Improving Adherence to Heart Failure Guidelines

The Problem:

The Get with the Guidelines-Heart Failure (GWTG-HF) studies recently reported that adherence to treatment guidelines for heart failure management is sub-optimal throughout the U.S. and this failure of management results in increased morbidity and mortality in these patients.

Aim/Goal:

To measure adherence to AHA/ACC guidelines at BIDMC prior to initiation of a webOMR clinical decision support tool designed to improve adherence to guidelines and then measure the effect of the tool on guideline adherence and patient outcomes at BIDMC. Finally, to compare adherence after initiation of the clinical decision support system with national averages as reported in the GWTG-HF studies.

The Team:

Lisa Battaglia, MD, Medicine; Jacob Shin, Medicine; Amy Goldman, Ambulatory Operations; Andrea Renken, Information Systems; Julie Rockwell, Ambulatory Operations; Naama Neeman, MSc, Quality Improvement; Mark D. Aronson, MD, Medicine QI; Gila Kriegel, MD, General Medicine; Hans Kim, MD, General Medicine; Scot B. Sternberg, MS, Medicine QI; James D. Chang, MD, Cardiology.

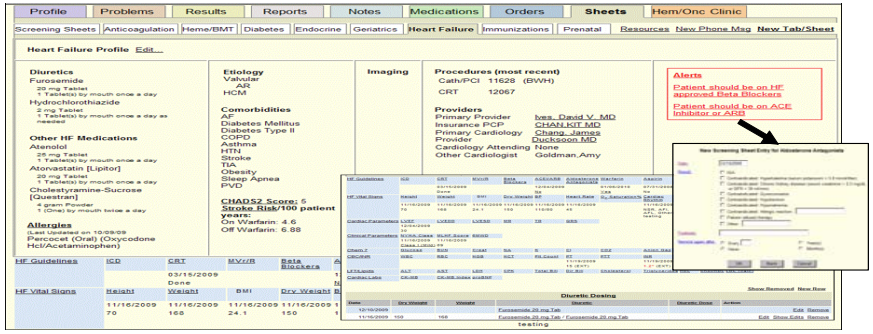
The Interventions:

- Gather pre-intervention performance data regarding use of ACE inhibitors, ARBs, Beta Blockers, Aldosterone Antagonists, and Warfarin in patients with heart failure and atrial fibrillation, respectively.
- Develop a Smart Sheet in webOMR that compiles disease-specific data into one webpage to facilitate provider workflow and effectiveness.
- Delineate criteria that will trigger an "alert" to physicians on the heart failure sheet if their patient's treatment does not comply with AHA/ACC heart failure guidelines.
- Measure post-intervention performance data at multiple time points starting at one year to ascertain whether the SmartSheet and alerts changed clinical practice.
- Measure SmartSheet usage over time and superimpose on performance data to ascertain whether there is a correlation.

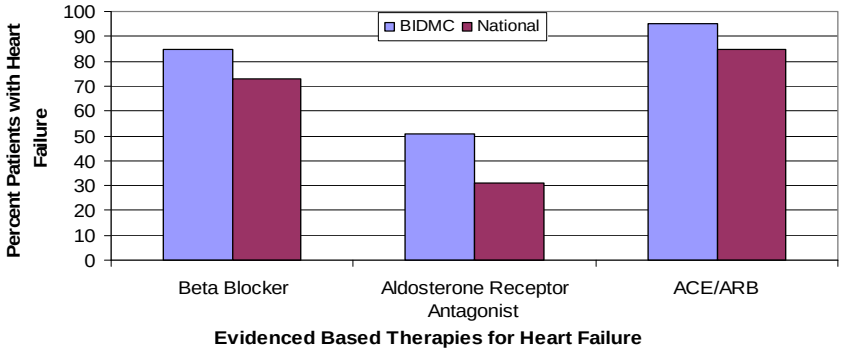
Progress To Date:

- Pre-intervention performance data suggested that BIDMC is at the national average.
- Charts of patients not on recommended medical therapy were reviewed to eliminate those patients with a contraindication to the therapy and the data was re-calculated.
- Heart failure SmartSheet implemented into OMR on 2/15/10

Web OMRHeart Failure SmartSheet



Use of Evidenced-Based Therapies for Heart Failure: BIDMC as compared to National Performance Rates*



* Peterson, P et al. Treatment and Risk in Heart Failure: Gaps in Evidence or Quality? Circoutcomes. 3(3), May 2010, pp 309-315.

Lessons Learned:

- Initially, SmartSheet usage was low despite educational efforts led by the team. Improving publicity for the sheet as well as increasing provider use by making the sheet more user-friendly may help in the future. In addition, providing physician feedback using performance data may enhance interest in improving practice for heart failure patients.

Next Steps:

- Educate and increase awareness of heart failure SmartSheet.
- Collect one year post-intervention performance data
- Collect one year SmartSheet usage data
- Initiate provider performance reports in performance manager to improve sheet usage and guideline adherence

For More Information Contact:
Lisa Battaglia
(lbattagl@bidmc.harvard.edu)

Beth Israel Deaconess Medical Center | A teaching hospital of Harvard Medical School | The Silverman Institute For Healthcare Quality and Safety