GPs' experiences of an advanced practice physiotherapy service

Submission date	Recruitment status No longer recruiting	Prospectively registered		
15/03/2024		Protocol		
Registration date	Overall study status Completed Condition category	Statistical analysis plan		
20/05/2024		Results		
Last Edited		Individual participant data		
20/05/2024	Other	Record updated in last year		

Plain English summary of protocol

Background and study aims

The Edinburgh Health and Social Care Partnership (EHSCP) Musculoskeletal (MSK) General Practice (GP) Advanced Practice Physiotherapy (APP) service was launched in May 2019 as part of the Scottish Government's (Scot Gov) transforming roles program. The program aims to support the development of Non-Medial Allied Health Professional (NMAHP) roles in addressing healthcare service needs, and in delivering safe, high-quality personalized care in line with NHS Lothian's Values and Quality Strategy.

The current study is being conducted to inform scientific analysis of service performance, as well as its development as part of a whole-healthcare systems approach. GPs' experience of the service has not been evaluated since early-stage implementation in 2019. GP experience represents a key element in successful service implementation and development, as well as in supporting the GP workforce in primary care.

It is estimated that approximately 100-120 GPs across 31 GP practices will be invited to participate in the study within EHSCP. The research team will consist of a Chief Investigator and three research assistants from Physiotherapy and applied healthcare research backgrounds. The study will be supported by an NHS Lothian AHP Research & Development Facilitator, and sponsored by the NHS Lothian Academic and Clinical Central Office for Research & Development (ACCORD).

The aims of this study are to:

- 1. Generate empirical knowledge of GP experiences of the MSK APP Service, as a key stakeholder.
- 2. Improve understanding of how the MSK APP Service is perceived to be achieving the aims of the Transformational Roles Program, including reducing GP Workload and improving the quality of patient care.
- 3. Use the knowledge gained for informing the implementation of continuous improvement activity, aimed at optimizing patient flow at the front end of the MSK Pathway.
- 4. Use the knowledge gained for informing future service evaluation and research activity.
- 5. Use the knowledge gained to support optimal multi-disciplinary team working and staff well-being.

Who can participate?

GPs including Registrars identified as working within EHSCP and based in one of 31 practices with an MSK APP embedded as part of the multi-disciplinary team (MDT)

What does the study involve?

Participants will have a 4-week period to take part in the study. Participants will be invited to complete an online questionnaire which will include questions relating to their experience of the APP service. NHS Lothian staff email addresses for GPs will be identified by liaison with Practice Managers. An email containing a link to the online survey will be distributed to participants. The NHS Lothian Staff email system will be used (Microsoft Outlook). The questionnaire will take approximately 10-15 minutes to complete. Participants can decide where, and when they would like to complete the online survey. Participants can decide if they would like to complete the survey using portable devices such as NHS Lothian smartphones, or an NHSL Computer. Participants will be required to confirm that they are a GP working within EHSCP. Participants will not be required to enter any other personal or identifiable information into the online portal. Data generated will be stored within the JISC Online Survey System assigned to NHS Lothian. Following the closure of the online survey portal, data will be exported to a Microsoft Excel Spreadsheet file and stored in line with NHS Lothian Information Governance policy, with information handling processes having been approved by NHSL Caldicott Guardian.

What are the possible benefits and risks of participating?

There are no direct benefits to participants taking part in this study, but the results from this study might help to improve the healthcare of patients in the future. A time burden of approximately 10-15 minutes is required to complete the study. Participants are encouraged to liaise with their practice Managers to request any administrative time required to complete the questionnaire during the working day. No specific preparatory requirements are necessary.

Where is the study run from? NHS Lothian (UK)

When is the study starting and how long is it expected to run for? June 2023 to June 2024

Who is funding the study? NHS Lothian (UK)

Who is the main contact?

Jordan Hepburn, jordan.hepburn@nhslothian.scot.nhs.uk

Contact information

Type(s)

Public, Scientific, Principal investigator

Contact name

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

Integrated Research Application System (IRAS) 331837

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number AC23111, IRAS 331837

Study information

Scientific Title

General practitioner experience of a musculoskeletal advanced practice physiotherapy service

Acronym

GEMAPP

Study objectives

As part of planning the Year 5 quality improvement (PDSA) cycle, a needs analysis was undertaken (Appendix 1) to identify knowledge gaps of the musculoskeletal general practitioner advanced practice physiotherapy (MSK GP APP) Service system relevant to the aims of the Edinburgh Health & Social Care Partnership's Transformational Care Program.

A problem theory and conceptual model of patient flow at the front end of the MSK pathway was generated. Optimal patient flow was conceptualized as a complex dynamic system that changes with time. Key stages were identified in understanding the system. The potential for future impactful quality improvement to moderate key stages underpinning optimal patient flow is illustrated. Service evaluation, audit and research activity can be mapped to address knowledge gaps informative of optimal service development and redesign, with the model being updated as required.

Research questions relevant to addressing the knowledge gap of GP Experience of the MSK APP Service were generated, aided by Logic Models and a root cause analysis. Empirical findings will inform future service development and improvement activity relevant to optimizing DCAQ at the front end of the MSK pathway. An example of how this knowledge can help inform the achievement of an MSK APP Service Annual Objective is provided in an aligned Driver Diagram.

Research Questions:

Content Analysis:

Broad: What are GPs' experiences of an MSK APP Service implemented as part of the Transformational Roles Program?

Specific:

- 1. How do GPs describe their experience of APP embedment within the MDT?
- 2. How do GPs describe their experience of support provided in implementing the APP service?
- 3. What are GPs' attitudes and beliefs about the APP role?
- 4. How do GPs describe the impact of the APP service on their ability to manage patient caseloads?
- 5. What are GPs' attitudes and beliefs about how the AP service has influenced their management of diagnostic uncertainty?
- 6. How do GPs describe the impact of the APP service on patient flow?
- 7. What are GPs' attitudes and beliefs about the quality of care APPs provide to patients presenting to the practice with musculoskeletal symptoms?

Quantitative:

Primary Questions:

- 1. What proportion of GPs believe that APPs have been successfully embedded within the MDT?
- 2. What proportion of GPs believe that sufficient support has been provided in implementing the APP service within the practice?
- 3. What proportion of GPs believe that the role of the MSK APP is clear? (moderating variable)
- 4. What proportion of GPs believe that the APP service has had a positive impact on their ability to manage patient caseloads?
- 5. What proportion of GPs agree that the APP service has had a positive impact on their management of diagnostic uncertainty?
- 6. What proportion of GPs agree that the APP service has improved patient flow for those presenting to primary care with MSK symptoms?
- 7. What proportion of GPs agree that the APP service has improved the quality of care provided to patients presenting to the practice with musculoskeletal symptoms?

Ethics approval required

Ethics approval not required

Ethics approval(s)

Studies that only involve NHS staff do not undergo NHS REC review

Study design

Observational cross-sectional survey

Primary study design

Observational

Study type(s)

Other

Health condition(s) or problem(s) studied

General practitioner experiences of a musculoskeletal advanced practice physiotherapy service in primary care

Interventions

A cross-sectional survey design will be used involving the concurrent collection of both textual and quantitative data which will be analyzed separately before being integrated. Quantitative data from cross-sectional electronic web-based surveys will be used to quantitatively describe the views of GPs within the HSCP. Textual survey data will be used to explore GP experiences of the MSK service. The reason for collecting both quantitative and textual data is to best understand the complex research problem by comparing different perspectives from two databases, as well as mitigate the limitations of using each in isolation.

A single-stage sampling design, utilizing a convenience sample from the population of GPs within the health board who were based at practices where an APP service had been implemented. A sample size of 100-120 GPs across 31 GP Practices wherein an APP Service had been implemented will be selected to optimize the accuracy of inference made from analysis. The recruitment period will be 4 weeks.

The NHS Lothian staff email addresses of GPs will be identified by the Chief Investigator by liaison with Practice Managers.

An email containing a web link to the online survey will be distributed to participants by the Chief Investigator. The NHS Lothian Staff email system will be used (Microsoft Outlook).

Participants will be permitted to consider the participant information sheet (PIS) before participating in the study for at least 24 hours.

Informed consent will be provided by participants by completing an informed consent form at the start of the web-based questionnaire on JISC

Participants are free to withdraw from the study at any point or a participant can be withdrawn by the Investigator. If withdrawal occurs, the primary reason for withdrawal will be documented in the participant's case report form if possible.

Data will be collected automatically upon participants completing the study questionnaire on the JISC online survey platform system assigned to NHS Lothian.

The Questionnaire will include a combination of multiple-choice questions as well as free-text questions. Response options for multiple choice questions will be presented using a 5-point Likert Scale. To maximize the completeness of data, reminders will be sent to potential participants identified during the planning stage on two occasions during the four-week study period. Data generated will be stored within the JISC Online Survey System assigned to NHS Lothian. Following the closure of the online survey portal, data will be exported to a Microsoft Excel Spreadsheet file and stored in line with NHS Lothian Information Governance policy, with information handling processes having been approved by NHSL Caldicott Guardian. Data will be analyzed to generate descriptive statistics for results in order to answer quantitative research questions. A content analysis method will be used to answer qualitative research questions deductively and inductively.

Intervention TypeOther

Primary outcome(s)

Survey responses will be measured quantitatively using a 5-point Likert Scale ranging from strongly disagree to strongly agree. Content analysis will be used to further explain Likert Scale responses to survey questions.

The proportion of the sample that agrees with statements indicative of positive MSK APP service impact:

- 1. The proportion of GPs who agree that the APP service has been successfully embedded with the MDT
- 2. The proportion of GPs who agree that sufficient support has been provided in implementing the APP Service within the practice
- 3. The proportion of GPs who agree that the role of the APP is clear
- 4. The proportion of GPs who agree that APP service has had a positive impact on their ability to manage patient caseloads
- 5. The proportion of GPs who agree that the APP service has had a positive impact on their management of diagnostic uncertainty
- 6. The proportion of GPs who agree that the APP service has improved patient flow for those presenting to primary care with musculoskeletal symptoms
- 7. The proportion of GPs who agree that the APP service has improved the quality of care provided to patients presenting to the practice with musculoskeletal symptoms Accompanying free-text responses to these statements will be further analysed using content analysis. Measured at a single timepoint for each participant.

Key secondary outcome(s))

There are no secondary outcome measures

Completion date

01/06/2024

Eligibility

Key inclusion criteria

GPs, including Registrars, identified as working within EHSCP, and based in one of 31 practices with an MSK APP embedded as part of the multi-disciplinary team (MDT)

Participant type(s)

Health professional

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 days

Upper age limit

100 years

Sex

Key exclusion criteria

- 1. GPs identified as working within EHSCP in a practice without an MSK APP embedded
- 2. GPs who have left NHS Lothian at the time of the study recruitment period

Date of first enrolment

04/03/2024

Date of final enrolment

04/04/2024

Locations

Countries of recruitment

United Kingdom

Scotland

Study participating centre NHS Lothian

Waverley Gate 2-4 Waterloo Place Edinburgh United Kingdom EH1 3EG

Sponsor information

Organisation

NHS Lothian

ROR

https://ror.org/03q82t418

Funder(s)

Funder type

Government

Funder Name

NHS Lothian

Results and Publications

Individual participant data (IPD) sharing plan

The anonymous and non-participant identifiable datasets generated during and/or analyzed during the current study will be stored in a non-publicly available repository.

The name of the repository: NHS Lothian secure IT drive

The type of data stored: Survey response data – Likert and accompanying free-text responses.

The process for requesting access: Contacting the study sponsor (NHSL Lothian Study Sponsor Contact as above)

Whether consent from participants was required and obtained: Yes informed consent is required and will be obtained.

Comments on data anonymization: only non-identifiable data will be collected.

Any ethical or legal restrictions: NHS Lothian ethical approval was not deemed requisite for the study as it does not involve patients.

IPD sharing plan summary

Stored in non-publicly available repository, Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes