**POS0483**

**PATIENT-PHYSICIAN DISCORDANCE IN DISEASE ACTIVITY ASSESSMENT IS ASSOCIATED WITH LOW CONSIDERATION OF TREAT-TO-TARGET IMPLEMENTATION, IMPAIRING REMISSION OUTCOMES IN EARLY RA: A POST-HOC MEDIATION ANALYSIS OF THE CARERA TRIAL**

**Keywords:** Rheumatoid arthritis, Patient reported outcomes, Treat to target

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**Background:** A treat-to-target (T2T) approach improves outcomes of rheumatoid arthritis (RA). However, T2T is applied only in two-thirds of real-world visits, while patient satisfaction, engagement and treatment success improve when patients and rheumatologists agree over T2T goals [1]. Consequently, discordance between patients’ and rheumatologists’ views on disease activity might hamper T2T implementation, impairing outcomes.

**Objectives:** To assess if patient-physician discourse in disease activity assessment affects the likelihood of T2T being applied, and how this influences remission.

**Methods:** This was a post-hoc analysis of the 2-year pragmatic randomized trial Care in early RA (CareRA), which compared several DMARD regimens with/without bridging glucocorticoids, in treatment-naïve patients with early RA. The trial was guided by T2T: during the first year, the protocol mandated specific DMARD adaptations in case of DAS28-CRP >3.2, with documentation of reasons for non-adherence. From week 52 onwards, treatment was at the rheumatologist’s discretion. For each patient, we quantified T2T implementation as the proportion of visits where DMARD treatment was adapted when DAS28-CRP was >3.2. Patient-physician discordance was defined by the discordance score (DS)[2], a weighted difference between patient-reported and clinical/laboratory outcomes, ranging from -1 to 1 with values >0 implying relatively more patient-perceived disease flares.

**Results:** In all, 379 patients were included in CareRA, 322 of whom completed the trial. Over 2 years, 3129 follow-up visits with available treatment information took place. On 445 (14%) of these visits, DAS28-CRP was >3.2, and DMARD treatment was adapted in 217/445 (49%) of such cases. T2T use declined over time and was consistently lower during the second trial year, where treatment was no longer protocolized, with T2T implementation ranging from 52-66% in year 1 and from 17-38% in year 2. The mean DS was higher on visits where T2T was not applied (0.33 [SD 0.17]) than on T2T visits (0.18 [SD 0.17], p <0.001). In the GLMM, higher DS was associated with a lower probability of T2T being applied (OR 0.62 [95% CI 0.33-0.95]) for one increase in DS, p <0.001). In multilevel mediation analysis, higher DS over time was associated with decreased odds of remission at year 2, and this effect was partly mediated by lower T2T implementation (Figure 1).

**Conclusion:** Patient-physician discordance in disease activity assessment was associated with a decreased probability of achieving remission. This association was partly explained by rheumatologists appearing less likely to apply a T2T strategy when their assessment of disease activity differed from the patient’s. These findings highlight the importance of an open dialogue between physicians and patients about their evaluation of disease activity before applying this as a target for treatment modification.

**REFERENCES:**


**Acknowledgements:** MD has received a Strategic Basic Research Fellowship grant from Fonds Wetenschappelijk Onderzoek (FWO) (grant number 1S85521N). CareRA was supported by a grant from the Flemish Government Agency for Innovation by Science and Technology (IWT) and by grants from the Fund for Scientific Research in Rheumatology (FWRO) and the Academic Foundation of Leuven.

**Disclosure of Interests:** None Declared.

DOI: 10.1136/annrheumdis-2023-eular.2911