

The Association between Patient-Reported Outcomes and a Heart Failure Risk Prediction Tool in the Emergency Department

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OBJECTIVE:

To evaluate the association of the Patient-Reported Outcomes Measurement Information System® (PROMIS®) measures of Depression, Anxiety, Physical Function, Cognitive Function, and Emotional, Informational, and Instrumental Support with the Emergency Heart Failure Mortality Risk Grade (EHMRG) score in patients with heart failure (HF). We hypothesized that those with high EHMRG scores would have worse PROMIS scores.

METHOD:

Individuals with HF were enrolled in a prior Heart Failure Risk Prediction Tools Feasibility Study in the Emergency Department. These individuals completed a fixed-length short PROMIS form for Depression, Anxiety, Physical Function, Cognitive Function, and Emotional, Informational, and Instrumental Support. From the total (n = 30) participants enrolled, 23 had a calculated EHMRG. These participants were stratified into a non-high EHMRG and high EHMRG group. To determine differences between groups, the mean and 95% confidence intervals of the PROMIS measures were compared between the non-high and high EHMRG groups.

RESULTS:

The participants had an average age of 60.5 years old, 21.7% were female, and 39.1 were black. The mean and 95% CI for anxiety was significantly higher in the non-high vs. high EHMRG group [52.0 (45.4, 58.6) vs. 41.4 (38.7, 44.0), respectively]. We did not observe differences in the other PROMIS scores between these groups.

CONCLUSIONS:

In a study of HF participants in the ED, the anxiety PROMIS scores were higher (worse) in the non-high vs. high EHMRG group. Our results suggest that the EHMRG does not capture patient-reported outcomes associated with morbidity and mortality. HF risk stratification tools should include patient-reported outcomes.