

# A RETROSPECTIVE OBSERVATIONAL ANALYSIS OF TAFAMIDIS ADHERENCE AND ITS INFLUENCE ON MEDICAL COSTS IN MEDICARE ADVANTAGE ENROLLEES DIAGNOSED WITH ATTR-CM

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## Background

- Transthyretin amyloid cardiomyopathy (ATTR-CM) is a life-threatening and often underdiagnosed disease that can lead to heart failure.
- Along with the disease burden, this condition frequently poses a significant economic burden for patients with a confirmed diagnosis for ATTR-CM.
- Tafamidis is the first FDA-approved treatment for wild-type and familial ATTR-CM.
- Previous studies indicate generally high adherence to tafamidis which often results in expensive prescription costs.
- The primary endpoint of this study is to understand the relationship between tafamidis adherence and total healthcare costs among Medicare Advantage Prescription Drug (MAPD) enrollees.

## Objective

To evaluate real-world adherence, at different therapy durations, and cost patterns of patients with ATTR-CM for MAPD enrollees using tafamidis.

## Methods

### Study Design:

- A retrospective analysis was conducted using United Healthcare MAPD medical and pharmacy claims from 1/1/2021 – 7/1/2024.
- All medications and related healthcare costs were retrieved for each member.
- The Medication Possession Ration (MPR) calculation was used to evaluate, for each member, adherence to tafamidis.
- All members were divided into non-users, non-adherent users (MPR <80%), and adherent users (MPR ≥80%).
- Members were assessed in the following cohorts of therapy durations in 180-day cohorts from 6 months to 3 years of therapy.

### Inclusion Criteria:

- MAPD members with documentation of ATTR-CM diagnosis and/or claims for tafamidis
- Pharmacy claims between 1/1/2021 – 7/1/2024
- Active insurance membership during the study period

### Figure 1. Study Population and Exclusion Criteria

Members with ATTR-CM (n=1758)	
Tafamidis users(n=838)	Non-tafamidis users(n=920)
Less than 6 months of data (n=805)	Less than 6 months of data (n=869)
Break-in membership (n=750)	Break-in membership (n=807)
Missing data integrity (n=484)	Missing data integrity (n=504)
Membership indexed after 1/1/24 (N=437)	Membership indexed after 1/1/24 (n=478)
Truncated into cohorts of 180, 360, 520, 720, 900, or 1080 days (n=174)	Truncated into cohorts of 180, 360, 520, 720, 900, or 1080 days (n=154)

## Results

- A total of 328 Medicare members met inclusion criteria of which 174 (53%) of members had prescription claims for tafamidis (Figure 1).
- Tafamidis users had a mean MPR of 94.2% and 90.8% of the members had an MPR ratio greater than 80% (Figure 2).
- Average per member per month (PMPM) medical costs were lower for adherent members (\$1,279) compared to non-adherent members (\$3,878) and non-users (\$1,671) (Table 1).
- Average monthly cost for tafamidis was \$22,061 for adherent and non-adherent members.
- Observed increase in non-tafamidis pharmacy costs across 180, 360, 540, 720 day cohorts for adherent members compared to non-users or non-adherent members (Figure 3).
- Some tafamidis-users received agents for ATTR-peripheral neuropathy (ATTR-PN) and other related comorbidities: Amvuttra™ (22%), Wainua™ (5%), Onpattro™ (5%), and Tegsedi™ (2%).

Figure 2. Member Cohort Composition

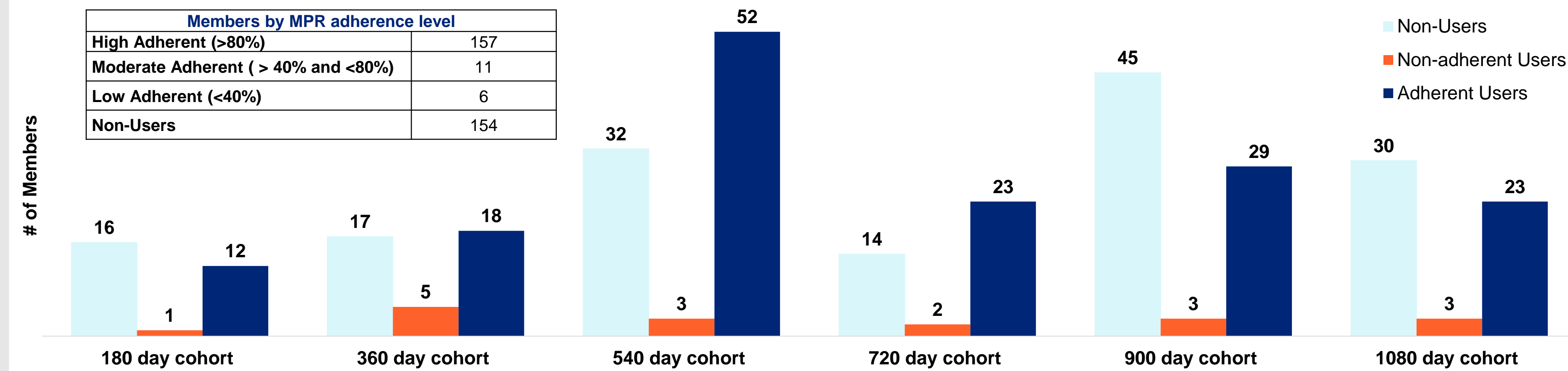
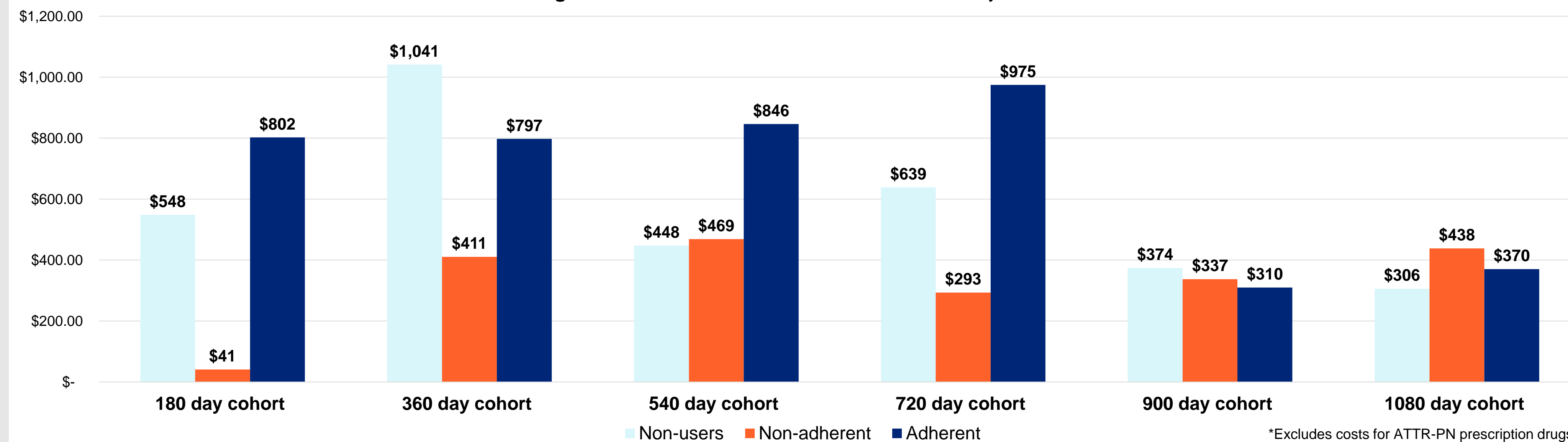


Table 1. PMPM Medical Costs

	Non-Users (n=154)	Non-adherent Users (n=17)	Adherent Users (n=157)
180-day cohort (n=29)	\$ 1,147	\$ 786	\$ 1,052
360-day cohort (n=40)	\$ 3,579	\$ 5,895	\$ 2,969
540-day cohort (n=87)	\$ 2,494	\$ 8,305	\$ 1,476
720-day cohort (n=39)	\$ 2,222	\$ 509	\$ 1,688
900-day cohort (n=77)	\$ 1,450	\$ 2,661	\$ 603
1080-day cohort (n=56)	\$ 2,029	\$ 1,744	\$ 1,702

Figure 3. Non-Tafamidis Related PMPM Pharmacy Costs\*



## Limitations

- Member data was obtained from unadjusted claims and sample size was low.
- Demographic information was not accessible for the member population.
- Limitations in accessing the degree of disease progression using methods such as the 6-minute walk test, an echocardiogram, or electrocardiogram reading.
- The contribution of other clinical factors to member medical costs was not determined.
- Propensity score matching was not performed for this analysis.

## Conclusions

- Tafamidis users with ATTR-CM were generally adherent to their treatment regimen.
- Adherent members had the lowest average medical costs over a 3-year period compared to non-users and non-adherent members.
- Non-adherent tafamidis members incurred higher medical costs and utilized more medical resources compared to both non-users and adherent members.
- The observed higher pharmacy expense for adherent members between 180-720 day cohorts suggests a need for further exploration of relationship between adherence and disease progression.
- Given their related mechanisms of action, concomitant use of medications for ATTR-CM and ATTR-PN merit further clinical and pharmacoeconomic evaluation.
- Implementing a member/patient program may enhance adherence and duration of therapy, helping members achieve the full therapeutic benefit of tafamidis.

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