The effect of work-based mentoring of physiotherapists on patient outcome

Submission date	Recruitment status No longer recruiting	Prospectively registered	
08/06/2012		[X] Protocol	
Registration date	Overall study status	Statistical analysis plan	
31/07/2012	Completed	Results	
Last Edited	Condition category Musculoskeletal Diseases	Individual participant data	
04/11/2016		Record updated in last year	

Plain English summary of protocol

Background and study aims

Outcomes research is the assessment of what does and does not work in the delivery of healthcare and researchers into medical educational have called for the education of healthcare workers to be measured by whether or not it actually results in better outcomes for patients. This will allow researchers to work out how the education of healthcare workers contributes to the health of individuals and the public. However, so far the call for this research appears to have been largely ignored as there are very few trials examining the link between professional education and patient outcome. Within physiotherapy, studies have looked into mentoring physiotherapists in the clinic environment. This clinical mentoring has been shown to improve physiotherapist performance, but so far no studies have measured whether these improvements in performance mean that the physiotherapists achieve better results with their patients. The aim of this study is to assess how well a mentoring programme for physiotherapists works in achieving better outcomes for patients.

Who can participate?

All qualified physiotherapists working the majority of their working week in the musculoskeletal (MSK) outpatient physiotherapy service of the Cardiff and Vale University Health Board (C&V UHB) will be invited to take part. Members of staff who have already been through this type of mentoring (as part of an external course) and rotational staff who will not be working in the department for long enough for the project will not be able to participate. The patients attending the outpatient MSK physiotherapy service at the C&V UHB for treatment by the participating physiotherapists during times when patient outcomes are collected will be invited to take part. Patients will need to be over 18 years of age, and able to read/write English due to the questionnaires we are using being designed for the English language and for adults.

What does the study involve?

The intervention is a 150-hour clinical mentorship programme. This will be delivered to participating physiotherapists by mentors who are experienced in delivering this kind of mentorship for University courses. The mentoring will take place in the usual clinic of the physiotherapists, and will consist of the mentors watching the physiotherapists assessing and treating patients, and discussing the thoughts and actions of the physiotherapist immediately after the patients leave. During the control stages of the study, participating physiotherapists

will receive their usual training, which involves monthly sessions on current physiotherapy research, weekly practical sessions on the skills of physiotherapy, as well as monthly mentoring sessions (1.5 hours per month). This study is using a stepped wedge design, which means that all participating physiotherapists will receive the intervention at different times during the study.

What are the possible benefits and risks of participating?

Participating physiotherapists will receive a recognised mentoring programme by a qualified clinical mentor. The potential gains are improved clinical skills and better patient outcomes. There are no risks associated with this study. However, should the mentor observe any practice that is unsafe, they would have a duty to report it. There are no risks associated with this study for patients, who will receive normal physiotherapy treatment.

Where is the study run from?

This study will be run from the six sites of the outpatient MSK physiotherapy service for the C&V UHB: The Barry Hospital, Cardiff Royal Infirmary, University Hospital Llandough, St. Davids Hospital, University Hospital of Wales and Whitchurch Hospital. The lead researcher is based at the University Hospital of Wales.

When is the study starting and how long is it expected to run for? The study is anticipated to start in July 2012 and is expected to run for 3 years. The trial will recruit physiotherapist participants for about 2 months, and patients will be recruited at four time points over the next 2 years.

Who is funding the study?
Cardiff and Vale University Health Board (UK)

Who is the main contact? Aled Williams Physiotherapy.FTR@wales.nhs.uk

Contact information

Type(s)

Scientific

Contact name

Mr Aled Williams

Contact details

Physiotherapy University Hospital of Wales Heath Park Cardiff United Kingdom CF14 4XW

Additional identifiers

Protocol serial number

11-CLC-5171

Study information

Scientific Title

The effect of work-based facilitation in clinical reasoning on outcome in musculo-skeletal physiotherapy

Study objectives

There will be a significant difference in the risk-adjusted outcomes of patients whose physiotherapists have received training in clinical reasoning skills via a clinical mentoring programme when compared with those whose physiotherapists have received standard training.

Ethics approval required

Old ethics approval format

Ethics approval(s)

South East Wales Research Ethics Committee C, 20/04/2012, ref: 12/WA/0078

Study design

Single-centre stepped-wedge cluster randomized controlled trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Musculoskeletal physiotherapy

Interventions

The intervention is a 150-hour clinical mentorship programme, aimed at facilitating clinical reasoning. This will be delivered to participating physiotherapists by mentors who have qualified at Masters level from a higher education establishment, and who have experience in delivering this form of mentorship at post-graduate level. The intervention will be delivered at the start of each time period of the stepped wedge design, to allow for consolidation and application of the programme, before data collection occurs at the end of the time period. This intervention is selected on the basis that the use of mentorship in the context of clinical placement is established practice in Masters programmes seeking to develop expert practice and has strong support from qualitative literature.

Control

During the control steps of the study, participants will receive their usual training allocation. Usual training for staff in the health board involves monthly in-service training on current evidence applied to physiotherapy practice (4 hours per month), weekly technique sessions on the technical and practical skills of physiotherapy practice (30 minutes per week), as well as monthly mentoring sessions (1½ hours per month). This choice of control is consistent with other studies into educational interventions using crossover methodologies where current or traditional practice is used to compare with new or proposed interventions on the basis that the comparison group needs to be plausible and fair.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Function, measured by The Patient Specific Functional Scale (PSFS) at first assessment, discharge and at 12 months. The PSFS is a numerical rating scale from 0 (unable to perform activity) to 10 (able to perform activity at the same level as before injury or problem).

Key secondary outcome(s))

- 1. Health-related quality of life, measured by the EQ-5D-5L
- 2. Patient satisfaction, measured by the MedRisk instrument
- 3. Patient activation, measured by the Patient Activation measure

Completion date

01/11/2015

Eligibility

Key inclusion criteria

- 1. Physiotherapists all qualified physiotherapy staff from the Cardiff and Vale University Health Board whose majority of time (i.e. greater than 50% of a whole time equivalent) is practised inside the musculoskeletal outpatient context.
- 2. Patients consecutive consenting patients attending the outpatient musculoskeletal physiotherapy service at the Cardiff and Vale University Health Board for treatment by the participating physiotherapists during data collection periods towards the end of each step.

Participant type(s)

Mixed

Healthy volunteers allowed

No

Age group

Adult

Sex

Αll

Key exclusion criteria

- 1. Physiotherapists members of staff who have already undertaken postgraduate placements as part of Masters education and so would have received similar mentoring, and rotational staff due to the fact that they will not be present in the department for long enough for both interventions and long-term follow-up.
- 2. Patients under 18 years of age
- 3. Patients who are not English-literate due to the validity of the Outcome Measures being established only for the English language and for adults.

Date of first enrolment 01/07/2012

Date of final enrolment 01/11/2015

Locations

Countries of recruitmentUnited Kingdom

Wales

Study participating centre
University Hospital of Wales
Cardiff
United Kingdom
CF14 4XW

Sponsor information

Organisation

Cardiff and Vale University Health Board (UK)

ROR

https://ror.org/0489f6q08

Funder(s)

Funder type

University/education

Funder Name

Cardiff and Vale University Health Board (UK)

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?
Protocol article	protocol	25/10/2014	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	No	Yes