Association of Copayments With Adherence to Sacubitril/Valsartan for Congestive Heart Failure

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Background

- Heart failure affects 6.2 million adults in the US and is a chronic illness that directly impacts the lives of many patients.[1]
- The 2022 AHA/ACC/HFSA guidelines show significant support for the use of ARNis in patients with congestive heart failure. Specifically, these updates identify ARNis as superior to ACEis in HFrEF and recommend their use in the general management of HFpEF. ARNis are expected to play an increasingly significant role in the management of heart failure and plans will likely see an increase in claims over the coming years.[2]
- Studies have shown that providing full preventive medication coverage with $0 copayments has a significant impact on maintenance medication adherence compared to partial coverage. The MI FREE trial studied this type of coverage change in people who had experienced a myocardial infarction, showing a statistically significant increase in adherence for all classes of medication studied, with a 5.6% increase in adherence for ACEis and ARBs.[3]
- Improved adherence reduces the risk of death, hospitalization, length of stay, and emergency department visits, helping to reduce overall costs and improve health outcomes.[4,5]
- There is insufficient long-term research showing the impact of coverage changes in similar groups. More information is needed to justify copayment re-evaluation based upon these new guideline updates.

Objective

To determine the association between copayment structure and patient adherence to sacubitril/valsartan.

Methods

- Design
  - A retrospective claims analysis for patients with coverage under three commercial prescription plans; each plan having different copayment structures.
  - Paid claims information was used to calculate patient copayments for both the target medication and all other maintenance medications within the look-back period.
- Study Population
  - Patients included were active with their health plans and had filled sacubitril/valsartan between the dates of July 1, 2021 and July 31, 2022. There were no age or quantity restrictions. Patients with only one fill of sacubitril/valsartan were excluded.
- Outcomes
  - Pharmacy claims were analyzed to compare patient fill behavior of sacubitril/valsartan under different plans/copayment structures.
  - Primary Outcome: The primary endpoint was the relative difference in percentage of patients achieving a proportion of days covered (PDC) of 80% or more for sacubitril/valsartan between the three different plans/copayment structures.
  - Secondary Outcome: The secondary endpoint was the proportion of patients achieving a PDC of 80% or more, related to sacubitril/valsartan's contribution to the patient's total maintenance medication copayment per month.

Results

Table 1. Baseline patient demographics

n = 208	
Female	61 (29.3%)
Male	147 (70.7%)
Mean Age (Years)	56.5 (+/- 11.9)
Plan A Population Size	30 (14.4%)
Plan B Population Size	92 (44.2%)
Plan C Population Size	86 (41.4%)

Table 1. This study identified 208 unique patients under three large commercial prescription plans who had multiple fills of sacubitril/valsartan.

Figure 1. Weighted mean copayment for sacubitril/valsartan

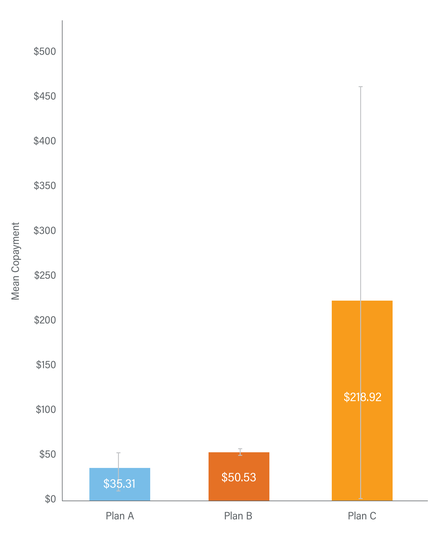

Figure 1. The mean copayment per individual plan was calculated based on paid claims for sacubitril/valsartan.

Primary Outcomes

Figure 2. Percentage of patients with sacubitril/valsartan PDC ≥80%

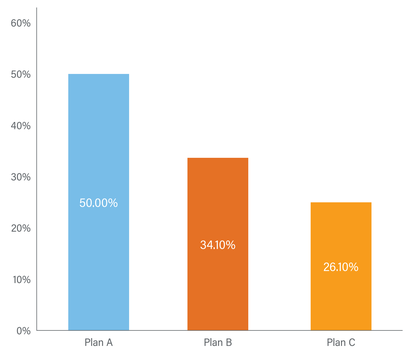

Figure 2. There was a statistically significant decrease in the proportion of patients with a PDC ≥80% as copayment increased across the three plans (p<0.001).

Figure 3. Mean copayment for sacubitril/valsartan compared to adherence

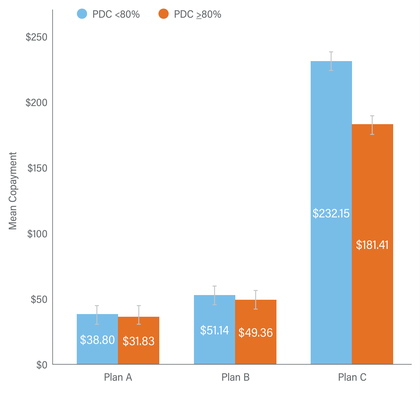

Figure 3. There was a statistically significant difference in copayment between adherence groups within Plan A (p=0.001) and Plan C (p<0.001), and a non-significant difference within Plan B (p=0.077).

Secondary Outcomes

Table 2. Mean adherence measures per plan

	PDC (%)	MPR (%)	GIT (days)
Plan A	74.07 ± 22.91	72.51 ± 29.48	58.60 ± 67.24
Plan B	72.01 ± 16.80	67.72 ± 22.56	71.16 ± 60.28
Plan C	70.07 ± 16.38	63.49 ± 20.99	77.77 ± 60.27

Table 2. Comparison of mean adherence measures per plan.
PDC – proportion of days covered; MPR – medication possession ratio;
GIT – gap in therapy.

Figure 4. Sacubitril/valsartan copayment as a percentage of all maintenance medications

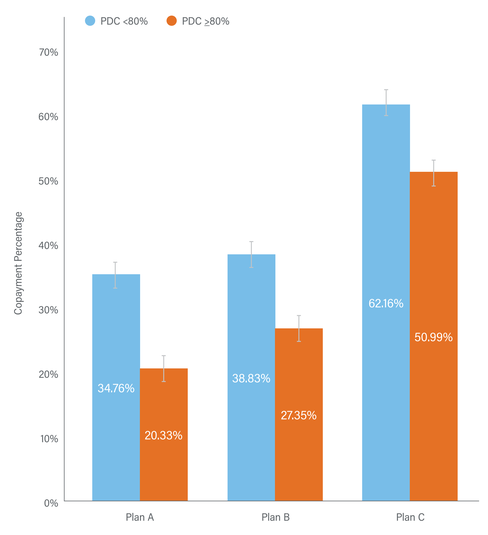

Figure 4. There was a statistically significant difference in sacubitril/valsartan contribution percentage within each plan (p<0.001).

Conclusions

- Higher copayments for sacubitril/valsartan are related to lower adherence.
- Adherence to sacubitril/valsartan is lower when its copayment represents a larger proportion of the patient's total maintenance medication regimen.
- There are many contributing factors that can influence adherence, but cost will likely continue to play a major role in many patients' lives.
- Organizations should strive to readily embrace guideline changes and adjust to the best practice for any area of medicine. Adapting quickly to these changes is vital to providing the optimal medications for our patients.

Future Directions

- Larger study populations over a longer length of time would provide more robust data to support these preliminary outcomes.
- Based upon new recommendations, other medications could be evaluated to provide further support for future formulary changes.
- Sacubitril/valsartan, along with other medications, may be considered for value-based contracting agreements. Companies may pursue this form of dynamic contracting as new medications enter the market and guidelines continue to change.[6]

Disclosures

This research was conducted by Navitus Health Solutions, based in Madison, WI, without external funding.

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