Development of a Rheumatoid Arthritis Patient Management Program

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BACKGROUND

- Intermountain Specialty Pharmacy (ISP) did not have a specific patient management program (PMP) for rheumatoid arthritis (RA). ISP felt that specialized follow-up for patients with RA would benefit our patients and the health system
- Routine disease activity assessment can improve the care of patients with rheumatoid arthritis (RA). These assessments are recommended at least every 6 months to guide therapy, per treat-to-target guidelines[1]
- RA assessment tools vary, and some may require joint counts and laboratory measures. Others, such as the RAPID3 (R3), uses only patient reported outcomes
- R3 is a validated measure of RA disease severity recommended by the American College of Rheumatology[2] and can be completed telephonically with patients

OBJECTIVES

- To evaluate disease activity over time in patients with RA using the R3
- Provide education on community and health system resources and non-pharmacologic treatment options
- Where appropriate, provide recommendations and referral to the rheumatology provider

METHODS

- This study used a prospective cohort design of all ISP patients identified through Enterprise Rx with a diagnosis code of RA (ICD9 714; ICD10 M05, M06) from 8/1/18 to 9/30/19, active RA medication within the previous 3 months, and at least 2 assessments
- These patients were sent a letter informing them an ISP clinical staff member would be contacting them to complete a baseline R3 assessment
- The intent was to have the timing of the follow-up assessments based on disease severity, with more severe disease activity followed monthly, and milder disease activity every 3-6 months
- Information collected over time included: R3 and assessment date, concomitant conditions that may influence R3 scores, resources shared, referral to the provider, time spent counselling, as well as recommendations to the provider
- Descriptive continuous variables were reported using average and standard deviation with categorical variable reported as counts and percentages
- Changes in continuous variables were measured with a paired student-t test with categorical measures using a McNemar's test, using Stata v14, and alpha=0.05

RESULTS

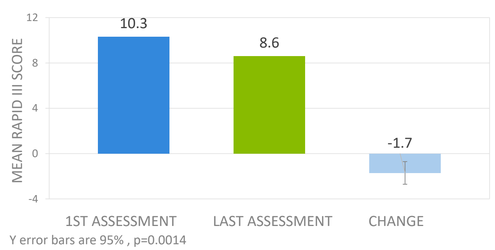
- A total of n=375 patients enrolled in the program, with 480 assessments completed
- Of these, n=10 opted out after initial assessment, with n=58 assessed patients declining R3. In all, n=214 had at least one assessment: n=208 baseline and n=115 having a following up assessment
- 110 patients had both a baseline and follow-up assessment completed

Table 1. Baseline characteristics (n=214 total)†

Characteristic	N	Mean (SD)	Median (IQR)	Range
Age (years)	168	50 (11)	51 (16)	20-85
Sex	214			
Female	128	60%	---	---
Male	40	19%		
NA	46	22%		
Follow up duration (days)	214	418 (190)	479 (246)	8-702
RA duration (years)	168	10.8 (10.5)	7 (13)	1-57
Avg time spent: pt calls (min)	136	14.4 (7.6)	12.5 (8.5)	5-47
Number of visits				
Overall	214	1.7 (0.93)	1 (1)	1-6
Pts with ≥ 2 visits	110	2.2 (0.6)	2 (0)	2-6
Comorbidities (response=yes)	129			
Osteoarthritis	24	19%	---	---
Fibromyalgia	16	12%		
Chronic pain	75	58%		

† Pts were missing various data elements, thus number (N) varies between characteristics. Percentages rounded and may not equal 100%.

Figure 1: Change in RAPID 3 Score (n=110 patients with ≥ 2 assessments)



† Disease composite score: Near Remission =1 to 3; Low Severity=4 to 6; Moderate Severity =7 to 12; High Severity=13 to 30.

Figure 2: Change in RAPID 3 disease severity (n=110 patients with ≥ 2 assessments)

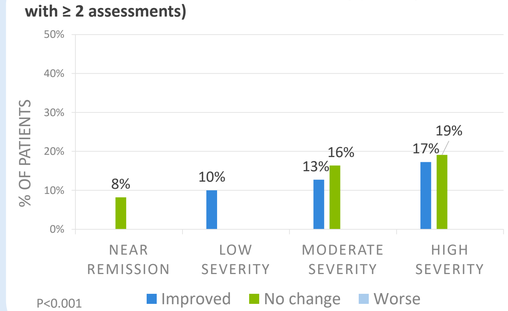
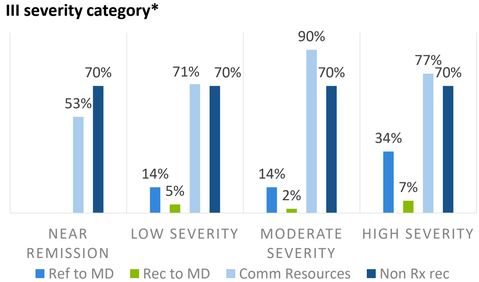
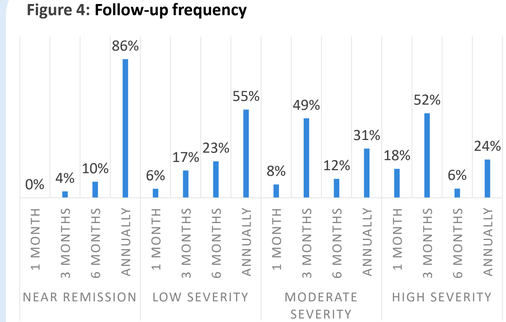


Figure 3: Pharmacy action based on 1st assessment and RAPID III severity category*



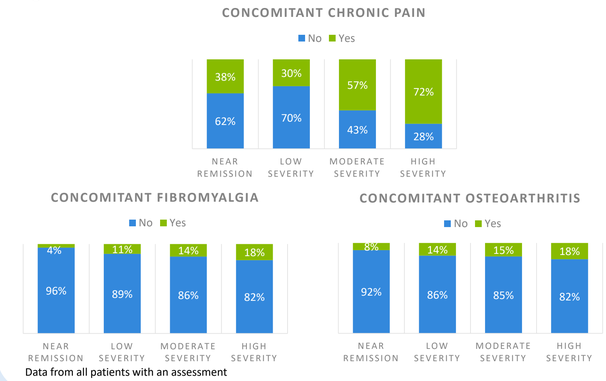
*P< 0.05 for all actions except Recommendation to MD, P=0.613

Figure 4: Follow-up frequency



Data from all patients with an assessment

Figure 5: Concomitant conditions by disease severity



Data from all patients with an assessment

DISCUSSION

- Patients with less severe disease activity preferred annual follow-up vs more frequent contact for patients having higher disease activity
- Patients showed general improvements in R3 disease activity. However, this was limited by only half of patients having at least two assessments completed
- About half of patients contacted declined participation, stating lack of interest and/or RA being well control, which may not make these results generalizable and creating a selection bias
- Since the R3 is composed of patient reported data, including a general pain scale, severity may be influenced by concomitant conditions
- There was mixed reception from rheumatologists in regards to the program, with several expressing they preferred patients to contact their office if there was a concern, rather than our pharmacy contacting the office directly

CONCLUSION

This project established a baseline RAPID3 in our specific patient population and, as we continue the patient management program, we may start to see larger trends in the data. The project has also allowed our clinical staff to provide more disease state education and resources to patients, empowering them to take part in decisions affecting their healthcare. Conducting the RAPID3 and obtaining an extensive medical history from patients also helped set realistic expectations as to the extent the medication may help their symptoms.

REFERENCES

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2. Anderson J, Caplan L, Yazdany J, et al. Rheumatoid Arthritis Disease Activity Measures: American College of Rheumatology Recommendations for Use in Clinical Practice. Arthritis Care Res (Hoboken). 2012 May;64(5):640-7.

No conflicts of interest to disclose