IDENTIFYING NONADHERENCE TO SPECIALTY MEDICATIONS: COMPARING PHARMACY CLAIMS DATA AND INDIVIDUAL REASONS FOR NONADHERENCE

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BACKGROUND

Pharmacy claims data, commonly used to calculate medication adherence, are unable to discern true nonadherence from appropriate gaps in therapy frequently required with specialty medications.

OBJECTIVE

Identify and categorize reasons for nonadherence and determine the rate of misidentified nonadherence to specialty medications

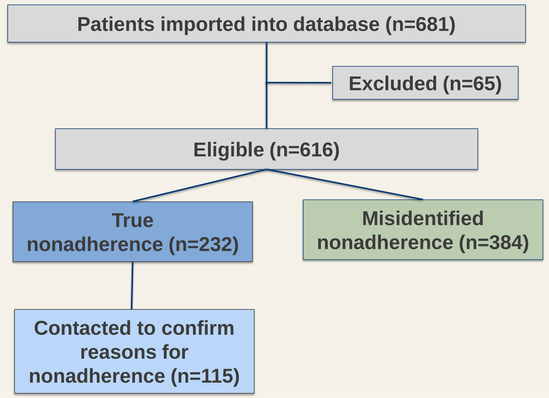
METHODS

Design	Prospective, cohort study at an integrated health-system specialty pharmacy within an academic medical center
Inclusion	Patients prescribed eligible medications dispensed by health-system specialty pharmacy with PDC <90% in previous 4 months, between May 2019 and August 2020
Exclusion	• Medication prescribed by an outside provider • Deceased before study enrollment • Planned treatment discontinuation in the next 8 months • 2+ unique specialty medications from same clinic in previous 4 months • 30+ gap days in previous 4 months and last fill >30 days from import date
Outcomes	Categorize reasons for nonadherence • Categories were developed from patient and clinical pharmacist focus groups • Categories confirmed in pilot study Rates of misidentified and true nonadherence • ***Misidentified nonadherence*** = PDC <90% and an appropriate reason for gaps in therapy • ***True non-adherence*** = PDC <90% and no identifiably appropriate reason for gaps in therapy

Patients meeting inclusion criteria are imported into study database → Pharmacist reviews patient health records to identify and categorize reasons for nonadherence → Pharmacist contacts a sample of patients categorized with true nonadherence to confirm reasons for nonadherence

RESULTS

FIGURE 1. REASONS FOR NONADHERENCE REVIEWED



Most patients reviewed had an appropriate reason for nonadherence and thus were categorized as misidentified nonadherence.

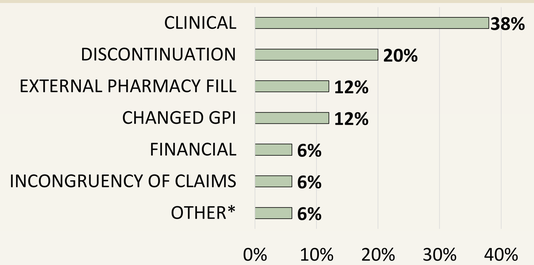
Most instances of misidentified nonadherence were for clinically appropriate reason for gaps in therapy (Table 2 and Figure 2).

True nonadherence was most commonly due to memory problems or were unreachable to schedule a refill (Figure 3).

TABLE 1. PATIENT CHARACTERISTICS, N(%) OR MEDIAN [IQR]

Characteristics	All patients n=681	True nonadherence n=232	Misidentified nonadherence n=384
Age, years	51 [39, 65]	52 [42,65]	49 [36,64]
Gender, Female	454 (67)	166 (72)	250 (65)
Race			
White	556 (86)	195 (86)	315 (85)
Black	77 (12)	28 (12)	45 (12)
Other	17 (2)	5 (2)	10 (3)
Insurance Type			
Commercial	379 (56)	129 (56)	219 (57)
Medicaid	63 (9)	15 (7)	44 (11)
Medicare	236 (35)	88 (38)	121 (32)
Other	3 (<1)	0 (0)	1 (<1)
Clinic			
Rheumatology	276 (41)	73 (31)	182 (47)
Multiple Sclerosis	83 (12)	49 (21)	31 (8)
Lipid	70 (10)	37 (16)	31 (8)
Other	252 (37)	73 (31)	143 (37)
Prescribed Medication			
adalimumab	136 (20)	31 (13)	90 (23)
etanercept	89 (13)	31 (13)	53 (14)
evolocumab	51 (7)	29 (13)	21 (5)
Other	405 (59)	141 (61)	223 (58)

FIGURE 2. REASONS FOR MISIDENTIFIED NONADHERENCE N =384

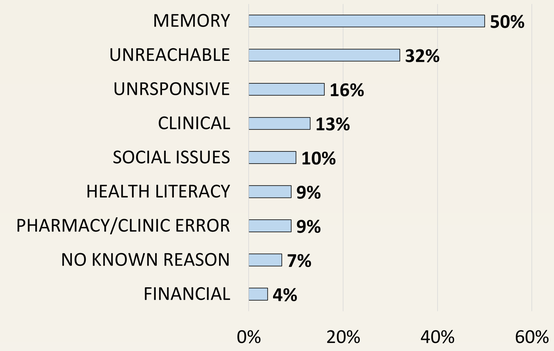


*Other reasons include delay in treatment initiation or shipping issues

TABLE 2. CLINICAL REASONS FOR MISIDENTIFIED NONADHERENCE N=146

REASON	N (%)
Appropriately held for illness/Infection	55 (38)
Drug intolerance/Adverse effect	28 (19)
Alternate dosing under prescriber supervision	26 (18)
Surgery/Procedure	20 (14)
Weaning or tapering of dose	10 (7)
Lab abnormalities	4 (3)
Temporary drug interaction	2 (1)
Pregnancy	1 (<1)

FIGURE 3. REASONS FOR TRUE NONADHERENCE N=115



Unresponsive refers to patients who did not comply with the necessary requirements for continuing treatment (labs, paperwork, etc.)

CONCLUSIONS

- A single pharmacy database cannot capture where a patient obtains medication or why they change or discontinue therapy, so patients can be misidentified as nonadherent based on claims data.
- Reasons for true and misidentified nonadherence vary by patients and clinics.
- Despite the high cost of specialty therapies, few patients were nonadherent due to cost, likely explained by specialty pharmacy coordinating benefits and financial assistance.
- Clinically appropriate gaps in therapy should be accounted for when evaluating adherence to specialty therapies.

FUTURE DIRECTIONS

- Better methods are needed to identify true nonadherence to specialty medications.
- Further research is needed to determine the best ways to reduce true nonadherence, especially memory and ability to reach the patient.

REFERENCES

1. Canfield SL, *J Manag Care Spec Pharm,* doi: 10.18553/jmcp.2019.25.10.1073.
2. Paolella D., *J Manag Care Spec Pharm,* doi: 10.18553/jmcp.2019.25.11.1282.