Impact of Entresto on Overall Medical Cost in Heart Failure Patients

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Introduction

National heart failure (HF) treatment guidelines recommend patients with stage C heart failure and reduced ejection fraction, who are on an angiotensin-converting enzyme inhibitor (ACE) or angiotensin II receptor antagonist (ARB) be switched to Entresto (sacubitril/valsartan) to reduce cardiovascular death and heart failure hospitalizations. Data from Medicaid recipients was reviewed to assess the real-world effects of initiating sacubitril/valsartan.

Objective

To determine if sacubitril/valsartan reduces overall cost of care in patients with heart failure to a greater extent than traditional care with an angiotensin-converting enzyme inhibitor or angiotensin II receptor antagonist.

Methods

Claims data from September 1, 2015 – March 1, 2016 was analyzed to identify Medicaid recipients who were continuously eligible and had a hospital admission due to heart failure and were not on sacubitril/valsartan prior to admission. The target group consisted of individuals who received sacubitril/valsartan post admission while the control group did not. The cost of pharmacy and medical care 6 months pre- and post–admission was calculated for both groups. A secondary comparison involved individuals from the target group and the control group who were not on a maximum dose of an angiotensin-converting enzyme inhibitor or angiotensin II receptor antagonist pre-admission.

Results

The control group consisted of 4,650 individuals that did not start sacubitril/valsartan at any point. Their pharmacy cost decreased by $8.50 (-6.85%) and medical cost decreased by $43.77 (-2.54%) resulting in an overall decrease of $52.27 (-2.83%). The target group consisted of 144 individuals who were not on sacubitril/valsartan pre-admission, but were post-admission. Their pharmacy cost increased by $147.99 (84.4%), but medical cost decreased by $886.40 (-48.5%) resulting in an overall decrease of $738.40 (-36.8%). Of the 144 individuals, 101 were not at a maximum ACE/ARB dose pre-admission and went on to start sacubitril/valsartan post-admission. Their pharmacy cost increased by $143.79 (98.98%) and medical cost decreased by $1,019.33 (-51.53%) resulting in an overall decrease of $875.53 (-41.23%). Of the 4,650 individuals in the control group, 627 were not at a maximum dose of an ACE/ARB prior to admission, but were after. Their pharmacy cost increased by $24.44 (20.59%) and medical cost decreased by $453.46 (-24.96%) resulting in an overall decrease of $429.02 (-22.17%).

Conclusion

The data revealed that individuals with heart failure had an overall decrease in cost of care after starting sacubitril/valsartan compared to those who continued on traditional care with an angiotensin-converting enzyme inhibitor or angiotensin II receptor antagonist.

Figure 1

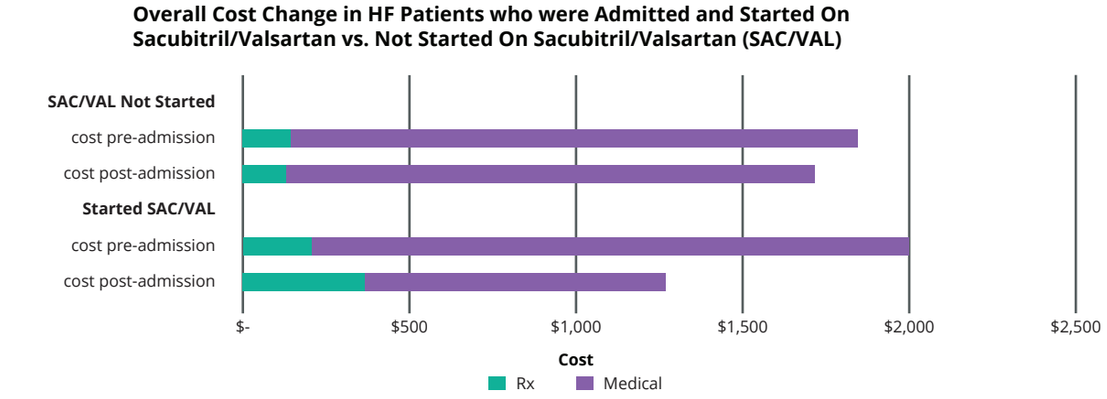

Figure 2