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Physician associates in the UK: Development, status, and future

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ABSTRACT

Physician associates (PAs) have been part of the United Kingdom health workforce for almost 20 years. The profession is growing at pace, with statutory regulation, protection of the title and career progression supported by a national level framework all in the pipeline for the near future. This article provides a brief history of the profession in the UK and prospects for its future.

Keywords: physician associate, PA, United Kingdom, workforce, regulation, healthcare

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Main Text

The United Kingdom (population 66.8 million) has four constituent countries: England, Scotland, Wales, and Northern Ireland (Figure 1). Residents use the National Health Service (NHS), which is a tax-funded health service, free at the point of care with some co-payments (for example, for medicines in England). Each country decides its own health policies as well as how to develop and invest public monies in its future and current NHS workforce.

Physician associates (PAs) have been part of the UK health workforce for almost 20 years. The profession is growing at pace, with statutory regulation, protection of the title, and career progression supported by a national level framework all in the pipeline for the near future.

DEVELOPMENT OF THE PROFESSION

The first recorded demonstration project of a PA in the NHS was a US student placement in 1980 in general practice (a family physician office).2 Since the early 2000s, the NHS across the UK has been introducing new clinical roles as part of the drive to enhance the experience of care, improve population health, contain per-capita health spending, and address NHS workforce shortages, particularly in medicine and nursing. Further demonstration projects of advanced practice roles were precursors to PA development in the NHS.3 In the early 2000s, NHS organisations recruited PAs from the United States to work in general practice, EDs, and some acute specialties. Government-funded evaluations of two such initiatives concluded that the these PAs were well-received by patients and professionals, were clinically safe, and were an asset to services.4,5 Four outcomes arose from these demonstration pilots:

• The UK Association of PAs (UKAPA) was formed in 2005

• Central government supported an agreed national PA education curriculum and allocated some public funding for the first PA programs in England and Scotland6

• Individual general practitioners (GPs, known as family physicians in the United States) continued to employ small numbers of US-trained PAs and the newly emerging UK-trained PAs to meet increasing patient workloads and mitigate physician shortages.7

• Individual departments in a few hospitals also started to employ PAs to help address physician-in-training shortages and patient workload, testing how PAs could contribute to their teams.8

Continued interest in the NHS and government departments regarding how best to address workforce shortages led to a National Institute of Health Research (NIHR)-funded study of the contribution of PAs in general practice. This study reported on the clinical safety, acceptability, and cost effectiveness of PAs.9,10 The research was used in 2014 alongside knowledge and experience of PAs in the United States to underpin Health Education England's (HEE's) decisions to use public funds to support the clinical education of PAs. The goal was to have 1,000 graduates available to work in general practice by 2020. HEE is an arm's length body of the Department of Health, England, which plans the NHS workforce.

As the PA profession grows and evolves in the UK, so does the body of evidence on its contribution to healthcare teams. Examples in the acute care setting include NIHR-funded research, which demonstrated the positive effect on continuity in care, patient flow and experience, support to physicians-in-training posts, equivalency in quality of ED consultations compared with foundation year 2 physicians (similar to early resident US physicians), and perceptions of cost efficiency.11,12 Other examples include research investigating the effect of a cohort of experienced PAs from the United States, which found (among other positives) a reduction in breaches of contracted hours and/or missing educational requirements in physicians-in-training posts.13 Studies reporting from the perspective of patients highlight support for the role, albeit in the context of a low understanding of the plethora of mid-level role and some concerns for being able to see a physician when that scope of practice is required.14,15 More recently, as the PA academic body grows, so does the evidence in relation to PA education.16

PROFESSIONAL BODY DEVELOPMENT

The UKAPA was established in 2005 as the professional body for PAs. At that time, several PAs from the United States who were working in the UK recognised the need for the profession to have a presence, a voice, and representation. UKAPA worked in conjunction with the universities, HEE, and other stakeholders to provide expertise and advice on developing this workforce. UKAPA identified the need for statutory regulation and prescribing rights and started the journey towards this goal. The organization also provided a platform and support network for UK-trained PAs as they entered this new profession. UKAPA established an annual PA conference in 2008 and created the PA Managed Voluntary Register (PAMVR) in 2010. In the absence of national legislation to regulate the profession, the PAMVR was one required step on the UK route to regulation. UKAPA also established an annual census and in 2013 brought about a change in professional title from physician assistant to physician associate.

With the increase in the number of PAs and PA programs, the professional body needed to grow to meet the needs of the profession. UKAPA required a more robust, sustainable structure with dedicated administrative support and resources. In 2012, the then-president of the Royal College of Physicians, inviting UKAPA leaders to meet to discuss the possibility of support for the profession from this college. Two years later, the Royal College of Physicians unanimously voted in favor of

developing a Faculty of Physician Associates (FPA). UKAPA dissolved in 2015 and the FPA was established.17

The FPA represents PAs across the UK, developing employer guidance, toolkits to support PAs in their development, and resources to support clinical practice. The FPA continues to provide clinical education with an annual conference, and allows members access to resources such as the continuing professional development diary and Royal College of Physicians publications. The FPA is the voice of the profession at a national level, representing PAs in work around regulation, prescribing, and career development and holding the managed voluntary register, which will remain active until statutory regulation comes into place.

REGULATION

In the UK, the government decides which professions to regulate. Legislation is passed to mandate an organisation (the regulator) to be responsible for the education, registration, and revalidation of such regulated professions. The regulator also gives guidance on matters of professional conduct, performance, and ethics. Regulating a new profession is a long process, including clear demonstration of the need for regulation against the risks of no regulation. A critical mass of potential registrants also is essential given the complexity and associated costs of the process.

PAs have been working with key stakeholders towards statutory regulation since 2005. These stakeholders include universities, the Royal Medical Colleges, Department of Health and Social Care (DHSC), the four governments of the UK, and HEE. In 2018, following formal application for regulation and a public consultation, the four governments of the UK approved the regulation of PAs, with the General Medical Council (GMC) being named as the regulator in July 2019. The legislation required to regulate PAs is being written, with further public consultation required before regulation. Statutory regulation of PAs is expected to start later this year.18

Legislation to allow PAs to prescribe can only be agreed once statutory regulation is in place. The FPA has already begun the initial development in collaboration with DHSC and other national bodies in preparation for this, and it appears that this will follow once the appropriate legislative processes are completed.

EDUCATION

To test the concept of the PA and the education model, education pilot sites were established at three universities: the University of Hertfordshire, St. George's University of London in partnership with Kingston University, and the University of Wolverhampton. The working title of medical care practitioner (MCP) was used at that time. In conjunction with the education pilot sites, work was simultaneously happening to establish a national curriculum for this emerging group. The National Competence and Curriculum Framework (CCF) for PA education document was developed between 2004 and 2006 in partnership with the Royal College of Physicians and the Royal College of General Practitioners; this was published by the Department of Health (now the DHSC) in 2006. The CCF was reviewed and updated in 2012.6 Before the end of the education pilots, the government ran a public consultation on the role to solicit opinion on the facets of the role. Following this consultation, the MCP title was replaced with PA.

From 2008, there were four active PA programs, but by early 2011, only one program (St. George's) was actively recruiting. The University of Aberdeen launched a program in late 2011 and these two universities offered the only PA programs until 2014. The PA education organisation encouraged universities to open programs and, paired with government financial support for PA education, provided a catalyst for new courses. The number of programs increased rapidly from five (late 2014), to 15 (2015) to 35 by late 2021.

All UK PA programs are at universities, with 54% at universities with medical schools; the remaining programs are housed in departments of allied health or biomedical sciences. All programs are taught in English. Most offer a master's degree (91%), with some offering a postgraduate diploma (120 postgraduate credits--similar to a US certificate program). Only two programs offer undergraduate entry, with a 4-year course duration to master's (UK undergraduate degrees are 3 years, often with 1 additional year for the master's degree).

Programs range in size from 15 to 70 students per cohort. Because no single application portal exists for PA applicants, precise application numbers for the profession are not available. However, program directors are reporting ever-increasing applications, with program places becoming more competitive; some programs offer admission to only 10% of applicants.

The increase in programs has resulted in an increase in graduates, with 655 graduates passing the PA National Examination in 2020. The total number of qualified PAs is now estimated at 2,850. From the FPA 2020 Census report, 66% of respondents identified as female and 12% male, with 12% of respondents preferring not to answer the question.19

NATIONAL ASSESSMENT

All PAs in the UK are required to take a PA National Examination to enter professional practice. The examination consists of two 100 single best answer (SBA) papers, and a 14-station objective clinical structure examination (OSCE). Qualified PAs also are required to take a national recertification examination every 6 years, although this is likely to be reviewed following statutory regulation with the GMC. The recertification examination is a written assessment only, comprising two 100 SBA papers across all specialities. Both the PA National Examination and the recertification examination are administered by the Royal College of Physicians' Assessment Unit on behalf of the FPA, with robust internal and external quality assurance processes.

DEPLOYMENT

PAs are employed across general practice/family medicine and hospital-based specialties in the NHS, private healthcare sector, research, and PA education. PAs in NHS hospitals are employed under nationally agreed terms and conditions (NHS Agenda for Change contract), including standardized contractual and pay conditions such as annual leave and pensions. As part of the national structure, salary scales often are linked to an NHS job evaluation scheme and national job profiles.20 Those looking to research a particular profession can find out more information via the NHS Health Career website; jobs also are advertised centrally via the NHS jobs website, allowing those seeking employment to browse all jobs in the NHS.21,22

In family practice and private healthcare, PAs are not employed under NHS Agenda for Change; contracts are instead negotiated directly with the employer, although they often are benchmarked against the NHS Agenda for Change salaries.

A number of schemes have been proposed to support PA employment in the NHS, including reimbursing general practices for PAs' salaries.23 Under the PA ambassador scheme, HEE employs qualified PAs part-time across England to support the development of job opportunities, as well as working with employers to ensure that PAs are supported in their roles and provided with appropriate teaching and training opportunities. Interest is keen in growing the number of PAs in psychiatry, with the Royal College of Psychiatrists becoming increasingly involved in the development of PAs working in mental health.

GROWTH OF THE PROFESSION

The PA profession continues to grow every year. Figure 2 shows the number of PAs completing the PA National Examination by year. 2021 figures are as of July 2021 with one remaining examination scheduled for September 2021.

Figure 3 shows the distribution of PAs working in general practice/family medicine, hospitals, universities, and in research, according to the FPA census 2014-2020. Some of the data are more than 100%, as PAs were allowed to select more than one option, for example if they had a role that was split between primary and secondary care, or between clinical practice and education. Although most PAs are employed in hospitals, the uptake of PAs in general practice, higher education, and research is increasing.

Figure 4 demonstrates the specialties in which PAs report working in the census. For the purposes of this figure, medical subspecialties have been collated, as have surgical subspecialties, excluding 2015 where these data were not collected. More detailed data can be found in the FPA census reports.19

WHAT ARE PAS DOING?

PAs are embedding as part of the medical team, with most involved in core clinical activities such as performing physical examinations, taking medical histories, and performing patient education as part of their regular clinical routine. Common procedural activities also are carried out by PAs, such as venepuncture, interpreting ECGs, and taking samples for arterial blood gas analysis, but PAs also undertake other skills such as surgical first assist, lumbar punctures, chest drain insertion, and bone marrow biopsies where appropriate to their role. More detail about PA activity can be found in the 2020 FPA census report.19

The value of the PA role was particularly visible during the coronavirus pandemic. PAs across the UK stepped up to support the teams in this unprecedented time, showcasing the value of the generalist. The FPA collated some case studies from PAs working during the pandemic, ranging from providing vaccinations and working in COVID assessment units, to supporting redeployed physicians in providing patient care in general practice.24

FUTURE

PAs are set to gain statutory regulation later this year. The GMC will hold the register for PAs and as such will have responsibility in a number of different areas. As the regulator, the GMC will set quality standards and policies that PAs will need to uphold, and will be responsible for deciding who will be able to join the register, as well as reviewing registrants in order to ensure that those who remain on the register are maintaining appropriate standards.

The GMC will approve the pre-qualification curriculum, owned by the FPA, and will provide robust quality assurance processes to ensure that the curriculum outcomes are met by each course provider. This high-level standardization will allow those entering the profession to be confident in the educational outcomes and be able to develop their professional identity while in training.

Statutory regulation also will protect the PA title, ensuring that only those who have trained and qualified as PAs will be able to call themselves that. Given the rapidly increasing growth and visibility of the profession, the protected title, along with the professional development and career progression support by the FPA, will provide reassurance for PAs, employers, and patients.

The profession will continue to grow, and with such growth and development comes interest from further afield. Once established as the regulator for PAs, the GMC will be well-placed to provide guidance and processes to allow PAs from across the globe to apply to join the register should they wish to look for employment in the UK.

CONCLUSION

The PA story in the UK is one of contribution to multidisciplinary teams across the NHS and beyond and meeting 21st-century challenges in providing healthcare; growth from the original demonstration projects into an embedded, accepted and researched profession in healthcare services and in education, with a presence in many areas of the NHS and in many universities; and trailblazing in creating new clinical career opportunities for graduates which widens the pool of talent from which the NHS can recruit. The future looks bright for PAs in the UK.

REFERENCES

2. Reedy BL, Stewart TI, Quick JB. Attachment of a physician's assistant to an English general practice. Br Med J. 1980;281(6241):664-666.

3. NHS Modernisation Agency. 10 high impact changes for service improvement and delivery: a guide for NHS leaders. www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2017/11/10-High-Impact-Changes.pdf. Accessed November 8, 2021.

4. Woodin J, McLeod H, McManus R et al. Evaluation of US-trained physician assistants working in the NHS in England. Final Report. https://research.birmingham.ac.uk/portal/en/publications/the-introduction-of-ustrained-physician-assistants-to-primary-care-and-accident-and-emergency-departments-in-sandwell-and-birmingham(56574f87-03b8-4b0d-b1c0-6be739b7cb78).html. Accessed November 8, 2021.

5. Farmer J, Currie M, Hyman J, et al. Evaluation of physician assistants in National Health Service Scotland. Scott Med J. 2011;56:130–134.

6. Royal College of Physicians, Royal College of General Practitioners, Department of Health. The Competence and Curriculum Framework for the Physician Assistant. London, UK: Department of Health; 2006.

7. Drennan V, Levenson R, Halter M, Tye C. Physician assistants in English general practice: a qualitative study of employers' viewpoints. J Health Services Res Policy. 2011;16(2):75-80.

8. Ross N, Parle J, Begg P, Kuhns D. The case for the physician assistant. Clin Med (Lond). 2012;12(3):200-206.

9. Drennan V, Halter M, Brearley S, et al. Investigating the contribution of physician assistants to primary care in England: a mixed-methods study. Health Serv Deliv Res. 2014;2.16.

10. Drennan VM, Halter M, Joly L, et al. Physician associates and GPs in primary care: a comparison. Br J Gen Pract. 2015;65(634):e344-e350.

11. Drennan VM, Halter M, Wheeler C, et al. What is the contribution of physician associates in hospital care in England? A mixed methods, multiple case study. BMJ Open. 2019;9(1):e027012.

12. Halter M, Drennan V, Wang C, et al. Comparing physician associates and foundation year two doctors-in-training undertaking emergency medicine consultations in England: a mixed-methods study of processes and outcomes. BMJ Open. 2020;10(9):e037557.

13. Drennan VM, Calestani M, Taylor F, et al. Perceived impact on efficiency and safety of experienced American physician assistants/associates in acute hospital care in England: findings from a multi-site case organisational study. JRSM Open. 2020;11(10):2054270420969572.

14. Taylor F, Halter M, Drennan VM. Understanding patients' satisfaction with physician assistant/associate encounters through communication experiences: a qualitative study in acute hospitals in England. BMC Health Serv Res. 2019;19(1):603.

15. Taylor F, Ogidi J, Chauhan R, et al. Introducing physician associates to hospital patients: development and feasibility testing of a patient experience-based intervention. Health Expect. 2021;24:77–86.

16. Hoskin J, Agarwal R. Preceptorship scheme for newly qualified physician associates working in general practice in Sheffield. Clin Med (Lond). 2020;20(6):e255-e259.

17. Royal College of Physicians. 2015. New Faculty of Physician Associates launched today. www.rcplondon.ac.uk/news/new-faculty-physician-associates-launched-today. Accessed November 8, 2021.

18. Straughton K. The road to regulation for physician associates. RCP Commentary. 2021;4:20-22.

19. Faculty of Physician Associates. The FPA census. www.fparcp.co.uk/about-fpa/fpa-census. Accessed November 8, 2021.

20. NHS Employers. Physician associate national job profile. www.nhsemployers.org/sites/default/files/2021-06/physician-associates-profiles.pdf. Accessed November 8, 2021.

21. NHS Health Careers. Physician associates. www.healthcareers.nhs.uk/explore-roles/medical-associate-professions/roles-medical-associate-professions/physician-associate. Accessed November 8, 2021.

22. NHS jobs. www.jobs.nhs.uk. Accessed November 8, 2021.

23. Howard J. Physician associate graduate preceptorship guidance. Health Education England, 2018.

24. Faculty of Physician Associates. Covid-19--PA stories. www.fparcp.co.uk/covid-19. Accessed November 8, 2021.