Although spirometry results are worse in the COPD group, only FEV$_1$ was statistically significant. **Conclusion:** Self reporting of COPD or asthma is a poor predictor of COPD diagnosis by GOLD criteria, and achievement of optimal dose of carvedilol. This finding suggests a larger safety and tolerability study of the use of beta-blocker therapy in chronic heart failure patients with COPD and/or asthma.

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Agreement between Physician and Patient's Self Assessment of Heart Failure Symptoms Using New York Heart Association Classification

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Background: New York Heart Association (NYHA) classification and quality of life score (QOL) using Minnesota Living with Heart Failure Questionnaire (MLHFQ) are commonly applied to evaluate the symptoms of heart failure (CHF). We compared the agreement of physician's assessment of NYHA class to patient's self assessment of NYHA class, QOL score and echocardiography assessment of left ventricular (LV) function in patients with CHF. **Methods:** We evaluated 79 consecutive patients with CHF, 66 ± 18 years old, 85% Male, LV ejection fraction (EF) 34 ± 13%, referred to our lab for echocardiogaphic assessment of LV mechanical asynchrony. Referring cardiologists (MDs) provided assessment of NYHA class. Prior to echocardiogram patients self evaluated their CHF symptoms using standard NYHA and MLHFQ questionnaire. **Results:** Using NYHA classification MDs evaluated patients as class: I-4%, II-11%, III-62% and IV-23% while patients self evaluated as class: I-27%, II-29%, III-24% and IV-20%.

Patients Self Assessment of NYHA Class Compared to Assessment by Referring Cardiologist
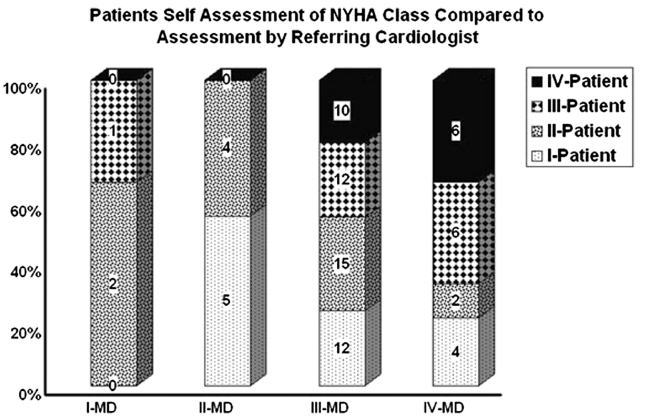
Figure shows the distribution of patient's self assessment of NYHA corresponding with the physician's assessment of NYHA. The absolute number of patients are shown for each functional class.

Patient's self assessment of NYHA class poorly agreed with MDs in male patients (Kappa=0.1, p=0.1) compared to female patients (Kappa=0.6, p=0.03). 57% of male patients and 10% of female patients identified as NYHA class >=III by MDs under classified their CHF symptoms as NYHA class <III. The correlation of NYHA class with QOL score was significantly better for patient's self assessment (r=0.6, p <0.001) compared to MDs (r=0.4, p=0.01). However, correlation of NYHA class with LV EF was better for MDs (r=-0.3, p<0.001) compared to patients self assessment (r=-0.2, p=0.3). **Conclusion:** Poor agreement exists between MDs and patient's self assessment of NYHA class. MDs are more likely to over estimate the severity of CHF symptoms in the male patients.

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Symptoms of Anxiety and Depression in Heart Failure Patients and Their Caregivers

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Introduction: There is strong evidence to suggest that emotional distress, particularly depression, is common in patients with heart failure. Caregivers are also at risk for emotional distress; however studies exploring these emotions in caregivers of patients with heart failure are sparse. Furthermore, only three studies to date have explored the relationship between the emotional status of heart failure patients and their primary caregivers. **Objectives:** The objectives of this study were to: a) explore the prevalence of symptoms of anxiety and depression in heart failure patients and their primary caregivers and b) to determine if there was a relationship between these variables. **Methods:** Using a cross-sectional, descriptive study design, patients and caregivers (n=48 pairs) attending a heart function clinic completed the Hospital Anxiety and Depression Scale. **Results:** Caregivers reported more symptoms of anxiety than patients (48% vs. 25% respectively; p=0.13) and patients reported more depressive symptoms than caregivers

(35% vs. 19% respectively; p=0.12). Significantly higher levels of anxiety were found in caregivers for a) male versus female patients (61% vs. 32% respectively; p=0.04), b) younger versus older patients (mean patient 76.6 ± 9.6 vs. 68.2 ± 12.3 respectively; p=0.011), and c) patients who were not retired versus retired (69% vs. 40% respectively; p=0.049). There was a trend for a relationship between patient and caregiver symptoms of depression (rho= .248, p=.089). However, in the subgroup of patients with heart failure for a least 1 year (n=31), there was a significant relationship between patient and caregiver symptoms of depression (rho =.403, p=0.023). **Conclusion:** The findings from this study contradict those reported by other authors regarding the relationships between the emotional status of patients and their caregivers. Variables that influence the strength of the correlation between patient and caregiver emotions have not been reported in the literature. Thus, ongoing research is needed to better understand the relationship, if any, between the emotional status of HF patients and their primary caregivers.

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Are PHQ-9 and PHQ-2 Depression Score Cutoffs the Best Cutoffs for Determining Significant Depression in Pts with HF and Mild-Moderate Symptoms?

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Introduction: 4 of 9 Pt Health Questionnaire (PHQ)-9 items represent somatic symptoms. Pts with advanced HF may have the same somatic symptoms, causing uncertainty in using original PHQ-9 and PHQ-2 cutoff scores of 10 and 3, respectively to diagnose depression (dep) in HF. **Methods:** HF pts (N=631; mild HF, n=337; moderate-severe HF, n=294) completed PHQ-9. Original (orig) PHQ-9 and PHQ-2 dep levels were compared by HF status. Alternate (alt) PHQ-9 and PHQ-2 cutoff scores of 15 and 4 were created. ROC analysis compared diagnostic efficiency of alt against orig dep levels. **Results:** Using orig dep levels, a difference in distribution was detected between PHQ-9 and PHQ-2 and dep level diagnosed (amb, X2 = 57.32, df=4, P<0.001; hosp, X2 = 87.97, df=4, P<0.001); PHQ-9 assigned higher levels of dep. Correlations between orig - alt PHQ-9 and PHQ-2 levels were similar: orig r, 0.662 (95% CI 0.576, 0.748); alt r, 0.652 (95% CI 0.564, 0.739). Differences between orig and alt level AUC values were very small with higher AUC for the orig PHQ-9 levels (Table, A) but similar AUC for PHQ-2 dep levels (Table, B).

Table A: Areas Under the Curve (AUC) comparing Orig and Alt PHQ-9 Scores to PHQ-2 Diagnoses

Gold Standard	Curoff Scores	Mild Depression		Moderate Depression		Severe Depression	
		AUC	Lower, Upper Confidence Limit	AUC	Lower, Upper Confidence Limit	AUC	Lower, Upper Confidence Limit
PHQ-2 Alt	PHQ-9 Orig	0.85	0.81, 0.89	0.88	0.84, 0.92	0.86	0.81, 0.91
PHQ-2 Alt	PHQ-9 Alt	0.82	0.77, 0.87	0.86	0.82, 0.91	0.85	0.79, 0.90
PHQ-2 Alt	Difference	0.03	-0.15, -0.5**	0.01	0.004, 0.02**	0.01	0.0003, 0.02*

Table B: AUC comparing PHQ-2 scores to Orig and Alt PHQ-9 Diagnoses

PHQ-9 Orig	PHQ-2 Alt	0.87	0.83, 0.92	0.87	0.84, 0.91	0.94	0.90, 0.98
PHQ-9 Alt	PHQ-2 Alt	0.87	0.84, 0.91	0.87	0.83, 0.91	0.94	0.90, 0.98

* P < 0 05; ** P< 0 01; Alt   alternate; Orig   original scoring

Conclusion: PHQ-9 diagnosed dep more often than PHQ-2 but sensitivity/specificity for detecting dep was similar between orig-alt PHQ-9 cutoff scores. Orig cutoff dep levels should be used.

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A Quick Fix: Can PHQ-2 Be Used Clinically to Diagnose Depression in Patients with Heart Failure?

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Introduction: Practical depression tools are needed in clinical practice. The Patient Health Questionnaire (PHQ)-2 uses the first 2 items of PHQ-9. It is completed and scored quickly; but use in patients with HF is not well studied. **Methods:** Ambulatory (n=337) and hospitalized (n=294) patients with HF completed the PHQ-9 once. A subset of 120 ambulatory patients also completed the Beck Depression Inventory (BDI). Raw scores on BDI, PHQ-9 and PHQ-2, and depression classifications were compared using correlation statistics. Receiver operator characteristic curves were generated using PHQ-9 as a gold standard. Efficiencies were determined by area under the curve (AUC) analysis. **Results:** Correlation between PHQ-2 and PHQ-9 raw scores was 0.82; r2 0.67; P < 0.001 and between BDI and PHQ-2 raw scores was 0.76; r2 0.58; P<0.001. When PHQ-9 and PHQ-2 score AUC's were compared by