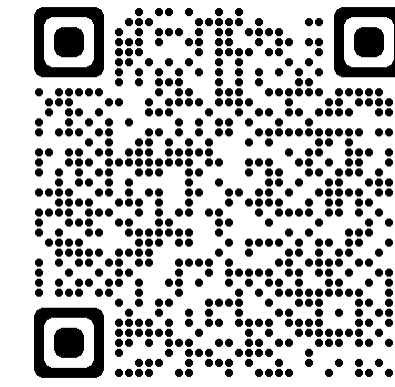


Patient-Tailored Pharmacist Interventions to Improve Specialty Medication Adherence: A Randomized Controlled Trial

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Conclusion

Patient-tailored interventions to address poor adherence to specialty medications resulted in significant adherence improvement compared to usual care:

8-month PDC 94% (intervention) vs. 88% (usual care), p<0.001

Specialty pharmacies should target nonadherent patients for adherence interventions.

Purpose

Evaluate the impact of patient-tailored complex interventions on adherence to specialty medications as compared to usual care.

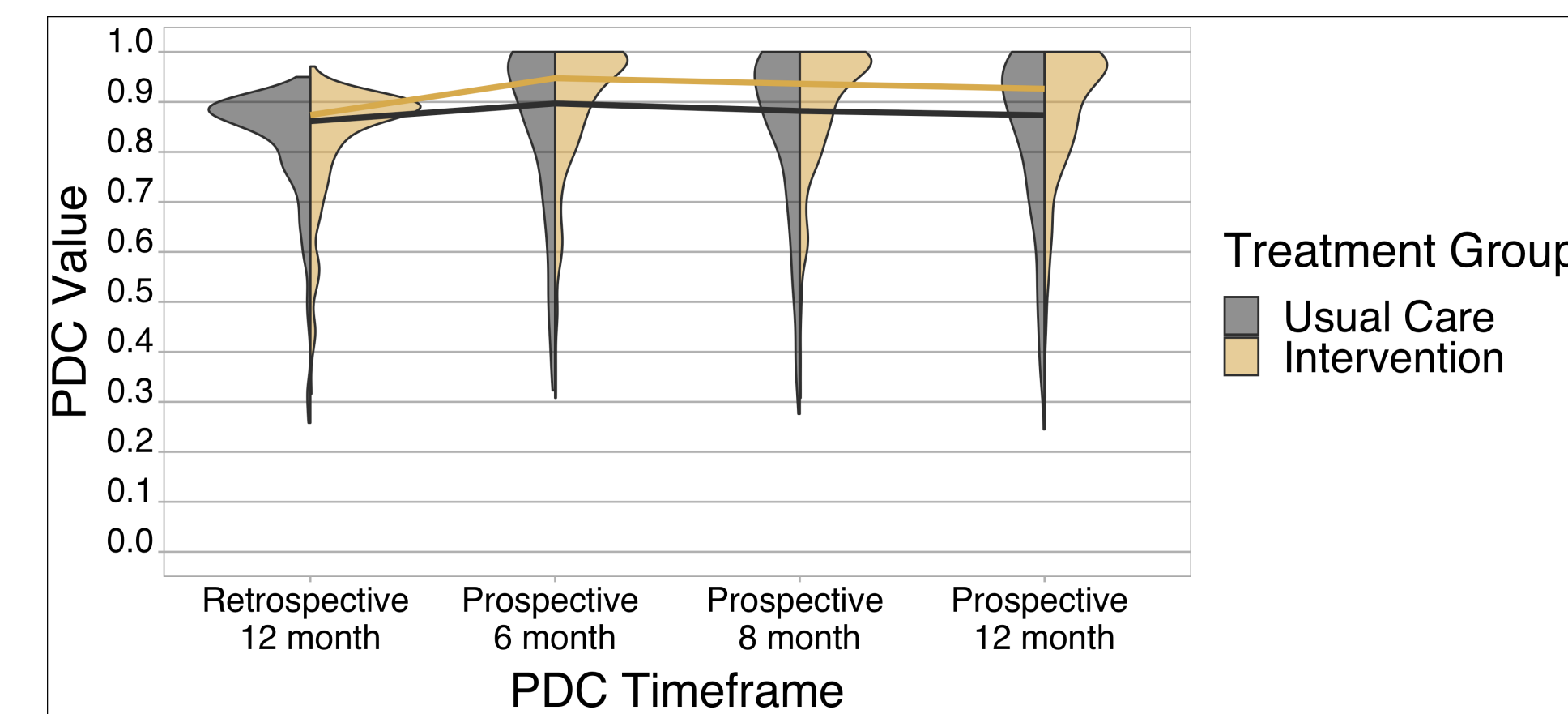
Setting and Patient Sample

Single-center, pragmatic, randomized controlled trial at an integrated health-system specialty pharmacy

Patients included for pharmacist review:
1) PDC <0.9 over the previous 4 and 12 months and
2) filled a specialty medication at least 4 times in the previous 12 months from select specialty clinics

Results

Figure 2. PDC by Treatment Group and Time



| PDC Timeframe | Usual Care Median (IQR) | Intervention Median (IQR) | P-value |
|----------------------|-------------------------|---------------------------|---------|
| Baseline 12-Month | 0.86 (0.78, 0.89) | 0.87 (0.78, 0.9) | 0.21 |
| Prospective 6-Month | 0.9 (0.76, 0.98) | 0.95 (0.84, 1) | 0.003 |
| Prospective 8-Month | 0.88 (0.75, 0.97) | 0.94 (0.84, 0.99) | <0.001 |
| Prospective 12-Month | 0.87 (0.72, 0.95) | 0.93 (0.82, 0.98) | <0.001 |

Figure 3. Reason for Nonadherence by Clinic

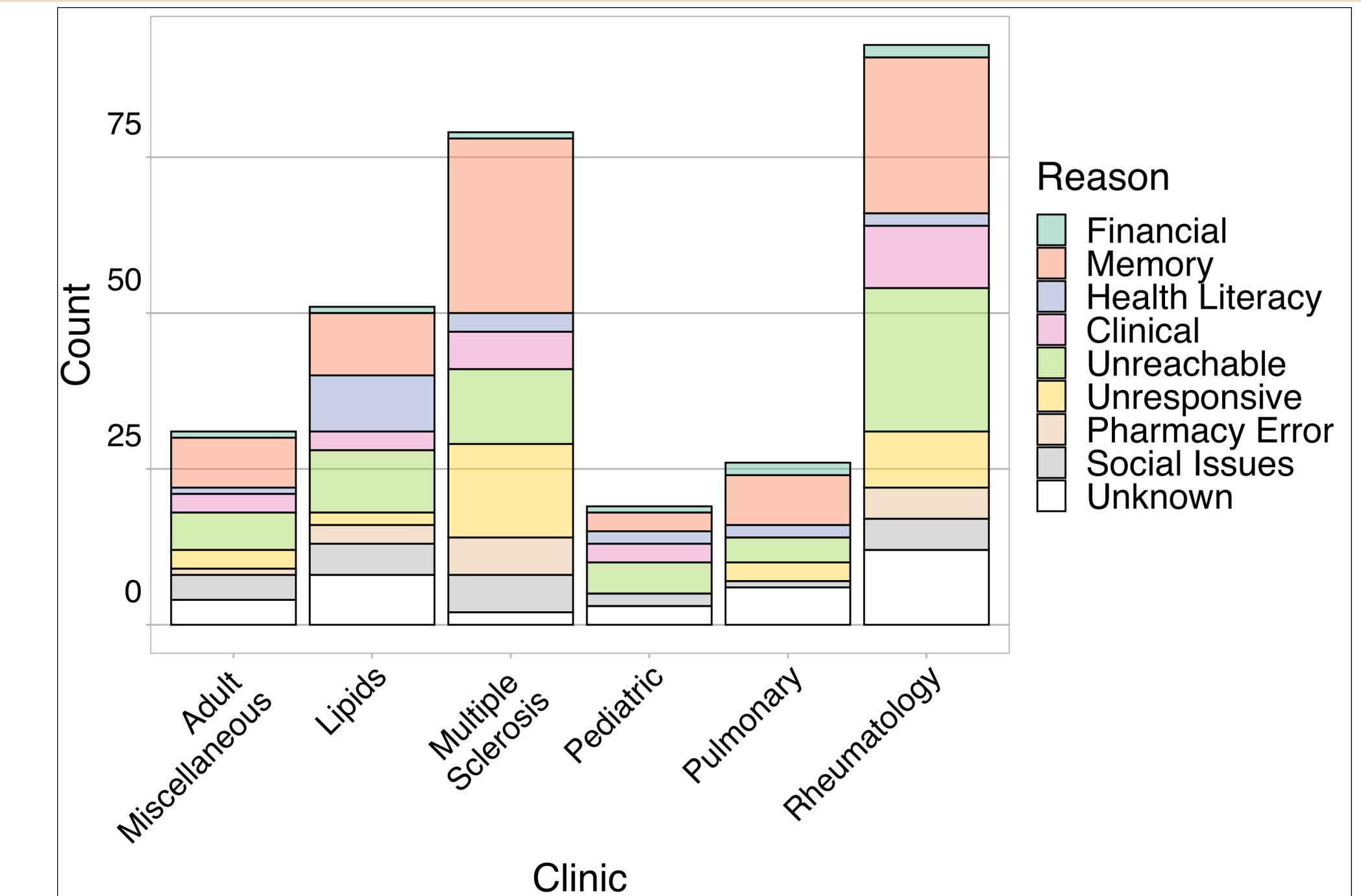


Figure 1. Study Methods

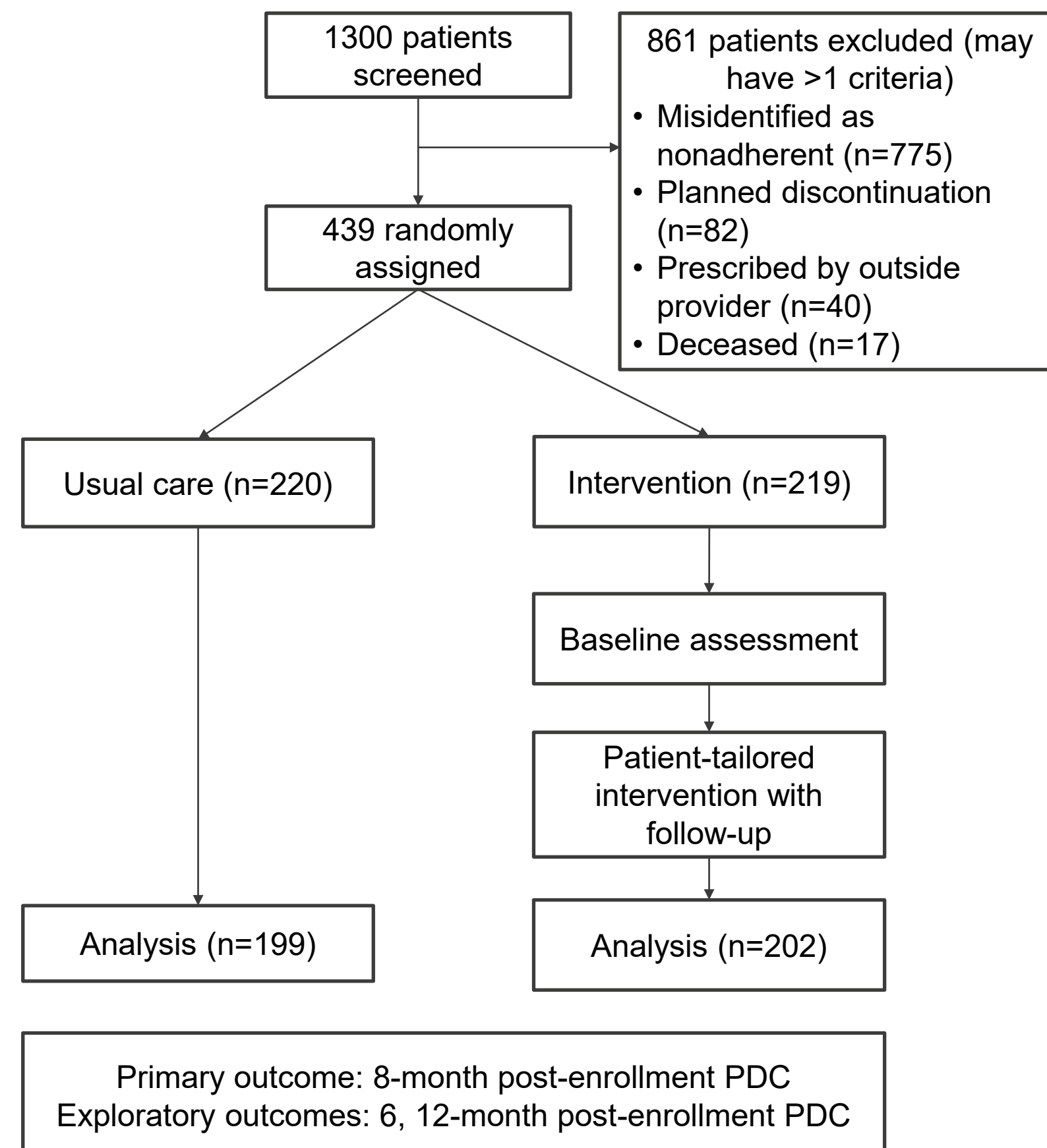


Table 1. Baseline Characteristics

| | N=439 |
|---|------------------|
| Age- mean (±SD) | 51 (±18) |
| Female | 299 (68%) |
| White | 360 (82%) |
| Commercial Insurance | 255 (58%) |
| Duration of Therapy ≥ 1 year | 292 (67%) |
| Clinic | |
| Adult Miscellaneous | 57 (13%) |
| Lipids | 75 (17%) |
| Multiple Sclerosis | 86 (20%) |
| Pediatric | 31 (7%) |
| Pulmonary | 38 (9%) |
| Rheumatology | 152 (35%) |
| Baseline PDC at 12 months- median (IQR) | 0.87 (0.78, 0.9) |

Figure 4. Patient-tailored Interventions

| Baseline Assessment |
|---|
| • Can you tell me how you take [med]? |
| • What concerns do you have about [med] |
| • Have you experienced any side effects? |
| • How do you remember to take [med]? |
| • How many doses have you missed in last 30 days? |
| • Can you tell me why you take [med]? |

| Nonadherence Reason | Count |
|------------------------------|-------|
| Memory | 82 |
| Unreachable | 60 |
| No known reason | 35 |
| Unresponsive* | 32 |
| Clinical | 25 |
| Social issues | 23 |
| Health Literacy | 19 |
| Health-system determinants** | 15 |
| Financial | 8 |

| Most Common Interventions | |
|--|---------------------------------------|
| • Sent instructions for smartphone reminders | • Addressed clinic or pharmacy errors |
| • Mailed daily pill boxes | • Provided encouragement |
| • Created unreachable action plans | • Discussed financial assistance |
| • Recommended follow up | |

*Unresponsive = patient who did not comply with the necessary requirements for continuing treatment
**Health-system determinant = clinic or pharmacy error resulting in refill delays