

Evaluation of Physiotherapist and Podiatrist Independent Prescribing, Mixing of Medicines and Prescribing of Controlled Drugs: **Executive Summary**

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Executive summary

1.1 Summary of Key Points

This is the first research to investigate the effectiveness and efficiency of independent prescribing by physiotherapists and podiatrists. The project was undertaken between February 2014 and January 2017. The literature review and survey of trainee physiotherapist or podiatrist independent prescribers found that:

- There is a lack of empirical literature relating to prescribing and a need for robust evaluation of physiotherapist and podiatrist involvement in medicines management activity, including prescribing.
- The first wave of physiotherapists and podiatrists to undertaking training were mainly highly experienced and highly qualified practitioners working in specialist or senior roles.
- Acute care was the largest single sector where physiotherapist and podiatrist independent prescribers worked, however a majority worked across multiple care sectors and the majority, particularly physiotherapists, worked in multi-professional services.
- Key areas in which physiotherapist independent prescribers worked were musculoskeletal services, orthopaedics, respiratory and pain management services. The key therapy areas for which trainee physiotherapist independent prescribers intended to prescribe were pain and musculoskeletal conditions, respiratory conditions and infections.
- Key areas in which podiatrist independent prescribers worked were high-risk foot, foot and ankle surgery and musculoskeletal /orthopaedics. The key therapy areas for which trainee podiatrist independent prescribers intended to prescribe were skin, infections and musculoskeletal conditions.
- Prior to undertaking independent prescribing training, physiotherapists and podiatrists were already regularly involved in supplying, administering or recommending medications and once qualified anticipated that they would prescribe a mean of 11 items per week.
- Key motivators for undertaking independent prescribing training were to improve the quality of patient care, access to medication and to make better use of professional skills. Introduction of physiotherapist and podiatrist independent prescribing was individually lead, with little evidence of strategic planning.
- The majority of trained physiotherapist and podiatrist independent prescribers were satisfied with the level of educational preparation for independent prescribing.

The comparative case study of physiotherapist and podiatrist independent prescribers and non-prescribers found that:

- Patients and healthcare professionals were generally positive about physiotherapist and podiatrist independent prescribing. A majority of patients agreed that physiotherapists and podiatrists should be able to prescribe medicine, although a minority of patients would prefer a doctor to prescribe their medicine.
- Physiotherapist and podiatrist independent prescribers were more active than non-prescribers in most aspects of medicines management, including providing medicine and giving advice or information to patients about medicine. Among physiotherapists, the predominant activity was pain/movement control. Among podiatrists, the predominant medications used were antibiotics, antifungal/microbial topical creams, emollients and pain medication.
- Perceived benefits included: reduced patient journey, fewer GP appointments, streamlining service, enabling services to continue when a doctor was not available, increased choice and enhanced quality of advice and information given. Benefits for physiotherapist and podiatrist independent prescribers included: improved knowledge around medicine management and safety, enhanced professional reputation, facilitation of advanced practice roles, and improved clarity over legality of medicines management activity practice.
- Barriers to independent prescribing included: finding a suitable Designated Medical Practitioner, access to a prescribing budget and patient medical records, clinical governance support for monitoring and auditing prescribing practice.
- Patients of physiotherapist and podiatrist independent prescribers received more information about how often to take medicines and more often intended to follow the advice of the physiotherapist and podiatrist independent prescribers than patients of non-prescribers. Additional benefits differed between the professions. Patients of physiotherapist independent prescribers received more information about their medicines, were more satisfied, able to understand and inclined to take their medicine than patients of physiotherapist non-prescribers. Patients of podiatrist independent prescribers were more satisfied with aspects of access to services than those of non-prescribing podiatrists.
- Health related quality of life, as measured by the EQ-5D-L, improved equally for patients in both independent prescriber and non-prescriber groups between baseline and two-month follow-up.
- Assessment of written prescriptions indicated gaps in provision of dose frequency in words in 9 out of 15 prescriptions. There was a high level of disagreement between assessors of audio-recorded consultations over the expected level of involvement by physiotherapists and podiatrists in diagnosis, assessment and providing information or advice about medicines. Overall, fewer issues of concern arose in physiotherapist and podiatrist independent prescriber consultations than non-prescriber consultations. There was incomplete recording of allergy status in patient notes.
- Care delivery by physiotherapist and podiatrist independent prescribers was more resource intensive and costly than physiotherapist and podiatrist non-

prescribers due to longer consultation duration and more frequent medicines management activities, however there are many limitations to the economic analysis so findings should be treated with caution.

1.2 Background

Non-medical prescribing was introduced in the United Kingdom (UK) as a means to improve healthcare service efficiency, access to medicines and to support service innovation. Physiotherapists and podiatrists are two of a growing number of allied health professions with entitlement to undertake training to prescribe medicines to patients in the UK. Legislation to enable physiotherapists and podiatrists to independently prescribe medicine was extended in 2013. This study was commissioned in the wake of this policy change to provide an evaluation of physiotherapist and podiatrist independent prescribing in England.

1.3 Study aim and objectives

The **aim** was to evaluate the effectiveness and efficiency physiotherapist and podiatrist (PP) independent prescribing (IP) in England. The **objectives** were to:

1. Describe and classify services provided
2. Identify factors that inhibit/facilitate uptake and implementation
3. Evaluate contribution to patient/carer experience and impact on choice, access, and self-reported health outcomes.
4. Identify medicines management activities that contribute most effectively to successful care outcomes.
5. Assess quality, safety and clinical appropriateness
6. Evaluate impact of on cost, quality, effectiveness and organisation of care.
7. Explore prescribing models in current practice, their associated resources, and patient utility.
8. Evaluate the appropriateness and effectiveness of educational programmes.

1.4 Study design and methods

A three phase mixed method study undertaken February 2014-April 2016. **Phase 1:** literature review to determine types of prescribing services provided and evidence of effectiveness of PP prescribing. **Phase 2:** survey of trainee PP-IPs, at beginning and end of training and document analysis to explore PP-IP at organisation and delivery level. **Phase 3:** comparative case study with economic analysis across 14 case sites (7 PPIP and 7 non-prescriber) in 11 geographical locations. Methods comprised observations; work sampling; interviews; patient questionnaire; audio recordings; patient record and prescription audit. Economic analysis examined cost implications through comparison of care delivery at PPIP and non-prescribing (NP) sites and consideration of costs and benefits of IP training.

1.5 Main findings

1.5.1 Phase One

87 articles relating to medicines management by physiotherapists or podiatrists were located. There was a lack of empirical work relating to prescribing in either profession. Physiotherapists in a number of countries administer, or advise patients about medicines, but there are concerns about available pharmacological training to support this activity.

1.5.2 Phase Two

85 trainee PP-IPs (56 physiotherapists, 29 podiatrists) completed questionnaire 1, and 39 (25 physiotherapists, 14 podiatrists) questionnaire 2. Participants were highly qualified, experienced practitioners working in specialist or senior roles: 82% had 10 years or more clinical experience, 58% were band 8 or higher and 50% had Master/PhD qualifications. 58% worked in acute care, 38% across multiple care sectors and 61.2% in multi-professional services. Medicines management activity was high prior to qualification: 94% recommended medicines and 84% reported weekly activity, using a median of 2 different methods to administer, supply or prescribe a mean 8.16 items per week. Participants anticipated they would IP a mean 11 items per week. Key areas of intended prescribing for physiotherapists were musculoskeletal (MSK) services, orthopaedics, respiratory and pain management, and for podiatrists' skin, infections and MSK conditions. Improving quality of care for patients, choice and efficiency were key motivators and anticipated benefits for PPIP. Improving clinician knowledge, skill use and job satisfaction were also anticipated, however improving job prospects or pay were weak motivators. The majority of questionnaire 2 respondents were satisfied with their educational preparation and felt adequately prepared to prescribe. Fewer physiotherapists than podiatrists had formal training in pharmacology prior to undertaking the training. Clinical governance systems for accessing prescribing data and facilities for audit were inconsistent. A minority reported difficulty in finding mentor support. Lack of availability of documents relating to service level agreements indicated low levels of strategic planning.

1.5.3 Phase Three

Observations: of 474 patient consultations (222 physiotherapist and 252 podiatrist). Medicines management activity (i.e. medicines supplied, administered, prescribed, recommended or adjusted) occurred in 24% of consultations. More activity was recorded in PPIP (31.5%) than NP consultations (17%). Predominant physiotherapy activity was pain/movement control. Among podiatrists, predominant medications were antibiotics, antifungal/microbial topical creams, emollients and pain medication. Information provision to patients about medication was inconsistent, particularly when administered during consultations.

Work sampling: 2,720 data points collected. Podiatrist IPs were more involved in care planning and computer use, whereas podiatrist NPs were more active in providing treatment, room preparation and used computers outside of consultation. Physiotherapist IPs engaged more in medicines management and treatment whereas physiotherapist NPs engaged more in general discussion with patients.

Interviews: A total of 25 interviews were conducted with PPs (n=14) and team members (n=11) across case-sites. Reported service benefits included fewer GP appointments, streamlining and enabling services to continue when a doctor was not available. Patient benefits included reduced patient journey, enhancing choice, quality of information, and aligning professional practice with patient expectations of specialist roles. Prescribers reported improved knowledge, professional reputation, facilitation of advanced practice roles and clarity over legislative 'grey areas' around existing practices. Methods predating IP, such as exemptions continued to be used, were considered adequate for the majority of patients and rates of prescribing were low. Barriers included difficulty finding mentorship, accessing medical records, lack of patient follow-up, time limitations and lack of prescribing budget. Concerns included over-medicalisation of roles, isolation, resistance, increasing responsibility and use of IP for cost saving rather than patient benefit.

Patient questionnaire: 315 patients completed an initial questionnaire (135 physiotherapy and 180 podiatry patients). Most (76%) agreed that PPIPs should be able to prescribe medicines, however 23% would prefer a doctor to prescribe. Patients of PPIPs were more likely to agree that they received information on how often to take medicines and that they would follow the advice given. In addition, patients of physiotherapist prescribers were more often told how to take their medicine, were more satisfied with the advice given, were better able to understand their treatment, more inclined to take their medicine and felt they had been treated more as an individual than patients of physiotherapist non-prescribers. In contrast, patients of podiatrist prescribers were more satisfied with the ease of making an appointment and the ability to contact the service by phone or in times of emergency.

Consultations: Clinicians assessed 55 audio-recorded consultations independently. There were high levels of disagreement regarding the applicability of medicines activity within physiotherapy or podiatry consultations. No agreed areas of safety concern occurred within physiotherapist IP consultations. Some concerns were raised about physiotherapist non-prescriber consultations in relation to assessment and communication. A greater number of concerns were identified in podiatry consultations overall relating to assessment, diagnosis and communication, most of which occurred within non-prescriber consultations.

Patient record and prescription audit: 153 patient records were reviewed 2 months following their consultation. The general quality of records and availability of source

documents was poor. 15 prescriptions (6 physiotherapists and 9 podiatrists), were collected from 4 sites. All were written on the appropriate form, used generic drug names, and gave instructions on timing/frequency and dosage. All but one included appropriate dose/product preparation, terminology, and were written legibly in ink, 9 omitted the dose frequency in words and 2 the quantity to be supplied.

Economic analysis: Available case site data suggests that IP care delivery is more resource intensive and costly than NPs due to longer consultations, more discussions with colleagues, and higher frequency of requiring new medications and tests. No differences between IP and NP groups were found in changes in patient health status (as measured by EQ-5D-5L) between baseline and two months follow up, although the sample for which data at both time points were available was limited.

1.5 Conclusion

This is the first research to investigate effectiveness and efficiency of PPIP and provides valuable information for key stakeholders. PPIP is acceptable to the majority of patients and with reported benefits in terms of intention to follow treatment, satisfaction with information and access to services. The study confirms that PPIP is developing in line with original policy intentions to improve care across a range of services, by advanced practitioners who regularly engage in medicines management. Evidence at this early stage of implementation and from case sites in this study suggest that PPIP care delivery is more resource intensive, but this study is limited and its findings needs to be verified through further research, including a full economic analysis. Evaluation of the educational programme was satisfactory. No safety issues were detected directly resulting from PPIP, although improvement could be made in the completeness of prescription writing, as for all prescribers.

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