

Research Article

Exploring Effective ways to Enhance the Understanding of the Role of Medical Associate Professions (MAPs) within the NHS: A Quantitative Study

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Abstract

Background: The National Health Service has expanded the use of the medical associate professions (MAPs) as one of the strategies to tackle the workforce shortages and improve access to safe patient care. It is considered important for the patient and the public to be made aware of the new roles within the NHS. There is several misinformation about MAPs on social media. This has led to the misunderstanding of the roles of MAPs within the NHS. Therefore, all healthcare professionals must explain their roles and responsibilities while interacting with patients, and clarity is more important than ever given the increasing use of new roles such as MAPs within the NHS. The Faculty of Physician Associate (FPA), the NHS and other key stakeholders should implement proactive strategies to communicate with the patient and the public in this area. This study is undertaken to understand the most effective way to communicate the roles of MAPs to patients and the health professionals within the NHS.

Aim and objectives: This study aims to identify effective ways to enhance the understanding of the role of MAPs within the NHS. The specific objectives include exploring ways to clearly communicate the roles and boundaries of MAPs to the patient/public and identifying ways to signpost the patient/public to easily accessible information on the role of MAPs.

Study design and setting: A quantitative cross-sectional survey distributed across educational institutions, primary and secondary levels of care to trainees and qualified healthcare professionals, and the public.

Results: Most of the responses came from PAs, but the balance of percentage responses from other professionals adds credibility to the data. 58.5% of the respondents work in secondary care, 26.8% work in the primary care, while 9.8% work at both primary and secondary care. 80% of respondents in this study hold the view that there is significant misunderstanding of the roles of MAPs within the NHS. 67.7% think there is no sufficient information about the role of MAPs and 78.5% believe that appropriate presentation of the roles of MAPs during inductions would foster more understanding of their roles by their colleagues

Conclusion: Induction programme for newly employed staff in the multidisciplinary team should include information about the roles and boundaries of MAPs. Making information about the MAPs available in a form of posters, flyers or published on Trust websites, and appropriate introduction of MAPs themselves during consultations to avoid confusion which is fuelling the current misunderstanding. These are some of the effective ways to enhance the understanding of the healthcare professionals, and the public about relatively new roles introduced within the NHS such MAPs.

Introduction

The National Health Service (NHS) continues to be faced with considerable pressure linked with workforce shortage, increasing healthcare cost and ageing population [1,2]. In response to some of these challenges, the UK government has come out with the NHS Long Term Plan which is aimed at transforming the workforce to increase service provision and optimise standards of patient care [3]. To address the issues around growing service demand, the NHS Long Term Workforce plan includes the expansion of the Medical Associate professions (MAPs) [4]. The NHS Long Term Workforce plan was

proposed by the previous Conservative government, but at the time of this survey, the current Labour government were consulting with the public to develop a new 10-year health plan. The MAPs include Surgical Care Practitioners, Physician Associates (PAs), and Anaesthesia Associates (AAs) [4]. It is well documented that MAPs play an important role within the NHS. PAs are not doctors but are trained to work within a defined scope of practice and limits of competence [5]. They can diagnose, treat, and refer patient for further management within their organisational policies and procedures [6].

The MAPs were first introduced to the NHS in England in the early 2000 and is a comparatively new role within the UK health system. The Faculty of Physician Associate (FPA) (2024) encourages PAs to work under the supervision of a named senior doctor and must work within their agreed scope of practice. The General Medical Council (GMC) makes it clear that when doctors delegate care in accordance with their guidance, the doctor is not accountable to the GMC for the omission of those to whom they delegate care (The Faculty of Physician Associate, 2024). Recently, there has been concerns raised about MAPs' scope of practice, patient safety, and missed education opportunities for doctors in training [6-8]. There have been calls for a national scope of practice for MAPs (especially

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for PAs), which has led to the BMA and the Royal College General Practitioners (RCGPs) to publish a scope of practice for PAs. MAPs work in various departments within the NHS and perform different roles where they develop their own level of competence and skills over time, working under the supervision of a senior physician. The term "scope of practice" used in this survey refers to the safe and legal way to practice. A nation-wide scope of practice for a group of healthcare professionals working within various department of the healthcare system will be extremely difficult if not impossible. A more possible approach for consideration will be for the royal colleges and the specialist societies to work with leaders/stakeholders of the MAPs to design an agreed post-qualification training programs that would provide a safe and legal way to practice in the different specialty for PAs and AAs.

The UK government has given the GMC the legal obligation to regulate PAs, and AAs. PAs are not legally able to prescribe medicines or request ionised radiation. According to Morris, the role of PAs was found to be accepted and appreciated, especially during the COVID-19 pandemic, although there were also several reports of ambiguity and resistance to this role [9]. The NHS in England has pledged to support MAPs to work effectively and safely as part of the multidisciplinary team (MDT), and to support doctors in their supervision responsibilities [4].

The GMC has completed a public consultation on the rules, standards and guidance that will implement the legislation introducing the regulation of PAs and AAs [4]. The FPA provides professional support for PAs across the UK, and the NHS in England is committed to supporting MAPs. The roles have been within the NHS for two-decade, but according to a survey by the British Medical Association (BMA), 57% of people have never heard of PAs [10]. A recent survey by the Healthwatch England (2024) reports that 52 % of people agreed or strongly agreed that they "understood the difference between a PA and a doctor", and 23% strongly or somewhat disagreed to this. This survey which represented the interests of patient called for more clarity around the role of PAs. Hence, it is essential the NHS, the Department of Health and Social Care (DHSC), and other key stakeholders to make information on the role of MAPs more accessible to patients, and the public.

Recently, there have been several misinformation and disinformation about the role of MAPs especially towards PAs on social media. This has led to the misunderstanding of the roles of MAPs within the NHS. PAs themselves see and hear about this negative social media comments, which they find hostile and upsetting [2,11]. According to Ismail et al., (2022), misinformation is frequently circulated through social media, where information is spread rapidly [12]. It is important for patients and the public to understand the roles, functions and boundaries of MAPs as part of the wider multidisciplinary teams. Effective ways to enhance the understanding of the role of MAPs within the NHS is equally important for the patient, the public and can help address the increasing misinformation about these relatively new roles. This will lead to a better understanding of the crucial roles of these health professionals within the healthcare system.

In this quantitative study, we obtained data from trainee and current MAPs, doctors, nurses, allied health staff and the public on effective ways to better communicate the role of MAPs within the NHS. This survey also provides a baseline data for future evaluation

and awareness of the role of MAPs. Specific objectives include the following:

1. To explore effective ways to clearly communicate the roles and boundaries of MAPs to patient/public.
2. To identify ways to signpost the patient/public to a more easily accessible service on the role of MAPs

Method

Study design

This was a quantitative cross-sectional online survey distributed to current MAPs, trainee MAPs, doctors, nurses, allied health professionals, and the public. The questionnaire survey was developed by the research team through literature search, interviews, and careful consideration of recommendations from existing survey by Care Quality Commission committee such Healthwatch England. The survey was disseminated by the research team to various organisations (NHS trust, GP surgery, Universities). Individual team members were also responsible for engaging and communicating with the respondents, and to encourage a good response to the survey. No personal or identifiable information was obtained from respondents, and consent implied by completing the survey.

Results and Discussion

Main findings of this study

At the heart of the rift between doctors and other medical associate professions (MAPs) is the allusion by the doctors that there is gross misunderstanding of the roles of MAPs by patients within the NHS. This has given rise to a myriad of problems which have continued to fuel the feud amongst the doctors and the medical associate professionals.

One of the issues is role clarity. Many doctors and patients do not fully understand the training, qualifications, and capabilities of MAPs, especially the PAs, leading to misconceptions about their competencies. This has resulted in scepticism regarding their ability to perform certain medical tasks.

Furthermore, some doctors view PAs as a threat to their professional identity and status. Misunderstandings about the collaborative nature of the PA role has fostered feelings of competition rather than teamwork. Also, there has been some ambiguity regarding what PAs are authorized to do, leading to conflicts over responsibilities. Some doctors underestimate the training PAs undergo, leading to doubts about their ability to work independently or require more supervision than necessary. If doctors are unaware of the specific tasks PAs can perform, they may be hesitant to delegate certain duties.

Lack of effective communication about the roles of PAs has led to assumptions and misinterpretations. Lack of clear discussions about the roles of MAPs has created friction and misunderstandings.

On the other hand, patients have also confused the roles of PAs and doctors, leading to unrealistic expectations about the level of care they receive. This confusion has placed additional strain on the doctor-PA relationship, as doctors have often been pressured to clarify roles in front of patients.

It is for these reasons that we have undertaken this study which aims to present effective ways to communicate the roles of MAPs to enhance their understanding amongst doctors and patients.

Various Roles and Workplaces of the Respondents

We sought to understand the professional composition of those that took part in the survey. As shown in Figure 1, out of 65 responses, 52.3% were registered PAs, while 29.2% were PA students. Responses from doctors and nurses constituted 7.7% and 6.2%, respectively. Other respondents were patients and the public. Interestingly, but curiously, there were no responses from other MAPs including Anaesthetic Associates, Surgical Care Practitioner and Allied Healthcare Practitioners. It is not certain if these health professionals were not contacted for responses, or they declined to participate. While it would add to the balance of analysis if the other MAPs had participated, the composition of the respondents is satisfactory. Again, it would have been beneficial to have more participants from the patients but their balance with doctors and nurse is significant and validatory.

In summary therefore, while it is no surprise that most responses came from the PAs, the balance in the percentage of responses from doctors, nurses and patients add credibility to the data, result discussions and conclusions therefrom.

Figure 2 presents the various workplaces of the respondents of the survey. As observed, 58.5 % of respondents work within the secondary healthcare. This statistics tallies with published data. According to Halter et al., about 75% of PAs in the UK work within the secondary care sector. Conversely, 26.8% of respondents work at the primary care, while 9.8% work at both primary and secondary care [13].

Existence of Significant Misunderstanding of the Roles of MAPs Within the NHS

The recent rollout of the scope of practice for physician associates in general practice by the Royal College of General Practitioners (RCGPs) and the BMA underscores the substantial misunderstanding of the roles of these health professionals within the NHS. As shown in Figure 3, over 80% of respondents in this study hold the view that there is significant misunderstanding of the roles of MAPs within the NHS. Only 6.2% of respondents believe the contrary while 23.8% remain undecided about this.

According to a press release by the BMA (2023), 86% patients polled in a study comprising 18,000 respondents said they were not aware of the differences in the roles of doctors and MAPs. But why are the roles of MAPs, especially the PAs misunderstood?

The roles of Physician Associates in the UK are often misunderstood due to several factors that contribute to confusion about their qualifications, responsibilities, and the nature of their work within the healthcare system. Here are some key reasons for this misunderstanding:

Lack of clarity on training and qualifications

PAs undergo a two-year postgraduate training program that includes approximately 3,200 hours of study, which is significantly less than the training required for doctors, who typically complete a minimum of 5,500 clinical hours over several years [14]. This disparity in training leads to misconceptions about the depth of knowledge and skills PAs possess compared to doctors. Before the two-year postgraduate training, candidate must have a first degree in a health or life science subject. Few universities in the UK offer four-year undergraduate integrated master's degree in physician associate studies. The PAs competence and curriculum frameworks was first

developed in 2006 by the RCP and the RCGP, this was reviewed by the FPA in 2018 [15].

Post-qualification examination

After successful completion of the two-year postgraduate training, and for graduates to practice legally in the UK, they are required to sit the Physician Associate National Examination (PANE). In order words, to become a fully qualified PA, you must pass both university programme and PANE or be a certified by the National Commission on certification from the United States of America to be able to work as a PA in the UK. The PANE is designed and developed by the assessment unit on behalf of the RCP [15]. There is misinformation that the PAs national examination is designed by PAs. The Royal College of Physicians states that, the RCP assessment unit develops, and governs the UK PACES, PANE and the diploma in geriatric medicine [16].

Similarities in daily tasks

The day-to-day responsibilities of PAs can closely resemble those of doctors, such as conducting physical examinations, taking medical histories, and managing treatment plans. This overlap can lead patients and even other healthcare professionals to mistakenly assume that PAs have the same level of authority and expertise as doctors [14,17].

Supervision requirements

PAs work under the supervision of a named senior doctor, which is a crucial aspect of their role. However, the extent of this supervision is often not well understood. Many people may not realize that PAs cannot operate independently and that their practice is heavily reliant on the guidance of supervising physicians [17]. This can create confusion about their autonomy and capabilities.

Regulatory changes and controversies

The introduction of regulation for PAs by the General Medical Council (GMC) is set to take effect in December 2024. While this regulation aims to standardize training and practice, it has also sparked debates about the potential blurring of lines between the roles of doctors and PAs. Concerns have been raised about patient understanding of who is providing their care, especially in light of past incidents involving professional negligence by PAs [14,17].

Public perception and media representation

High-profile cases of misconduct involving PAs have contributed to negative perceptions of the role. Such incidents can overshadow the positive contributions PAs make to healthcare, leading to a general mistrust of their capabilities [17]. Additionally, media portrayals may not accurately reflect the training and responsibilities of PAs, further complicating public understanding.

Integration challenges within the NHS

The integration of PAs into the NHS has faced resistance from some medical professionals, with concerns about patient safety and the impact on doctors' workloads. A significant percentage of doctors perceive PAs as a risk to patient safety, which can influence public opinion and understanding of the role [17].

Consequently, the misunderstanding of PAs in the UK stems from a combination of their training background, the nature of their work, regulatory changes, and public perception shaped by media and professional opinions. Addressing these misconceptions is essential for improving the integration of PAs into the healthcare system and

enhancing patient care.

Availability of Sufficient Information on the Roles of MAPs within the NHS

This study sought to determine whether there is enough information about the roles of MAPs to enable other health professionals and the general public to understand their roles. Figure 4 presents these results. Overwhelming the number of the respondents believe there is no sufficient evidence of enough information to allow health professionals and the public to make informed decisions about the roles of MAPs in the UK, representing 67.7%. However, 23.1% of the respondents think there is enough information, while 9.2% could not make up their minds.

The information available about the roles of MAPs (especially PAs) in the UK is somewhat limited and can be attributed to several factors:

- 1. Recent Introduction and Development:** PAs were first introduced in the UK in the early 2000, and the role is still evolving. As a relatively new profession compared to other healthcare roles, comprehensive data on their impact and integration into the healthcare system is still being gathered and analysed.
- 2. Lack of Standardization:** The scope of practice for PAs can vary significantly depending on local policies and the supervising physician. This variability leads to inconsistencies in how PAs are utilized across different healthcare settings, making it challenging to compile uniform data on their roles and effectiveness.
- 3. Limited Research:** There is a scarcity of extensive research studies specifically focusing on PAs in the UK. While some studies have reported positive outcomes regarding PA safety and effectiveness, more comprehensive research is needed to fully understand their contributions and challenges within the healthcare system.
- 4. Professional Regulation:** Currently, PAs in the UK are not statutorily regulated but this is about to change in December 2024, which raises concerns about their integration and the consistency of their training and practice. The lack of regulation can hinder the establishment of clear guidelines and standards, further complicating the understanding of their roles.
- 5. Integration Challenges:** There are ongoing debates within the medical community regarding the integration of PAs into existing healthcare teams. Some healthcare professionals' express concerns about the potential risks to patient safety and the effectiveness of PAs in alleviating the workload of doctors, which can affect the perception and acceptance of the role.
- 6. Focus on General Practice:** Most PAs currently work in general practice and acute medicine, but there is limited data on their roles in other specialties. This concentration can skew the available information, making it seem as though their roles are narrower than they actually are.

In summary, while PAs are increasingly recognized as valuable members of the healthcare team in the UK, the combination of their recent introduction, lack of standardization, limited

research, and absence of professional regulation, integration challenges, and a focus on general practice contributes to the insufficient information about their roles.

MOST Effective way to Communicate the Roles of MAPs within the NHS

The most important aspect of this study was to address the issue of the most effective means to communicate the roles of MAPs to patients and other health professionals alike. Question 5 of the survey was created to investigate the responses in this regard. As presented in Figure 5, the responses are almost non-distinguishable. However, the results show that most respondents are of the view that the most effective way to explain the roles of MAPs is by integrating the roles of MAPs as part of their induction which normally has other health professionals in attendance. Out of 65 respondents who answered this question, 78.5% believe that appropriate presentation of the roles of MAPs during inductions would foster more understanding of their roles by their colleagues. But does this address the misunderstanding by patients? In this regard, the percentage of those who believe the solution lies in creating leaflets about the roles of MAPs and placing same in strategic areas within the secondary and primary care settings needs consideration as 73.8% favoured this choice. This is followed by the option to create more accessible websites by primary and secondary health care settings.

The study also highlighted the need for FPA/NHS to create platforms that focus on the roles of MAPs and for MAPs to adhere to appropriate level of introduction of their titles and roles during consultations. These two points were weighted equally in the responses as shown in Figure 5. Another point to note from the survey is the need for the primary and secondary healthcare institutions to use posters to illustrate the roles of MAPs within their setting. This is akin to the previous point which necessitates healthcare settings to create websites or platforms dedicated to describing the roles of MAPs to both colleagues and patients.

It is apparent from the study that it is imperative to clearly educate patients and the healthcare practitioners on the roles of MAPs to avoid confusing them with doctors which is fuelling the current misunderstanding. This will be achieved mainly by making information available during inductions and by disseminating through flyers, posters, websites and appropriate introduction by MAPs themselves.

Overall, to effectively communicate the roles of medical associate professionals (MAPs) in the UK and distinguish them from doctors, we consider the following strategies:

- 1. Clear definitions:** This can be achieved by providing clear, concise definitions of MAP roles, such as Physician Associates (PAs) and Anaesthesia Associates (AAs), highlighting their specific responsibilities and training. Furthermore, use of visual aids like charts can be applied to compare the qualifications, training, and duties of MAPs versus doctors.
- 2. Education and training:** Outlining the educational pathways for MAPs and emphasizing their specific training programs, which differ from those of doctors will help to distinguish the roles of MPAs from the doctors.
- 3. Public awareness campaigns:** Various Trusts can organize workshops, webinars, and community outreach programs to educate the public about the roles of MAPs. The social media can be utilized

to share informative posts, videos, and infographics that clarify the roles of MAPs.

4. Collaboration with healthcare providers: Interdisciplinary collaboration between MAPs and doctors in clinical settings, showcasing their complementary roles should be encouraged. This can be done by creating joint statements or promotional materials from medical institutions that clarify the distinctions.

5. Patient information materials: Develop easy-to-understand brochures that explain MAPs' roles in patient care and when to see a doctor. Trusts can also create a list of frequently asked questions addressing common misconceptions about MAPs.

6. Use of terminology: Use consistent terminology across all communication platforms will reinforce the distinct roles of MAPs. The use of medical jargon when explaining roles to ensure clarity for non-medical audiences should be minimized.

7. Feedback Mechanisms: Implement surveys to gauge public understanding and identify areas where communication can improve. Also, conduct focus groups with patients to discuss their perceptions and misconceptions regarding MAPs.

Limitations of study

In this study, few responses were obtained and mainly from qualified or trainee PAs but no responses from other medical associate professionals. This makes it difficult to generalise the findings. Nevertheless, finding from this study can serve as baseline data for further studies into this particular area.

Most of the authors for this survey were qualified PAs, but to avoid any bias in the interpretation of the data, the analysis of data was by an independent individual who is not a qualified or practicing PA but have a fair knowledge about the medical associate professions.

Recommendations for future research

In this study, we recommend similar study using a mixed- method approach to gather information about how to promote effective publicity of the MAPs roles with the support from the Department of Health and the HEE. We also recommend additional studies to explore how the royal college and specialist societies can work with the MAPs stakeholders to design post-qualification training programmes which aim to ensure high standards of care.

Career progression is important within the healthcare sector, further studies into designing pathways for career advancement for the MAPs within the NHS is vital for individual within this profession.

Conclusion

The NHS continues to face mounting pressure to improve the health and wellbeing of the public by providing high-quality care and services. However, an increasing population, particularly the ageing population with multiple co-morbidities, high healthcare cost, staff shortages and lack of resources affect healthcare system to deliver such services. The provision of healthcare has changed over the years from 'doctor-centric approach' to a team approach where multiple healthcare professionals work in an MDT collaboratively complementing each other's role in order to provide the best possible care to the patients.

The NHS' long-term workforce plan by the Conservative government incorporates and advocates the use of additional roles like MAPs to optimise effective MDT working, reduce the

workload burden on other clinicians while still being committed to maintaining high levels of patient safety and welfare. MAPs play a complementary role in a team environment and never meant to replace doctors. Although MAPs are relatively new for the NHS, they have been working collaboratively in a complementary role in many countries including the USA, Germany, Canada, India, Ghana, New Zealand (where they are called physician assistants) for several years. Unfortunately, there has been insufficient education of patients, the public and other HCPs in the UK as to the training, knowledge, skills and scope of practice of MAPs in the NHS as shown by a number of surveys done, including Healthwatch England and the BMA [18-21]. This inadequate knowledge has been compounded by recent spread of misinformation/disinformation via social media and by some negative press coverage. The absence of a statutory regulation for MAPs may have also contributed to the current situation. The upcoming regulation of MAPs by the GMC will assure patient, employers and the multidisciplinary team that PAs and AAs have the knowledge and skills to provide safe patient care and can be held to account if major concerns are raised. Another area that probably knocked the public confidence on MAPs is the unfortunate recent events where patients died as a result of errors/negligence involving PAs. Any loss of life is tragic and regrettable; however, errors do happen, and this is not peculiar to PAs. "To err is human" as stated by Sir Liam Donaldson, former chief medical officer for England. He went on to say, "to cover up is unforgivable, and to fail to learn is inexcusable." This applies to all healthcare professionals. Errors can happen due to human error, as part of the wider system failure. The medical profession by nature is a risk taking one. The most important thing is to aim to not make avoidable mistakes and admit when things do go wrong, learn from it and make sure that this never repeats rather than finger pointing/blaming.

The situation regarding a lack of knowledge and understanding has necessitated an urgent need to identify effective ways of enhancing methods of communication regarding the role of MAPs. This cross-sectional quantitative survey was carried out to identify the level of current understanding of MAPs among HCPs/public and to identify effective ways of enhancing communication/signposting the patients/public.

Although the majority of the responses to the survey were registered PAs and PA students, our respondents were very clear in their response that there is a significant misunderstanding of the role of MAPs within the NHS. Furthermore, the majority of them thinks there is no sufficient information about the role of MAPs. This study also identified different effective ways of communicating the roles of MAPs to other HCPs and the patients/public. The most effective way identified was incorporating the information regarding MAPs in the Induction programme of HCPs at the outset. This would help to educate and clarify any doubts/curiosity about MAPs. The second most effective way identified for improving knowledge and understanding about MAPs is by creating leaflets/posters and make them available/visible to the patients/public in both primary and secondary care settings. This survey also identified some other means of improving communication which includes web platforms, joint statements by the educational/healthcare institutions, positive use of social media and the press educate the public about this relatively new role.

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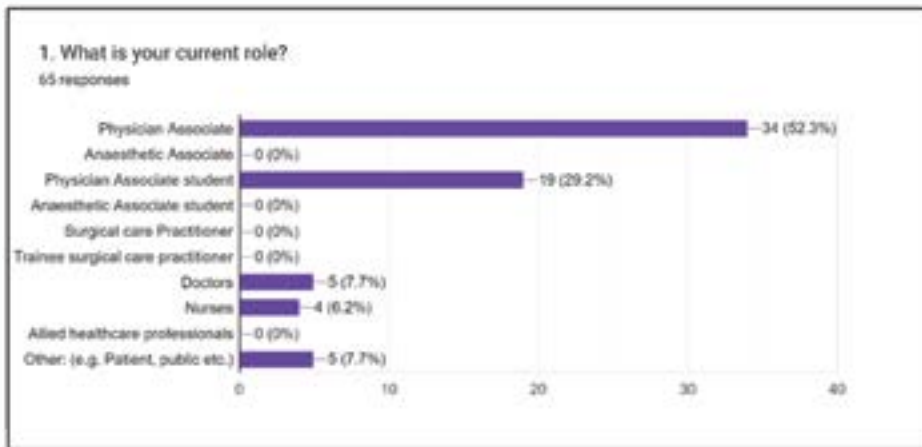


Figure 1: Composition of the respondents of the survey.

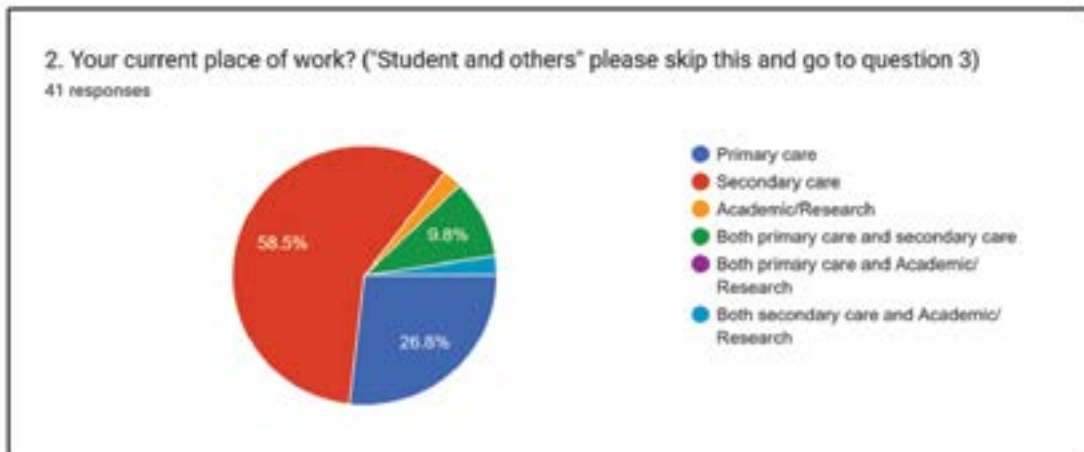


Figure 2: Workplace of the respondents of the survey.

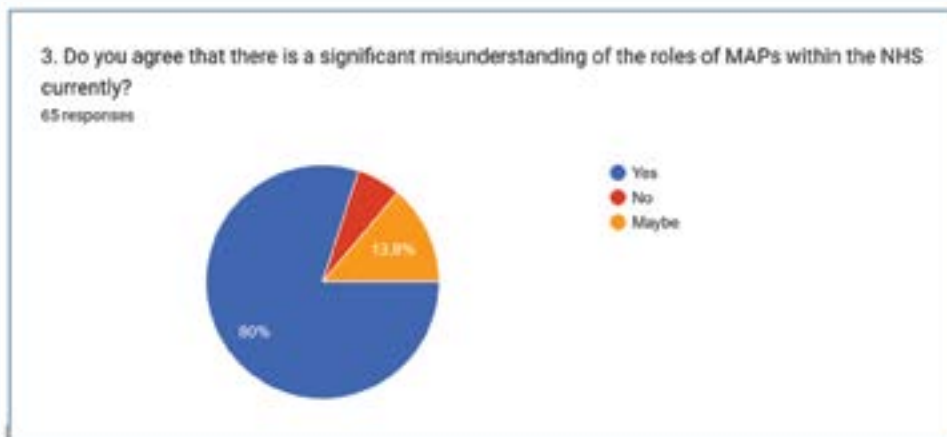


Figure 3: Existence of significant misunderstanding of the roles of MAPs within the NHS.

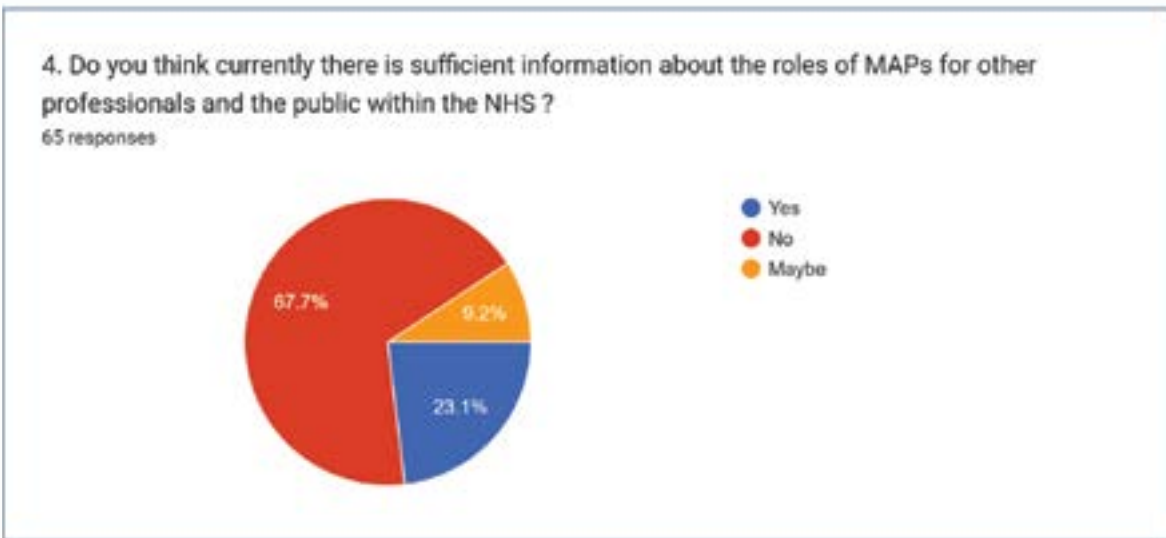


Figure 4: Availability of sufficient information on the roles of MAPs within the NHS.

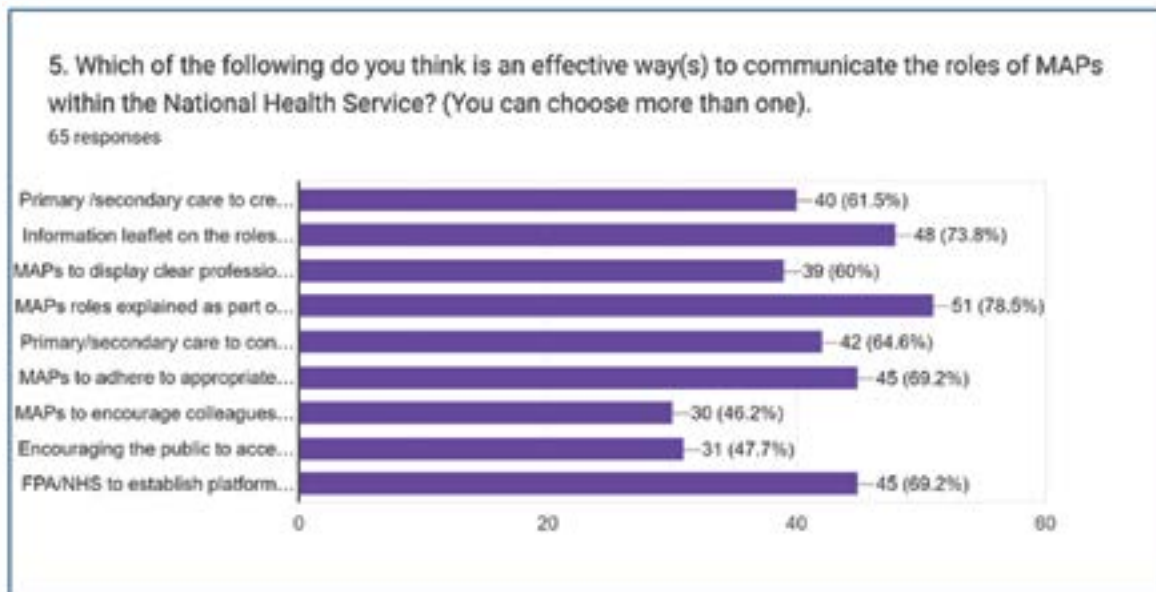


Figure 5: Most effective way to communicate the roles of MAPs within NHS.