

Telemonitoring intensive strategy in early rheumatoid arthritis

Submission date 02/02/2016	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 17/03/2016	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 15/11/2016	Condition category Musculoskeletal Diseases	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Rheumatoid arthritis (RA) is a long-term disease causing pain, swelling (inflammation) and stiffness in the joints. It is part of a group of diseases called autoimmune diseases, where the immune system starts to attack healthy joints. In healthy people, the body produces different types of immune cells. One of these is the B-cell, which produces antibodies to fight infection. In people with RA, these do not behave properly and produce antibodies which attack a person's own body even if there is no infection. Early rheumatoid arthritis (ERA) is the name given to the first stages of the disease, when only the smaller joints, such as in the fingers and toes, are affected. By identifying and treating ERA early, it is possible to slow down the progression (worsening) of the disease. Telemonitoring is an emerging technique in which patients' conditions are monitored away from the health care provider using electronic devices, which transmit the results to the health care provider. This allows doctors to keep track of a patient's condition so that treatment can be delivered quickly and effectively. The aim of this study is to find out whether using a web-based monitoring system for patients with ERA is an effective way of controlling their condition.

Who can participate?

Adults suffering from early rheumatoid arthritis.

What does the study involve?

Participants are randomly allocated to one of two groups. Those in the first group have five face-to-face sessions with their doctor at the start of the study and then at 3, 6, 9 and 12 months. These participants also take part in "televisits" (at 1, 2, 4, 5, 7, 8, 10 and 11 months), where they fill out a questionnaire online about any symptoms they are having, which is then sent to the doctor managing their case. This allows the case manager to monitor their condition from a distance. If any problems are flagged, then the case manager can call the participant and advice on how they might change their treatments to help lessen their symptoms and invite them to a clinic appointment if necessary. Those in the second group take part in the five face-to-face sessions with their doctor at the start of the study and then at 3, 6, 9 and 12 months only. In these sessions, their doctor is able to manage and change their treatment at their discretion. At

the start of the study and again after one year, all participants complete a number of questionnaires in order to assess how bad their symptoms are and how well they are controlling their condition.

What are the possible benefits and risks of participating?

Participants in the telemonitoring group may benefit from being able to better manage their condition, as problems can be spotted earlier because of the continuous monitoring. There are no notable risks of taking part in the study.

Where is the study run from?

Rheumatic Disease Unit, Marche Polytechnic University (Italy)

When is the study starting and how long is it expected to run for?

June 2010 to June 2015

Who is funding the study?

Marche Polytechnic University (Italy)

Who is the main contact?

Professor Fausto Salaffi

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Study information

Scientific Title

Observational study for the evaluation of safety and effectiveness of biologic drugs in patients with inflammatory rheumatic diseases based on a web platform

Study objectives

To verify the effectiveness of a tight control strategy based on a web platform in patients with inflammatory rheumatic diseases.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Comitato Unico Regionale – ASUR Marche, 20/04/2011

Primary study design

Interventional

Study design

Randomised controlled trial

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Rheumatoid arthritis

Interventions

Participants are randomly allocated to one of two groups.

Group 1: Participants have their condition monitored using the intensive telemonitoring strategy, which involves five face-to-face visits (at baseline, 3, 6, 9 and 12 months) as well as eight televisits, which involve the patient filling out the Recent-Onset Disability Index (ROAD) form on the website (1, 2, 4, 5, 7, 8, 10 and 11 months). The results of the televisits are sent to the physician case manager, allowing them to monitor the patient's response at distance and, if necessary, directly intervene by phoning the patient. During the phone call, patients were required to modify the treatment or were encouraged to return for a follow-up visit at the clinic for any treatment modification.

Group 2: Patients are monitored using the conventional approach. This involves being assessed by a rheumatologist at baseline, 3, 6, 9 and 12 months. In this group, treatment decisions were made at any visit according to the discretion of the rheumatologist, following the standard guidelines for treating rheumatoid arthritis.

Disease activity and disease control are measured for all participants at baseline and one year.

Intervention Type

Other

Primary outcome(s)

Disease activity, measured using the clinical disease activity index (CDAI) is measured at baseline and 1 year

Key secondary outcome(s)

Comprehensive disease control (CDC), measured using the clinical disease activity index (CDAI) and the Recent-Onset Disability Index (ROAD) at baseline and 1 year

Completion date

30/06/2015

Eligibility

Key inclusion criteria

1. Diagnosis of rheumatoid arthritis according the 2010 ACR/EULAR criteria for RA
2. Age 18 years and over
3. Disease duration less than 1 year (the disease duration was considered from the onset of the symptoms to baseline that corresponded with the point of diagnosis and with the start of treatment)
4. Clinical Disease Activity Index (CDAI) of 22 or over

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

All

Key exclusion criteria

1. Visual limitations were present
2. Hard of hearing and living alone
3. Poor command of the Italian language
4. Suffering from diseases requiring hospitalization such as chronic obstructive pulmonary disease, heart disease, multiple sclerosis, extracorporeal dialysis or chronic infectious disease

Date of first enrolment

01/01/2012

Date of final enrolment

30/06/2014

Locations

Countries of recruitment

Italy

Study participating centre

Marche Polytechnic University
Rheumatic Disease Unit
Via Aldo Moro, 25
Jesi (Ancona)
Italy
60035

Sponsor information

Organisation

Università Politecnica delle Marche

ROR

<https://ror.org/00x69rs40>

Funder(s)

Funder type

University/education

Funder Name

Università Politecnica delle Marche

Alternative Name(s)

Polytechnic University of the Marche, UNIVPM

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

Italy

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	02/04/2016		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes