Introduction Volume control is critical in HF management. Clinical methods to assess volume status are neither sensitive nor specific enough to reliably predict volume overload. This lack of precision in volume assessment may leave patients at risk for decompensation or renal dysfunction. Ultrasound evaluation of inferior vena cava size has been useful to estimate and grade hemodynamic congestion in HF patients. Purpose We set out to examine the additional information provided by analysis of the IVC regarding volume status in a cohort of patients with chronic stable heart failure. We assessed NYHA class, clinical volume status, and inferior vena cava metrics. Methods This is an ongoing observational study. This abstract presents data on the first 91. All patients had established HF and were attending for regular annual clinic review. Patients had a history obtained as a marker of clinical stability and clinical examination to assess for any signs of clinical congestion. These patients also had a complete Doppler-echocardiographic examination including assessment of E-e prime (E/e') and inferior vena cava including long axis diameter and collapsibility index (IVCCI) as assessed by the reduction in size from baseline with inspiratory manoeuvre. Volume overload was defined as IVC diameter (IVCD) > 2cm with IVCCI < 50%. All patients had a natriuretic peptide assessment (NT-proBNP) and renal function measured. Results To date sixty percent of the patients had reduced ejection fraction heart failure (LVEF < 50%). Ninety five percent (87) had normal volume status on exam. The remaining four patients with volume overload on physical exam were omitted from further analysis. Thirty one patients (35%) had Doppler-echocardiographic evidence of volume overload without signs of congestion on physical exam (IVCD M = 2.19, SD = 0.49 and IVCCI < 50%). These patients had higher values of NT-proBNP (M = 3.692, SD = 5.247 pg/ml, p = 0.005) and E/e' M =11.5, SD= 3.3, P = 0.18) compared with those with normal IVC metrics. Sixty five percent of the total group had atrial fibrillation. Within this subcohort those with IVC metrics of volume overload also had a higher value for NT-proBNP (M = 4,266.7, SD = 5,904.5, p <0.001) compared to those in AF a normal IVC metrics. Similar results were obtained in HF-PEF and HF-rEF cohorts. Conclusion In conclusion, standard assessment of patients with stable chronic heart failure by symptom assessment and physical exam underestimates subclinical volume overload. This potentially leaves patients at higher risk for decompensation. Consideration of focused analysis of IVC and E-e prime in such patients in particular those with markedly elevated NP may be of value in diagnosing and managing this cohort.