of depression in cardiovascular patients and the tool’s efficacy and ease of use. Depression screening in primary care should be included in continuing medical education requirements for providers working in the primary care setting. It is important to support all levels of government to adopt mental health policies and to integrate mental health policy into public health policy and general social policy. Additional research is needed to properly characterize evidence-based care of patients with comorbid depression and cardiovascular disease.