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REGULATION Comparison of the scope of practice of physician associates with that of healthcare professions with prescribing responsibility from point of registration

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Physician associates (PAs) have been practising in the UK since the mid-2000s and are due to be regulated by the General Medical Council (GMC) after summer 2024. Presently, PAs are not able to prescribe prescription-only medication (POM), but this is anticipated to change following GMC regulation. This research compared the scope of practice (SoP) of PAs with other healthcare professionals who have some level of prescribing authority from the point of registration, to establish the need for PAs to prescribe POM and to explore which of the prescribing authority options would fit the PA role. The comparison demonstrates that PA SoP would suggest the need to prescribe POM, and that any prescribing authority should not be limited to a set clinical speciality or patient population. Additional research is needed to explore PA clinical practice further and identify the range of POM for which PAs need prescribing authority.

KEYWORDS: physician associate, prescribing, clinical practice

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Introduction

The physician associate (PA) profession is relatively new in the UK, with UK-based training of PAs beginning in 2006. The profession will be regulated by the General Medical Council (GMC) from sometime around summer 2024. Once regulated, consideration of extending prescribing authority to PAs can begin and some preliminary work has already been undertaken. This work is part of a broader project that is considering which mechanism of prescribing fits most appropriately with PA clinical practice. To this end, it is helpful to compare the scope of practice (SoP) of the PA to that of other healthcare professions that can prescribe, supply, or administer prescription-only medication (POM) from the point

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of registration in that profession. Through such a comparison, it is also possible to gain insight into which mode of provision of POM will be most suitable for the clinical role of the PA. There are a variety of methods for the providing access to POM to patients in the UK.

Prescribing in the UK

The main mechanisms to provide POM are subject to primary and secondary legislation limiting who may prescribe, administer or supply POM and controlled drugs. These mechanisms can be either extended to any member of a profession once they achieve registration with the regulating body of that profession or achieved through additional training after an individual has been registered.

- Independent prescribing (IP) from qualification: the practitioner can prescribe any POM.
- Independent prescribing after completion of a non-medical prescribing course: the practitioner can prescribe any POM, except for controlled drugs; these are authorised separately by profession.
- Supplementary prescribing: the practitioner can make alterations to pre-existing prescriptions that are part of a clinical management plan (CMP), such as dose, frequency or stopping a POM
- > Exemptions: where a named POM is exempt from its prescriptiononly status for a specific named professional group (not all of which are healthcare professions); from the point of professional registration or appointment to position (e.g., the Master of a ship); and individual formularies per professional group, which are limited to either 'supplying' or 'administering' (or a combination thereof) a named drug.
- Patient group direction (PGD): a prescription for any patient meeting a specific set of criteria, generated by a physician and approved by the chief pharmacist of the organisation, one POM per PGD. The full list of those healthcare professions that can use PGDs is detailed in Schedule 12, Part 4 of The Human Medicines Regulations.³
- Patient-specific direction (PSD): written by a prescriber who has assessed the patient, a PSD authorises an individual to administer the specified medication to said patient. This is used by multiple healthcare professions both regulated (e.g., nurses) and unregulated (e.g., healthcare assistants).

Healthcare professions might be able to use one or more of these mechanisms. For example, whereas physicians and dentists achieve independent prescribing authority at their co-terminus point of qualification and registration, the only authority available to dieticians is the use of PSDs. By contrast, chiropodists can gain authority through exemptions, PGDs and PSDs, and can then undertake additional qualifications to become either supplementary or independent prescribers after registration. Table 1 provides a list of available authorities by profession.

The provision of POM using these mechanisms has been the subject of much previous research. Patient experience is one area in which an improvement in patient care has been demonstrated, such as improved patient concordance with treatment regimens because of the long-term relationships built between practitioner and patient. Patient care is another aspect, with reduced waiting times noted in emergency departments and discharge times more generally. Sexual health services make use of PGDs to allow experienced sexual health nurses to issue a very streamlined range of POM.

Aims

The current report compares the SoP of PAs to that of three other healthcare professions, all of which have access to a mechanism of prescribing from registration. The aims are twofold:

- > To evaluate PA SoP in relation to the SoP of the three other professions to determine whether PAs have a SoP that warrants use of a mechanism of prescribing.
- If a need for prescribing is indicated, to explore which mechanism of prescribing that is in use by one of those three healthcare professions is the best fit for PA SoP.

Theoretical framework

SoP is a term with multiple meanings within healthcare. In some cases, often in the USA, it is a term used to specify the roles of all practitioners within a healthcare profession, whereas in other countries, such as the UK, the term can refer to the remit of an individual within a profession. Indeed, the term 'scope of practice' is not used by all professions in the UK, and current documents pertaining to professional standards for healthcare professions have been written in isolation and at different times. As such, each has been composed in different formats and use differing terminology for the elements of SoP. For example, whereas the General Dental Council (GDC) uses the term 'scope of practice', 8 the GMC sets the range and remit of a Registered Medical Practitioner (RMP) out as 'duties of a doctor registered with the GMC'. 14

In other instances, there is a wider set of documents that govern and define a profession, each with different titles, which must be viewed collectively to give the complete set of standards and requirements. For example, the General Pharmaceutical Council has the 'standards for pharmacy professionals' as one document with a second document specifying the educational requirements for pharmacy students to apply for registration. 15

The difference is not limited to the title of such documents, also occurring in the structure and composition of the guidance, making comparison between different healthcare professions difficult. Furthermore, there are no guidelines on how to compare professional roles/SoP. Hence, this comparison was undertaken

using a tool designed specifically to allow for content analysis across documents from different regulation bodies.

The principles of the tool are based on a concept originated by Schuiling and Slager, ¹⁶ who, when investigating the SoP of midwives in the USA, identified that there are both flexible and inflexible boundaries within in SoP. The former are those that vary for individual practitioners; duties based on professional experience, supervision and/or collaboration. For example, physicians register with the GMC on the same basis as one another. However, one might undertake higher level medical training to specialise in paediatrics, another in psychiatry. Subspecialities might also occur within each field. For example, PAs must be trained in airway management to the standard of Immediate Life Support (ILS) qualification as a required core competency; ¹⁷ however, a PA working in a general practice setting might never have call to use this skill and their registration is not affected.

Inflexible boundaries are those boundaries set out either in law or by the regulatory body of the profession, such as educational requirements to join the profession and prescribing authority. Some inflexible boundaries might need to be met to achieve registration and can be termed 'core competencies'. How these are deployed by an individual can be shaped by flexible boundaries, such as the patient population that is being served. Each profession has its own set of core competencies and, although some might be common to other professions, the combination of these is unique to each.

Methods

A collection tool was designed in Excel with the domains and associated elements identified in the development of the theoretical framework. The tool was completed for each profession using data from the documents identified in Table 2 for each profession.

The professions to be compared were selected because they represent the different mechanisms by which POM can be administered, supplied or prescribed from the point of qualification, as set out above. Each profession can do so as an inherent part of the role, at the point of achieving full registration with their respective regulatory body.

Three other professions were selected for this comparison. Each has access to one of the main mechanisms of prescribing: physicians have IP; paramedics have exemptions; and pharmacists have PGDs. Supplementary prescribing (SP) is not considered here because it is a qualification that can only be undertaken after registration in a profession and still requires a prescription to have been made by someone with IP status. IP status after completing a post-registration prescribing course is represented by IP with physicians. The advance practice roles (such as advanced care practitioner, ACP) are not included in this comparison, because these are not pre-registration training roles; that is, entry to these roles is reserved for those from existing healthcare professions (HCPs), which does not correspond to the four professions that are subject to comparison here.

Results

The results are recorded in Table 2 and demonstrate that most of the elements within each domain are aligned between PA SoP and that of physicians, paramedics and pharmacists. PAs are trained

Table 1. Comparison of POM authority by healthca	uthority by healthco	are profession in the UK	the UK	ı		
Healthcare profession	Supply and administration			Prescribing		
	Patient-specific direction	Patient-group direction	Exemptions	Supplementary prescribing	Independent prescribing (post-registration training)	Independent prescribing (from qualification)
Art therapist ⁷	`	×	×	×	×	×
Biomedical scientist ⁷	`	×	×	×	×	×
Dentist ^{3,8}	A/N	A/N	A/Z	A/Z	N/A	`
Physician ^{3,9}	N/A	N/A	N/A	Z/A	N/A	`
Chiropodist/podiatrist ^{3,7}	>	>	\	`	(including controlled drugs)	×
Clinical scientist ⁷	>	×	×	×	×	×
Dietitian ⁷	>	\	×	`	×	×
Hearing aid dispenser ⁷	`	×	×	×	×	×
Nursing associate ¹⁰	`	×	×	×	×	×
Occupational therapist ⁷	`	\	×	×	×	×
Orthoptist ⁷	`	\	\	×	×	×
Operating department practitioner ⁷	`	×	×	×	×	×
Paramedic ^{3,7}	>	>	\	`	`	×
Pharmacist ^{3,11}	`	`	×	`	(including controlled drugs)	×
Physician associate ¹²	`	×	×	×	×	×
Physiotherapist ^{3,7}	`	`	×	`	(including controlled drugs)	×
Practitioner psychologist ⁷	`	×	×	×	×	×
Prosthetist ⁷	`	`	×	×	×	×
Radiographer (diagnostic) ⁷	`	`	×	`	×	×
Radiographer (therapeutic) ⁷	`	`	×	`	`	×
Registered nurse ^{3,13}	`	`	×	`	(including controlled drugs)	×
Registered midwife ^{3,13}	`	`	\	`	`	×
Speech and language therapist ⁷	`	`	×	×	×	×
N/A = not applicable.						

Table 2. Comparison of physician associate scope		of practice to that of three other healthcare professions		
Element	Profession			
	Physician associate ^{17,18}	Registered medical practitioner 14	Registered paramedic ¹⁹	Registered pharmacist ¹¹
Domain: inflexible boundaries: education, regulation and certification	and certification			
Regulation	Managed Voluntary Register	General Medical Council	Health and Care Professions Council	General Pharmaceutical Council
Educational requirement	PGDip or MSc	MBChB/MBBS	DipHE/FdSc or BSc	MPharm
QAA level of registration qualification	Level 7	Level 7	Level 5 (pre-2018) or 6	Level 7
Certification examination	Yes: must be completed before entry to Managed Voluntary Register	OZ OZ	0 ∠	Yes: at end of pre- registration year
Pre-registration year	o _N	Yes	No	Yes
Engagement with CPD and/or CE	100 h over 2 years.	Annual engagement; must be tailored to scope of practice and needs of individual; annual personal development plan	CPD requirement is outcomes based and, as such, does not have set number of hours	Annual CPD requirement for continued registration, tailored to scope of practice and needs of individual
Recertification examination/assessment	National Recertification Examination every 6 years	Annual Review of Competence Progression for physicians in training	°Z	ON
Prescription-only medication status	None	Independent prescriber	Exemptions	PGD, emergency supplies of medication
Domain: inflexible boundaries: core competencies				
Patient assessment: history taking	Yes	Yes	Yes	Yes
Patient assessment: physical examination	Yes	Yes	Yes	Yes
Patient assessment: requests diagnostic investigations	Yes	Yes	Yes	Yes
Patient assessment: interpreting diagnostic investigations	Yes	Yes	Yes	Yes
Patient assessment: makes a diagnosis	Yes	Yes	Yes	Yes
Patient management: develops a management plan	Yes	Yes	Yes	Yes
Patient management: undertakes therapeutic interventions	Yes	Yes	Yes	Yes

Table 2. Comparison of physician associate scope	ute scope of practice to that of three	of practice to that of three other healthcare professions (Continued)	(Continued)	
Domain: flexible boundaries				
Professional experience of clinician	Yes, and agreed with supervising physician; might change with roles in new clinical specialities	Developed through formal exams with Medical Royal Colleges and Foundation, Core and Speciality training schemes	Can develop, recognising that paramedic might become more specialised/ focused in their practice over time or with change in roles	Formally developed, with Foundation year leading to full registration; develop through post-registration education and research; some roles are very specialised
Patient population	All	All	All	All
Supervision/collaboration	Named supervisor(s) who must be contactable during working hours	Consultant or GP named as an educational supervisor, none at consultant/GP level	Autonomous practice, knowing when to refer on appropriately	Autonomous practice, knowing when to seek help or refer on appropriately; to provide leadership in pharmacy practice
Practice guidelines	Aware of, and work with, guidelines, but not restricted by protocols	Aware of, and work with, guidelines, but not restricted by protocols	Aware of, and work with, guidelines, but not restricted by protocols	Be aware of, and take a critical view of, national and local policies and guidelines, without being restricted by them

BSc = Batchelor of science; CE = continuing education; CPD = continuing professional development; DipHE = Diploma of Higher Education; FdSc = Foundation degree in science; MBChB/MBBS = Batchelor of Medicine and Surgery; MPharm = Master of Pharmacy; MSc = Master of science; PGDip = Postgraduate Diploma; PGD = Patient group direction; QAA = Quality Assurance Agency for Higher Education.

to the same, or higher, Quality Assurance Agency for Higher Education (QAA) level as the three other HCPs included. The PA SoP includes the same core competencies as all three HCPs and applies these to the same range of patient populations.

There are some areas of divergence: PAs are not yet subject to statutory regulation, require a named supervisor to be contactable during working time and are currently one of only two HCPs subject to a passing a national certification examination that then allows an individual to register with that body.

Discussion

The findings of the SoP comparison suggest that PAs sit in an area of clinical practice with other professions for whom the provision of POM is a necessity for practice. There are many opportunities for PAs to prescribe, supply or administer POM in an effective manner, as other healthcare professions have already demonstrated, not only those that were involved in this comparison, but also others, such as nurses, physiotherapists, and advanced clinical practitioners. PA education, similar to that of pharmacists and physicians, is at QAA level 7, where individuals can, among other descriptors, work autonomously with complexity and uncertainty, ²⁰ and this reflects well the ability of PAs to assess patients and, with them, make decisions concerning their care, including prescribing decisions. This suggests that IP would be an appropriate tool for PAs to use.

The areas of divergence, notably statutory regulation, must be resolved before any mechanism of prescribing can be applied to the PA profession. The need for a named supervisor when working does not present a barrier to PAs having a mechanism of prescribing, because PAs still work autonomously without every patient being reviewed by the supervisor. This implies that PAs can and should have access to a mechanism of prescribing/supplying POM. The suitability of each mechanism for use by PAs is be discussed in turn below.

Exemptions

This study demonstrates that PAs have a SoP, including level of education, that meets or exceeds that of a profession that already uses exemptions. This would require not only an amendment to the Human Medicines Regulations, but also a list of POM that are exempt to be generated first. Exemptions have some logistical and governance issues that might make this mechanism a poor fit for PAs. From a governance perspective, the POM listed must be of a number that PAs and their supervisors can recall easily.

It is notable that, where exemptions are applied, the professions in question have a relatively narrow SoP and a correspondingly small list of POM for which exemptions apply. Although paramedics meet almost all the same elements of SoP as PAs, physicians and pharmacists, their practice setting is primarily emergency care as first responders, providing the first part of a patient's care journey. This often follows standard protocols that influence or specify the patient management, and this is reflected in the limited set of POM that are exempt for use by paramedics. This would make application of exemptions to PAs challenging. If the list of POM is limited, that implies that there will be clinical roles in which several POM that can be used are not routinely done so, if at all. This might then prevent PAs from working in areas in which the exemptions list is too narrow, diminishing the generalist

nature of the role, which is one of the hallmarks of the profession. Where paramedics have moved into advanced care practitioner roles, there has been a need to complete an independent prescriber course to provide further POM.

The means of providing POM by means of exemptions in primary care, and outpatient settings as medication to take home, is potentially a limiting factor. A POM that is exempt must be listed in one of five categories: some are only for supply, some for administration and some for combinations thereof. Any POM listed for exemption would need to be allocated to the correct category, which would require additional research to achieve. This has added importance with respect to the second logistical consideration, that of the physical provision (supply) of that POM to the patient (ie dispensing the POM). This will be limiting because few clinical settings allow for staff to dispense POM directly to the patient; this function is normally undertaken by a pharmacist on receipt of a valid prescription. However, exemptions are not a mechanism for prescribing POM; rather, they are a mechanism for suppling and administrating them. Podiatrists have the facility to supply POM (which they are allowed to 'supply' only) via a written order. ²¹ This order permits a pharmacist to issue the named POM directly to the patient, the podiatrist not being restricted to carrying stock of each drug that they can supply. This facility would make exemptions practical for PAs from a logistical perspective, but would need to be written into the legislation from the outset.

Patient group directions

PGDs are similarly problematic from a logistic perspective. Each PGD must be written for a single drug or class of drugs, by each employing organisation, which would preclude these from being carried from one organisation to another by the PA. As with exemptions, PGDs are designed for the administration of the POM or directly provide a supply to the patient by the individual HCP using the PGD and not another person.²² This again makes use in primary care settings (eg in general practice) and ambulatory settings ineffective. PGDs have been shown to be effective in settings such as sexual health, 23 where the range of POM is limited, reviewed regularly based on infection prevalence and antimicrobial resistance, and where supplies of medication are dispensed on the premises by the HCP. Data from the annual Faculty of Physician Associates (FPA) census show that 30% of PAs work in general practice, 23 suggesting that there is a large body of PAs who would not find the use of PGDs effective in clinical practice.

The National Institute for Health and Care Excellence (NICE) does not consider PGDs to be a mechanism that is specific enough for the provision of routine care of patients and suggests that PGDs should be used only when there is no alternative. ²⁴ NICE holds that POM requiring frequent changes in dose or frequency are inappropriate for use in PGD. This paper suggests that PAs have a SoP that would include patients for whom changes to dose would occur, but this should be explored further through specific analysis of the POM that PAs need to obtain for their patients. For PAs, this illustrates the limitation of PGDs as a means of routine provision of POM to patients.

It could be argued that PGDs would create a personal formulary for each PA that would be reflective of the clinical area in which they work, and dovetail with the concept of delegated

practice that can evolve over time. However, the logistical constrains of using PDGs in practice renders this effectively unworkable.

Independent prescribing

Independent prescribing would enable PA movement between clinical settings and employers without impacting on the ability of PAs to provide POM for their patients. This includes short-term redeployments, as seen during the COVID-19 pandemic. The mechanism for providing this, whether at the point of qualification or as an add-on post-qualification independent prescribing course, is difficult to determine from this study.

The logistical problems presented by exemptions and PGDs do not apply to independent prescribing, making this suited for any PAs working in primary care and ambulatory settings. The FPA annual census reflects the wide range of clinical settings in which PAs currently practice, including accident and emergency departments, and in-patient wards (across medicine, surgery, and specialities, including ENT, paediatrics, and many others). ²⁴

Pharmacology education

The framework for comparison of HCPs that has been developed and used in this paper evaluates what Boeren²⁶ would term 'macrolevel curricula': it looks at the professional standards and expectations, but not the syllabus ('microlevel curricula') of individual courses for each profession. As a result, it is difficult to gauge the depth of some of the elements of the comparison, such as the teaching of pharmacology.

Pharmacology education for PAs is mandated in the Core Competency Framework (CCF), but is not defined, although some models have been suggested specifically for PA education. A survey of UK PA courses found that all respondents (59% of UK PA courses) included pharmacology in their syllabus, but there was variation in the form that this took. This presents a potential problem, such as allowing PAs to prescribe from the point of registration. Requiring an assessment, undertaken post registration, has been suggested as a way of mitigating for this. Another would be to restrict IP to PAs who complete a post-registration IP course, allowing opportunity for recognition of prior learning (RPL) of pharmacology teaching. This could be resolved by the new GMC and FPA curricula for PAs who start training post regulation, which points to a post-registration IP course being most appropriate for PAs trained before regulation.

In a similar vein, the core competencies of clinical skills are the same across all professions and the framework for comparison is not able to elucidate on the specific aspects of patient assessment for each profession.

Conclusions and recommendations

This comparison indicates that PAs have a SoP consistent with a need for a mechanism to prescribe, supply or administer POM. Evidence from this research suggests that this needs to be wideranging access, as would be afforded by independent prescriber status or by PGD, rather than the narrow range afforded by a list of exemptions. There are also logistical considerations to the use of both PGDs and exemptions, suggesting that these mechanisms are not optimal for PA SoP. Further research is needed to identify which POM PAs request for their patients and any associated

patterns of clinical practice that drive these requests; such information could confirm that independent prescriber status to be the optimal mechanism of prescribing to ensure PAs are able to provide optimal and timely patient care.

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