

A PATIENT REPORTED OUTCOMES BASED REFERRAL FORM TO IDENTIFY PATIENTS WITH RHEUMATOID ARTHRITIS AND FACILITATE EARLY REFERRAL FROM PRIMARY CARE: PRELIMINARY RESULTS

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BACKGROUND

- Early referral to rheumatology of patients with symptoms suspicious for progression to rheumatoid arthritis (RA) is recommended for an early diagnosis and intensive treatment¹.
- However, the non-specific symptoms early in the disease and the lack of confidence can be a challenge for primary care physicians (PCPs) in order to adequately refer patients.

OBJECTIVES

To validate a referral form based only on patient reported outcomes (PROs) easily completed by patients as a tool to improve referral of patients with suspected RA by PCPs.

METHODS

- An early arthritis clinic (EAC) with direct access for PCPs in our area (180 PCP) was started in Jan 2022 for patients with suspected RA. Referral criteria are strictly clinical, based on previous EACs, SLR and approved by a PCP committee.
- Patients can be referred if >2 swollen joints, duration of symptoms <2 years and no previous diagnosis by a rheumatologist explaining the symptoms.
- At baseline, patients complete a referral form based on PROs and a multidimensional health assessment questionnaire (MDHAQ) on a tablet. The referral form include an evaluation of affected joints, symmetry, morning stiffness, age and family history. In addition, a physical exam including joint counts and laboratory tests are performed.
- A descriptive analysis by diagnostic group is presented. A receiver operating characteristic (ROC) analysis was performed to evaluate the ability of the referral form to discriminate between RA and other diagnosis.

RESULTS

- From Jan to Dec 2022, 50/164 (31%) fulfilled the inclusion criteria: 14 (28%) with RA, 23 (46%) with undifferentiated arthritis and 13 (26%) with other diagnosis (Table 1)
- Patients in the RA group were older, with higher levels of ESR and CRP. Disease activity according to DAS28, CDAI and RAPID3 was moderate in the 3 groups.
- A comparison was performed to evaluate how the referral form discriminate RA from other diagnosis with an area under the curve of 0.5896, larger than the one for RAPID3 (0.4331) also based only on PROs, but smaller than the one for CDAI (0.6566) which require a physician's global assessment of disease activity and joint counts (Figure 1).

Figure: ROC curves comparison for the referral form, RAPID3 and CDAI

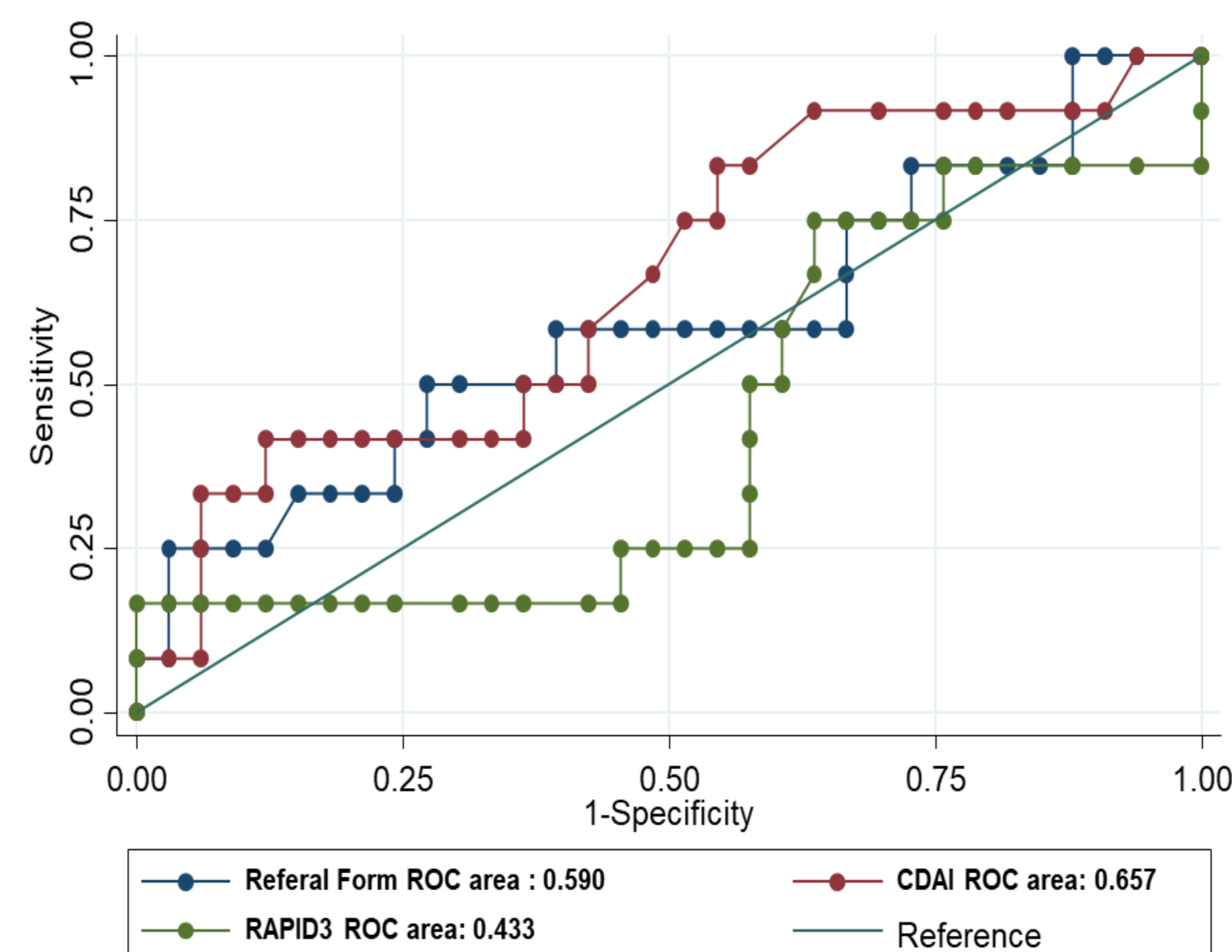


Table: Patients demographics and clinical characteristics.

	Rheumatoid Arthritis N= 14 (28%)	Undifferentiated Arthritis N= 23 (46%)	Other diagnosis N= 13 (26%)
Age, mean (SD)	53.5 (17.3)	44.4 (10.1)	52.9 (12.6)
Female, n (%)	11 (78%)	17 (74%)	6 (46%)
Rheumatoid Factor, n (%)	169 (190)	52 (63)	30 (33)
ACPA, n (%)	470 (968)	88 (250)	25 (0.4)
ESR, mean (SD)	30.9 (19.9)	16.0 (13.4)	25.0 (26.3)
CRP, mean (SD)	1.5 (3.0)	0.5 (0.2)	0.8 (0.7)
PATGL, mean (SD)	4.7 (2.9)	4.4 (2.7)	6.4 (2.7)
DOCGL, mean (SD)	2.1 (2.5)	1.6 (1.9)	1.8 (2.7)
Referral Score, mean (SD)	15.2 (11.5)	14.2 (10.7)	12.1 (7.5)
DAS28-CRP, mean (SD)	2.6 (0.9)	2.1 (0.6)	2.5 (0.8)
CDAI, mean (SD)	10.9 (9.5)	6.7 (5.9)	8.2 (7.1)
RAPID3, mean (SD)	11.0 (17.3)	8.9 (6.2)	15.8 (4.7)

CONCLUSIONS

- Our preliminary results show that a referral form based only on PROs and easily completed by patients on a tablet, can be useful to discriminate patients with RA.
- This tool may guide PCPs for an early referral of patients with suspected RA.