



# Telehealth vs Outpatients clinic Follow up in Rheumatoid Arthritis Patients

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## Background

Rheumatoid arthritis (RA) is a chronic inflammatory joint disease. Outcomes for the individuals living with RA have been improved and the majority of RA patients are now in remission or low disease activity status. Still, RA patients continue to be followed up by pre-scheduled visits. Given competing demands and scarce resources, it is important to minimize unnecessary follow-up care visits at the expense of patients in need of medical attention. As a consequence of the rising health care direct costs, there is a need to optimize and streamline the RA patients' management.

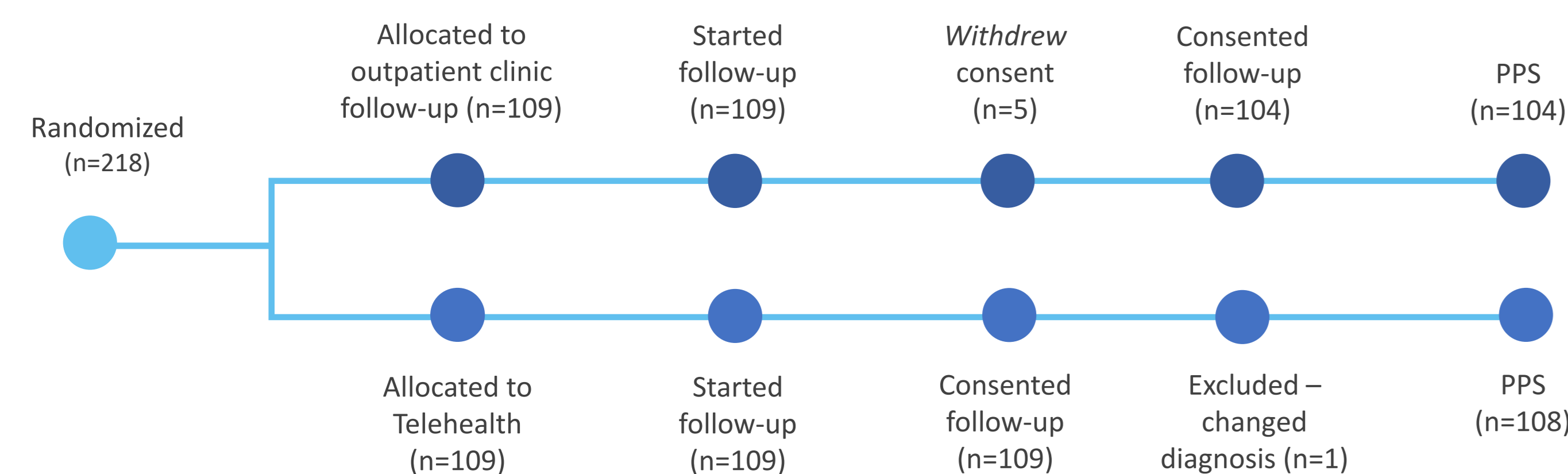
### Object

To examine the effect of a customized Patient-Reported-Outcome (PRO-based) telehealth follow-up compared to a conventional pre-scheduled outpatient follow-up to monitor disease activity in Norwegian patients with RA.

## Methods

The study was a randomized study. Patients with RA in remission or low disease activity (RAPID3<6) were recruited at the Department of Rheumatology at Martina Hansens Hospital (MHH), Bærum, Norway, between May and June 2020. RAPID3 is a pooled index of the three patient-reported American College of Rheumatology rheumatoid arthritis (RA) Core Data Set measures: function (MHAQ), pain, and patient global estimate of status. Rapid3 was used as an outcome measure.

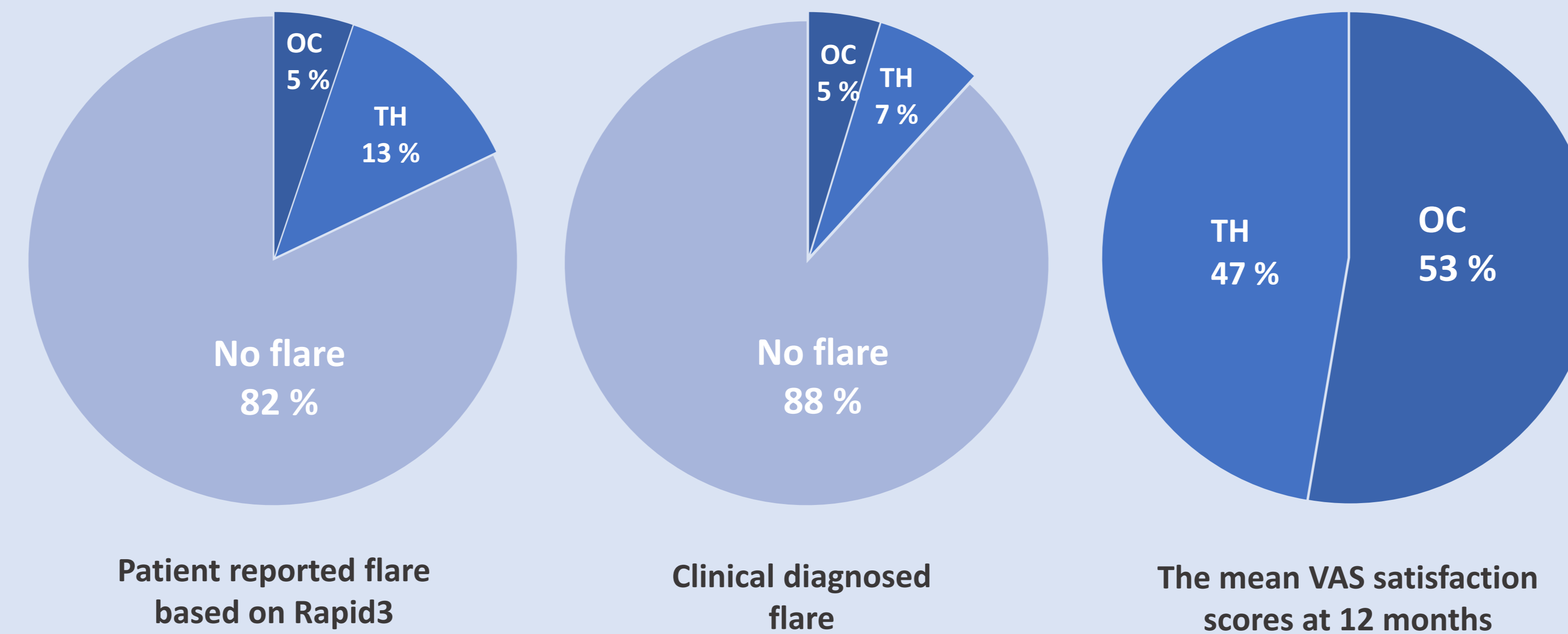
The patients were divided in two equal groups, one allocated to telehealth (TH) and the other to outpatient clinic (OC) follow-up. An electronic app (Dignio), was used to collect data from the Telehealth follow-up group. Visual Analogue Scale (VAS) was used by the patients to score satisfaction with the follow-up procedures.



## Results

Based on RAPID3 we had following results: 11 (5%) patients flared in the OC group and 27 (13%) patients flared in the TH group. No difference was observed in between the two groups regarding the clinical flare, with 10 patients (5%) having a clinical flare in the OC group compared to 15 patients (7%) in the TH group.

The mean VAS satisfaction scores at 12 months in TH and OC groups were 8.8 and 9.8, respectively. The main reason for the lower satisfaction rates in the TH group was the log in procedure, which many patients found complicated.



## Conclusion

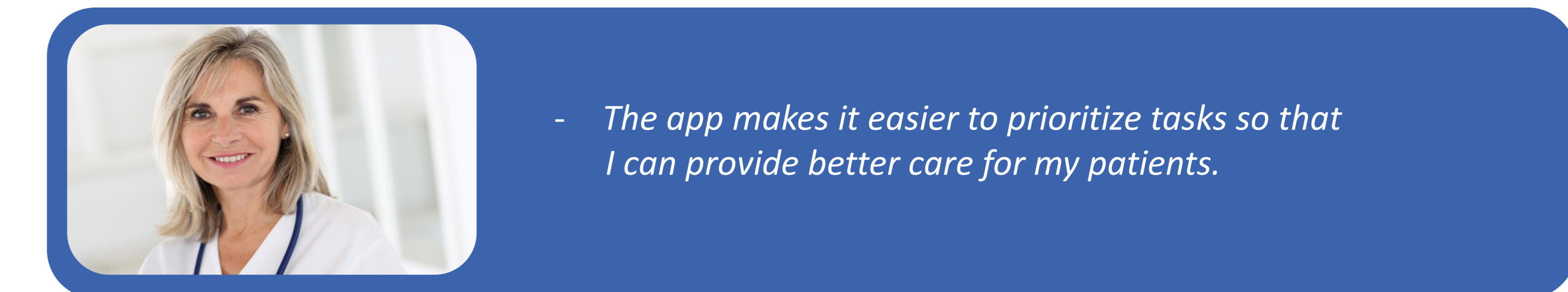
TH follow-up seems to have a significant higher flare rate than OC follow-up, yet no difference was observed with regard to clinical flare as it was judged by a rheumatologist. One explanation could be the relatively easy and straightforward way for the patients to communicate their problems to outpatient clinic through the app, though not attributed to their RA.

The lower satisfaction rates at the TH group illustrates that technological solutions need to be easy to use by the patients. Feedback from the TH patients, who scored lower than expected, claimed that the reason was technical issues with the app, and was not able to differentiate between the technical issues they had, and the follow-up.

Due to the complexity of the economical aspect of the process, we are still waiting for the result. At the end of the study, all the Patients was given the choice to continue or change their follow-up from OC to TH or the opposite. Today we have 150 patients in the TH follow-up, only 50 chose to continue with OC follow-ups.

## Feedback

Most TH patients were satisfied, those who scored lower than expected, claimed that the reason was technical issues with the app. They were not able to differentiate between the technical issues they had, and the follow-up.



## Lessons learned

- ✓ **Essential** to educate patients in the use of the application.
- ✓ **Necessary** to develop checklists for the staff to perform the telehealth monitoring.
- ✓ **Important** to create a backup system when the application is not functioning properly.

