

# Closing the Gap: Identifying Rates and Reasons for Nonadherence in a Specialty Population

Dominic Paoella, Autumn Zuckerman, PharmD, BCPS, AAHIVP, CSP, Elizabeth Cherry, PharmD, Jacob A. Jolly, PharmD, CSP

## Quick Facts

### Evaluated



**105**

Patients on specialty medications with proportion of days covered (adherence) <80%

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### Results



**40%**

of non-adherence was intentional



**60%**

of intentional non-adherence was due to provider-directed treatment gaps



**59%**

of unintentional non-adherence was due to inability to reach patient

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Therapy gaps that lead to lower adherence rates are often due to intentional clinically appropriate holds in specialty medication

Unintentional non-adherence may be improved by using innovative methods for contacting patients

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Dominic Paolella<sup>1</sup>, Autumn Zuckerman, PharmD, BCPS, AAHIVP, CSP<sup>2</sup>, Elizabeth Cherry, PharmD<sup>2</sup>, Jacob A. Jolly, PharmD, CSP<sup>2</sup>

## Background

- Adherence to specialty medication is crucial in controlling rare chronic conditions and achieving desired clinical outcomes.
- Proportion of days covered (PDC), a commonly used calculation to assess adherence using pharmacy claims data, does not account for appropriate reasons a patient may appear nonadherent.
- Vanderbilt Specialty Pharmacy is systematically addressing nonadherence through a multi-phase project. Phase I evaluated rates of adherence across clinics:

7,307 prescription (18 clinics)

Average PDC: 93% / Average rate of nonadherence (PDC <80%): 12.6%

Assess rates of nonadherence

Understand and categorize reasons for nonadherence

Implement intervention targeting unintentional nonadherence

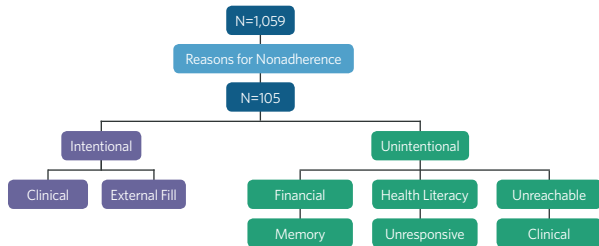
Build accurate adherence calculation

## Objective

Assess patient reasons for nonadherence, as calculated by PDC, to specialty medication at an integrated specialty pharmacy.

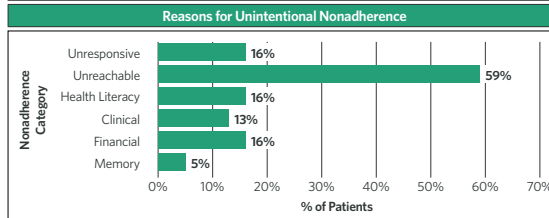
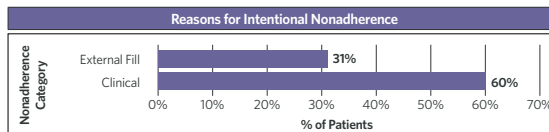
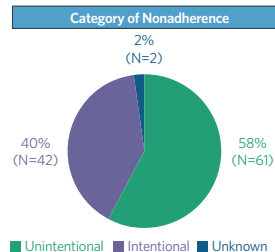
## Methods

- Single-center, retrospective chart review.
- 1,059 patients with PDC of <80%, between March 2017 and March 2018.
- 10% sample (n=105) generated by random numerical assignment in Excel.
- Reasons for nonadherence were identified by medical record review and categorized based on available information.



## Results

Demographic Characteristics (N = 105)	
Characteristic	Value
Age (mean 4SD)	45 ± 20
<b>Gender</b>	
Female	71 (67.6%)
Male	34 (32.4%)
<b>Ethnicity</b>	
Caucasian/White	93 (88.6%)
African American/Black	7 (6.7%)
Asian	1 (1.0%)
Other	4 (3.8%)



Nonadherence Category	N (%)	
<b>Financial</b>	Insurance change	9 (14.8)
	Affordability: Loss of grant	6 (9.8)
	Affordability: High copay	1 (1.6)
	Other	2 (3.3)
<b>Clinical</b>	Intolerance/adverse effect	8 (13.1)
	Other	7 (11.5)
	Other	1 (1.6)
<b>Health Literacy</b>	Med safety/efficacy belief	10 (16.4)
	Alternative administration	3 (4.9)
<b>Memory</b>	Forgetfulness	7 (11.5)
	Other	3 (4.9)
<b>Unreachable</b>	Unreachable	36 (59.0)
	Other	34 (55.7)
	Other	2 (3.3)
<b>Patient Unresponsive</b>	Unresponsive getting labs	10 (16.4)
	No show to appointment	7 (11.5)
	Unresponsive to financial office	1 (1.6)
	Other	1 (1.6)
<b>Clinical</b>	Lab abnormalities	25 (59.5)
	Surgery/procedure	4 (9.5)
	Temporary contraindication	7 (16.7)
	Intolerance/adverse effect	6 (14.3)
	Other	7 (16.7)
	Other	5 (11.9)
<b>External Fill</b>	Filled at another pharmacy	13 (30.9)
	Patient given samples	8 (19.0)
	Other	4 (9.5)
	Other	1 (2.4)

## Discussion

- Majority of unintentional nonadherence is due to inability to reach the patient.
- Majority of intentional nonadherence is due to clinical reasons for holding treatment.
- PDC calculations do not optimally represent intentional nonadherence.

## Conclusion

- Our results demonstrate the need to improve communication methods to contact patients in innovative ways.
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- Additionally, adjustments to current measures of adherence are needed to improve the accuracy in the reported incidence of nonadherence.

## Future Directions

- Future research is planned to use targeted pharmacist-driven intervention to identify and overcome reasons for unintentional nonadherence.
- The goal is to evaluate the impact of an adherence intervention on adherence rates for nonadherent patients.