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Patient-tailored pharmacist interventions to improve specialty medication adherence: a randomized controlled trial

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Disclosures and Disclaimers

There are no financial relationships with commercial interests to disclose and this presentation does not include discussion of off-label or investigational use.

This presentation includes information based on unpublished data.

CPE Information

Target Audience:
ACPE#:
Activity Type:

(APhA will complete this information.)

Learning Objective

- Identify the most common reason for nonadherence to specialty medications

Assessment Questions

1. The most common reason for specialty medication nonadherence falls into which category:
   A. Clinical
   B. Memory
   C. Financial
   D. Health literacy

Study Question and Definitions

Study question

- Can pharmacists improve adherence to specialty medications by providing patient-tailored interventions?

Study definitions

- Specialty medications – complex medications requiring intense management
- Proportion of days covered (PDC) - covered days in an observation window/days in observation window; uses refill history to estimate adherence
- Nonadherent – PDC < 0.9
- Improve adherence – ≥ 5% increase in PDC over the control arm at 8 months

Enrollment criteria

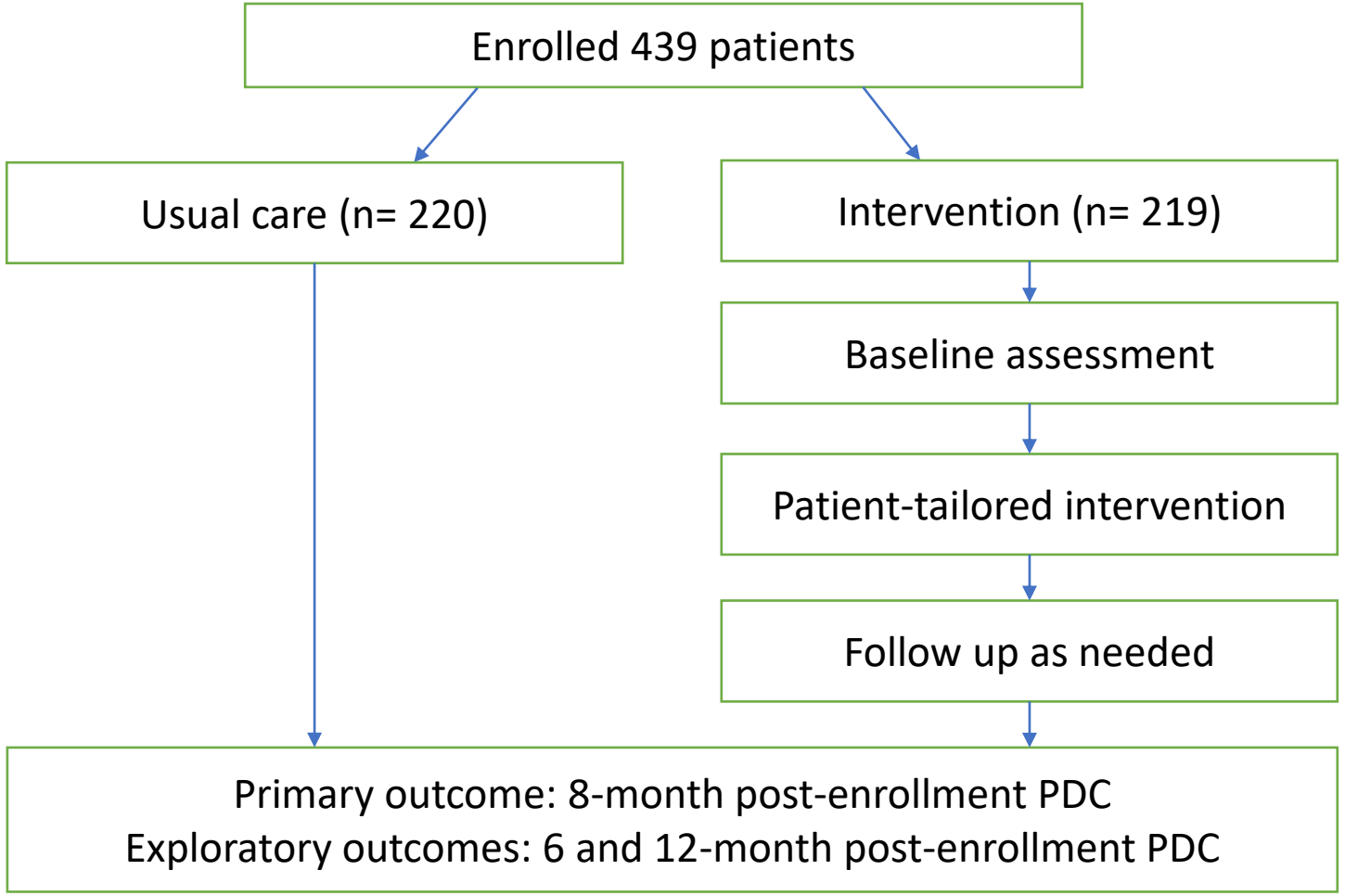
Inclusion Criteria

- ≥ 4 fills of the same specialty medication in previous 12 months
- PDC < 0.9 in the previous 4 and 12 months

Exclusion Criteria

- Misidentified as nonadherent
- Planned discontinuation
- Prescription from outside provider
- Deceased

Study methods flowchart



Baseline Characteristics

- No significant differences between two arms
- Most patients were female (68%) and white (82%)
- Median age of 53 years (interquartile range [IQR] 40, 64)
- Patients were most commonly from the adult rheumatology (35%) or multiple sclerosis (20%) clinics
- Median baseline 12-month PDC
  - Intervention: 0.87 ([IQR] 0.78, 0.90)
  - Control: 0.86 ([IQR] 0.78, 0.90)

Usual care arm

- Specialty pharmacists embedded in clinic and manage therapies
- Refill questionnaires gauge response to therapy, adverse effects, healthcare utilization and adherence
- Pharmacist assessments done routinely
- Clinic-specific protocols outline patient monitoring

Intervention arm

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]?

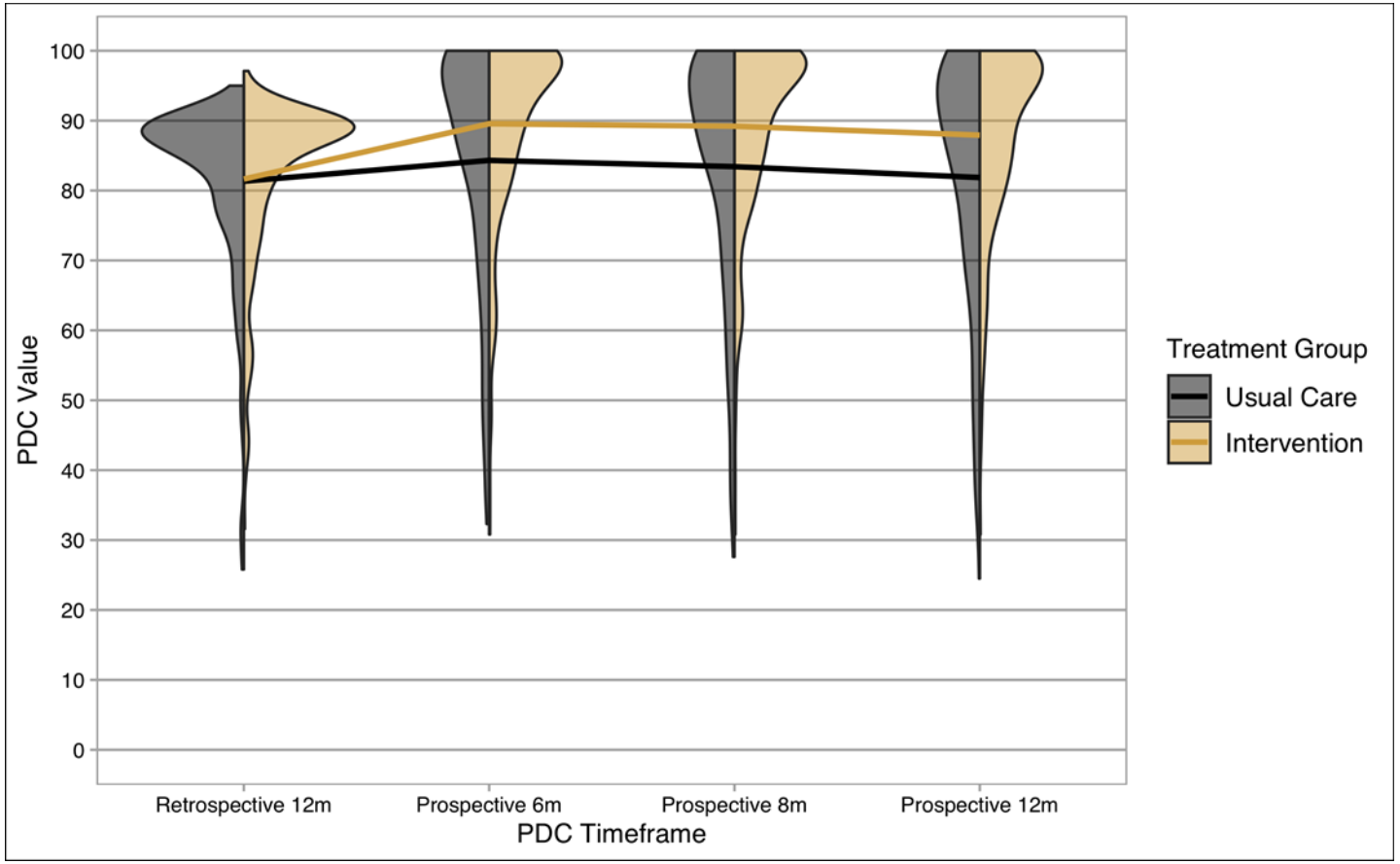
Categories of Nonadherence

Category	Number
Memory	82
Unreachable	60
No known reason	35
Clinical	25
Unresponsive	24
Social issues	23
Health Literacy	19
Health-system determinants	15
Financial	8

Most Common Interventions

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

Can pharmacists improve adherence by providing patient-tailored interventions?



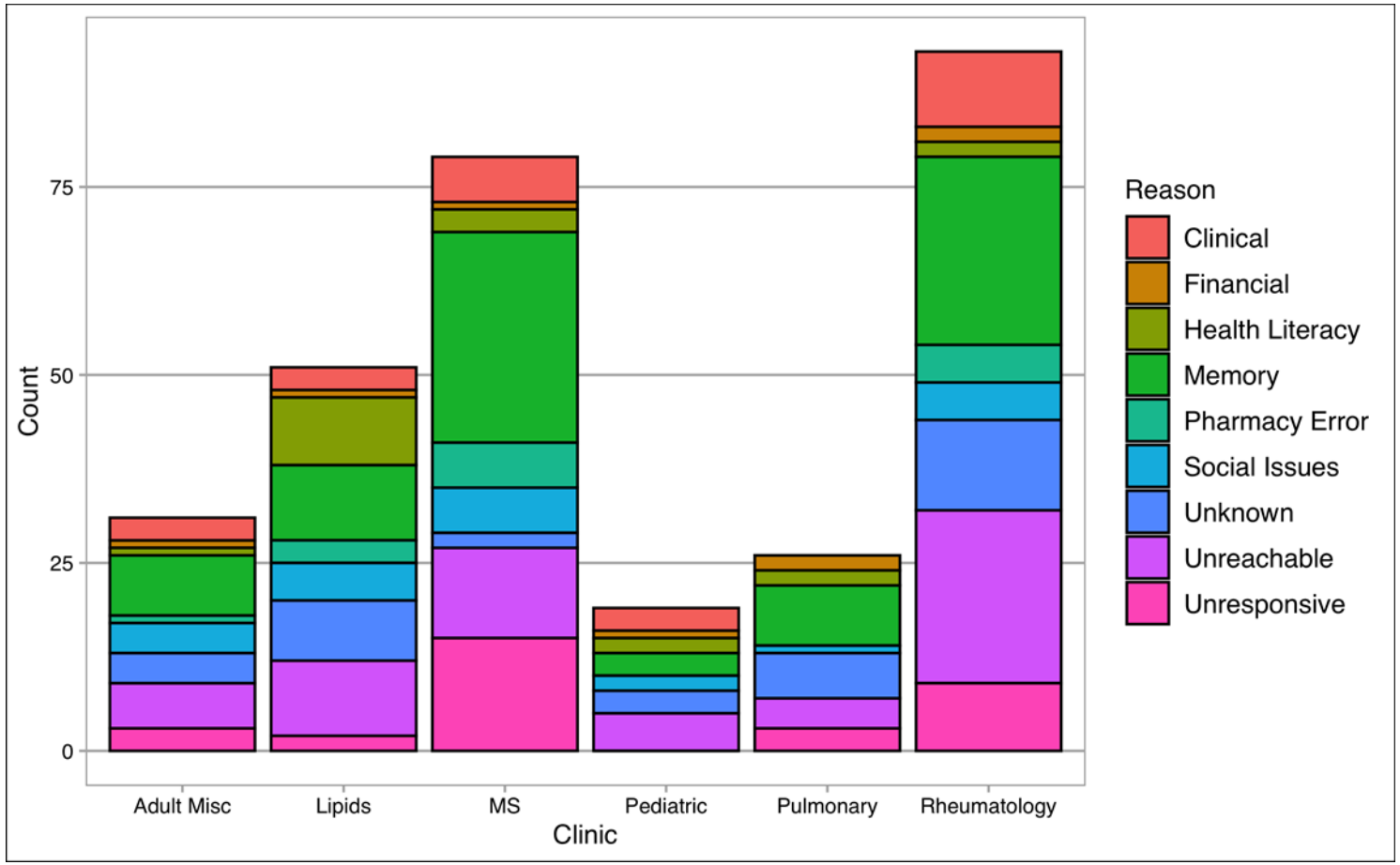
A 12-month retrospective baseline PDC was not significantly different between the 2 arms

Intervention vs. usual care

- At 6 months: 0.92 vs. 0.87, p=0.004
- **At 8 months: 0.89 vs. 0.83, p=0.001**
- At 12 months: 0.85 vs. 0.78, p=0.012

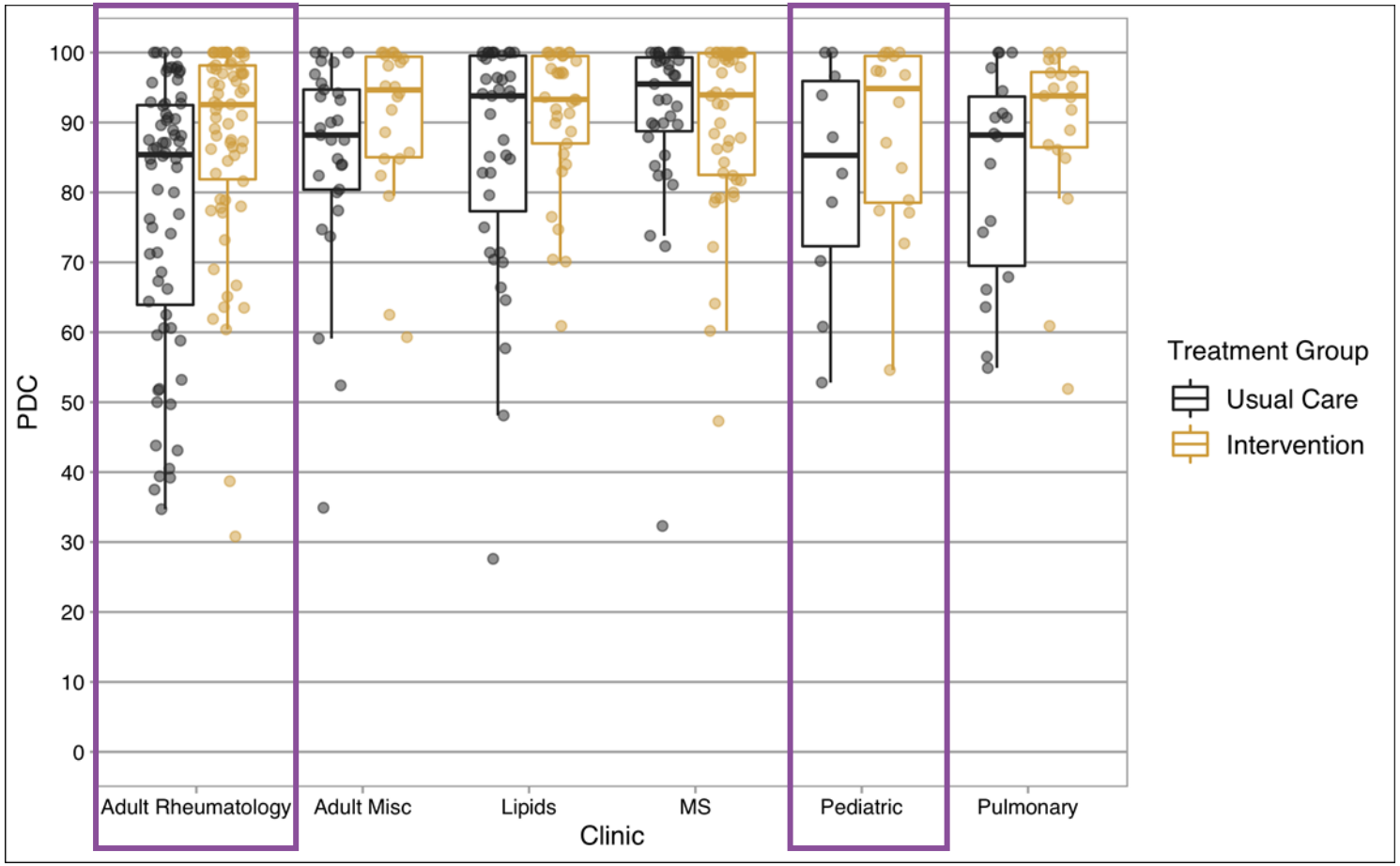
Intervention patients were 1.8 times more likely to have a higher PDC than control patients

Reasons for Nonadherence by Clinic



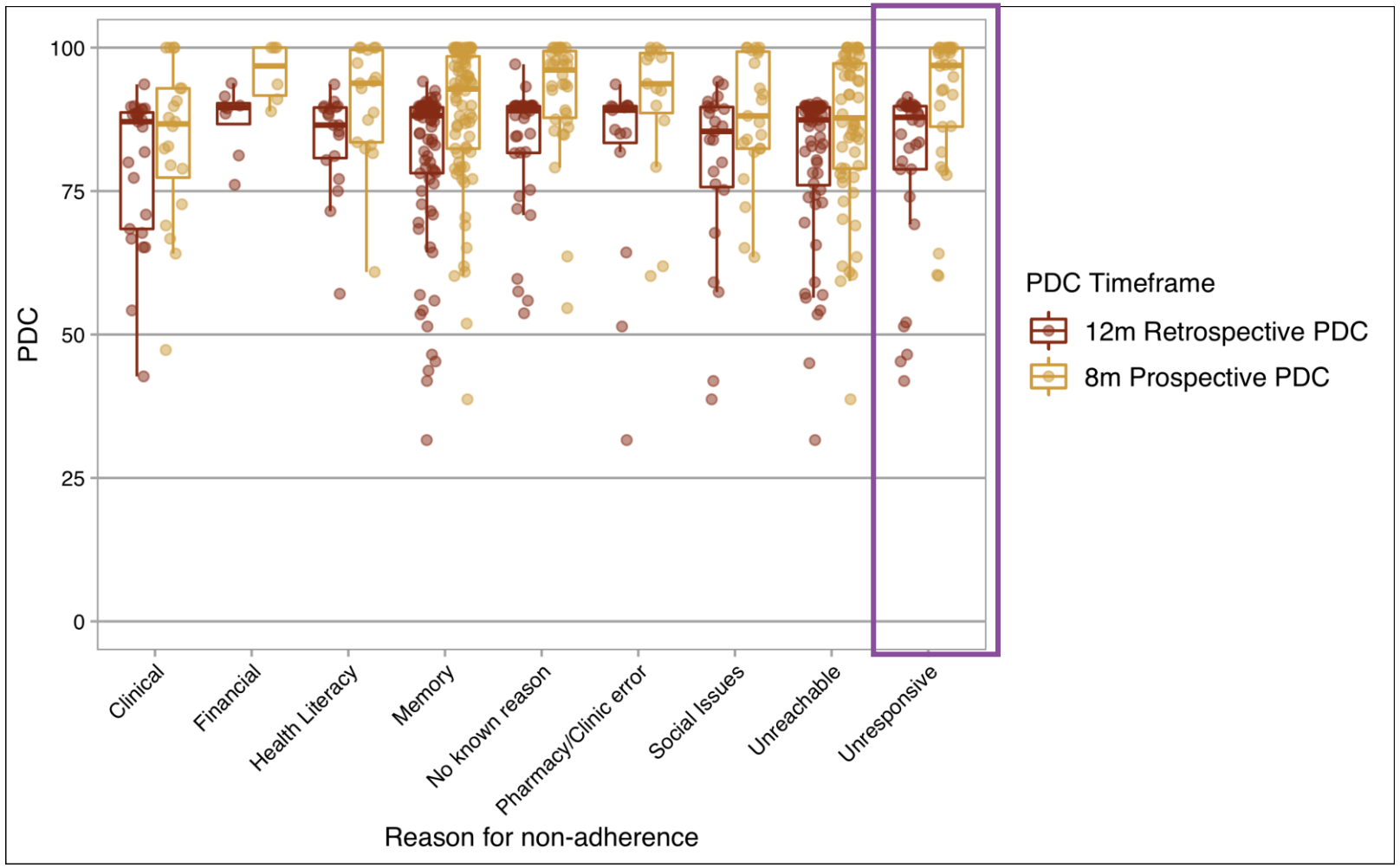
- Reasons for nonadherence distributed evenly among clinics
- MS clinic with higher rates of unresponsive and memory reasons

Median 8-month post-enrollment PDC by clinic



- Pediatric patients and patients from adult rheumatology showed the most improvement in adherence
- Adherence in patients from Lipid and MS clinics did not improve compared to the control group

Change in PDC by reason for nonadherence



- Unresponsive patients had the greatest increase in PDC
- Essentially no change in PDC in patients having a clinical reason for nonadherence
- Very little change in adherence in patients having social issues

Conclusion

- The most common reasons for nonadherence to specialty medications was due to memory issues
- The most effective interventions did not require clinical expertise
- Targeting patients for interventions based on clinic and reason for nonadherence may be an efficient way to address nonadherence to specialty medications

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Contact Information

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