Effectiveness of peer-assessment for implementing a Low Back Pain Guideline for physical therapy: a clustered randomized controlled trial

Submission date	Recruitment status No longer recruiting Overall study status	Prospectively registered		
05/10/2012		☐ Protocol		
Registration date		Statistical analysis plan		
11/10/2012	Completed	[X] Results		
Last Edited 17/12/2020	Condition category	[] Individual participant data		

Plain English summary of protocol

Background and study aims

Clinical practice guidelines are considered important instruments to improve quality of care, but their use in clinical practice is limited. Many different types of barriers may influence the use of clinical guidelines. A range of interventions has been developed to increase the use of guidelines, including audit and feedback, continuing professional education and reminders. In physical therapy, the discrepancy between current practice and the recommendations of the guidelines is related to the knowledge or skills of the physical therapists. Those barriers ask for an educational and behavioral strategy. A specific educational strategy is peer assessment, where peers observe the performance of colleagues and give them feedback. The aim of this study is to find out whether peer assessment is more effective at improving guideline adherence and reflective practice than regular case-based discussions, which is the regular implementation strategy.

Who can participate?

Communities of practice that include physical therapists and manual therapists treating patients with low back pain on a regular basis

What does the study involve?

The communities of practice are randomly allocated to either peer assessment or case-based discussions. Both peer-assessment groups and case-based discussions groups consist of a series of four meetings during a six-month period in 2010. Both programs include strategies to improve knowledge about the Dutch physical therapy guideline on low back pain and on clinical reasoning skills according to the decision aid in the guideline. This guideline describes the diagnostic and therapeutic actions physical therapists should perform when faced with patients suffering from low back pain. Peer assessment consists of the performance and assessment of tasks of individual clinical cases derived from the Dutch physical therapy guideline on low back pain. During the peer-assessment meetings, participants perform the physical therapist role, patient role, and assessor role. In the physical therapist role they have to demonstrate

diagnostic and therapeutic reasoning and skills based on written patient cases. Cases cover the content domain of the guideline on low back pain. In the assessor role they have to observe the performance of their peers and provide them with feedback. In the patient role, participants simulate a clinical problem according to brief simulation guidelines. The peer-assessment process is coached by an external assessor. Case-based discussion groups receive a program manual that contain a structured program schedule and written clinical cases accompanied by questions to guide group discussion. After every meeting, the learning results are evaluated by the group. There is no external coach to guide the discussion process. Outcomes are assessed at the start of the study and after 8 months when both groups have finished their meetings. Adherence to the low back pain guideline is assessed by means of a written assignment using four patient cases.

What are the possible benefits and risks of participating?

Both groups receive an intensive strategy for implementing the guideline on low back pain. One intervention might be more effective than another.

Where is the study run from?

Scientific Institute for Quality of Healthcare in collaboration with the Royal Dutch Society for Physical Therapy and the HAN University of Applied Sciences (Netherlands)

When is the study starting and how long is it expected to run for? September 2009 to October 2010

Who is funding the study?

Royal Dutch Society for Physical Therapy, the Radboud University Nijmegen Medical Centre, Scientific Institute for Quality of Healthcare, and the HAN University of Applied Sciences (Netherlands)

Who is the main contact? Simone A van Dulmen s.vandulmen@ig.umcn.nl

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

Study information

Scientific Title

The effectiveness of peer-assessment to improve guideline adherence and reflective practice compared with regular case-based discussions about the Dutch physical therapy guideline on low back pain. A cluster randomized controlled trial in Communities of Practice (CoP) of primary care physical therapists.

Study objectives

A significant improvement of guideline adherence, clinical reasoning, and self-reflection after the intervention peer-assessment compared with the regular intervention case-based discussions.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The Regional Committee on Medical Research Ethics, Nijmegen, July 2012, ref: 2012/211

Study design

Cluster randomized trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Implementation of the Dutch guideline on low back pain for physical therapists

Interventions

All participants will be invited for a joint meeting where the updated low back pain guideline will be discussed in an interactive educational session. Both peer-assessment groups and case-based discussion groups (regular implementation) consist of a series of four meetings during a six month period. Both programs are aimed at improving clinical reasoning and clinical decision making according to de guideline low back pain.

Intervention group

Peer-assessment consist of the performance and assessment of tasks of individual clinical cases that are derived from the Dutch physical therapy guideline on low back pain. Peer groups will be provided with a manual that contained a highly structured program, guidelines for giving and receiving feedback and a scoring form.

During the peer-assessment meetings, participants will be performing the physical therapist role, a patient role, and an assessor role. In the physical therapist role they have to demonstrate diagnostic and therapeutic reasoning and skills based on written cases. Cases cover the content domain of the guideline. In the assessor role they have to observe the performance of their peers and provide them of improvement feedback. The peer-assessment meetings are tightly

scheduled and discussion time is limited. Based on the feedback of their performance of the first two meetings the participants will develop a personal plan for improvement, including an action plan, which will be evaluated and discussed during the third meeting. In the final meeting another session of peer-assessment will be scheduled based on explicit learning objectives of the individual physical therapists. This session is identical to the first two meetings, with patient cases focused on learning objectives of the physical therapists. The peer-assessment process will be coached by an external assessor who provide additional feedback.

Control group

The case-based discussion groups will also receive a structured program schedule that allows time for group discussion. The manual include a preparation phase for each meeting, joint discussion and evaluation. Clinical cases are provided in advance to allow for preparation. During the fourth meeting 25 statements about low back pain will be discussed. After this meeting participants will answer individually the statements as being true or false via an electronic system and received feedback on the results. There is no external coach to guide the discussion process.

Outcomes will be assessed at baseline and after 8 months when both groups have finalized their meetings.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Adherence to the low back pain guideline with 12 validated performance indicators. These indicators reflect all steps in the care process and are directly related to the clinical vignettes based on the Dutch physical therapy guideline on low back pain. The degree to which physical therapists adhere to these indicators will be assessed by means of an online assignment using vignettes of four cases of low back pain that adequately cover the patient profiles described in the guideline. For each vignette, a score of guideline adherence will be calculated by dividing the actual score by the maximum possible score, and multiplying the result by 100. In addition, a mean score of overall guideline adherence will be calculated by adding up the four scores per vignette and dividing the total by four.

Key secondary outcome(s))

Self-reflection, which is measured by the Self-Reflection and Insight Scale (SRIS) at baseline and after 8 months follow up.

Completion date

31/10/2010

Eligibility

Key inclusion criteria

Communities of Practice with physical therapists working in a primary care setting and treating patients with low back pain on a regular basis

Participant type(s)

Health professional

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

10

Key exclusion criteria

Communities of Practices with physical therapist who are not working in primary care and not treating patients with low back pain on a regular basis

Date of first enrolment

01/09/2009

Date of final enrolment

31/10/2010

Locations

Countries of recruitment

Netherlands

United States of America

Study participating centre Harvard Medical School

Boston United States of America MA 02115-5821

Sponsor information

Organisation

Royal Dutch Society for Physical Therapy (Netherlands)

ROR

https://ror.org/04946nn35

Funder(s)

Funder type

Research organisation

Funder Name

Koninklijk Nederlands Genootschap voor Fysiotherapie

Alternative Name(s)

Royal Dutch Society for Physical Therapy, KNGF

Funding Body Type

Private sector organisation

Funding Body Subtype

Associations and societies (private and public)

Location

Netherlands

Funder Name

Radboud Universitair Medisch Centrum (ref: RG000365)

Alternative Name(s)

Radboudumc, Radboud University Medical Center, Radboud University Nijmegen Medical Center, RUNMC

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

Netherlands

Funder Name

School for Physical Therapy, University of Applied Sciences (Netherlands) ref: 443142

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summaryNot provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/10/2014	17/12/2020	Yes	No