

Effectiveness of in-home telerehabilitation service following knee arthroplasty

Submission date 09/09/2009	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 18/09/2009	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 07/04/2015	Condition category Surgery	☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
MCT-91011

Study information

Scientific Title

Effectiveness of in-home telerehabilitation service following knee arthroplasty: a multicentric clinical trial

Acronym

TelAge

Study objectives

The principle objective of this non-inferiority clinical trial is to check if an in-home telerehabilitation approach is as effective as the standard approach of face-to-face rehabilitation and education at home in participants after a knee arthroplasty.

Ethics approval required

Old ethics approval format

Ethics approval(s)

1. Local medical ethics committee (Comité d'éthique de la recherche clinique du CHUQ-HDQ) approved on the 19th March 2009 (ref: MP-CHUQ-HD-08-010; 5.6.08.12)
2. Final approval by the REC principal, amended on July 28 2009, for the following establishments:
 - 2.1. Hôtel-Dieu de Québec
 - 2.2. IRDPQ (CIRRS)
 - 2.3. CHUS
 - 2.4. Hôpital Jean-Talon de Montréal
 - 2.5. Institut universitaire de gériatrie de Sherbrooke
 - 2.6. Hôpital Saint-François-d'Assise
 - 2.7. Hôpital Ste-Marys de Montréal
 - 2.8. CHA, hôpital de l'Enfant-Jésus
 - 2.9. Institut de réadaptation Gingras-Lindsay-de-Montréal (CRIR)

As of 10/09/2009, only one approval is still pending: Hôtel-Dieu Arthabaska-Érable

Primary study design

Interventional

Study design

Multicentre randomised controlled clinical trial

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Total knee arthroplasty

Interventions

The same rehabilitation intervention is given in both study groups: the one receiving the in-home telerehabilitation approach and the other, the face-to-face home visit approach. Only the delivery approach differs between groups. The rehabilitation intervention combined 16 supervised home-based treatments (mean duration of 45 minutes per treatment) with individualised home exercises performed on the days without supervised treatments. These treatments are based on an intensive functional approach to reducing impairment and improving

function in daily activities. It starts the first week following hospital discharge and it is supervised by a physiotherapist over a period of 8 weeks. The type and intensity of the exercises are regularly adapted to the individuals' needs and tolerance to ensure optimal intensity of the intervention all along the treatment period.

Intervention Type

Procedure/Surgery

Phase

Not Applicable

Primary outcome(s)

Western Ontario and McMaster Universities Osteoarthritis (OA) Index (WOMAC) (post-operative versus pre-operative score) at four months following the exit of the hospital

Key secondary outcome(s)

1. Knee Injury and Osteoarthritis Outcome Score (KOOS) questionnaire
2. Six-minute walk test
3. Timed Stair Test
4. Range of motion and muscle strength after knee surgery
5. Knee function during walking and rising from a chair
6. Participants' satisfaction with the intervention

Completion date

31/08/2011

Eligibility**Key inclusion criteria**

1. Being an adult (more than 18 years) man or woman
2. Being operated for a primary total knee arthroplasty after a diagnosis of osteoarthritis
3. Returning at home after hospital discharge
4. Having access to Internet high speed connexion
5. Living in a 60-minute driving area
6. Being ambulatory with or without a walking aid

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

All

Key exclusion criteria

1. Having health conditions that could interfere with tests or rehabilitation program
2. Planning a second surgery of lower limbs within 4 months
3. Having cognitive or collaboration problems
4. Having post-operative major complications
5. Having a rest prescription for a period longer than 2 weeks
6. Having had previous surgery of the lower limbs affecting the gait pattern during the past year

Date of first enrolment

01/09/2009

Date of final enrolment

31/08/2011

Locations**Countries of recruitment**

Canada

Study participating centre

Université Laval

Québec

Canada

G1K 7P4

Sponsor information**Organisation**

Laval University (Canada)

ROR

<https://ror.org/04sjchr03>

Funder(s)**Funder type**

Research organisation

Funder Name

Canadian Institutes of Health Research

Alternative Name(s)

Instituts de Recherche en Santé du Canada, The Canadian Institutes of Health Research (CIHR), Canadian Institutes of Health Research (CIHR), Canadian Institutes of Health Research | Ottawa ON, CIHR - Welcome to the Canadian Institutes of Health Research, CIHR, IRSC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Canada

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary****Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	31/03/2015		Yes	No