Main text file –

Advanced clinical practice roles in the National Health Service, England: a remedy for workforce problems? A qualitative study of senior staff perspectives.

# Abstract

Objectives

Improving population health, while responding to growing patient numbers and needs and developing and retaining the health care workforce, is a major issue in all health systems. One policy response to medical shortages in some countries has been the development of advanced practice roles. In the context of an English national policy promoting such roles in the health service, we explored senior manager and senior clinicians’ perceptions of factors supporting or inhibiting their introduction at the organisation level. The investigation was framed by theories of the diffusion of innovation and the system of professions.

Methods

A qualitative interview study with thirty-nine senior manager and clinicians in 19 National Health Service acute, community, mental health and ambulance organisations across a metropolitan area in 2019.

Findings

Very small numbers of advanced practice roles were reported, often in single services. Five main ‘influencers’ were identified in their development: a strategic response to medical shortages, commissioner-funded new roles in new ambulatory care services and primary care, education commissioner-funded training, roles developed by individuals and the desire to retain experienced staff. Two factors were reported as enablers for the roles: – finance for substantive posts and evidence of value of the posts. Perceived inhibiting factors to developing the roles were: lack of identified finance for training and positions; confusion and lack of knowledge amongst clinicians and managers; and a nervousness (sometimes resistance) to introducing a new role with little evidence and many unanswered questions about its effectiveness and consequences.

Conclusions

While the national policy was to promote advanced practice roles, the evidence suggested there was and would continue to be limited implementation at the operational level. Development scenarios that introduced new monies for such roles reduced some of the inhibiting factors. However, where the introduction of roles required funding to move from one part of a service to another, and potentially from one staff group to another, the growth of these roles was and is likely to be contested. In such scenarios research and business evidence of relative advantage will be important as too will be supporters in powerful positions. The paucity of publicly available evidence on the effectiveness of advanced practice roles across the specialties and professions in the context requires urgent attention.

# Main Text

# Introduction

All heath care systems are facing the quadruple challenge: how to improve the experience of care, improve population health, reduce per capita cost of health care and improve the lives of health care staff.[1] At the same time there is global maldistribution and shortages of doctors and other health professional groups. [2] One solution advocated by the World Health Organisation is to develop mid-level providers who, although not doctors, are educated to a level to be able to undertake some of the activities of doctors within a prescribed scope of practice [2] Mid-level providers originate from two distinct pathways. The first group are those who are directly recruited with further or higher education qualifications onto non-physician (NPC) training courses, such as physician assistants/associates, clinical officers, and assistant medical officers. The second group are those with an existing health profession qualification and licence who train and credential as an advanced clinical practitioner (ACP) e.g. nurse practitioner, extended practice physiotherapists. Our scoping review (2000 to present) of the extent and spread of these roles found variability between and within countries and regions. A national key informant survey of 47 sub-Saharan countries reported 25 with some NPCs (commonly known as clinical or health officers) [3]. Repeated national key informant surveys tracked the growth in the number of countries with advanced nurse practitioner (ANP) roles from 14 in 2008, to 38 in 2011. [4,5] A third of the Office for Economic Cooperation and Development (OECD) member countries reported introducing advanced practice roles for nurses, pharmacists and other professions, primarily to address access to primary care services. [6] We found reviews reporting inter- and intra-country variation in: education levels; scope of practice; and presence of legislation to quality assure ACP and NPC education and titles. [7,8,9,10] Consequently the nature of ‘advanced practice’ is country and occupational group specific. For example, a minority of countries legislate for nurses to prescribe medications but in some of these countries the legislation allows all registered nurses to prescribe certain categories of medicines while in others registered nurses require additional qualifications and licensure. [11] Many reviews report that the presence and spread of ACPs and NPCs is influenced by health workforce policies but these in turn are dependent on the extent of opposition or support of other professional groups, most notably medicine. [3,4,5,6,7,8,9,10,12] There are many reports and reviews of the introduction of advanced practice roles at the team level (the micro level), mainly focusing on nurses [13,14]. Organisation level (the meso level) consideration of the influences on the introduction of advanced roles has mainly focused on primary care medical services (also known as family physician or general practice services).[15] Where studies have included consideration of the hospital and community health services organisation level perspective the reporting of findings has been indistinct from the macro and micro level. [16,17,18] In this study we investigated the factors influencing the development and continuance, or otherwise, of ACP posts at the meso level of the health system, in English NHS organisations, in the context of significant macro level policy support for the workforce innovation of advanced practice roles.

England is one high income country with explicit policies since 2014 for increased numbers of ACP roles within its tax funded National Health Service (NHS) to address, amongst other issues, the shortages and maldistribution of doctors.[19,20] The policies support ACP roles from across professional backgrounds: nurses, midwives, allied health professionals, pharmacists and health scientists. These policies have been underpinned by national workforce development strategies that have committed substantial financial resources to advanced practice education. [21] While the United Kingdom (UK) has devolved health policy to its constituent countries (England, Wales, Scotland and Northern Ireland), the governance of health professionals remains UK wide. Across the UK there is no state regulation or licensing for ACP roles. Health Education England (HEE), the government body responsible for health workforce planning, development and commissioning (i.e. purchasing some education and training for NHS staff from education providers such as Universities) in England, has published a multi-professional ACP framework.[22] This framework specifies the ACP level of practice for those health professionals already regulated by the Nursing & Midwifery Council or the Health & Care Professions Council (Box 1). HEE has also established a national centre with responsibilities for accreditation of ACP master’s level courses. [22]

Box 1

There are no figures as to the numbers or extent of ACP posts in England. There is some evidence in a few types of services that the numbers are small but growing, with significant regional variation. For example, in 2019 there were 164 critical care units employing 16,480 registered nurses of whom 153 were Advanced Critical Care Practitioners (ACCPs), an increase of 60 since 2017, but none were reported in 4 of 18 areas in England and Wales. [23].

As the focus of the study was a workforce innovation and an innovation that international reviews identified was influenced by the views of other professional groups, it was framed by two sets of theories. The first was Greenhalgh et al.’s [2004] theory of diffusion of innovation in which there is complex interplay between the outer context, the resource system, the knowledge purveyors, change agency and the inner processes of the user system. [24] The second was Abbott’s (1988) theory of the system of professions, characterised as a jostling, interdependent ecology in which the activities and developments of one occupational group impact on others and are tied up with issues of power, status and rewards.[25] Within the field of health care Abbott (1988) identified medicine as the dominant profession. He argued that professions contested for jurisdiction over work, theoretical knowledge and client groups but jurisdiction was also shaped by societal changes and state agency. He described jurisdiction boundary contests between groups as resulting in range of possible settlements including: the legal right of only one group to perform certain tasks and the subordination of one group to another. He also noted that dominant professions released jurisdiction to others of work or clients considered routine or of lower status. [25]

The study addressed two research questions in the English NHS context:

1. To what extent are NHS acute, community and emergency services described to be developing ACP roles and what are the stimuli driving their development or otherwise?

2.What do senior managers in NHS organisations consider to be the factors influencing the success or otherwise of the introduction and continuance of ACP roles in the workforce?

# Methods

The qualitative study design was in the interpretative tradition underpinned by the pragmatist paradigm which recognises multiple perceptions occurring within specific socio-cultural and historical contexts but is focused on problems and solutions [26]. Individual semi-structured interviews and one group interview were used to gather data in 2019 from a purposive sample of senior (including board level) managers and clinicians with responsibilities for service provision and workforce issues in nineteen NHS organisations in a large metropolitan area (population eight million). The NHS organisations (known as trusts) provided mental health services, community services, acute hospital services, tertiary care, or emergency care and ambulance services or a combination thereof but not primary care general practice services (known in other countries as family physician services). The organisations employed between 1000 to over 12,000 staff. Potential participants were initially approached by email using publicly available information on the organisations’ websites. The email invitation to participate included information about the study, researcher contact details and a request to pass the invitation to other relevant senior staff in the organisation. Recruitment continued until the sampling frame was filled across the breadth of type of participant and organisation type. Interviews were undertaken by all study researchers (authors) and were conducted by telephone, video call or face-to-face as preferred by participants. Topic guides for the individual and the group interviews were developed based on the research questions and theoretical framing by the study researchers, informed by input from patient and public representative advisers to the study. Questions addressed perceived reasons for the introduction and development of ACP roles, the number and extent of ACP roles, factors influencing (positively and negatively) the introduction and spread of such roles and any local evidence of value or impact of the roles (supplementary file 1). Interviews were recorded with permission or contemporaneous notes taken. Interview data were coded and analysed using thematic analysis which was informed by the research questions and the theoretical framing. Analysis was through an iterative, comparative process of discussion and written reports between researchers.

The study was conducted in an ethical manner, ensuring informed consent for participation and for the use of anonymised quotations. Research ethics review was undertaken and approved by University research committees.

# Findings

Twenty-nine individual interviews were conducted with senior managers and clinicians and one group interview with ten Directors of Nursing for mental health services or mental health and community services (Table 1), in nineteen NHS organisations.

Table 1

We report first on the extent of ACP positions and situations reported as driving their development, before turning to the factors that were considered to have enabled or deterred the introduction and continuance of these positions.

## The extent of ACP positions

Most NHS organisations were reported to have a small number of ACPs, although some had only trainee ACPs. For example, in one acute care and community service organisation employing over 12,000 staff, 80 staff were reported as working at ACP level. Some organisations were reported to not employ any ACPs, mainly those providing mental health services. Only two of the organisations had documented numbers of the ACPs they employed. Where they existed, the ACPs were mainly clustered in certain types of services such as urgent and emergency care services, musculoskeletal services, critical care and podiatric surgery. The majority of ACPs were reported to be nurses but physiotherapists, paramedics, podiatrists were also described as working at advanced levels and to a lesser extent some pharmacists, dietitians, radiographers, speech & language therapists, midwives, clinical psychologists, and health scientists. In some organisations there was reported to be a long history of over 10 years of developing ACPs in services such as urgent and emergency services and musculoskeletal services. However, more commonly described were single ACP posts of more recent origin without necessarily a planned workforce strategy.

“I think what's happened is that [ACP] posts have evolved over time, led by services, or the geography and I think, in terms of the ACP role, I don't think that has been led specifically across the trust”. ID 021

## The perceived impetus for ACP posts

Participants in organisations with ACPs described four types of stimuli to the development of ACPs posts. Two were internal and two were external to the organisation but interlinked. The first stimulus was the internal organisation response to ongoing and predicted staff shortages particularly of doctors in training grades, combined with rising patient demand for the services. The combination of these two factors was reported as problematic for the quality and cost of services, which drove a directorate or organisational level response.

“The whole thinking behind ACPs, of non-medical staff and particularly for us at [name of hospital] we're extremely challenged trying to find doctors to work within [service]. ID 011

The second stimulus internal to organisations was reported to be the desire to retain individual experienced staff through both career development opportunities for the individual but also through the contribution they could make to the quality of the service delivery.

 “So, if we don’t do clinical career development for [name of professional group] they won’t stay with us, so that’s the retention agenda”. ID 141

“The ACPs have stayed in the surgical area and seen it as a progression route” ID 013

Participants identifying these two internal stimuli were, in the main, providing acute hospital services.

The third stimulus was reported to come from external commissioners or purchasers of services looking to shape new or existing services in line with national policy. The NHS has a system of local bodies, known at the time as Clinical Commissioning Groups (CCGs) who purchase or commission NHS services on behalf of a defined population. The participants pointed to national policy, the NHS Long Term Plan (NHS LTP) [20], which directed CCGs and NHS organisations to deliver more care outside of hospital settings and increase ambulatory care provision designed to avoid hospital admission. In designing new types of services, in the context of medical workforce shortages, participants described the inclusion of new ACP roles as a means of achieving the desired change.

“Some of the key areas of focus [of CCG commissioners] are driving the ACP health roles. For example, there's a real focus on diabetes, there's a real focus on frailty and I think they are helping to shape some of the conversations with regards to needing to work in a slightly different way” ID 111

 Some participants pointed to the significant stimulus created by the NHS Long Term Plan [20] which financed the salaries of some types of ACPs such as prescribing pharmacists and first contact physiotherapists to work in ambulatory care settings.

“So, we’re working with local PCNs [primary care networks] for us at [name of organisation] to be the provider of independent prescribing pharmacists rather than they employ individuals who become isolated and that way we don’t lose skilled people.” ID 321

This third stimulus was reported mainly from participants from those providing community, urgent and emergency care services.

The fourth stimulus was reported as the opportunity for the organisation to participate in external national and regional HEE funded programmes of ACP training for already registered health professionals, such as ACP roles in emergency services. This was reported from those participants providing acute care and ambulatory services.

We turn now to the perceived factors supporting and inhibiting ACP posts.

## Factors supporting the development, maintenance, and growth of ACP posts

Participants reported three main themes as enablers of ACP posts: finance, evidence of value of ACP posts and structural support within the organisation.

Finance was considered the key enabler for ACP posts. Participants described external and internal sources. The external sources of finance were, as mentioned above, CCGs and HEE as commissioners of health services and training. The external financial resources for training staff to achieve ACP level was also mentioned as an enabler. Nevertheless, these resources were not necessarily sustained, as we report below. The internal source of finance was through agreed business plans for service development/improvement which included budget for ACP posts.

Two of the enabling sources of finance (the external commissioning of services with funded ACP posts and the internal developments with budget for ACP posts) were described as linked to the second enabling theme – evidence of value in addressing a specific service problem or service delivery.

“We‘ve been very pleased with how the ACP roles have really helped address junior doctor shortages and other issues in [name of service] and so are now taking that learning to [name of another service] and looking to see where else we can have ACPs”. ID 211

Several participants reported examples of ACP posts, originally with time limited funding that had demonstrated success and were then contracted for a longer period or embedded in the service staffing budget.

We recruited some extra ACPs to take forward a pilot that we ran for one particular neighbourhood….and given the successes that we found from running that pilot our CCG colleagues commissioned the service for the rest of the neighbourhoods. ID 121

None of the participants were able to provide internal or published evaluation reports of ACP posts in their services, although a small number described internal evaluations as having been carried out.

The third enabler theme was structural support within the organisation. Participants described several different elements that came within this theme. One element was the facilitative influence of organisational recognition of the value of ACP roles in the service, for example, the organisations’ workforce strategy specifically included the employment of ACPs. Participants also pointed to the positive influence that having director-level advocacy or interest in the ACP role had within the organisation. A further organisational support mechanism, identified by a few participants, was having a senior staff member with a remit to support the development of ACP roles and share good practice across the organisation.

“Senior executive engagement and support with the chief nurse, chief operating officer and chief medical officer has significantly helped push the culture through the organisation” ID 003

## Factors perceived to inhibit the development, maintenance and growth of ACP posts

Participants reported their organisations were addressing many workforce problems with multiple innovations, such as the introduction of nursing associates and new apprenticeship routes to qualification. The development of ACP level posts was seen to compete in a crowded workforce agenda with more pressing priorities. Some participants suggested that managers were focused on the immediate and short term and did not look to long term workforce planning. Against this context three themes were identified as influential in inhibiting this type of post: lack of knowledge and confusion about ACP roles, the availability of finance for ACP posts and training, and resistance to ACP posts.

“At the moment finance for any developments is a big issue but then there is a huge level of confusion as to what ACP means amongst managers and staff.” ID 221

The three themes were interlinked and differently ordered by participants.

Many participants argued that lack of knowledge about the ACP level of practice was an inhibiting factor, compounded by confusion as to whether it included or excluded groups such as allied health consultants, clinical nurse specialists and those with independent prescribing qualifications, ‘*I hadn’t realised it applies to any professional’* (ID 052). Some participants argued that evidence of the effectiveness of ACPs was not readily available or if it was available, it was not seen as applicable to their service(s). This confusion combined with an absence of evidence was considered to contribute to the absence of ACPs from the workforce planning strategies in most of the organisations and their sub-units.

Lack of finance for ACP posts was a reported inhibiting factor. Many participants commented that ACPs were absent in their organisation’s workforce planning with a consequent absence of internal business cases and funding for ACP positions. Another reported inhibiting factor was the siloed nature of staff establishments and budgets by professional groups, resulting in a resistance to move finance from one type of position to another e.g., a long term vacant medical post converted into finance for an ACP post.

In terms of permanent posts where does the money come from? If you speak to each division directorate, they'll have a pot of money for the medical staff, a pot of nursing money, ….so where does the money come for ACPs? Usually, it comes out of the medical staffing budgets, but, of course, people are protective over their budgets and the moment you start saying to people, 'Okay, we're going to lose two doctor posts to create these ACP posts,' you can understand why that causes some challenges. ID 171

The absence of an organisation’s plan for permanent ACP posts was reported to result in the failure to retain qualifying ACPs who the organisation had supported as trainees with external training monies.

“So, we [the NHS organisation] supported this cohort of three trainee [name of profession] ACP posts with funding from HEE and at the end there were no posts for them and they have all got jobs in other trusts and PCNs [primary care networks]”. ID 151

Some participants also described situations where there was finance for ACP posts but insufficient to fund the supervision and support required from medical staff and others, particularly while the ACPs were in training and in their first year. This in turn was reported to impact on the success or otherwise of the ACP post and the retention of the individuals.

Some participants reported outright resistance to ACP posts from some doctors and nurses:

So about having advanced practice in the [named specialty], we have two sites, and the views of the consultant body on one site is completely opposite to the other. So, one group very, very supportive, 'Yes, let's have [ACPs],'. Where the other is like, 'Oh God, no we don't want any of these.' ID 281

Others described there to be more a sense of nervousness about the concept, particularly from senior consultants (the most senior doctors in an NHS organisation). The lack of evidence, for example on safety and effectiveness, as well as making changes to medical practice, was reported as a source of nervousness.

“Given that we've converted some medical posts into ACP vacancies so that we can recruit, there's a nervousness around changing that medical model; so around accepting that what was traditionally carried out by medics at quite a junior grade can now be carried out by ACPs.” ID 261

There was also a reported reluctance of the senior medical staff to convert any medical posts , and the funding for them, to ACP posts as this was perceived likely to be irreversible, irrespective as to whether the ACP posts proved effective or not or whether the availability of doctors to employ changed.

Some participants also pointed to confusion and unanswered questions over governance and quality issues associated with ACP education, training and credentialing as inhibiting factors to further developments.

“There needs to be some oversight, some, I suppose localised or regional commitment to agreeing to take staff that move elsewhere…I don’t think that it been banged out really about the supervision and sign-offs.” ID 191

 Finally, some participants argued that many professionals were reluctant to consider ACP work through lack of clarity about education routes, career progression, fear of the types of additional responsibilities, and for some whether the salary reflected the responsibility.

So amongst the [AHP profession named] there is real hesitancy and in some cases fear of the type of ACP roles taking on some of the work of the junior doctors [Doctors in postgraduate training known as residents in the United States]. They view it as just too big a leap. They have questions like: ‘are they protected, supported, if something goes wrong?’ ‘Will their pay reflect the responsibility?’ ID 171

# Discussion

This study examined at the organisation level (the meso level of the health care system) the stimuli and the factors influencing the success or otherwise of a workforce innovation - ACP roles. To our knowledge, outside of the primary health care sector, there are few studies that have focused on this level of the system or across multiple organisations; where they exist, the reporting is conflated with that from the meso and micro levels. [16,17,18] his paper also adds new knowledge in that it addresses the introduction of ACPs from across professional backgrounds rather than a single profession.

This qualitative study reports relatively few ACP posts in the NHS against a national policy promoting such roles and supported by training funds. Where they existed the ACP posts were clustered in services such emergency care, critical care, musculoskeletal services and podiatric surgery. These are services in which advanced roles were first supported by NHS national policy in the early 2000s. This finding suggests there has been very limited assimilation (adoption) of this workforce innovation. [24] We consider our findings through the lens of the two framing theories [24,25] to offer explanatory theories.

Greenhalgh et al’s (2004) model proposes that there must be system readiness for change for innovations to be successful; one element being that the current situation was judged intolerable, another that there were resources for innovation and a third that there were supportive individuals in positions of decision-making power. We found four reported stimuli. Two of these were challenges pushing organisations to consider the introduction of ACP posts: 1) workforce shortages particularly of doctors for which ACPs became a substitute; 2) failure to retain experienced staff particularly nurses for which ACP provided a career route. The first stimulus has been reported widely at national level in other countries. [8,28] The second stimulus has not been described before to our knowledge. The other two stimuli were opportunities which pulled organisations to create new ACP or trainee ACP posts: 3) a new income stream specifically for ACP services; 4) new external finance for training posts. This type of push stimulus has been reported in other countries, for example, in the US when the nurse practitioner services could be billed under the Affordable Care Act.[28]

Greenhalgh et al’s (2004) model proposed that: the innovation must be seen to have relative advantage by those adopting it; the meaning understood by all parties, and be compatible with current ways of working. [24] Further, the model suggests that implementation and routinisation of innovation depends on top and middle management support, funding and timely evaluation. We found that the creation and continuance of ACP roles was facilitated by the availability of evidence of the value (including efficiency, safety and cost consequences) of ACPs to senior decision makers i.e., evidence of relative advantage. This has not been reported before although hospital managers’ knowledge gaps about ANPs have been explored in the Canadian setting. [29] We found top management and senior clinician support was considered influential in the establishment and maintenance of the posts that existed as was dedicated finance was reported to support the implementation and maintenance of ACP posts. These are factors previously reported in international reviews of ANP developments. [7,28]. We identified that some organisations were engaging with the innovation and employed active change agency strategies, but it was evident that most were not. We found the inhibiting factors to the creation and maintenance of ACP posts were: confusion as to what this level of practice was (lack of agreed meaning), lack of readily available evidence of effectiveness and safety (absence of evidence of relative advantage) and lack of identified budget for such posts (absence of funding). We also found a reported lack of support, and in some cases active resistance, to such posts by senior doctors. Some of these findings support existing evidence in relation to nurse practitioners. [12,13,14,16,28] Further it was reported that in some professions there was little appetite to take on ACP roles and responsibilities. Greenhalgh et al.’s (2004) work focused on innovation as practices, products and technologies and did not consider the innovation of new or changing roles between professional groups. [24] The innovation of ACPs is fundamentally a disruption to current ways of working and the work boundaries between professions. Abbott argued that at the micro level of the team these boundaries were always blurred or fuzzy and it was at the organisation and broader societal level that the boundaries were significant in claims for jurisdiction, clients, knowledge, resources and rewards. [25] He argued that the dominant professions were not homogenous but stratified and split by speciality. As a consequence different boundary settlements were reached dependent on: whether they were sufficient in number to supply all client demand; whether they wished to divest work seen as routine or less prestigious and on their relationship with the encroaching profession. [25] We found reported resistance by senior doctors to the concept of ACPs (i.e. taking some work usually undertaken by doctors) but whether that was based on the absence of evidence of relative advantage or views about the work boundaries of doctors versus other groups, or a combination of both requires further investigation. The inference was that where additional external funding became available for the posts there was less resistance to the innovation. However, when new posts required internal funding from existing staffing budgets, with the potential for permanent loss of budget for medical staffing, this was resisted (actively or through passive non-cooperation) more strongly. Resistance to ACPs was reported even in the face of long-term medical staff vacancies and problematic, costly, use of locum doctors. This resistance suggests the defence of resources for medical posts was important to some senior medical staff. We theorise that in the absence of new income streams for ACP level posts the implementation and routinisation of this workforce innovation will always be challenged ,or at least passively resisted. This proposition requires testing over time and across a range of organisations. Likewise in the absence of new income streams it is unclear the extent to which other professional groups in the NHS are prepared to convert their staffing budgets to create and sustain ACP level posts i.e. ceding resource to undertake the work usually undertaken by doctors. The evidence in this study suggests that for some professional leaders in control of staff budgets this might be a strategy to advance career opportunities, retain experienced staff and advance the boundaries of work of their profession but not all. This requires further investigation.

The question remains as to whether there is likely to be widespread assimilation of ACP roles in countries like England to address the quadruple challenges facing health systems. The pandemic created intolerable challenges to health care staffing across the globe precipitating significant shifts in work roles between the professions but only at crisis points. The Greenhalgh et al. (2004) model suggests the chances of the diffusion and adoption of the ACP role will be increased by paying attention to the provision of evidence of value (relative advantage, knowledge transfer and strategic change agency within organisations. However, in reviewing the evidence to develop the model, Greenhalgh et al. (2004) acknowledged the paucity of studies that considered differential power held by different groups in the decisions making about introducing and sustaining innovations in complex organisations, a point echoed in a recent review. [30] Using the lens of Abbott’s theory of system of professions we suggest the introduction and routinisation of ACP-level posts will only progress in a few settings and in a limited way as, in the absence of new income streams, the movement of financial resource between one professional group to another will continue to be contested as a boundary encroachment, only conceded in the face of intolerable situations and workforce shortages. The ceding of work roles of ACPs in this scenario is likely to require research and business evidence of value specific to that service, strategic change agency but most importantly powerful supporters within the organisation. This requires investigation over time and in different contexts, for example, in organisations with few or declining numbers of postgraduate doctors in training.

Our qualitative study is limited by its focus on one metropolitan area; however, we have tried to mitigate this by a purposive sampling frame which sought breadth across types of NHS organisations and senior voices within that. Some of the study researchers have professional backgrounds in nursing which may have influenced their interpretation. However, this was mediated in that as a team we brought different perspectives including as social scientists and former NHS managers. A strength of this study was that it was framed theoretically, and this was used in the analysis and to propose further theories requiring testing and investigation.

# Conclusion

The main stimulus at the organisational level for advanced clinical practice posts was workforce shortages, particularly of doctors in training. National policy suggests ACP-level posts are one solution and we pose the question in our title are they a remedy for workforce problems? The theoretical framing of our analysis suggests these posts could be both a solution but also a challenge. While the national policy agenda is to promote ACP roles we found limited understanding, limited evidence, nervousness and open resistance at the meso level of the health system. It was evident that development scenarios, which introduce new monies for such roles, will reduce some of the inhibiting factors. However, where the introduction of ACP roles requires funding to move from one part of a service to another, and from one professional group to another, the growth of these roles is likely to be contested. In such scenarios research and business evidence of relative advantage will be important as too will be supporters in powerful positions. The paucity of publicly available evidence on the cost effectiveness and safety of ACP roles across the range of professions and services, as advocated in the national policy in England, requires urgent attention.

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# Keywords

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