Host department:

School of Medicine – Keele University

Title:

Redesigning musculoskeletal primary care: balancing patient priorities with feasible, appropriate and sustainable models of care

Proposed supervisory team:

Elizabeth Cottrell
John Edwards
George Peat
Statistical advice (requested from statistical team, awaiting outcome from line manager)

Project description:

In the UK, general practice is struggling to meet demand due to a combination of a shortage in the GP workforce (1,2) and rising multimorbiditiy. To add to this challenging milieu, patient expectations for convenient access is also increasing (3). Expanding primary care teams into multi-disciplinary workforces is thought to better meet the needs of today's patients (3). However, such new service models are commonly developed in a top-down way, with minimal patient involvement and little regard for their priorities and preferences. While healthcare professionals and policy makers may recognise the appropriateness and benefits of patients seeing non-GP primary care healthcare professionals, it is not clear that entirely patients share this view. Somehow, new primary care service models need to develop within a balance of convenient and timely access, appointments that are long enough to accommodate the complexity of aging, multimorbid patients, using the correct healthcare professional with the appropriate expertise who provide high quality care and patient priorities and preferences. Musculoskeletal (MSK) problems form a large part of the primary care workload. We know that common musculoskeletal problems, such as osteoarthritis and low back pain, are not always managed in line with guideline recommendations by GPs. We also know that other members of the primary care workforce may be better placed to deliver care for such conditions, for example, Nurse Practitioners and Physiotherapists. Newer primary care workforce roles are developing, such as First Contact Practitioners (Physiotherapists with an extended skill-set), Physician Associates and Pharmacists. While these roles are positioned and have the skillset to deliver MSK care, it is not clear whether this is what patients want and under which circumstances.

The hypothesis underlying this project is that to realise the maximum value in new models of care for patients with MSK pain, and to develop sustainable, cost-effective, high quality service delivery, the preferences and priorities of patients need to be finely balanced with what is feasible, deliverable and sustainable for the healthcare economy. In this way, this project will identify the preferences and priorities of patients, and the compromises they are willing to make when accessing primary healthcare, to inform recommendations for new primary care MSK service models that reflect the patients' views and identify potential barriers that may need to be actively overcome to implement new service models. To achieve this, the Fellow will undertake three phases of work:

- Phase 1: to establish what is already known about patient preferences and priorities for primary care services for MSK problems
    - Methods: Systematic review examining the existing literature. This would include qualitative data.
    - Analysis: An interpretative meta-synthesis will be undertaken, drawing from the seven-step approach described by Noblit and Hare (4).
- Phase 2: to investigate patient understanding of current primary healthcare provision and experiences and perceived acceptability of seeking care from different models and healthcare professionals for MSK problems

    - Methods: online patient survey, distributed via practices (a variety of ways would be developed for recruitment for practices to select which means they would wish to use: - waiting room poster with QR code, Facebook page and/or website post, and/or text message) and social media. A patient advisory group will be convened by the Fellow to develop the content for the survey.
    - Analysis: descriptive analyses of understanding, experiences and acceptability of different primary care service models. Responses will also be stratified according to key demographics (e.g. age, gender, presence of multimorbidity) to be decided by the Fellow.
- Phase 3: to establish patient priorities for primary care for MSK problems when bound within realistic constrains of what the healthcare service can deliver.
    - Methods: online patient conjoint analysis, in which patients are presented with realistic compromises in MSK pain primary care service models and are asked to state their preference. Such features of the care to test may include appointment length, waiting time for appointment, relational continuity, healthcare professional seen, appointment location, day of appointment, time of appointment, site of MSK problem or duration of MSK problem. These will be finalised by the Fellow through discussion with a patient advisory group.
    - Analysis: the Fellow would have to choose the most appropriate conjoint design to use to answer the question, this would dictate the analysis required.

The outcome of this PhD will be quantitative estimates of patients' priorities and preferences with regard to service design. The Fellow will be able to develop recommendations for commissioners and primary care practices to consider when developing their primary care MSK service models and be alert to key barriers that may need to be addressed.

Training plan:

This PhD presents an opportunity for the student to gain training in systematic reviewing, survey and conjoint analysis. Training needs will be dependent on the qualifications and previous experience of the PhD student and will be informed by the Vitae Researcher Development Framework.

Formal training:

The student will require skills in systematic reviews, survey development and conjoint analysis. They will also need project management expertise, writing and oral presentation skills. All the above can be obtained through masters' modules provided at Keele University and/or attendance at staff and student development workshops, internal Systematic Review workshops. External training courses, where applicable, will also be identified according to learning and practical needs. Formal training will be identified which does not exceed agreed provision for costs.

Informal training:

Informal training will be achieved through attending internal and external seminars and methodological, statistical, and trials journal clubs. The student will be encouraged to present their work in different settings (e.g. internal seminars, post-graduate symposium, student groups), in addition to submitting abstracts to relevant national and international conferences during the PhD to gain experience of presenting research to a wider audience.

PPIE:

A patient advisory group will be convened to inform the development of the questionnaire survey and the conjoint analysis data collection tool.