



# **MEDICAL ASSOCIATE PROFESSIONALS**

IMPACT ON SAS, LOCALLY EMPLOYED AND  
INTERNATIONAL MEDICAL GRADUATES



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# BAPPIO

FOUNDATION


# **BAPIO MAP REPORT**


## IMPACT ON IMGs, SAS & LEDs

The British Association of Physicians of Indian Origin (BAPIO), a national voluntary professional organisation (established in 1996), represents the views of international medical graduates, many doctors from the Indian sub-continent, provides excellence in patient care through research and training (in partnership with the NHS, medical royal colleges and the regulator), supports professionals through leadership and provides mentorship and wellbeing as well as its charitable mission to improve global health by fostering links with healthcare professionals across the globe in education, research and patient care.


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## Executive Summary

The national discourse on the issue of Medical Associate Professionals (MAP) reached a climax in the weeks leading up to the UK general elections and is continuing well after. What began as an innovative workforce solution imported from its successful implementation in the USA has become controversial. This appears to lead the healthcare profession into a spiral of public discourse and lively debate within professional membership bodies (i.e., Medical Royal Colleges) by the trade union, and it has not spared the regulator or NHS-employing organisations. It has frequently descended into rivalry between members of different professional groups. The publication of statements from a number of medical royal colleges and the parliamentary order rushed through by the previous administration, has led to the final stage, where the doctor's trade union opened a legal battle against its regulator in an attempt to protect the title of '*medical professional*' and prevent the '*blurring of boundaries*' between doctors and MAPs.

While the primary focus of the debate has been a risk to '*patient safety*' and the necessity of honesty and transparency in communicating with patients while providing care, there has been a noticeable absence of patient or public involvement. Equally significant, but often overlooked, is the MAP 'experiment' impact on a substantial cohort of the NHS workforce. This includes international medical graduates (IMGs), who constitute nearly 40% of the UK medical workforce, locally employed doctors (LEDs) in hospitals, locum doctors in general practice, and SAS - Specialist, Associate Specialist and Speciality doctors. To fully comprehend the intensity and complexity of the MAP debate, it is crucial to consider their broader context in the UK healthcare workforce. This includes the current imbalance between healthcare demand and supply, compounded in the aftermath of the COVID-19 pandemic, the challenged state of national finances, the series of industrial actions by healthcare professionals in 2023-24, and the apparent lack of trust and engagement from the previous administration in meaningful negotiations with doctors. These factors, when viewed collectively considered, present a challenging scenario, often referred to as a '*perfect storm*'.

BAPIO and its alliance partners, including members of the Federation of Minority Healthcare Organisations (FEMHO), spurred by concerns raised by its members, decided to undertake a comprehensive, 360-degree assessment of the impact of MAPs on the UK healthcare system. The review was to be unbiased, balanced to include MAPs in its stakeholder groups and consider the impact on IMGs, LEDs and the SAS cohort, as well as the public.

The methodology for the review, based on qualitative research, including a short thematic review, an online survey and a series of focus groups. The steering group included members of the broader spectrum of healthcare professionals.

Based on the results of a short focussed review, the areas for exploration for the survey and focus groups were;

- Patient safety
- Role and clarity to patients and other healthcare staff
- Scope of practice
- Impact on education and training of doctors
- Risks of prescribing and ordering investigations (ionising radiation)
- Impact on IMG, LEDs and SAS
- Economic impact
- Equality, diversity and inclusion assessment

The results from the survey and discussion conducted in focus groups demonstrated that the primary of concerns were with patient safety risks posed by what was being described as '*scope creep*', primarily local employing organisations and their relevant departmental leaders allowing or entrusting MAPs to take on extended roles, undertake procedures, operate in autonomous or semi-autonomous roles, see undifferentiated patients in primary care, or replace doctors in rotas. There were concerns that MAPs were taking jobs away from doctors, competing for training opportunities in 'craft specialities' and reducing the time available for consultants or supervising doctors to offer to doctors in training roles. Patient safety concerns were centred around the lack of transparency in roles and training to unsuspecting patients, who naturally presumed MAPs to be doctors, as well as the risk to doctors who were asked to prescribe by proxy or request investigations involving ionising radiation for patients they had not seen or reviewed. For IMGs, many of whom were in non-formal training roles, often in the first year of their transition to the UK, (often with inadequate induction or onboarding experience), the risk from proxy prescribing and ordering investigations was substantially higher, as well as the impact on their training opportunities, availability of senior supervision and competing for jobs in the presence of limited financial resources.

In line with the opinions expressed by members of doctors' unions, members of the medical royal colleges and other representative bodies, the focus groups strongly recommended a new and independent regulator for MAPs, a national role definition, a formal scope and competency framework, supervision and oversight arrangements as dependent practitioners, a review of pay structures in relation to doctors, and to increase patient awareness of clarity of roles, training and responsibilities.



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## 1.1 History

Physician Associates (PAs), formerly Physician Assistants, were introduced in the United Kingdom (UK) in 2003 as a response to staffing shortages and the need to bridge service gaps to alleviate the burden on doctors (1). The UK's adoption of the PA role was modelled on the experience of the United States of America (USA), which introduced Physician Assistants in the 1960s to improve healthcare accessibility in underserved areas, recognising a shortage of primary care physicians. Eugene A. Stead Jr of the Duke University Medical Center assembled the first class of PAs in 1965, selecting four Navy Hospital Corpsmen who had received considerable medical training during their military service. Stead based the curriculum of the PA program on his knowledge of the fast-track training of doctors during World War II. The first PA class graduated on Oct. 6, 1967 (2).

The concept of PAs as an economical and fast-track solution to physician workforce challenges in the USA gained federal acceptance and backing in the 1970s. The existing medical community supported the 'new profession', setting accreditation standards, establishing a national certification process through a standardised examination, and developing continuing medical education requirements. In 1968, the American Academy of Physician Associates (formerly the American Academy of Physician Assistants) was established and incorporated in North Carolina. In recent years, Physician Assistants/Associates (PAs) have become an important class of medical practitioners in the U.S. healthcare system, after physicians (1).

According to the American Association of Physician Assistants, PAs commonly:

*'Take medical histories; conduct physical exams; diagnose and treat illness; order and interpret tests; develop treatment plans; prescribe medication; counsel on preventive care; perform procedures; assist in surgery; make rounds in hospitals and nursing homes; do clinical research' (3).*

These tasks are often transferred from physicians to PAs or completed in physician-PA teams. As such, PAs can act as substitutes or complements for physicians within US healthcare and some other healthcare systems. More specifically, PAs can either work without physician supervision while performing physician-like tasks, or work in teams where physicians directly supervise them (4). In the early 2000s, after four decades of existence, the PAs obtained formal registration and, in 2007, authorisation for prescribing in all fifty US states.

Given that their tasks are highly related to those of US physicians, it is essential to understand the prevalent trends in the role and scale of PAs in the US healthcare system. Projections indicate that the number of PAs in the US will grow by 31% between 2019 and 2029, while the growth rate for physicians and surgeons stands at less than 4%. Consequently, the physician-to-PA ratio is expected to decrease from 6:1 to 4.7:1. This shift is attributed to several factors, including legislative changes, profit-driven actions by for-profit health institutions (as training and deployment of PAs is considerably cheaper), and a substantial pay gap between doctors and PAs (5). According to the U.S. Bureau of Labor Statistics, the average salary for a physician assistant in the US is around US\$130,020 per year (median). The range is between US\$86,280 and US\$170,790 annually (6). In contrast, the average salary for medical doctors can vary widely depending on their speciality, with the median pay being US\$229,300 annually in 2022(7).

In recent times, there has been a growing tension among US medical professionals, represented by organisations such as the American Medical Association (AMA), robustly opposing non-doctor-led care, particularly underscoring the concerns surrounding PA expansion. In their paper *'Advocacy in Action- Fighting Scope Creep'*, they proposed; *'The U.S. health system has room for improvement, but allowing non-physicians such as nurse practitioners (NPs) or physician assistants to diagnose and treat patients without physician oversight is a step in the wrong direction'* (8). Research from the US highlights that PAs tend to overprescribe opioids and order more investigations (1). Perhaps demonstrating that limited exposure to clinical training may add to the clinical risk and adversely affect patient outcomes if PAs work independently.

## 1.2 The UK Adoption

As the UK considers expanding the role of PAs, lessons from the US highlight the need for stringent oversight and regulation to avoid similar pitfalls. The economic incentives shaping the PA model in the US do not readily extrapolate to the objectives and principles of the NHS's not-for-profit healthcare system. Therefore, implementing the PA model within the NHS must be carefully considered and tailored to align with the UK's unique demands and ethical commitments to healthcare provision. An opinion that is held widely by the UK healthcare profession that despite the government's desire to cut costs, it must maintain quality care and patient safety. The US experience with PAs should serve as a cautionary tale rather than a template, alerting policymakers and practitioners to potential pitfalls and limitations (1).

### 1.3 Expansion to Meet Population Health Needs

The primary argument favouring diversification of the healthcare workforce is to meet the population's needs and improve access to care in remote or deprived areas, historically attracting fewer doctors. Therefore, the expansion of PAs and the recruitment of international medical graduates (IMGs) in the US (and other developed healthcare economies) is driven by policy objectives to provide better access to care in remote and deprived areas. A similar argument should apply in the UK and many countries worldwide, although some mismatches exist between health needs and the medical workforce available in many countries.

- The shortage of medical doctors is not universal; it is predominantly in medical specialities like primary care, geriatrics, paediatrics, and emergency care. This is due to a range of factors, including -
  - the skewed medical resource distribution where personnel and state-of-the-art facilities are concentrated in the major urban areas or areas of economic affluence,
  - preferences of medical professionals to choose their places of work due to personal economic, family or social factors and
  - the concentration of medical training institutions in urban areas and similar factors lead to regional disparities in health workforce distribution and ultimately to population health outcomes.

In countries like the US, India, and South Korea, where private providers dominate the healthcare system and pay either through a fee-for-service system or a hybrid health insurance programme, physicians' incomes largely depend on the volume of service they provide. The fee-for-service payment method and low medical fees appear to create an incentive system to increase the volume of turnover in health services, which puts considerable additional pressure on the system and ends up with longer wait times, shorter consultations, and prolonged working hours (9). Somewhat paradoxically, doctors and their unions were striking against plans by the South Korean government to increase the number of medical school places, as this would negatively impact potential earnings and crowded, lucrative areas already oversubscribed. This proposed expansion of medical school places would have a negligible impact on underserved areas.

## 1.4 Paradox of UK Healthcare Workforce Planning

This is different in the UK, where most healthcare is provided free at delivery, except perhaps in additional services in primary care. There, an incentive system is applied to meet national priorities or by the number of interactions, like the Quality and Outcomes Framework (QOF) and the Impact and Investment Fund (IIF), which have improved the management of long-term conditions and supported primary care networks (PCNs) (10). Despite the ambitious objectives of the NHS Long Term Plan (11), the UK has fewer doctors per head than other wealthy countries, in spite of the higher proportions of IMGs (28.6%) and international nurses (15%). The number of medical professionals (general practitioners, specialists, and nurses) is some of the lowest of all countries (the UK has 2.8 doctors per 1000 population compared with a 3.5 study average), and these numbers appear to be declining. As the migration of healthcare professionals has decreased since 2015, the existing staffing challenges facing the NHS will likely be further exacerbated (12). Originally, PAs and Anaesthesia Associates (AAs) were envisaged as assistants to doctors to increase their productivity by relieving them of some routine tasks.

NHS England's position on Medical Associate Professions stated (13).

*PAs work as valued members of the wider multidisciplinary team (MDT) to deliver effective and efficient healthcare, helping to improve continuity of care and expand patient access to health services. PAs are trained to examine, diagnose and treat patients under the supervision of doctors. With careful workforce and service planning based on local needs, PAs can support delivering effective and efficient medical services across the broader health system.*

However, it's crucial to ensure that the quality of patient care is not compromised in the process. Effective leadership and systems that enable clinical safety are essential for this. In many hospitals and general practices, PAs are deployed to replace doctors, taking on increasingly complex roles, including assessing and managing patients with undiagnosed problems. Multiprofessional teams working collaboratively are established in healthcare, but increasing headcount and activity without efficiency, thus adding little value for patients, is also possible. Dependent practitioners with specific skills can be delegated appropriate tasks to improve efficiency, including limited and well-described autonomy. Still, doctors who ultimately retain responsibility for patient care need the power to discharge their leadership effectively and systems that enable clinical safety. Doctors being given more responsibility to supervise 'less skilled' staff while having little control is a recipe for burnout and disaster (14).

UK doctors' representatives have been lobbying the government to increase medical school places, and there have been planned increases based on the affordability and availability of training places. The attraction of filling a proportion of the gaps for trained doctors by extended roles of nurses, midwives, allied health professions and MAPs, but at an affordable cost to the tax-payer, is therefore understandable. In France, there is evidence that primary care practices, which are composed of groups of general practitioners or multi-professional groups, provide better work-life balance and better engagement with additional activities towards health promotion, but with a distinction that those that are multi-professional tend to have higher human resources outlay - i.e. cost more to run than practices with groups of GPs (15).

### 1.5 The Economic Argument

In the US, the added use of PAs in clinical healthcare delivery reduces costs and improves access, given the significant average wage/salary difference between PAs and physicians. Such labour cost savings can be partly passed onto patients. However, affordability can paradoxically increase the quantity demanded (access) of healthcare under market equilibrium. Increased access is a tenet of the US Affordable Care Act (16), and increased reliance on PAs can help realise part of the Act's vision. However, this increased reliance also has the potential to distort the qualitative nature of healthcare. Before this shift toward PAs, examining whether increased PA reliance entails a healthcare access-quality tradeoff is essential. PAs typically receive 24–27 months of post-baccalaureate schooling, whereas physicians typically receive four years of medical education, often followed by a lengthy residency and fellowship. This inter-group training gap helps to drive differences in pay among the two worker types. Also, it suggests potential differences in how the groups practice medicine, on average, when employed as substitutes for one another, as often occurs.

In the UK, by 2022, there were 1305 PAs employed in the NHS, with numbers projected to expand to 3500 by 2025 and 7000 in 2035, while doctors were static at 100k between 2015-2024, figure 1 (NHS Digital). MAPs primarily work 9-5 hours and are paid more than equivalent junior doctor pay scales (Foundation and Core years 1-4). However, this difference reverses after five years of employment as doctors reach senior roles including registrar, specialist or consultant or GP roles, Figure 2 (17). Emergency medicine, acute medicine, and paediatrics are typical areas where PAs can work evenings/weekends. There are barriers to hospitals introducing out-of-hours working for PAs. These include lack of supervisory capacity, insufficient numbers of PAs to enable 7-day working, and because PAs are unable to prescribe. PAs are not permitted to request ionising radiation, which is a further limitation, although many PAs are able to work around this.

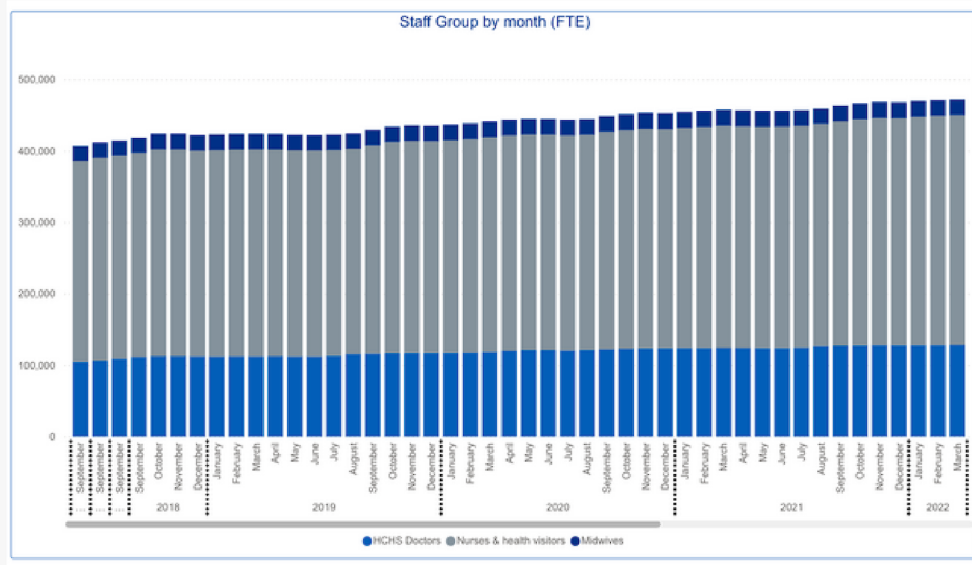
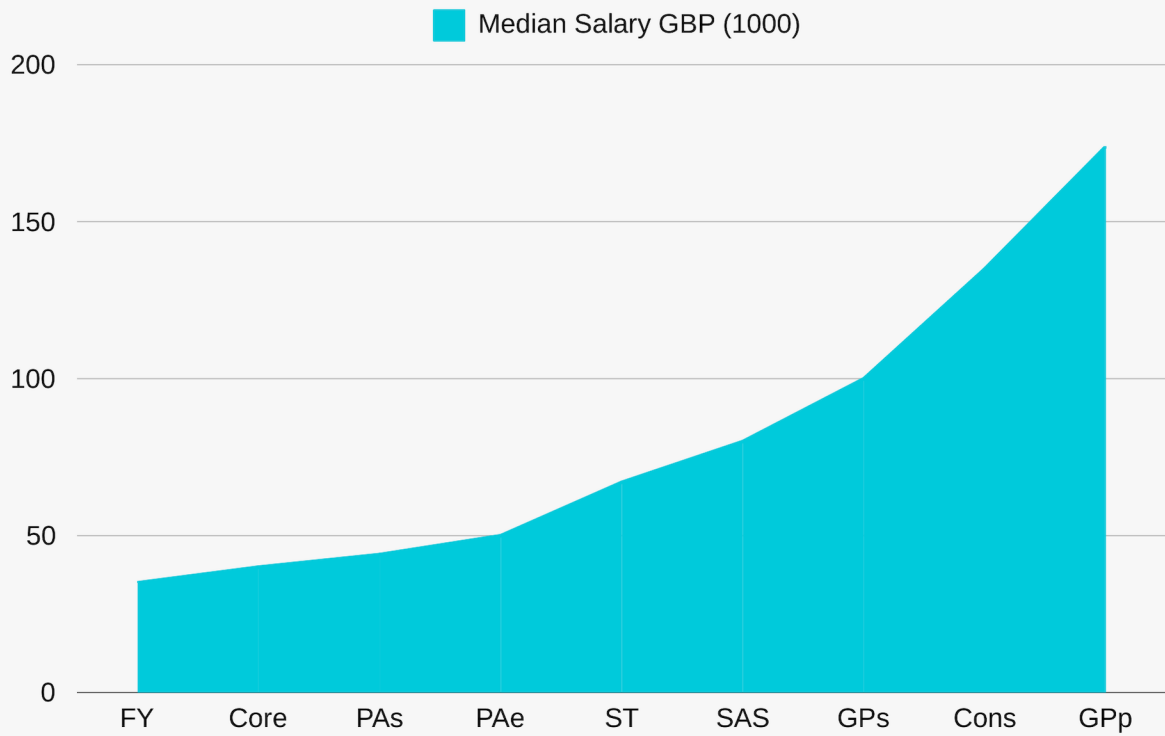


Figure adapted from NHS Digital



The fundamental premise of a safe scope of practice for dependent professionals is that they are adequately supervised by a doctor (of appropriate seniority) for their activities while working in teams (secondary care) or on a one-to-one basis in primary care. However, for this model to be effective, the employment cost of the MAPs should be equal to or less than that of a single supervisor physician. The supervisor can be an autonomous speciality doctor or a specialist, so the economically viable MAP salary envelope is less than £40,000 per year in 2023 terms. However, MAP salaries exceed this (Agenda for Change Band 7 midpoint salary at £45,996). Inevitably and economically, one way to justify such salaries is for MAPs to become autonomous and eventually replace SAS at a lower cost, which appears to have been happening in the UK. However, there are medico-political consequences, from safety, efficiency (i.e. the need for direct supervision, ordering investigations and prescriptions) and misperception by the public (18).

## 1.6 UK Role, Scope and Experience of MAPs

### 1.6.1 NHS People Plan 2023

Compared to 1948, when the UK National Health Service was founded, in 2023, the UK has increased life expectancy by 13 years, and NHS in England has 1,275,354 full-time equivalent staff, with 53% being clinically trained. But, at the same time, local services report vacancies of over 112,000. The NHS People's Plan forecasts the shortfall to rise to between 260,000 and 360,000 staff by 2036/37 (11). The lack of a sufficient workforce, in terms of number and mix of skills, impacts patient experience, service capacity, and productivity and constrains the ability to innovate.

The Plan proposes to

- Increasing education and training, as well as increasing apprenticeships and alternative routes into professional roles (4-year MBBS programs), to deliver more doctors and dentists, more nurses and midwives, and
- Train more of other professional groups, including new roles designed to better meet patients' changing needs and support the ongoing transformation of care. (up to 5%)
  - Ensure that more than 6,300 clinicians start advanced practice pathways annually by 2031/32.
  - Increasing training places for nursing associates (NAs) to 10,500 by 2031/32.
  - Increasing PA training places to over 1,500 by 2031/32 (11).

The Plan also refers to the intention to work with partners to ensure new roles are appropriately regulated so they can use their full scope of practice and free up the time of other clinicians as much as possible—for example, by bringing anaesthesia and physician associates into the scope of GMC registration by the end of 2024, with the potential to give them prescribing rights in the future.

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### 1.6.2 Scope of Practice

The 2012 International Labour Classification of Occupations (ISCO) classifies PA/PA-comparable professions within ISCO group 2240 paramedical practitioners (19). However, no global framework categorises and describes their scope of practice or a single unifying occupational group name. In 2022, the World Health Organisation (WHO) published its Global Competency and Outcomes Framework for Universal Health Coverage. It focuses on the practice activities for health workers with a pre-service training pathway of 12–48 months, thus including many PA/PA-comparable roles (20).

For Physician associates in the UK, there have been several developments since 2003, including a standardised training curriculum in 2006, a voluntary register in 2010, and revisions of the training curriculum in 2012 and 2023. The Faculty of Physician Associates (FPA), hosted by the Royal College of Physicians London (RCP), has introduced a national code of conduct for physician associates (21), the PA Managed Voluntary Register (22) and title and introduction guidance for PAs, supervisors and employers (23). The RCP also delivers the Physician Associate National Examination on behalf of the FPA, which is required to become a qualified PA in the UK (24).

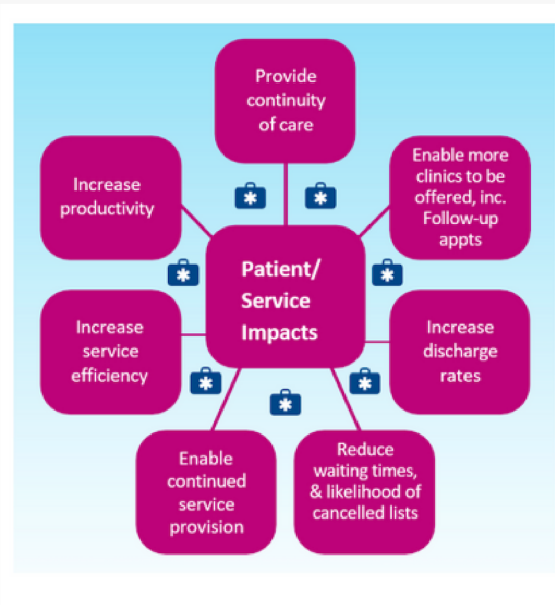
All healthcare professionals, including PAs, should work within their scope of practice, which describes what individuals are trained and competent to undertake in providing safe patient care. PAs can assess, diagnose, and treat patients, providing increased access to clinical care for patients, all under the supervision of a named senior doctor. Practice activities relating to Individual Health, Population Health, and Management and Organisation practice domains include:

- Formulating a judgement following a clinical encounter
- Assessing community health needs
- Planning and delivering community health programmes
- Managing public health communication
- Developing preparedness for health emergencies and disasters, including disease outbreaks
- Providing workplace-based learning and supervision
- Participating in evaluation and research” (25)

**PAs are not doctors and are designed to supplement the primary and secondary care medical workforce as additional multidisciplinary team members.**

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FPA



<https://www.hee.nhs.uk/our-work/medical-associate-professions/impact-case-studies/physician-associate-role-secondary-care-impact-case-study>

### 1.63 PA Impact Case Study Secondary Care (HEE)

A Health Education England (HEE) case study suggested that PAs were a helpful part of addressing NHS workforce shortages because they are typically science graduates trained to be a flexible workforce who can provide an appropriate skill mix across the service. This means that during staff absences, PAs can take on some of a clinicians' workload (e.g., child protection medical assessments, fast-track cancer clinics, and theatre cover), reducing the need for expensive locum doctors. Because many PAs tend to be permanent staff members with a routine working pattern, they provide a level of stability to the workforce, which benefits the whole MDT. For example, PAs understand departmental processes and protocols which can help with inducting postgraduate doctors on rotation. Additionally, because they have capacity to see follow-up patients, PAs reduce the burden on consultants, freeing them up to work on more important tasks and to deliver training. PAs also free up consultants' time by providing training to PA students and postgraduate doctors.

In order to achieving increased impact, the case study recommended;

- expansion of the PAs workforce
- increased funding for employing PAs in secondary care
- GMC regulation
- ability to prescribe and to request ionising radiation
- preceptorship/foundation year on a national scale
- training in advanced skills and career development
- increased awareness of the role

## 1.7 PA Schools & Curriculum

MAPs in the UK undertake a two-year master's degree in physician associate studies following an undergraduate degree, with a minimum classification of 2:2, which in most cases is in field related to bio-sciences (26). The degree includes a compulsory 1600 clinical hours, of which 200 can be in a simulation environment. Students must sit the Physician Associate National Examination (PANE), a 200-question multiple-choice online exam, and a 14-station objective structured clinical examination (OSCE). This differs from the requirement of medical students training to be doctors, who must complete a minimum of 5500 clinical hours, including a year of medical practice, to obtain complete professional registration (27). A full list of universities offering PA degrees in the UK is available in Appendix 9.1. As of June 2023, there were 73 full-time equivalent (FTE) qualified AAs and 1,508 FTE qualified PAs working in NHS trusts and other core organisations in England, as well as a further 1,707 FTE qualified PAs working in GP practices and primary care networks (26).

## 1.8 Supervision & Regulation

The current FPA and NHS England's recommendations for all MAPs employed in roles is to include the following;

- Induction- a minimum of 1-2 weeks of supernumerary and supervised practice before they are expected to work in their prescribed roles.
- Day-to-day supervision - the clinical supervisor should preferably be one or two named permanent clinicians who oversee and support the PA's progress throughout the first year. This may include PAs established within the practice (28).

In the USA, where the profession originated when it was new, PAs were legally required to work with a specific physician to practise. This has since been loosened through the passing of the Optimal Team Practice, which has enabled more collaborative work across the team. Some states specifically indicate a set number of hours per week or month of supervision and even a limit on PA supervisors, but factors including scope of practice of that PA and the ruralness of the specific location likely plays a part in this legislature. While clinical supervision details for newly qualified PAs otherwise do not appear to be explicitly defined in the USA, the role is more widely understood instead of the longevity of the role and significantly higher PA numbers (estimated to be over 140,000) (28).

Between 24 March and 16 June 2021, the UK government sought views on proposals to reform the regulation of healthcare professionals and to introduce statutory regulation for anaesthesia associates (AAs) and physician associates (PAs). The consultation received 525 responses from individuals, organisations, healthcare professionals and members of the public. Responses to the consultation showed clear support for changes to the legislative structure that underpins the regulatory bodies and creates a more consistent legislative framework (29). In response to the feedback received and following an extended period of stakeholder engagement and policy development, the UK government set out the finalised policy positions, which underpin the draft legislation that gives the General Medical Council the power to effectively regulate AAs and PAs and provide a template for subsequent regulatory, legislative reforms.

The UK Parliament passed the draft order delegating the formal regulation of MAPs to the GMC UK by Dec'24. This allows the regulator to ensure that the applicant meets the standards of education, training, knowledge, skills, experience, conduct, performance, ethics, and English language as determined for entry into the register (30).

### **1.9 2023-4 Public Debate & Discourse**

In Australia, the Royal College of General Practitioners (RACGP) responded to the pilot of PAs introduced in Queensland (2012), reiterating that all patients should have access to high-quality GP-led primary healthcare services provided by a multidisciplinary general practice team. Implementation of the physician assistant role could:

- increase barriers to training for medical students, interns and registrars
- reduce the number of GPs working in rural areas
- reduce support for the current primary care workforce if funding is diverted to support a new health professional role.

Patients in rural and remote communities need access to the same quality of care as patients in metropolitan and regional areas.

The RACGP:

- did not support an increase in the implementation of the physician assistant role in the current Australian medical workforce context
- recognised that when distribution of medical workforce is balanced across urban, regional, rural and remote areas, combined with sufficient intern and GP training places, the physician assistant role may complement the general practice team and the rural hospital workforce.

In the UK, PAs are educated on a medical model with basic medical skills but lack formal professional regulation and do not have prescribing rights. In contrast, advanced practitioners are educated on a nurse model (also for regulated allied healthcare professionals) with enhanced skills that depend on roles within specific specialities. At the same time, their governance is chiefly employer-led and is usually seen as a form of clinical career progression for nurses or allied health professionals. PAs are employed both in primary and secondary care. No defined career progression exists for PAs. However, both roles are considered cost-effective compared to doctors performing simple or specified tasks. PAs tend to be less well understood by patients than ANPs and also receive a mixed reception from colleagues, which sometimes undermines their professional identity. In contrast, ANPs are seen to be mostly welcomed by colleagues (31). Around the introduction of ANPs in clinical practice, there is evidence of their negative experiences from colleagues and patients, highlighting the need for support to counteract often prevalent stereotypical and prejudicial attitudes in the early years.

In discussions with GPs, there are known concerns regarding PAs around managing medical complexity in less supervised settings, the inevitable supervision burden, their non-prescriber status, and consequent medicolegal implications in routine practice. Patients appear less concerned about specific competencies if there is adequate supervision and they accept a PA role (32). It is argued that professional boundaries become malleable and subject to negotiation at the micro level of service delivery (33).

In secondary care settings, MAPs were mainly deployed to undertake inpatient ward work in the medical/surgical team during core weekday hours. They were reported to positively contribute to continuity within their medical/surgical team, patient experience and flow, inducting new junior doctors, and supporting the medical/surgical teams' workload, which released doctors for more complex patients and their training. The lack of regulation and attendant authority to prescribe was seen as a problem in many specialities. Patients and relatives described PAs positively, but most did not understand who and what a PA was, often mistaking them for doctors (34).

The contribution of PAs to productivity and patient outcomes is rarely quantifiable separately from other members of the team and broader service organisations. Where they add to the numbers of clinical staff available, studies support the contribution of MAPs in reduction in waiting times, length of stay, readmission rates, and those leaving without being seen when PAs work in the ED seeing moderate- to low-acuity patients. There is evidence that PAs are key healthcare team members, and their work is helpful for low- to moderate-acuity patients, thus seen as a valid solution to staff shortages faced by healthcare systems worldwide (35).

### **Royal College of Physicians of London**

The college has an integral relationship with the Faculty of Physician Associates, the professional membership body for the UK's PAs, since 2015, maintained the voluntary register, set and marked the national PA examination and has been nominally responsible for overseeing the profession's development. With its 500 years of history in upholding the profession, setting the curriculum, managing the dialogue with the royal and then political powers in Westminster, and representing the largest congregation of members and fellows from across the world, the college was rightfully seen as the most appropriate body to set the standards of the new profession, created to assist in the medical workforce crisis. Since 2015, the presidents have presided over this function and have managed the PAs on behalf of the health profession.

In 2015, Dame Jane Dacre, president of the RCP, said:

*One of the reasons that the RCP decided to establish the FPA was to ensure that the expansion of this new section of the medical workforce was done as safely and effectively as possible, particularly pending formal regulation (36).*

The RCP, in fulfilling its commitment to strengthening the relationship between doctors and physician associates, released 'An Employer's Guide to Physician Associates' to help employers, commissioners, and workforce planners understand physician associates, when to employ them, how they can best benefit the wider team, and how they can improve patient care (36).

Jeannie Watkins, previous President of the FPA, said: ‘Physician associates, in addition to existing members of the healthcare team, are here to add value, capacity, and generalist skills to the clinical teams providing care for patients across primary and secondary care. This guidance will not only help employers introduce physician associates to their teams but also retain PAs by supporting their progress and success’ (36). Despite that PAs were never intended to be independent practitioners nor as a replacement for doctors, data from an electronic, self-report survey of medical directors of acute and mental health NHS trusts in England found that PAs employed in small numbers, in a range of specialities, in 20 of the responding trusts – was reported to have been used to fill gaps in medical staffing and support medical speciality trainees. Inhibiting factors were commonly a shortage of physician associates to recruit, a lack of authority to prescribe, and a lack of evidence and colleague resistance (37).

By 2023, PAs—whose numbers are set to expand rapidly in the next few years—were being used in various roles, including joining hospital doctors’ rotas and seeing undifferentiated patients in general practice. Given that PAs do not yet have a clearly defined scope of practice, the college’s close association with their training and certification has raised much controversy regarding the inadvertent impact on patient safety and the blurring of boundaries between doctors and non-doctors. In early 2024, the RCP governing body - the Council and Members and Fellows, expressed concerns over an extraordinary general meeting (EGM) held in March 2024 to discuss growing concerns regarding PAs. During the meeting, RCP president Sarah Clarke chaired a debate on five motions covering PAs’ scope of practice, accountability, evaluation, impact on training opportunities, and pace and scale of rollout. RCP fellows voted overwhelmingly to limit the scope of practice and to pause the rollout of PAs (38).

Following allegations of manipulating the data presented at the EGM, a series of senior office-bearers of RCPL resigned. The remaining senior members of the RCPL Executive and over 80 fellows openly expressed no confidence in the senior leadership and called for the President to resign. RCP London has announced that it is committed to honouring the result of the fellows’ EGM vote and considering its members’ views. It agreed to put measures in place to limit the pace and scale of PA rollout until critical safety questions have been answered. There are calls for It to openly welcome an independent inquiry into how fellows’ concerns about PAs were addressed by senior officers (39).

In its statement, the RCP Edinburgh highlighted that ‘Clear guidance regarding the scope and limits of the clinical practice of physician associates is essential. We are deeply concerned that “scope creep” in clinical practice will rapidly develop if this does not occur, with significant potential concerns for standards of patient care and patient safety and that ‘Physician associates should recognise that their work should assist and support all members of the medical team, from foundation doctor to consultant. Specifically, their roles should not be confined to the support of aspects of the work of a consultant or “senior” trainee. They should provide as much support to other members of the medical team, such as foundation doctors and speciality trainees in internal medicine, and share the burden of work that is regarded as rote, such as phlebotomy, performing simple procedures such as ECG recording, test ordering, and results checking’ (40).

One after the other, all the Medical Royal Colleges have either come out with statements that mirror the ones from RCPE or are similar in spirit. Notably, the Royal College of General Practitioners and Royal College of Surgeons have also set up formal membership surveys and established task and finish groups to address the gap in guidance for PAs and other roles in the extended surgical team (EST). The group will determine the scope of practice, training, assessment and governance arrangements for all members of the EST and how this relates to surgical training (41). Even before the medical royal colleges engaged with the PAs debate, the Royal College of Anaesthetists, back in Oct 2023, had set out its intention to define the scope of practice for Anaesthesia Associates, their education and training, limit their potential for unregulated enhanced practice as well as the impact on the training of anaesthetists (42).

### **1.10 Impact on SAS & Locally Employed Doctors**

In the presence of a perpetual ‘severe shortage of doctors’ in the UK NHS, the solution has always been envisaged to recruit more IMGs, and this was true even before the formation of the NHS and has not changed in its 75-year history. Expanding the cap on medical and dental school places is complicated by the cost of training, current university and clinical placement capacity, and the number of clinically qualified academic staff who design and deliver courses. The UK Government has estimated the ‘public’ cost for each medical or dental school place to be around GBP 230,000. Around GBP 65,000 is paid to students through loans, which most medical and dental graduates repay in full throughout their careers. Using the Government’s figures, the Medical Schools Council has estimated the annual cost of increasing the number of medical students by 5,000 would be approximately GBP 1 billion. The main rate-limiting step in expanding UK ‘home’ training places is public funding and the perception that oversubscription may lead to widespread unemployment and waste of resources invested in training.



It is, therefore, a more economically effective and publicly safe option to hire a variable number of IMGs based on workforce needs. Currently, IMGs comprise around 4 out of every 10 doctors in the UK NHS, specifically in areas such as the emergency department, general practice, psychiatry, and paediatrics (43). Despite the ongoing debate about the lack of doctors and the demand to train more home students, the NHS continues to struggle to maintain safe medical rotas or provide adequate resources in primary care. Therefore, it is hardly surprising that the group of doctors that has expanded most in the last decade are IMGs. IMGs are graduates who qualify outside the UK and must undergo an exam to confirm their competencies (PLAB). They are then deemed equivalent to Foundation Y2. GMC gives registration and license to practice. The term 'SAS' includes speciality doctors, Associate Specialists, and specialist grade doctors with at least four years of postgraduate training, two of which are in a relevant speciality. SAS are essential to the medical workforce and represent a diverse group with many skills, experience and specialities, who provide continuity of care in departments with rotational trainees.

In its 'State of the Medical Workforce Report' in 2022, the GMC reported that the number of SAS and LEDs on the GMC register has increased at six times the rate of GPs, primarily driven by doctors coming from overseas. If the trend continues, then by 2030, it is predicted that SAS and LEDs in secondary care will form the largest group in the medical workforce (44). SAS and LEDs are valuable in terms of knowledge and expertise. However, the system does not always make the most of their talents. Supporting the varied career aspirations of SAS, either by enabling them to progress further within their chosen specialities or by offering opportunities in different areas of the healthcare system, will be crucial to a sustainable medical workforce. Figures from the GMC showed that 936 IMGs joined the GP register in 2022 – a significant increase from the 321 who joined in 2018. Yet subsequent governments have been reluctant to allow SAS to join the GP Performers list; PAs and ANPs in primary care have expanded, where they sometimes allegedly work with limited or no supervision (44).

Another significant aspect of the healthcare workforce is the increasing role of IMGs. While the recent expansion in UK medical school places and postgraduate training is a positive development, it is overshadowed by the substantial increase in IMGs practising in the UK. The number of UK graduates joining the workforce rose by 2% from 2017, compared to a staggering 121% rise in IMGs (44). The BAPIO SAS-LED forum estimates that IMGs spend approximately GBP 5-8k and 12-18 months to complete registration after three rigorous examinations. Most IMGs must then secure clinical attachments and consolidate their portfolios before successfully applying for jobs after 400-600 applications.

The GMC conducts the PLAB exam, which is attempted by approximately 17-18k candidates, contributing to a revenue of £17 million in 2022. Despite their significant investment of personal wealth and the contribution to their training by their parent international healthcare systems and economies, IMGs with complete UK registration often struggle to find jobs in the NHS, while the NHS Employers are diverting resources to creating additional allied healthcare professionals roles including MAPs, ANPs to meet the demands of the healthcare system.

Even after securing their clinical jobs, IMGs face various psychological, social, and practical challenges, which the NHS's current help and support needs to address adequately (45). IMGs need more clarity on the supervisor's role, career pathways, and medico-legal and ethical issues. Discrepancies in study budgets and study leave days, compared to those available to doctors in trainee posts, were another issue raised. GMC recommends that every organisation in the health system urgently improve the cultures and environments in which it expects doctors to work. Employers must also provide more structured support for their growing numbers of IMG doctors as they adjust to life and work in the UK and the complexities of the UK healthcare system.

IMGs also face challenges related to differential attainment in every aspect of their career progression (46). A study of a cohort of 7423 foundation year two doctors found that those with an undergraduate degree from outside the UK were less likely to be offered a speciality or GP training place than those who attended a UK medical school. Also, doctors not in a UK training programme but with a UK licence to practise were less likely than their UK-trained counterparts to pass postgraduate exams or receive a successful outcome in their training progression (47). Communication in complex clinical scenarios was also reported to be an issue for many participants. IMGs were proportionally more likely to be subject to an investigation by the GMC about poor clinical skills and knowledge, lack of understanding of the law or codes, and inadequate participation in medical education. They were also more likely to be investigated about these issues within the first two years of joining the UK register.

One way to start immediately would be for the government to change the Performers List criteria to allow more doctors to work in general practice. Lifting the barriers that prevent SAS from working alongside GPs in complementary primary care roles would expand SAS career options and provide new opportunities for those who want them.

State of the Medical Workforce Report, from GMC UK

Doctors taking up (or returning to) a licence to practise, by PMQ (excluding TRE and UK 2020 graduates), from 2012 to 2020

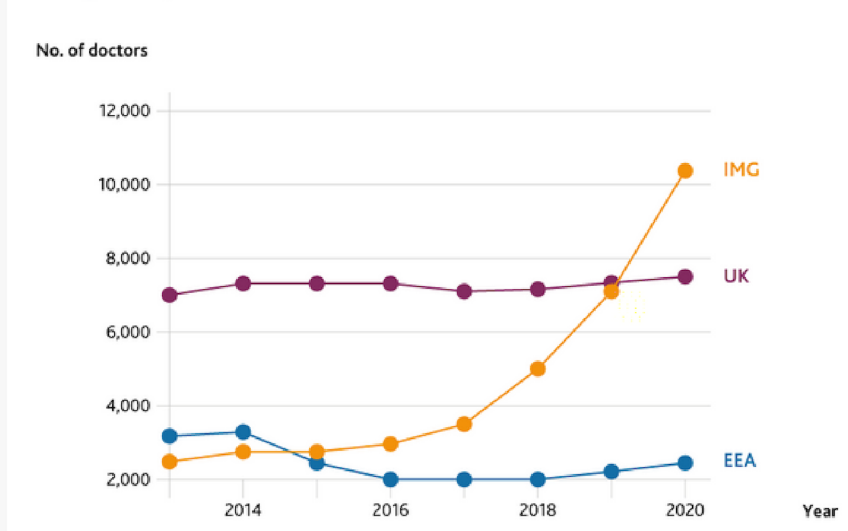
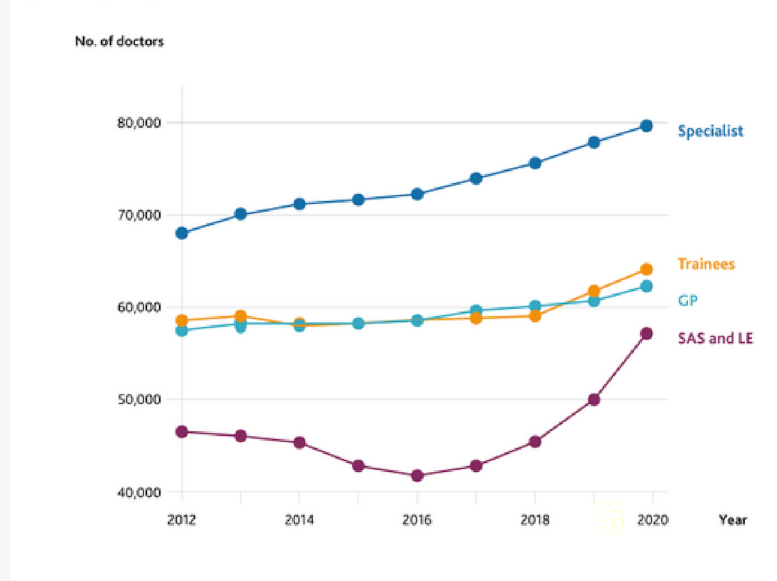


Figure S3: Register types of licensed doctors, from 2012 to 2020



Overseas doctors are vital to the functioning of the NHS and without them, in my view, the system would collapse. Yet IMG’s report countless stories of bullying, harassment and being made to feel unwelcome, and evidence shows they are also less likely to report it, due to fear of repercussions.

Kim Nurse, GPST2

# Scope

As a voluntary organisation representing the views of a substantial number of IMGs, the British Association of Physicians of Indian Origin (BAPIO) and its alliance partners heard from their membership about the concerns related to MAPs and the impact this debate had on them in primary and secondary care. Yet, none of the medical royal colleges and trade union bodies appeared to specifically seek the opinion of SAS, LEDs, and IMGs in this debate, nor did they recognise the impact on them.

In addition, patients, especially those from minority cohorts, believed they would likely miss the opportunity to hear their voices in this discourse.

Hence, BAPIO and its alliance partners undertook an exercise to seek the views of the whole spectrum of stakeholders, including PAs, legal, lay, and IMG groups, to provide a consensus on the key aspects of this debate.

This report purports to cover the following aspects of the MAP discourse;

1. Scope of practice
2. Safety and governance
3. Supervision
4. Regulation including prescribing
5. Impact on the training of medical students, postgraduate doctors, and
6. Impact on IMGs, SAS and LEDs



# Methodology

The methodology included the following:

1. **Survey design and distribution:** An initial online survey was conducted to gather quantitative data and identify critical areas of concern. The survey questions were crafted based on a focused literature review and panel discussions with healthcare professionals, including MAPs.
2. **Focus Groups:** Following the survey, focus groups were organised to delve deeper into the themes identified. These groups included a mix of LEDs, SAS, and IMGs to ensure a broad range of perspectives.
3. **Thematic Analysis:** The responses from the survey and focus groups were analysed thematically to identify common concerns and suggestions. This analysis helped in understanding the nuanced views of different professional groups.
4. **Iterative Feedback:** Participants were invited to review preliminary findings and provide additional feedback, ensuring the final analysis accurately reflected their views.

Through this comprehensive approach, we were able to capture a detailed picture of healthcare professionals' perceptions and suggestions regarding the role and impact of MAPs in the NHS.

## Focus Groups

A series of focus groups were held to explore the themes arising from the survey findings. These groups were designed as inclusive spaces for contributors to share their experiences, perspectives, and feedback on the role of MAPs in the UK NHS. Two health researchers facilitated the focus groups with no conflicts of interest in the role of medical practitioners or MAPS. Our facilitators were a Professor of Health Equity and Inclusion, and the other a Senior Lecturer in Health Psychology.

Focus groups were facilitated using a semi-structured topic guide constructed by the researchers following a desktop review of key themes in public discourse on MAPs. The topic guide covered four core areas

- understanding of the role of MAPs
- strengths, opportunities, and challenges of MAP roles,
- workforce equity and inclusion, and
- sweeping questions for anything else participants wished to add.

Five diverse focus group meetings, each involving 25 participants from various sectors of the medical field, were conducted. These participants included members of the medical workforce, medical students, MAPs, MAP trainees, and patients. The meetings, which took place via Zoom, lasted an average of 2.5 hours. They were not audio recorded to ensure participants felt comfortable expressing their individual views. The researcher took notes to capture the diverse perspectives and emerging themes. Due to scheduling issues, some people contributed via 1-1 sessions.

The notes were summarised and are presented below under thematic summaries as they relate to the specific dimensions of the topic guide. Both researchers sense checked the key points highlighted, resolving any differences by discussion.

## Survey Results

The primary survey explored healthcare professionals' perceptions, mainly focusing on the opinions of LEDs, SAS, and IMGs regarding the role and impact of MAPs in the NHS. A total of 583 responses were received, encompassing a diverse group of healthcare professionals, including consultants, postgraduate doctors in training, general practitioners, LEDs, IMGs, nurses, and allied health professionals (49).

### Key Findings:

- **Role Clarity and Scope:** More than half (53%) of respondents needed clarification about the specific role of MAPs within their teams. However, 43% acknowledged that MAPs primarily deliver specific skill-based services, reduce workload (20%), and provide continuity of care (19%). A significant majority (89%) stressed the importance of establishing a clear distinction between the roles of doctors and MAPs.
- **Patient Safety:** Concerns about patient safety were prominent, with 77% of respondents agreeing that MAPs might pose a risk to patient safety and 89% recognising the risk associated with MAPs working beyond their scope. There was support (69%) for developing a competency framework for MAPs to ensure safe practice.
- **Supervision and Clinical Risk:** Supervisory roles for doctors were highlighted as a concern, with 75% of respondents expressing worries about the increased clinical risk and burden on doctors supervising MAPs. This includes the potential for reduced job opportunities for locums, LEDs, and IMGs (69%), and increased workload associated with prescribing medications or requesting investigations on behalf of MAPs (67%).
- **Impact on Recruitment, Training, and Career Progression:** MAPs were perceived to adversely impact doctors' training and career progression. Approximately 67% of respondents cited concerns about reduced training opportunities due to increased competition for clinical experiences and procedures. There were also fears of MAPs being used as substitutes rather than supporters, potentially undermining the training and retention of junior doctors.
- Chakravorty, T. A., Parekh, A., Sharma, S., Bamrah, J., Srinivas, J., Zamvar, V., Desai, P., Tumurgoti, K., Mehta, R., & Chakravorty, I. (2024). A Multiprofessional Survey on the Role and Impact of Medical Associate Professions in the NHS. *Sushruta Journal of Health Policy & Opinion*, 16(1), 1–12. <https://doi.org/10.38192/16.1.12>

# Focus Group Results

## 5.1 Role of MAPs

There was consensus on the need to reimagine the future of the healthcare workforce through awareness of the role of MAPs. Participants who were not themselves MAPs or MAP trainees had varying levels of understanding about the duties and remit associated with these roles. There was consensus that MAP roles function within a workforce at a crisis point and form part of innovative healthcare delivery models where efficient and lean function is necessary. Participants welcomed the aspiration that patients should see the right person. This may only sometimes be a doctor, but the 'professional' would have the appropriate competencies and access to support them and refer them to others when necessary. They also welcomed efforts to ensure that professionals' practice aligns with their training and expertise, reassuring the audience about the quality of healthcare delivery and the maximisation of the use of their skill set.

Those who had experience in MAP roles mainly focused on the specific remit of Physician Associates (PAs), perceiving that:

- PAs perform tasks similar to junior doctors, including clerking, examining, and diagnosing patients.
- The role of PAs varies between primary and specialist care settings, particularly regarding autonomy. In specialist settings, PAs are often integrated into multidisciplinary teams (MDTs) and have less autonomy, whereas, in primary care, they tend to have more independence.
- Many participants noted blurred boundaries between the roles of doctors and PAs, particularly in emergency departments.
- Despite established practice parameters, PAs are deployed in significant variation across NHS organisations, which is influenced by decisions made by NHS Trust leadership and local training practices.
- The advantage of PAs lies in providing a specific skill set, but perceived scope creep warranted the need for clear safety frameworks, otherwise placing undue responsibility on the physicians overseeing their practice.
- There needs to be more understanding of PAs' experience and career progression. Additionally, there needs to be more clarity about the varying levels of seniority among PAs, making it difficult to gauge their equivalent positions when compared to resident physicians (such as foundation doctors, core trainees, or registrars).
- Some compared the 'unwelcoming' attitudes toward PAs with the historical attitudes towards women entering the medical workforce, expressing empathy for the tensions experienced.



- There was concern that PAs should not be unfairly targeted for the unintended consequences of workforce planning strategies, significantly when these strategies may disproportionately affect IMGs, who often see these roles as part of a leadership strategy to be cost-effective by inappropriately substituting medical jobs.

## 5.2 Patient Awareness of Different Roles

Patient involvement in workforce planning decisions and understanding healthcare roles' ecosystem is limited.

- There was consensus that patients and the public generally need more awareness of the roles and responsibilities of various healthcare professionals, notably MAPs, which indicates a broader issue with understanding, visibility, and communication.
- In several instances, concerns were raised regarding the public's misperception of PAs as doctors.
- It was deemed crucial for PAs and other innovative healthcare professionals to take some degree of ownership in sharing their innovative/ expanded roles with patients and the public and dispel inaccurate assumptions.
- There was a prevailing worry about patients and the public's limited involvement in decisions shaping the future composition of the healthcare workforce, reflecting broader concerns about healthcare governance and transparency.

## 5.3 Patient Safety

Scope creep was a concern to safeguard patient safety and effective multi-professional relationships.

- The consensus was that when working within the appropriate level of competency and supervision, MAPs can provide safe and valuable patient care that contributes positively to the whole professional team, with benefits such as continuity of care.
- However, there were instances where both PAs and physicians felt that patient safety could become compromised, including unsupervised work or work outside of competency.
- Participants described situations in primary care where PAs were given additional responsibilities for seeing patients without appropriate supervision. This caused some PAs undue stress and highlighted concerns regarding patient safety. PAs described leaving primary care roles and moving to hospitals where they felt better embedded in MDTs, where their decision-making was supported, and they felt that patient safety was more considered.
- Some physicians express concerns about patient safety when MAPs are utilised in healthcare services without adequate regulation or supervision. These concerns arise from various factors, including perceived gaps in the experience or knowledge of MAPs.

- PAs and other healthcare professionals expressed a strong interest in utilising accredited mechanisms to demonstrate their knowledge and competency. These mechanisms include the national PA exam, prescribing, and procedural competency assessments. Such accreditation would reassure the medical workforce, who often bear responsibility for PA decisions, and enhance patient safety.
- PAs were keen to engage with a portfolio of practice and revalidation, which will be imminent from December 2024 as part of professional development and support the highest patient safety standards.
- It was mentioned that MAPs' core training is quite different from that of doctors. This should be considered when localised decisions about role deployment to avoid patient safety issues.

#### **5.4 Training and Regulation:**

- Regulating MAPs was welcomed by all, though tensions over the regulator of choice further blur patient and public health care roles. There was also worry that the vision for workforce development did not match the lived reality of access to training opportunities for junior doctors, IMGs, and SAS.
- Physicians expressed concerns regarding the potential adverse impact of increasing numbers of MAPs on training opportunities for doctors, particularly opportunities for IMGs.
- IMGs expressed concern about PAs' impact on training opportunities. Many cited that they needed help gaining job opportunities or spaces for training where PAs had been prioritised.
- Some medical workforce members gave examples that MAPs tend to have team longevity rather than trainees who rotate between placements, so they often preferred to provide opportunities here. This meant that a physician working with a MAP might, for example, be able to undertake more procedures than when supporting the development of a junior doctor.
- There was overwhelming support and recognition of the need to regulate MAPs. The professional body carrying out this regulation could have been from any appropriate source, including the General Medical Council.
- Some participants were concerned about the robustness of the PA licensing exam, given the potential allegations that the examination has a one hundred percent pass rate.
- It was proposed that MAPs undergo regular licensing assessments/ exams similar to those required by doctors in training, IMGs who choose to practise in the UK to allow for general confidence in their competency and a standardised high level of care. This would ensure competence and patient safety.

- There was a debate on whether PAs should have GMC registration numbers as physicians do. There was a consensus that registration numbers are essential from a medico-legal perspective but that the registration numbers for PAs should be on a separate numerical system from physicians to avoid blurring professional boundaries.

### 5.5 Opportunities and Challenges of MAP Roles

- Proper consideration of the strengths and limitations of workforce composition shifts would be welcome, ensuring that well-intended change does not negatively impact specific groups.
- Physicians with experience working with MAPs were complementary about their skill level.
- It was agreed that the concept of MAPs working alongside physicians was safe/robust and that MAPs were a valuable addition to the healthcare team when utilised appropriately to the level of their training and skill sets.
- PAs were highlighted for tasks that effectively alleviated burdens, especially in medical ward settings. These tasks included documentation, organising outpatient follow-ups, scan scheduling, writing discharge summaries, and specific procedures.
- As MAPs generally work in a specific practice or department for a more extended period than junior doctors on rotation, they positively impact MDT working and continuity of patient care. This also preserves organisational memory for efficient care delivery.
- MAPs were also valuable as they have local knowledge and a history of supporting new starters/ doctors in settling into their roles—especially foundation year one doctors who are new to the profession.
- The main challenges related to
  - (1) access to training opportunities, as different professional groups (physicians & MAPs) appear to be competing for opportunities to learn, including access to supervisors;
  - (2) how those responsible for workforce decisions in different care settings deploy MAPs, especially PAs, with examples given of MAPs being used as a substitution for doctors;
  - (3) regulatory need and accountability for own decision making since concerns lead to 'double checking' work/ decisions;
  - (4) scope creep that occurs from non-standardisation of duties;
  - (5) patient and public awareness raising of who is seeing them and what care they can offer.

## 5.6 Career Choice and Progression

- The impact of local variation in deployment and current public debate about MAP roles was recognised to negatively impact motivation towards training.
- PAs described choosing their vocation due to their interest in patient care and health sciences and the unique aspects of the role distinctly different from doctors' everyday practice and training.
- PAs felt their courses prepared them to become generalists, who can later specialise in meeting the needs of the health service in areas facing recruitment challenges.
- PAs expressed uncertainty about their roles given the imminent regulation and doctors' resistance to overlapping responsibilities, which was reported as stressful.
- Members of the wider workforce expressed concerns about the flexibility in university entry criteria for PA training, emphasising the importance of having a relevant primary discipline background (such as biomedical sciences).
- PAs were mindful of not encroaching on training opportunities for junior doctors, particularly in areas requiring specific competencies, such as surgery or invasive-procedural skills.
- The current debates regarding MAPs were noted to have a tangible impact, with PAs feeling uncertain about requesting more responsibilities or role extensions due to negative publicity.
- It was suggested that PAs could find niche areas, such as regularly performed procedures in different specialities (e.g. lumbar punctures, ascitic drains, pleural aspirates), similar to nurse specialists or nurse practitioners. This approach could meet departmental needs while providing training opportunities for junior doctors in these specific procedures.

## 5.7 Equality, Diversity, Inclusion

- IMGs, particularly those taking on SAS and LED roles, expressed significant disadvantages from the expansion and ongoing plans to increase PA training.
- IMGs expressed concerns about how the role of PAs could impact their career opportunities. Some IMGs mentioned they might not have chosen to come to the UK if they had anticipated the role conflicts. Many are now considering alternative career options.
- IMGs and SAS were worried about access to training posts and opportunities, citing instances where they felt that PAs seemed to be prioritised over them.
- Some physicians, particularly IMGs, felt discriminated against, noting that PAs were mostly UK graduates.

- SAS from varying cultural backgrounds cited the workforce demographic and loss of opportunities from PAs being appointed to roles as a significant barrier to NHS Trust meeting their equality objectives. It was emphasised that PAs have a predominantly UK-domiciled profile, where SAS and even LEDs were at least >50% IMGs.
- There was a clear sense of adverse culture towards SAS-LEDs, leading to further destabilisation and demotivation amongst them and towards those advocating for their positions.
- Design and implementation issues affected relationships between healthcare professionals, misaligning with individual or organisational values.
- PAs shared examples of department leads' positive impacts on their career experience and well-being, such as opportunities to develop teaching portfolios for student PAs, quality improvement projects, governance structures, scope of practice descriptions, and competency assessment frameworks. This was positive for workforce value and a sense of belonging within an MDT.
- PAs showed empathy for the challenges faced by junior doctors, including uncertain schedules, demanding job requirements, constant rotations, shift work, and long hours, as well as their impact on well-being and family life.
- All professionals emphasised the need to feel part of a cohesive team, working collaboratively towards patient care with clear boundaries, accountability, and mutual respect.

## DISCUSSION

- Although the UK NHS cannot claim to be the inventor of the MAP role as a way of meeting the economic and numerical challenge of a healthcare system battling the triple restraints of a limited purse, evolving demographic and the spiralling cost of healthcare provision - it certainly has faced the most significant and most disparaging public discourse, triggered by a concerted challenge from a generation of estranged doctors throughout the last five years, leading to the regulation slated for Dec'24.
- The situation has been further complicated by the staggering rise in the influx of IMGs to the GMC register, the UK political system's grappling with the perception of over-immigration threatening jobs and lifestyles, and the post-pandemic NHS, which faces its worst-ever mismatch between demands/ expectations vs ability to provide quality healthcare.
- In this toxic milieu are the patients who remain primarily unaware and ignored by the healthcare workforce—the leadership system, SAS and LEDs, who make up a large proportion of the medical workforce but suffer the consequences of not having structured career progression pathways or opportunities, and IMGs, who are still sold a false promise of the UK's traditionally famed medical education and training systems and of a fair and just society.
- Caught up in this battle of aspirations, ill-designed and ill-conceived workforce innovations are MAPs who are motivated individuals and also the innocent victims of this healthcare quagmire. Due to no fault of their own, they appear to be facing the ire of the medical profession, being ignored by the healthcare leadership, and now face-to-face with the possibility of a seismic change that is about to consume their nascent profession.
- The insights gathered from our survey and focus groups collectively underscore a nuanced understanding of the roles and challenges associated with MAPs within the healthcare landscape. Introducing MAPs into the UK was one of the proposed innovations to improve healthcare delivery in a resource-pressured environment. Whilst this has several benefits, as seen by the successful implementation of MAPs, including PAs in some countries globally, utilising MAPs within the UK has challenges.
- Overall, the sentiment expressed in our survey and workshops leans towards scepticism and concern regarding MAPs in the NHS, with particular emphasis on patient safety, role clarity, regulatory oversight, and the impact on the existing medical workforce. The views, in general, reflect the sentiments of other doctors as seen in other published surveys.

- A study by the British Medical Association showed that most doctors feel that the way that MAPs currently work is a risk to patient safety, that they are concerned about MAPs working beyond their competence, and that PAs increase their workloads (50).
- Integrating MAPs into the NHS has some benefits. One primary advantage is the potential reduction in doctors' workload, which can lead to improved patient care. MAPs can complement doctors' work by handling specific tasks, mainly when these roles are clearly defined and focused on assisting doctors appropriately.
- Despite these benefits, several concerns were highlighted regarding integrating MAPs. A significant worry is a potential risk to patient safety when acting autonomously or seeing undifferentiated patients in primary care - due to a different focus on clinical knowledge, training and lack of physician oversight. The issue of scope creep was also noted. Replacing doctors on rotas with MAPs without sufficient supervision and regulatory oversight raises safety and quality concerns.
- Another critical issue is the erosion of training opportunities for junior doctors, which could adversely affect the career progression of SAS, LED, and IMGs.
- Additionally, there needs to be more clarity and transparency to patients regarding the qualifications of MAPs, leading to potential mistrust and misunderstanding.
- Supervisors also face challenges, such as the increased burden and potential medico-legal implications of prescribing by proxy for doctors.
- The need for role clarity and undefined scope of practice for MAPs further exacerbates these issues. Dissatisfaction with the recruitment process and the need for more precise definitions regarding MAPs' roles and responsibilities were also reported. Concerns about unequal pay and workload distribution between MAPs and junior doctors were prevalent, along with fears that the quality of medical care in the UK might degrade over time. These apprehensions extend to the potential long-term impact on patient care and the healthcare system, highlighting the need for clear guidelines and robust regulatory frameworks to ensure the safe and effective integration of MAPs into healthcare teams.
- Another impact is the availability of training opportunities and career development for doctors, particularly for IMGs who already struggle to access the same opportunities for career development as UK graduates and face more educational challenges during their training (43, 45). The concern is that since MAPs remain in the same department for extended periods, they can foster more meaningful connections with senior staff and may be preferentially given training opportunities. In contrast, junior doctors who work in short rotations can build different connections. This issue is particularly concerning due to the increasing competition ratios for speciality training positions, which represents systemic bottlenecks and barriers to traditional training progression pathways (51).

# *Recommendations*



## 1 Clarify Roles and Scope of Practice:

- Establish clear and distinct roles and responsibilities for MAPs to prevent scope creep and ensure they are utilised in tasks appropriate to their training and competencies.
- This includes developing a collaborative, national, standardised scope of practice framework that delineates the boundaries of MAPs' duties and responsibilities and outlines the role and duty of physicians as supervisors. The British Medical Association has published a safe scope of practice document for MAPs, which also includes guidance for the supervision of doctors (52). This could serve as the foundation for a nationally accepted framework.
- The role of developing this framework must be led by a multi-stakeholder independent professional committee with representation from patients and the public, and must include broadbased consultation and transparent publication of impact assessment.

## 2 Regulation

- Introduce a national regulatory framework for MAPs to standardise training, certification, and practice.
- This should involve creating an independent professional body (similar to the FPA) to oversee MAPs and ensure they meet high standards of care and accountability.
- From December 2024, the GMC will regulate PAs and AAs (53). Although the GMC is not an independent body, feedback from our workshops suggests that as long as this regulation remains unbiased and maintains a clear and publicly recognisable distinction between MAPs and physicians, it may be acceptable for the GMC to serve as the interim regulatory body.

## 3 Prioritise Training Opportunities for Doctors

- Safeguard training and career development opportunities for junior doctors by clearly defining the roles of MAPs in a way that complements rather than replaces the training of doctors.
- MAPs' involvement in clinical activities should be designed to assist SAS, LEDs, and IMGs progress in their educational and careers.
- Promote collaborative working environments where MAPs and junior doctors can learn from each other, enhancing the overall training experience.
- Workforce planning should articulate how access to supervision and training opportunities will be managed equitably between professions.

## 4 Standardise Nomenclature & Improve Patient Awareness

- Encourage all healthcare professionals to communicate their roles to patients during consultations clearly.
- Patients and the public should be engaged in awareness-raising campaigns that profile different healthcare roles and improve their knowledge.
- Adopt a standardised approach for introduction to patients, co-professionals and sign off on medical documents.
- Consider, consult and aim to obtain multi-stakeholder consensus on whether the term "associate" maybe ambiguous, likely to be confused with SAS, and may not reflect the role of the AA or PA as a dependent practitioner.

## 5 Multi-stakeholder Collaborative & Interim Plans

- Adopt a collaborative approach involving discussions between relevant stakeholders and bodies, including the Royal Colleges and other healthcare professional groups, with consultation of their members, when determining the future landscape of healthcare.
- Until this collaborative completes its process, as called for multiple medical royal colleges - further locally driven expansion of the MAPs in the NHS should be paused. This needs to be done without destabilising the current MAP workforce or the MAP training pathways in higher educational institutions. NHS England and NHS Employers must establish an interim career structure to incorporate those in training before the new system comes into action in 2026.

## 6 Monitoring & Evaluation

- There must be a robust, evidence based framework for assessment, feedback and ongoing professional development that assures competencies of roles aligned to MAPs, presented via portfolio of evidence and annual appraisals.
- Establish mechanisms to continuously monitor and evaluate the integration of MAPs into the healthcare system, which includes feedback from other healthcare professionals, stakeholder institutions and patients, to identify areas for improvement and ensure the effective implementation of these recommendations.

## 7 Supporting Environment, Culture & Career Path

- Foster a supportive work environment that values the contributions of all healthcare professionals, including IMGs, SAS, LEDs, ANPs and MAPs.
- Encourage a culture of better understanding of roles, mutual respect and collaboration to enhance team cohesion and safe patient care.
- Create pathways for MAPs, to develop specific skills and career advancement.
- Implement a structured career progression scale for MAPs, similar to the numerical system for doctors (e.g., FY1, FY2, CT1, CT2), to help other professionals understand their experience level.
- Establish opportunities for MAPs to engage in teaching, research, and leadership roles within healthcare settings.

## 8 Address workload & Pay

- Develop policies that ensure fair compensation for MAPs, offer pay progression which reflects their roles, experience, and responsibilities within the multi-professional healthcare system.

## 9 Further Work/ Research

- Encourage future independent research with unbiased data, clear research aims, and strict adherence to ethical standards to ensure the integrity of findings.
- Transparent and rigorous research practices are essential to accurately assess the impact of MAPs, specifically on the NHS, patient outcomes, professional outcomes, and economic effects, and to guide informed policy decisions.

By implementing these recommendations, healthcare organisations can maximise the benefits of MAPs while addressing the concerns identified in the survey and workshops. This will contribute to a more efficient, safe, and collaborative healthcare system that meets the needs of both professionals and patients.

University	Course	Entry	Comments
Aberdeen	MSc (24 months)	A UK Honours Degree at 2:1 or 1st class in medical or health-related science. Higher (or A level) grade C or above in chemistry. Standard (or O level) grades B or above in English and Mathematics.	(Experience in healthcare may contribute and compensate if the above requirements have not been fully met).
Anglia Ruskin	MSc (24 months)	A first degree in life sciences (such as human biology, biochemistry, medical science or allied health degree) with at least a 2:1 classification or an equivalent qualification.	Health experience in a clinical setting is preferred.
Bangor	MSc (18 months)	a) awarded an initial degree (2.1 or higher) by a recognised Higher Education Institution in medically related life science subjects b) have a 2:2 in a life science degree with a higher degree in a relevant subject, e.g., MSc Clinical Sciences.	Widening Access - Applications are invited from all individuals with a strong interest in primary or secondary care. Applicants with a Higher Education degree outside the Life Sciences are expected to complete the Certificate in Medical Sciences (year 1 of the BMedSci B100 course) or Diploma in Medical Sciences (years 1 + 2 of the BMedSci B100 course) subject to their requirements. Having completed this top-up qualification, graduates are eligible to apply for a place on the MSc Physician Associate program.
Birmingham	MSc (4 months)	PgDip in PA studies	Top up MSc
Brighton & Sussex Medical	MSc (24 months) 2016	Applicants must have gained a 1st or 2:1 in a	In addition, all applicant must have GCSE Maths and English

UK PA SCHOOLS

School		Life Sciences degree or other health-related undergraduate degree obtained within the last 5 years. Registered health professionals with more than 5 years' clinical experience may request RPL in exceptional circumstances with appropriate references and a personal statement.	Grade A*-B or equivalent. For EU students, an IELTS score of 7.5 or above is required in addition to the academic requirements.
Bristol University of West England	MSc (24 months)	Grade C or above in GCSE English and Mathematics, or equivalent. 2:1 Honours Degree in a suitable life-science/health-related subject consider applications with a 2.2 on an individual basis.	Work Experience Work experience in a patient-facing healthcare setting is encouraged but not compulsory.
Brunel University	MSc (24 months)	A UK first or 2:1 Honours degree, or equivalent internationally recognised qualification, in a Life or Health Sciences subject area	
Chester	MSc (24 months)	Applicants should normally have: a 2:2 honours degree or above (or accepted equivalent) in life/health sciences;	
De Montfort	MSc (24 months)	Minimum of a 2:1 BSc Hons, or equivalent, in a life sciences or health-related subject.	Alternatively, applicants with a 2:2 or equivalent and significant experience (6 months) within a patient-facing healthcare/clinical role may be considered individually if the above requirement is unmet.
East Anglia	MSc (24 months)	Degree classification: Bachelor's degree - 2.1. Degree subject: Science	Applicants typically have 3 A-Levels at grade C or above, including at least one science

		or Health related discipline.	subject or equivalent. Applicants with a bachelor's degree that does not meet the normal admission requirements for this course may sit the GAMSAT test.
Edge Hill	MSc (24 months)	UK first-class or second-class honours (2:2 or above) in a science or health-related subject. evidence studying some bioscience or anatomy content.	You should also have GCSE English Language and GCSE Mathematics at Grade C or Grade 4 or above (or equivalent). Previous experience working in healthcare is desirable but not essential.
Hertfordshire	MSc (24 months)	Applicants should hold a minimum of a second-class honours degree in a relevant subject. Suitable subjects include the life sciences or allied health professions	Applicants with equivalent or non-standard qualifications will be considered on an individual basis.
Keele	MSc (24 months)	UK: A 2:1 degree in a biomedical or health science-related subject.	You will also need a 4/ C in GCSE Maths or Level 2 Functional Skills Maths, plus a 6 / B in GCSE English language (or alternative qualification)
Manchester	MSc (24 months)	Upper second-class degree (2:1) in life sciences or allied health professions. GCSE qualifications in Maths and English at <u>grader</u> equivalent.	Although we encourage applications from other healthcare professionals, we do not accept applications from candidates with medical degrees or those who have previously studied for, but have not completed a medical or healthcare degree.
Newcastle	MSc (24 months)	A 2:1 honours degree, or international equivalent, in a bioscience or related subject.	If you have a Health Sciences Diploma (eg Nursing) with extensive clinical experience, we may also consider you. We do not consider applications from candidates who have previously commenced a medical degree and failed to progress for any reason.

Queen Mary University of London	MSc (24 months)	A 2:1 or above at undergraduate level in a Biological, Biomedical or Health Profession degree.	Applicants will be considered primarily on the basis of their first degree, which includes integrated Masters programmes such as MSci, and performance in the CASPER test.
Queen Mary University of London	MSc (30 months-apprenticeship)	2:2 or above at the undergraduate level in a Life Sciences, Biomedical or Health Profession Degree.	modules, which will be taught in blocks on campus, via online learning, and work-based learning including clinical placements. As an apprentice, you will be working for 80% of your contracted week and your line manager will be expected to assign work to you that allows for the application of learning in the workplace.
Reading	MSc (24 months)	undergraduate honours degree (2.1 or above), in a relevant life sciences subject.	A good lower second-class honours degree (2.2) combined with other relevant practical healthcare skills and experience (or qualifications and experience considered to be equivalent to the above) will also be considered.
St George's University of London	MSc (24 months) Open to International Students.	Undergraduate Degree - a minimum of a second-class degree (2:2). For healthcare graduates, a pass is required. Human Physiology is a necessity for all applicants.	Alternative evidence of recent Physiology academic study (NVQ Level 4 and above) will be considered. UCAT (University Clinical Aptitude Test)
Sheffield	MMedSci (24 months)	at least a 2:1 undergraduate honours degree including a substantial element of human or animal biology.	In addition, <u>requires</u> BBB at A-level (or equivalent appropriate qualification).
Surrey	PgDip (24 months)	A minimum of a 2:2 UK honours degree in life sciences or	We will consider the following degrees: Audiology, biological sciences, biology, health

		health-related degrees or a recognised equivalent international qualification. GCSE English and Maths C (or equivalent) are also required.	psychology, pharmacy, psychology or sport and exercise science. We'll also consider relevant work experience.
Sussex	MSc (24 months)	Applicants should have a first or upper second-class degree in life sciences or another health-related undergraduate degree within the past five years.	Applicants with a degree awarded more than five years ago may apply but should have clinical experience and may be asked to write an academic essay as part of the application process.
Swansea	Master of Physician Associate Studies (24 months)	Minimum grade C at GCSE in Mathematics - Minimum grade C at GCSE in English/Welsh AND a minimum of one of the following: - 2:2 undergraduate Bachelors or integrated Masters degree in a healthcare or biosciences subject.	or - 2:1 undergraduate Bachelors or integrated Masters degree in a non-healthcare or non-biosciences subject, with relevant work experience and demonstration of values in line with the NHS
Ulster	MSc (24 months)	at least a 2:2 degree classification in a life science or health-related subject. Applicants must also have experience of paid or voluntary work with people, preferably in a health or social care context; a pass in GCSE Mathematics and English language grades A-C.	Applicants with non-standard entry qualifications which do not meet all the above criteria may be considered for entry at the discretion of the Course Director/Committee.
Birmingham	Anaesthesia Associate (24 months + 3 months of supervised practice)	1. Registered health care practitioners (eg, nurses, operating department practitioners) require one or both of the following: At least three years full-time, post-qualification work	2. New entrants to health care (graduates or graduate equivalent) require: A biomedical science or biological science background Preferably a second-class Honours degree or better, or other evidence of recent and successful academic activity A



		experience in a relevant area. A first degree in a health-related subject	demonstrable commitment to a career in health care
Edge Hill	Surgical Care Practice (MSc 3 years)	Be a registered non-medical practitioner working within a specific/specialist area of surgical practice, registered with a healthcare Professional Statutory Regulatory Body (PSRB). The minimum requirement is a lower second-class honours degree. at least 18 months post-registration experience in surgical practice. Be employed as a Trainee Surgical Care Practitioner (TSCP) (supernumerary) for the duration of the programme.	A third-class honours degree classification and/or a relevant Diploma in Healthcare will be considered on an individual basis.

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