

# **Clinical Outcomes in Rheumatoid Arthritis** Patients Enrolled in an **Integrated Specialty Pharmacy Care Model**

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## **BACKGROUND**

- Rheumatoid arthritis (RA) is an inflammatory disease in which the immune system attacks healthy cells, causing inflammation and painful swelling.
- Measuring disease activity in RA is vital, as this allows assessment of medication efficacy and therapy modification, ultimately helping to slow disease progression and achieve symptom remission.
- Severity assessment tools like the Routine Assessment of Patient Index Data 31 (RAPID3), supplemented by other patient-reported outcomes (PROs), provide insight into RA management; however, there is limited real-world evidence for RA patients enrolled within an integrated health system specialty pharmacy (HSSP) model.
- The objective was to demonstrate clinical outcomes in RA patients enrolled within an integrated HSSP model.

# **METHODS**



Outcome Selection: Clinical outcomes for reporting in RA patients were selected, including change in RAPID 3 scores from baseline assessment, number of RA flares, pain score, and absenteeism.



Outcome Implementation: Clinical outcomes for RA were deployed into the patient management platform for multiple HSSPs using discrete data fields.



Patient Analysis: This was a multisite, retrospective analysis of patients enrolled in the RA patient management program between January and December 2022. Patients were eligible for inclusion if they had a clinical pharmacist touchpoint within the last one year, an initial and follow-up RAPID3 score within the same time period, and a minimum of 84 days between assessments.

### **Definitions:**



- Treat to target: Patients with Low Activity or Near Remission RAPID3 Scores<sup>1, 2</sup>
- Clinically meaningful improvement: A -3.6 or greater change from baseline RAPID3 and/or those who met treat-to-target
- Overall RAPID3 improvement: Any negative change from RAPID3 baseline score
- Pain Score: Assessed on a scale of 0 to 10<sup>3</sup>

RAPID3 Disease Severity Category	RAPID3 Score
Near Remission	≤ 3
Low Activity	3.1-6
Moderate Activity	6.1-12
High Activity	12.1-30

### **RESULTS**

From January to December 2022, 1423 patients enrolled within the RA patient management program from 25 health systems met inclusion criteria for analysis. Table 1 summarizes the patient demographics and clinical outcomes.

Table 1: Patient Characteristics and Outcomes

CHARACTERISTIC	n=1423
Demographics	
Age¹ (years)	57
Sex Female, n(%) Male, n(%)	1184 (83) 239 (17)
Baseline RAPID3 Score <sup>1</sup>	12.6
Health System Region, n(%) New York New England Midwest/West Southeast Mid-Atlantic	594 (42) 503 (35) 158 (11) 108 (8) 60 (4)
Clinical Outcomes	
Clinically Meaningful RAPID3 response, n(%)	694 (49)
Overall RAPID3 Improvement, n(%)	855 (60)
Pain Score, n(%) None (0) Mild (1-4) Moderate (5-6) Severe (7-10)	228 (16) 474 (33) 361 (25) 360 (25)
Missed days of school, work, activities, n(%) Yes No	436 (31) 987 (69)
Number of flares in past year, n(%) 0 1 >1	615 (43) 395 (28) 413 (29)
	<sup>1</sup> M

72%

Patients reported no more than one RA flare



**Patients reported** no or mild pain



Patients reported no missed days from planned activities, school, or work



Patients demonstrated overall RAPID3 improvement

# **CONCLUSIONS**

- Rheumatoid arthritis patients enrolled in an integrated HSSP patient management program had clinically meaningful responses to therapy, as demonstrated by disease severity scores and patient reported measures.
- Tools like RAPID3 and other PROs provide insights for comprehensive disease management, while absenteeism measures reflect disease burden and quality of life. These measures contribute to a holistic understanding of patient experiences, ensuring optimum patient care and outcomes.
- · Future directions include the implementation of electronic methods to obtain PROs, which can address challenges to data collection, simplify the capture process, and increase response rates.

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