CHARACTERISTICS ASSOCIATED WITH NONADHERENCE FROM DATA COLLECTED AS PART OF AN AUTOMATED REFILL REMINDER PROGRAM

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INTRODUCTION

- Refill reminder (RR) programs are frequently used to address medication nonadherence and collect member activity data that may help identify members at greater risk of nonadherence.
- Improving health outcomes by addressing nonadherence is an important role of health plans.
- Targeted interventions support plans in achieving adherence goals while also ensuring programs are efficient and sustainable.

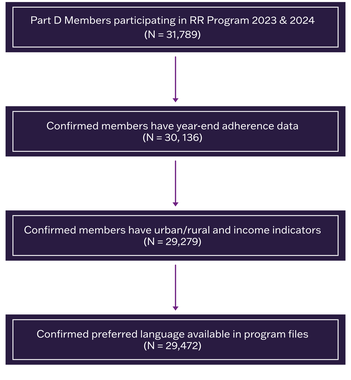
OBJECTIVE

The study's objective was to evaluate the association of selected plan member characteristics with proportion of days overed (PDC) less than 80% (nonadherent) for three medication classes: diabetes (DM), hypertension (HTN), and statins in Part D plans participating in the automated RR program.

METHODOLOGY

- Identified all Part D members participating in the automated RR program in 2023 and 2024.
- PDC was calculated using Pharmacy Quality Alliance (PQA) methodology.
- Descriptive statistics and logistic regression using generalized estimating equations for a binary outcome was used to model the odds of nonadherence based on member characteristics and RR program activity.

Figure 1: Attrition Flow Chart

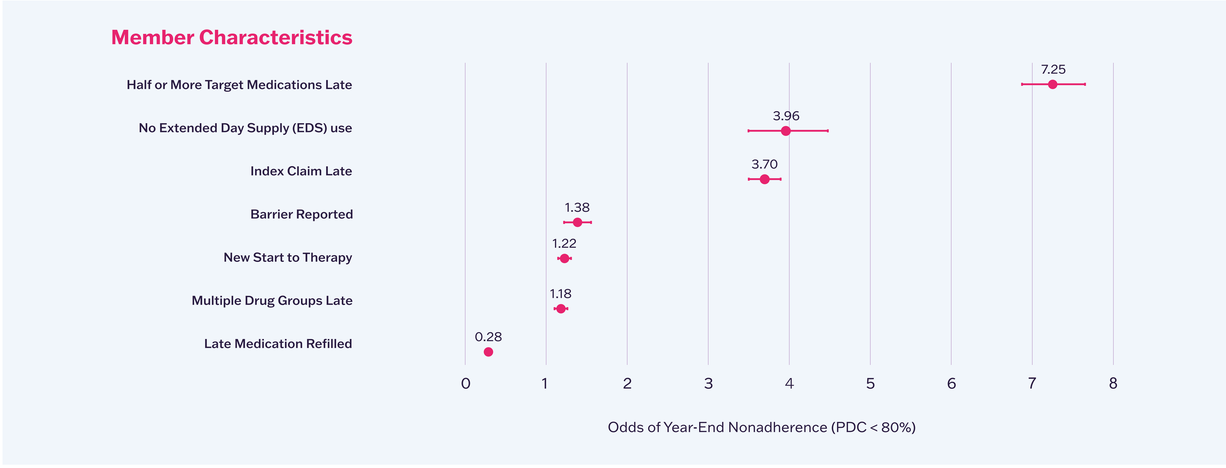


RESULTS

Table 1: Summary of Member Characteristics by Adherence Status

Characteristic	Nonadherent, n (%)	Adherent, n (%)	P value
Year			0.19
2023	4,442 (26.7)	12,174 (73.3)	
2024	6,754 (26.2)	19,069 (73.8)	
Therapy Type			<0.001
Continuing	5,761 (24.0)	18,221 (76.0)	
New Start	5,171 (35.0)	9,616 (65.0)	
Age Group			0.002
65-84	8,487 (29.0)	20,742 (71.0)	
<65 or >84l	1,793 (31.1)	3,973 (68.9)	
Preferred Language			0.004
English	8,619 (29.5)	20,605 (70.5)	
Spanish	446 (26.0)	1,271 (74.0)	
Other	1,273 (28.4)	3,204 (71.6)	
Extended Day Supply Use			<0.001
Yes	9,295 (28.4)	23,396 (71.6)	
No	1,026 (44.0)	1,307 (56.0)	
Barrier Reported			<0.001
Yes	515 (37.2)	871 (62.8)	
No	9,794 (29.0)	23,992 (71.0)	
Half or More Target Medications Late			<0.001
Yes	7,648 (48.5)	8,106 (51.5)	
No	3,318 (13.8)	20,736 (86.2)	
Index Claim Late			<0.001
Yes	6,626 (43.7)	8,539 (56.3)	
No	4,561 (18.4)	20,239 (81.6)	
Multiple Drug Groups Late			<0.001
Yes	4,967 (31.0)	11,044 (69.0)	
No	5,552 (26.2)	15,674 (73.8)	

Figure 2: Odds of Nonadherence Among Member Characteristics



DISCUSSION

- The value of clinical programs provided by pharmacy benefit managers extend beyond the service itself into the insights of the data captured in the delivery of those services.
  - Many of the characteristics assessed here are measurable as early as the first outreach attempt for a late refill.
  - Plans can use the activity reports to identify specifically which members may require additional, and potentially more expensive, outreach.
  - Statistically significant characteristics may prove to be useful variables in predictive modeling.
- Limitations of this study include the use of administrative claims from select Part D member populations. The results may not be applicable in other populations

CONCLUSION

This study demonstrates the value in the data collected through low-cost, automated member outreach programs. Further research is needed to evaluate interventions on patients with more risk factors on year-end adherence.

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