The medical care practitioner: developing a physician assistant equivalent for the United Kingdom

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ABSTRACT

- A range of demographic, social and other factors are creating a crisis in the provision of clinical care in the United Kingdom for which the physician assistant (PA) model developed in the United States appears to offer a partial solution.
- Local and national moves are underway to develop a similar cadre of registered health care professionals in England, with the current title of medical care practitioners (MCPs).
- A competence and curriculum framework document produced by a national steering group has formed the basis for a recent consultation process.
- A limited evaluation of US-trained PAs working in the West Midlands region of England in both primary care and acute secondary care suggests that PA activity is similar to that of doctors working in primary care and to primary care doctors working in the accident and emergency setting.
- The planned introduction of MCPs in England appears to offer, first, an effective strategy for increasing medical capacity, without jeopardising quality in frontline clinical services; and, second, the prospect of increased flexibility and stability in the medical workforce.
- The deployment of MCPs may offer advantages over increasing the number of doctors or taking nurses out of nursing roles. The introduction of MCPs may also enhance service effectiveness and efficiency.

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There is a looming crisis in clinical care in the United Kingdom. The ageing population,[1] rising patient expectations and a culture of consumerism[2] are increasing the demand on clinical services. At the same time, several factors are reducing whole-career service provision of the frontline medical workforce. These include demographic factors,[3,4] such as the increase in the proportion of female medical graduates to almost 60%;[3] issues of balancing work and other aspects of life, leading to earlier retirement; and changes in doctors' working patterns (eg, the European Working Time Directive[5] will result in increasingly tighter legal limits on doctors' working hours).

In geographic areas of severe socioeconomic deprivation, medical workforce shortages, particularly in primary care, are often an additional problem. A shortage of general practitioners in the West Midlands region of England led several practices to recruit physician assistants (PAs) trained in the United States to support the delivery of core primary care services. The American Academy of Physician Assistants describes PAs as "health care professionals licensed to practice medicine with physician supervision" and, within the physician–PA relationship, to exercise "autonomy in medical decision making and provide a broad range of diagnostic and therapeutic services".[6] The definition would hold equally well for the medical care practitioner role now emerging in the UK.

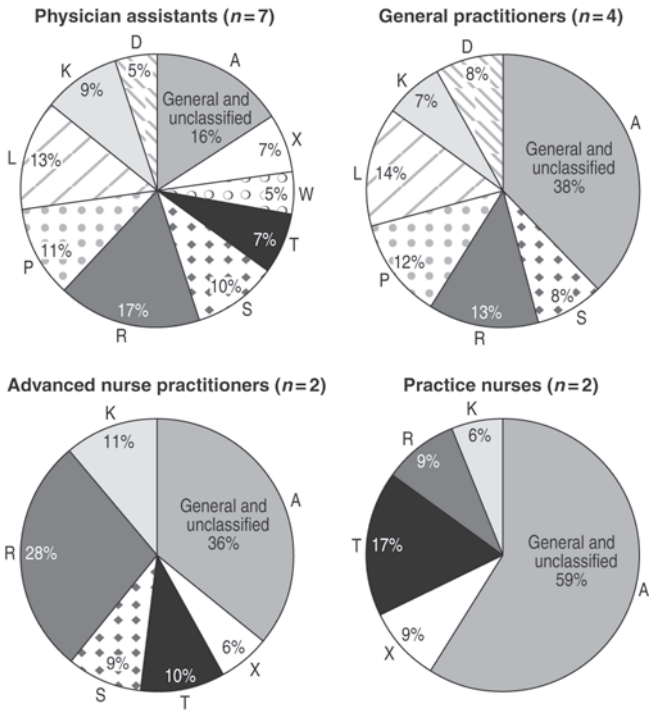
Favourable early experience encouraged an initiative to import an additional 10 PAs to work predominantly in primary care. Two PAs were also recruited to work in accident and emergency (A&E) departments. This "grass roots" response to the severe shortage of medical workforce was consistent with the UK Government Department of Health's national policy to introduce more flexibility into health care delivery.[7] The widening gap foreseen between a rising demand for health care in the UK and the available clinical workforce stimulated a study of the West Midlands' experience. This found that the PA model could make a significant contribution to the delivery of clinical care in the National Health Service (NHS). Other regions in the UK have responded to shortages in their clinical workforce by using advanced nurse practitioners (ANPs: nurses designated as having a higher level of expertise in a particular field) in related roles, or have recruited doctors and nurses from overseas. The former is commented on below. Recruitment of health professionals from overseas and the consequent denuding of local services raises significant political and moral issues, and the UK government has developed a code of practice intended to reduce such recruitment.[8]

Creating a new profession: local and national developments

Early in 2002, the University of Birmingham was approached by a local primary care organisation representing several general practices. This organisation, which was already employing American-educated PAs, asked if the medical school would develop a local course and hence "grow our own" PAs (referred to in this article as "medical care practitioners" or MCPs). National developments around this time led to a series of separate but linked streams of activity. First, the Department of Health established "pilot sites" in England, in which existing health care professionals (eg, nurses and physiotherapists) undertook some aspects of the developing MCP role. They were supported in their learning by clinical mentors and a designated higher educational institution with a health science faculty. Second, a steering group was set up, chaired by representatives of the Royal College of Physicians (RCP), the Royal College of General Practitioners (RCGP), the University of Birmingham (the higher education perspective), the Department of Health, and Skills for Health (an organisation developing competency specifications across the whole of the health service), as well as doctors in training and, more recently, patient representatives. The group was formally constituted in late 2004 as the National Competence and Curriculum Framework Steering Group, and its task was to develop practical guidance for employers, higher educational institutions and potential students as to how the MCP role would work and how entry to the new profession might be managed. In parallel with these initiatives, a third national stream of work involved an informal (and growing) grouping of interested higher educational institutions. This group has played a significant part in informing the educational aspects of the proposal to license a new profession.

In the West Midlands, we have developed our educational proposals by involving local primary and secondary care trusts and

1 Primary care activity by the *International classification for primary care* (ICPC) chapter headings



Key to ICPC chapter headings[11]

A General and unclassified	R Respiratory
D Digestive	S Skin
K Circulatory	T Endocrine, metabolic and nutritional
L Musculoskeletal	W Pregnancy, child-bearing, family planning
P Psychological	X Female genital ◆

the Strategic Health Authority in regular meetings to ensure that fitness for purpose as well as pragmatic issues such as training placements are considered.

Developing a curriculum

Although also involved in aspects of licensing and regulation, the core task of the National Steering Group was to develop a statement of competences for the qualifying MCP and a curriculum framework for institutions wishing to offer educational programs leading to qualification. The decision of the group to develop a framework, as opposed to a fully fledged national curriculum, allows individual higher educational institutions to design programs that meet national criteria but take account of local circumstances. The National Steering Group developed a detailed consultation document to enable both the competences and the framework to be considered more widely through public consultation.[9] The outcome of the consultation is expected to be available in July 2006.

Deliberations at both the National Steering Group and the higher educational institutions group (now the National Board for MCP courses) have emphasised the importance of gaining public trust and accountability for this new role. A proposal emerged from these discussions for a national core knowledge and competence assessment, combined with local assessment (to a national template) of fitness to practise and professional behaviour. Higher educational institutions will then be free to either incorporate the result of the national assessment into their own degree-awarding systems or not, as their regulations allow. In the former case, the educational institution would award a degree on the basis of both the national assessment (pass or fail) and a local assessment used to determine degree classification or award of distinction. In the latter case, institutions would award the degree purely on their own internal assessment, but their students would still be required to pass the national assessment.

Evaluation of PA role in the UK setting

To inform its nascent plans for developing an MCP role based on the PA model, the Department of Health commissioned the Health Services Management Centre at the University of Birmingham to evaluate the impact of the initiative to recruit US-trained PAs.[10] Methods included collection of both quantitative data (relating to the clinical service activity of the PAs) and qualitative data (by interviews, surveys and focus groups) to determine the views of doctors, nurses and patients regarding the roles taken by PAs in primary care and in hospital A&E departments. The number of PAs working in the region grew considerably during the period of the evaluation, and this is reflected in the data collected. This changing picture meant that the evaluation could not utilise even a quasi-experimental design. As a result, even the quantitative data must be viewed as largely descriptive, and formal statistical analysis as inappropriate.

Primary care

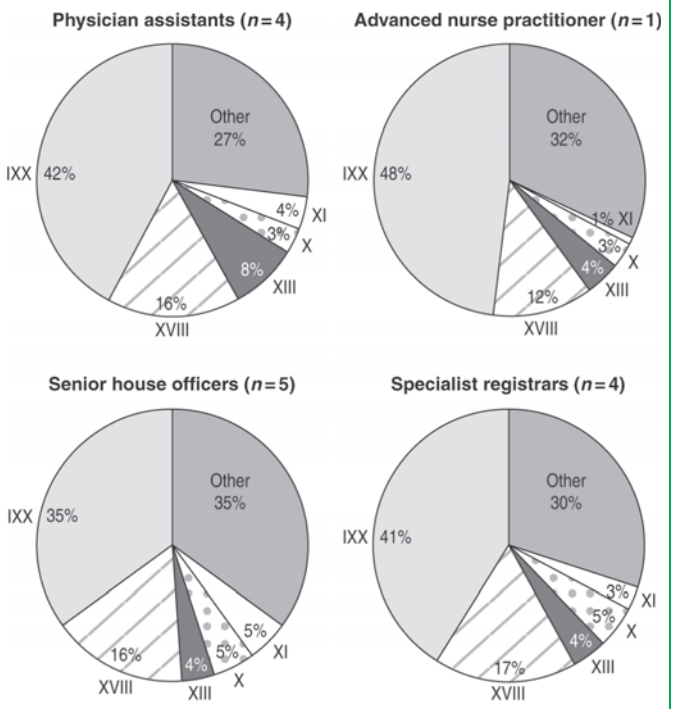
Caseload

Detailed consultation data gathered from three general practices indicated that PAs provided an average of 16.5 consultations per day, an output similar to that provided by the GPs (17 per day) in the same practices. Both groups saw a similar distribution of sexes, but the mean age of patients seen by PAs was older.

PAs and their supervising GPs had a similar spread of activity across the 17 chapters of the *International classification for primary care* (ICPC),[11] but there were considerable differences between the activity patterns of GPs and PAs and those of practice nurses and ANPs (Box 1), although the number of nurses sampled is small. Ten per cent or more of GPs' and PAs' activity was coded in each of three ICPC chapters — psychological, respiratory and musculoskeletal — although the differences in the activity of each of the professional groups are indicative of differences in their professional roles. The variations in activity pattern between individual practitioners are also indicative of prior experience, subspecialisation and practice organisation.

PAs saw patients presenting with an acute condition in all the general practices surveyed. There was no systematic triage by reception staff, although there were instances when, by agreement between the PA and supervising GP, patients in specified categories were directed to the GP. While initial experience suggested some informal triaging, whereby the PA saw a similar but less complex casemix, over time, in most instances, triage was seen to be unnecessary. Rather, PAs' own perception of their boundaries of

2 Accident and emergency activity by the International classification of diseases, 10th revision (ICD-10) chapter headings



Key to ICD-10 chapter headings[12]

X	Diseases of the respiratory system	XVIII	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
XI	Diseases of the digestive system	IXX	Injury, poisoning and certain other consequences of external causes
XIII	Diseases of the musculoskeletal system and connective tissue	Other	All other categories

◆

competence and GPs' interests and subspecialisation became the basis for a negotiated balance within each practice. Consultation patterns, as reflected by the proportion of patients seen by PAs as a follow-up from their own initial consultation, were similar to that for GPs in the three general practices.

Supervision

Although US-trained PAs are qualified to prescribe medication and are allowed to do so in most US states,[7] they are not legally permitted to prescribe in the UK. Across seven of the practices surveyed, by far the most common reason for the PA contacting their supervising GP about a particular patient (38%–68% of all such contacts) was to seek a signature on a prepared prescription. By contrast, only 1%–16% of such contacts were for the purpose of reviewing treatment plans. The need for a supervisor's signature on every PA prescription caused considerable inconvenience for patients because of delay in issuing their prescriptions. Inability to sign a prescription also seriously curtailed home visits by PAs. We anticipate that this anomaly will be rectified once the UK develops a registration process for MCPs, when prescribing rights will be included as an essential competence (as outlined in the current national consultation document, *The competence and curriculum framework for the medical care practitioner*[9]).

Relationships with clinical and non-clinical staff

The interviews, surveys and focus groups indicated that PAs were well received by doctors at all levels, as well as practice nurses, non-clinical staff and patients. These experienced PAs integrated readily into practice teams and their enthusiasm, interpersonal skills, approach to patients, communication skills, flexibility, documentation in patients' notes, and willingness to work in a team were appreciated. These qualities have additional significance in view of the PA's dependent practitioner role. Although some of the practice nurses and ANPs interviewed admitted to initial doubts about the PA role, these were largely allayed by their experience of working with PAs and, in particular, by the willingness of PAs to work flexibly in the health care team.

Impact on clinical service delivery

The introduction of PAs has expanded capacity in the primary care teams of which they form a part, improving access for patients and reducing waiting times. In eight of nine practices in which patient list data were collected, the introduction of PAs led to increases in patient lists (ie, the number of registered people for whom a practice provides all primary care) by 2.4%–5.3% in 1 year. By reducing the stress on an overtaxed general practice workforce, the increased job satisfaction is expected to reduce staff turnover and to enhance continuity of care for patients. Both of the problems identified by supervising GPs (the burden of familiarising US-trained PAs with NHS processes, and the interruption of their clinics to sign prescriptions for PAs) should only be short-term problems. The former will be nullified when PA equivalents (ie, MCPs) are trained in the UK, and the latter will be resolved when UK prescribing rights for PAs and MCPs are achieved.

Re-profiling clinical work between doctors and PAs

Limited but positive evidence is emerging of PAs taking responsibility for tasks previously performed by GPs. In a number of practices, PAs have taken responsibility for checking all the investigation results for the practice. When women attend for Pap smears, female PAs have also sought to introduce full pelvic examination, and to include access to counselling about sexually transmitted infections and investigation (if appropriate). The expanded capacity associated with PAs in primary care has also enabled GPs to introduce minor surgery clinics. In one practice, a medicines review of a patient's full clinical notes by a clinical pharmacist, followed by referral where appropriate to the PA for consultation about the patient's medications, has been set up. PAs have also undertaken the provision of clinical services to residential and nursing homes.

Accident and emergency

In addition to shortages of doctors in primary care, A&E services and hospitals at night are also seriously affected by changes to the working hours of doctors in training and the conditions imposed by the European Working Time Directive. A preliminary evaluation of the PA role in A&E was conducted in two hospitals over a 2-month period during 2004. After an induction program of 3–4 weeks, four PAs (two full-time equivalents) in one of the hospitals saw 8% of all attendees. Across the hospitals, three of the four PAs saw 12%–24% of ambulance patients, and this was similar to the proportion seen by the clinical assistants (experienced GPs work-

ing sessions in the A&E department), and by the one ANP. The PAs' caseload was characterised by fewer ambulance cases and lower admission rates than that for the specialist registrars (doctors in specialist training programs) and senior house officers (doctors in the prespecialist phase of training) in the same clinical setting. Data on first attendance for injuries and for chest or abdominal and pelvic pain (International classification of diseases, 10th revision [ICD-10][12] Chapter XVIII; R07, R10) indicate that PAs, clinical assistants, senior house officers and most specialist registrars saw a similar proportion of urgent and non-urgent patients in this category. The proportion of urgent and non-urgent cases was again broadly similar for all categories of clinicians, except for specialist registrars. The clinical caseload across ICD-10 chapters was similar for PAs and doctors, as was found with the ICPC chapter analysis in primary care. However, unlike primary care, a similar pattern was also found for the ANP (Box 2).

Supervision

As with PAs working in primary care, who were supervised by a particular GP in the practice, PAs in A&E were allocated a consultant as supervisor. However, for day-to-day advice and support, PAs approached whichever consultant or senior registrar was on duty. The reasons for contacting a supervising doctor about a particular patient were markedly different from those in general practice, with 42%–48% of contacts in A&E being for treatment plan review. In most cases, however, review did not result in change in the treatment plan. In A&E, only 23%–33% of contacts were for prescription signatures. Concerns were expressed, however, by those PAs working in A&E that a senior A&E doctor, although on call, was not available on site at all times.

Legislative issues

The development of a new clinical profession requires a formal regulatory body to set standards to oversee initial and continued registration with reference to both competence and fitness to practice. For those qualifying as MCPs who are not already members of another health profession, such a body is clearly essential. At present, the decision as to the appropriate professional council for MCP registration awaits the outcome of the current review of regulatory bodies for all health professions, which is due in late 2006. For those who are already members of a UK-registered health care profession, questions of switching registers, maintaining dual registration, or being entered on a new part of an existing professional register, remain to be resolved. It is proposed that continuing registration of MCPs would be dependent on successful re-examination, on a 5- or 6-yearly cycle, that requires MCPs to demonstrate generalist medical competence, whatever their clinical field at the time.

The issue of prescribing rights is inextricably linked to that of professional registration. There is already legislative action in the UK to further extend prescribing rights to suitably experienced nurses and to some members of appropriately registered health professions.[13] For PAs and MCPs, however, the position is somewhat different, because prescribing is central to their role. Whereas other professions may have been well established before seeking prescribing rights, it is essential to the success of the MCP role that the establishment of the regulatory framework for the MCP profession and the legislation enabling registration of MCPs with prescribing rights are made concurrently.

Why not more doctors?

If the introduction of MCPs was nothing more than a "short-term fix" to tide the NHS over until more doctors could be trained, any success would have to be balanced against the cost of continuing uncertainty in the health service and unfairness to those qualifying for the role. MCPs, however, offer the prospect of a much longer-term benefit to the health service and an effective complement to the medical and nursing professions.

MCPs may also provide more stability and acute general medical support, hence lessening the disruption created by the rotation of doctors in training and the resultant unevenness in the availability and skills levels of acute medical care in frontline clinical services. The trend towards increasing specialisation among doctors would be usefully counterpointed by the generalist clinical expertise offered by MCPs, and that same generalist expertise would offer flexibility for innovation in clinical delivery. In addition, the breadth of MCPs' education and training and the maintenance of a generalist perspective provide a cadre of clinicians who have a long "shelf life" and can, with further training, be deployed flexibly to cover future and as yet unforeseen shortages in the medical workforce, as well as fulfilling generalist roles in subspecialty settings. MCPs will also be a valuable resource in the health care of an ageing population, as many older people, in addition to the condition with which they present, suffer from other health problems beyond the notional range of expertise of the specialist medical staff concerned.

Why shouldn't the proposed roles be undertaken by nurses?

The question is not whether there are nurses capable of training as MCPs, but whether this is in fact a nursing role and whether the health service would be better or worse off for switching highly experienced nurses into the new MCP role. We would argue that the professional function of the MCP is based on the medical rather than the nursing model, and that, in becoming an MCP, a nurse would leave behind much hard-won nursing expertise, and the health service and the nursing profession would be the poorer.

As the new profession is developed, there are bound to be those nurses (or indeed other health professionals) who will say: "That is the profession I would have joined if it had existed when I first became a health worker". That being the case, nurses should be allowed to train for the new profession through the established entry criteria. There will always be those who wish to switch professions. From a workforce planning perspective, however, it is preferable that most of those admitted into the MCP degree program be drawn from the fresh pool of science graduates rather than from the nursing profession.

Public acceptance

Gaining public acceptance for a new profession requires, if anything, higher standards than for existing professions. There is a need to be more certain that educational standards have been met and that qualifying practitioners are safe. Recognising that safety can never be absolute, it is suggested that public acceptance of the MCP role will be best achieved through the setting of clear standards and competences, and a rigorous national assessment with re-assessment or re-accreditation on a regular basis.

Conclusion

Although the existing professional roles have served health care delivery well in the past, many factors, including changing demographics and working patterns, have generated new demands for a more flexible medical workforce to enhance the delivery of frontline clinical services. There is now preliminary evidence to suggest that the introduction of the MCP role, based on the proven North American PA model, may make a valuable contribution to clinical care in the NHS, and represents an effective strategy for increasing medical capacity without jeopardising quality. The MCP role offers the prospect of increased flexibility and stability in the medical workforce. Further studies are required to determine whether introducing MCPs in England will also enhance effectiveness and efficiency of service delivery.

Several fundamental issues remain to be resolved, including regulation, registration and prescribing. The realisation of this new profession for the UK now awaits the outcome of the national consultation process.

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Competing interests

None identified.

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