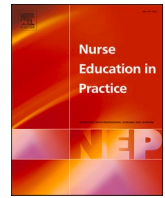




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Exploring the role of advanced clinical practitioners (ACPs) and their contribution to health services in England: A qualitative exploratory study

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ABSTRACT

Background: An extended role being explored globally is the advanced clinical practitioner (ACP). In England this is an extended role for allied health professions, nurses and midwives in a range of settings.

Objectives: This paper focuses on three research questions: 1) What is the role of ACPs in England? 2) What are the barriers and facilitators to implementing the role? and 3) What is the contribution of ACPs to health services in England?

Design/setting: A qualitative, exploratory study to explore perspectives on the ACP role in a range of clinical settings.

Participants: We recruited 63 stakeholders, including 34 nurses, working in a ACP role or ACP education. A purposive snowball sampling technique identified participants meeting inclusion criteria.

Methods: One-to-one semi-structured interviews throughout 2020, recorded and transcribed verbatim, anonymised and thematically analysed.

Results: The ACP role in England was undertaken in a broad range of clinical contexts. In England 'advanced clinical practitioner' was not a protected title. There were high levels of variability and ambiguity of understanding and deployment of the ACP role in England. Facilitators to the implementation process included training and education, clinical supervision and organisational support. Lack of protection for the role and variances in experience were barriers. Employer support facilitated development of the ACP role, however where support was limited, at either an individual or organisation level, this was a barrier. Our study highlighted the wide range of ways the ACP role benefitted patient outcomes and workforce development.

Conclusions: This study outlines the contribution that ACPs can make to health services, contributing factors and key barriers and facilitators to implementing this role. The work showed the positive contribution ACPs can make to service redesign, workforce development and patient outcomes, whilst accepting there is much work to do to ensure protected status and parity across all professions and clinical contexts

1. Background

Globally, all medicine and health professions are dealing with a

growing supply-demand imbalance. Increasing ageing populations, and workforce shortages are adding pressure to the global health environment (World Health Organization, 2007; Evans et al., 2021; Health

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Education England., 2017; Bailey, 2020). The recent Covid-19 global pandemic has made the situation more acute (HEE, 2021). There is evidence of significant shortages of GPs and emergency care clinicians in the UK National Health Service (NHS) (Bailey, 2020). Professionals from a wide range of backgrounds are encouraged to work at an advanced level in a range of global settings (Cardwell and Smith, 2018; Cohen et al., 2009; Laurant et al., 2018; Thompson et al., 2019; Spacey et al., 2020; Weeks et al., 2016; Bigham et al., 2013; Hardy et al., 2016; Martínez-González et al., 2014; Timmons et al., 2014). One new extended role being explored globally is that of the advanced clinical practitioner (ACP). In England the ACP is an extended role for nurses and allied health professionals (Evans et al., 2021) and the role of advanced practice has evolved organically until quite recently, led mostly by nurses working in advanced roles (Carter, 2010; Courtenay et al., 2011). In many allied health professions (AHPs) there have been limited opportunities to progress to an advanced level clinically until the development, recognition and certification of the ACP role. Recent policy developments are reflected in the NHS People Plan (Health Education England., 2017) which has a specific commitment to new ways of working by 'making effective use of the full range of our people's skills and experiences' p3.

The ACP role is defined by HEE as follows.

"Advanced clinical practitioners (ACPs) are healthcare professionals, educated to Master's level or equivalent, with the skills and knowledge to allow them to expand their scope of practice to better meet the needs of the people they care for. ACPs are deployed across all healthcare settings and work at a level of advanced clinical practice that pulls together the four ACP pillars of clinical practice, leadership and management, education and research." (Health Education England., 2017) (HEE 2017)

The role is overseen and supported by Health Education England (HEE). HEE's aims are closely aligned to those of the NHS and have an important role to play in providing educational pathways and multi-professional frameworks for a cross-section of ACPs in England (Health Education England., 2017). The aim for ACPs is to develop as autonomous practitioners confident in complex decision-making (Health Education England., 2017)

In England, 'trainee ACPs' undertake master's level study and normally undertake modules including history taking, physical examination, clinical decision-making, independent prescribing (if appropriate) then complete workplace-based education/competencies under a clinical supervisor. On graduation they have the job title of ACP. Within England recognition for this professional qualification can lead to change in scope and remit of role, higher clinical and management responsibilities, staff responsibilities and practical acknowledgment with a change in lanyard, uniform or job title. Responsibilities of the role varied across individuals and contexts. In England one key function of the ACP role is the ability to be an independent prescriber. Professionals in the UK are regulated and have job titles protected by law to ensure the public are protected against being misled, the ACP role is not a 'protected' job title.

This paper draws on research commissioned by HEE for England and reported in 2020 (Mann et al., 2020). The objective was to evaluate the national implementation of the ACP role from multiple stakeholder. The research drew on a wide range of stakeholders including Higher Education Institutions (HEIs) designing and delivering ACP training, ACPs both qualified and in training, employers of ACPs, supervisors of ACPs and those in national roles related to the advancement of clinical practice. This paper focuses on three key research questions: 1) What is the role of advanced clinical practitioners (ACPs) in England? 2) What are the barriers and facilitators to implementing the role? and 3) What are the contributions of ACPs to health services in England?

2. Methods

This paper reports the findings of a qualitative exploratory study

using semi-structured interviews with stakeholders. The work is located in a post-positivist paradigm using semi-structured interviews to explore stakeholder perspectives on the ACP role in England. 63 key stakeholders participated in one-to-one interviews throughout 2020, including 34 nurses, with two research fellows (CM, CO). Due to pandemic restrictions all interviews were conducted remotely by telephone or online (Microsoft Teams) and lasted between 30 and 60 minutes.

A purposive snowball sampling technique was used to identify participants meeting the inclusion criteria, by email approach to contacts within ACP networks. The main inclusion criteria were for participants to be actively working in a role relating to ACP or ACP education in England. Participants were invited to contact the team if willing to be interviewed then provided with an information sheet explaining the study and asked to provide consent. Throughout the study the sampling approach was revisited to ensure a reasonable spread of representation across professions and roles. For example, we recognised that no dietitians or speech and language therapists had been involved in the first 50 interviews and therefore we targeted these professions to include them before data collection ceased. The following table outlines this sampling spread.

There is significant overlap in these roles, for example most employers are also practitioners, and many are also clinical supervisors.

All interviews were digitally recorded and transcribed verbatim, anonymised and thematically analysed. The analysis utilised inductive and deductive coding and was undertaken separately by two researchers (CM, CO) using NVivo 12 software comparisons for inter-coder reliability (Bryman and Burgess, 1994). Team based discussions with the wider team (CE, CM, ST, RP, KHS) facilitated iterative development of the themes presented in this paper.

The process had University ethical approval. The research is reported according to the Standards for Reporting Qualitative Research (SRQR) (Bridget et al. in 2014)

Qualitative research has the potential to be influenced by the research process. Data was collected and analysed by multiple researchers, one nurse and one non-clinical researcher, therefore mitigating researcher bias and improving validity through inter-coder reliability. Furthermore, the analysis was sense-checked and reviewed by a wider team incorporating both clinical and non-clinical researchers. Data was triangulated between the multiple sources of professionals and their roles within the research allowing for themes to be explored across a range of perspectives until data saturation was achieved.

3. Findings

The key findings are reported in three broad themes with associated sub-themes (see Fig. 1), these are (1) The role of ACPs, (2) Barriers and facilitators of the ACP role and (3) the contribution of the ACP role to

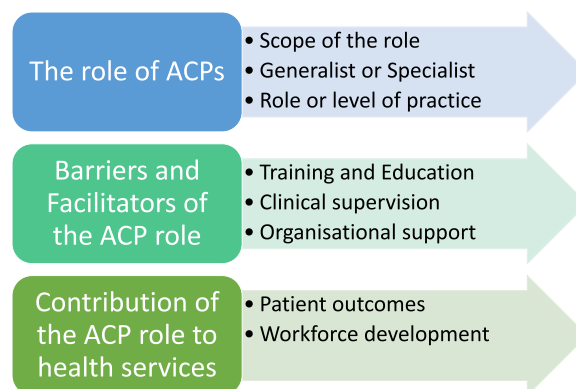


Fig. 1. Qualitative thematic analysis: Broad top-level themes and associated sub-themes.

health services as shown in Fig. 1 below.

3.1. Theme 1 - the role of ACPs

Data confirmed that the ACP role was wide-ranging and is undertaken in community and hospital settings, care homes and community settings as well as other locations. All ACP participants, with one exception were working in direct contact with patients (the exception was a radiographer). Three sub-themes were identified: the scope of the role, and the dichotomies of general or specialist and role or level of practice.

3.1.1. Sub-theme: scope of the role

The ACP roles of the participants in our study were wide-ranging and there was concern from multiple more than half of the participants that the ACP role is not clearly defined. ACP is not a protected title and there was evidence of its overuse and misuse in numerous NHS Trusts and in different clinical settings. There was some tension and confusion between nursing roles, such as the Specialist Nurse Practitioner (SNP), Advanced Nurse Practitioner (ANP) and Advanced Clinical Practitioner (ACP) job titles and roles:

Currently with the models in the UK anyone can call themselves an advanced practitioner. And we've done research at this university into the misuse of the Advanced Practitioner title, which is widely misused by people who've had no education or training at all.

3.1.2. Assistant Professor, HEI (Nursing) P08

One participant described an internal study at their organisation that revealed 50 clinical posts that have ACP in their job title but none of these roles are held by clinicians who have undertaken a Master's programme aligned to the HEE ACP framework. This was a source of frustration to those who suggested the ACP title needs to be protected in order to protect the reputation and validate those undertaking the master's level ACP programmes. A further participant mentioned other countries (such as Australia) where ACP is a protected title.

3.1.3. Sub-theme: generalist or specialist

More than half of the participants identified advanced practice as a combination of both general and specialist skills, delivered with confidence and autonomy:

The Advanced Practitioner will have that more holistic approach to the patient and should be capable of dealing with a broader set of issues, instead of being single system focused.

4. Trainee ACP (Nursing, Paramedic) P28

Those experienced in delivering ACP services suggested it is a balance between advanced skills and professional background:

It's not forgetting where you've come from because you're got those very specialist skills. And you'll always utilise those skills and I suppose in the areas where you're not so sure, so ... if I get a completely random condition in clinic, I do all the basic history-taking, the basic assessments and then because it's diet, it's nutrition and treated, I fall back on taking my dietary assessments while I'm thinking about what else do I need to do. And it's my comfort blanket I suppose. (laughs) And I think it's an ACP is bigger than that and sometimes it's letting go of your comfort blanket.

4.1. Practitioner (dietician) P54

A small proportion of participants suggested that the ACP role is more generalist than specialist:

It's not a bad thing being a generalist is it? If you can put your hand to a lot of things, that's actually a good thing for the patient. Because you could pick up on different things. While you're might be dealing with one specific issue, but you might pick up on other things.

4.2. Deputy workforce lead (non-clinical employer) P48

4.2.1. Sub-theme: role or level of practice

A dichotomy identified by more than half of the participants is whether ACP defines a role or a level of practice, despite HEE being clear that the ACP framework (Health Education England, 2017) relates to an advanced level of practice:

You know, they've got ACPs doing different roles in their organisation, but they don't know where to put me because they don't assume that ... because they see it as different roles rather than a level of practice.

4.2.2. Programme lead, HEI (Nursing) P35

A function of the ACP role is the ability to function autonomously. For example, several doctors in our study suggested that mastery of a task was achieved when a clinical presentation had been experienced multiple times and became comfortably embedded within the clinician's scope of practice:

If you're a master of a particular task you know, it's something that you ... not just necessarily a task but you know, a particular clinical presentation, something that you've seen many times before. You've seen its variants you know, you've not just seen the kind of standard presentation and it's something that you feel comfortable with. I suppose the definition of mastery is that you're almost not having to think too hard about it you know, it's something that is very clearly within your scope of practice and you feel very comfortable with it.

4.2.3. Clinical supervisor (doctor in secondary care) P62

Autonomous decision-making was linked to the ability to make decisions for example, as an independent prescriber:

So, mastery is around making those clinical decisions and acknowledging that there are multiple ways to tackle problems. But to be able to rationalise which option you have chosen and for what reasons because it would be very different from one patient to another as to what approach you choose potentially.

4.2.4. Clinical lead/supervisor (nursing) P63

This was supported by views of a physiotherapist supervisor:

When they get to that point of being able to work with undifferentiated and undiagnosed clients and to be able to recognise that, that's when they're gaining the mastery in advanced practice.

4.2.5. Clinical lead/supervisor, (physiotherapy) P59

This research was undertaken during the Covid-19 pandemic. There was evidence that during this time ACP roles were working in a range of flexible and responsive ways to react to the pandemic.

This section has outlined high levels of variability and ambiguity in understanding and deployment of the ACP role in England.

4.3. Theme 2 - facilitators of the ACP role implementation

This theme explores the factors acting as facilitators to implementation of the ACP role. Three sub-themes were identified: training and education, clinical supervision and organisational support.

4.3.1. Sub-theme: training and education

The training pathway is a university approved 60 credits master's

(level 7) programme aligned to the HEE framework leading to a full Masters level qualification – the MSc Advanced Clinical Practice. The pathway comprises regular classroom teaching and assessments, supported by an in-practice portfolio of clinical skills developed through on-the-job learning and supervision.

Due to the range of clinical professionals undertaking the ACP role there was wide variation in participants' previous clinical experiences and learning needs. Different professional backgrounds had variances in the amount of direct patient contact in both pre- and post-registration training and it was suggested that a therapeutic background, for example in nursing, gave clinicians a head start on the ACP requirements compared to other AHPs, for example pharmacists and paramedics:

Students from a paramedic background, from a nursing background, from a physio background, would be very much hands-on and very much used to speaking with patients and they will have different skills in terms of the interprofessional ... or the interrelation skills to talk to patients and get their confidence. I think the pharmacists maybe struggle a little bit more with that aspect because they don't have as much hands-on with patients that in their pre-reg training

4.3.2. ACP Lecturer, HEI (nursing) P22

The multi-professional ACP cohorts added value to the learning experience of the group. Many participants described benefits from learning in a multidisciplinary cohort:

What they bring in terms of learning within the classroom is phenomenal because the OTs and the dieticians will bring some really valuable discussion that the nurses haven't considered, likewise physiotherapists or paramedics. So, they learn from each other so much, which is just so rich.

4.3.3. Programme lead, HEI (nursing) P36

In England, HEIs can be accredited with the Centre for Advancing Practice through HEE. Multiple participants suggested the accreditation process was vital to reduce variety in courses.

Both employers and trainee ACP participants suggested that the standards were a useful measure ensuring quality in employing ACPs and facilitating their easy movement within the NHS:

As an employer I would view that we need to have a level of standardisation on regulation ... because otherwise how do we know what we're getting when we have more and more, ... ACPs in the country ?

4.3.4. Clinical lead/employer (nursing) P63

Alternate pathways to accredit existing ACPs exist through an evidence portfolio and personalised training plan. Multiple participants indicated that an equivalence route is a strong facilitator to enable practitioners delivering at the ACP level to accredit their expertise and provide recognition:

There's also a mass of advanced practitioners potentially who are out there, who have not done a course or have part done a course, yet who are functioning and really need to be drawn in.

4.3.5. Programme director, HEI (nursing) P07

HEIs stakeholders pointed out that it would be disheartening for ACPs to be required to undertake Master's training if they could evidence working at the level required for an ACP in other ways.

This theme highlights that a standardised education pathway can be a facilitator to the scheme. However, the lack of protection for the role and some variances in experience could be a barrier.

4.3.6. Sub-theme: clinical supervision

Mentoring and supervision were identified by all participants as vital components of ACP development and facilitators of scheme implementation and role development. The role of the clinical supervisor was

twofold – supporting learning and assessing development.

All participants alluded to the fact that learning was not knowledge alone but the application of theory into practice. It was suggested that ACP learning was best facilitated in the workplace when learners had the opportunity to link theory and practice:

It should all be about applying things in real-life work settings and having that vocational approach rather than a hugely academic sitting in a classroom and learning lots of theory.

5. Head of assessment and credentialing (pharmacy) P61

Several participants who were supervisors pointed to the importance of shared context, in order to facilitate learning opportunistically. One supervisor suggested that direct clinical supervision of new skills and experience was essential for patient safety. Through revisiting particular presentations, the supervisors scaffolded complexity. One medical supervisor suggested that the best feedback for learning was when a supervisor witnessed a learner complete a clinical task repeatedly, offering reinforcement of learning with hints for improvement. Several participants agreed that supervisors must strategically reduce the scaffolding to support autonomous decision making:

Everything has to be grounded in that individual scope of practice, otherwise the risk is that the advanced practice attributes are abstract and free-floating and not actually of patient care and clinical value or necessarily supporting safe care.

5.1. Director of education (optometry) P60

Clinical supervision was an important facilitator of the role but implemented inconsistently and there was evidence of a huge variance in experiences. Some work environments, in particular non-hospital settings, struggled to release time to provide mentoring opportunities for their ACPs:

So, if I'm working in a ward for example, the consultant will only be on there for 10 minutes and you won't see them for the rest of the day.

5.1.1. Trainee ACP (ODP) P48

There was variance in clinical supervision requirements – one university provider mandated participants to spend one day per week with a clinical supervisor in contrast to another who had no specific supervision time for their ACP learners. There were also variances in the support and commitment afforded to clinical supervisors by their organisation. Clinical supervision is a crucial facilitator to ACP development. Good quality supervision in shared contexts scaffolds learners to achieve their potential and the scaffolding can be reduced as the learner achieves autonomy.

5.1.2. Sub-theme: organisational support

Previous sub-themes outlined the importance of support for individuals, which was facilitated by support at organisational and strategic levels. Time release varied for the participants in our study, for example, one NHS Trust provided ACPs with a minimum of 6 hours per week for Continuing Professional Development (CPD). Another Trust was increasing release time for ACPs up to 10-15% of an individual's contracted hours.,

Key individuals played a key role in facilitating the role in organisations, especially at the highest level in NHS Trusts:

There needs to be really within an organisation a very clear sense of, we want ACPs and this is what we want them to do.

5.1.3. ACP clinical lead/supervisor (nursing) P58

ACP development was reliant on the support of management at all

levels and buy-in at organisational level was essential to progress the role. There was evidence of success at several sites when there was joined-up working between the HEI provider, the local trust and ACP trainees:

You know their Medical Director is on board with the ACP, he's involved with the assessments of ACP. They have real buy-in from the medical school, they have a real joined-up way of thinking. And we are the entire polar opposite here.

5.2. Clinical lead/supervisor (nursing) P63

5.2.1. Theme 3 -the contribution of ACPs to health services in England

This theme relates to the contribution of ACPs and the work of the NHS in two key sub-themes – the impact of individual ACPs on patient outcomes, and the impact of the role on workforce development.

5.2.2. Sub-theme: patient outcomes

By engaging participants across a wide range of health professions the research captured the unique range and reach of the ACP role and impact of this on patient outcomes. Specific examples include a ACP speech and language therapist who set up a triage system for patients referred into hospital at risk of laryngeal cancer to ensure they were seen within two weeks. Several ACP pharmacists had set up schemes to support and manage specific patient groups, such as those with multimorbidity, long-term conditions or risk of falls in primary care. An occupational therapist (OT), alongside other cardiology ACPs, set up and ran a one-stop shop for follow up for heart failure patients. A dietician set up telephone consultations to start treatments for patients at home that reduced attendance at emergency care by 20%. There was significant evidence from our data that showed the way in which the ACP role had a positive impact on service provision across a wide range of clinical contexts including financial savings with reductions in acute bed stays.

5.2.3. Sub-theme: workforce development

Many of our ACP participants were in roles designed strategically by the employer to fill a need. There was also evidence that AHPs were undertaking roles which would historically have been assigned to a nurse or junior doctor. In some cases, ACPs had filled a gap that was not able to be filled in any other way. Participants in all professions reported that that whilst the ACP role 'filled a gap' it did so in a way that also added value, by utilising the specific expertise of professionals, providing holistic care and freeing up doctors to focus on the specific tasks which required their attention:

...I do think that the ACPs do bring something else to the table. They do bring that holistic approach to patient care. They're not just looking at a diagnosis, a treatment and then sending the patient on their way, they are looking at the whole picture. they are very much keen and enthusiastic to give that extra to patients, they feel that they can do the whole journey with the patient that includes the socioeconomic kind of care as well as the sort of practical care.

5.2.4. Senior lecturer, HEI (nursing) P02

Employers and clinicians in the study gave examples of the ability to diversify the delivery of healthcare services by deploying ACPs in their clinical settings. There were several specific examples of how the role of ACP contributed to changing workforce development

Having that baseline knowledge and understanding really enhances then their ability to also do their mental health assessment, to really enhance their ability to prescribe. Because you suddenly have much more awareness of some of the interactions and issues. So, I think they were the first ones who really start to think, wow, this could be fantastic, and this could see us really operating in a different way, doing different things than

traditional mental health nurses have done. And gradually I think other people started to get that as well

5.2.5. Deputy workforce lead (non-clinical employer) P48

It is clear from our study findings that the ACP role can contribute to workforce development. In particular, practitioners and employers drew attention to the scope of the post to be a co-ordinating force that can focus on individualised care and responsibility for ensuring the delivery of fully integrated and meaningful care going forwards.

6. Discussion

Our research exploring the ACP role in England raised a number of key and relevant findings for a global audience. (Table 1)

6.1. The role of ACPs

A seminal systematic review of the changing skill mix conducted in 2004 highlights the beginning of a fundamental shift in roles, predominantly led by nurses, but with support from AHPs from across different clinical settings (Sibbald et al., 2004). A more recent systematic review of the ACP role (Evans et al., 2021) highlights the extent of the development of the ACP role across professions in the UK and provides a useful backdrop to this empirical work undertaken in 2020. By contrast a limited number of studies were identified examining a multi-professional ACP role within the global context (Cardwell and Smith, 2018; Cohen et al., 2009).

Our study showed the contribution of a wide range of professions and there were limited studies which report on advanced practice across professions on a national or global level (Spacey et al., 2020; Saxon et al., 2014). Ladd et al (Ladd et al., 2020). presented a global SWOT analysis of advanced practice but with reference to one profession, nursing. This is underpinned by a wide range of studies on advanced nursing practice across the globe (Sibbald et al., 2004). Our study clearly adds to this debate by demonstrating that in our context, ACPs, regardless of profession, were aligned with the evidence for their value

Table 1
Stakeholder participants by healthcare profession and ACP role.

Role	Healthcare profession	Number of participants	
Working within delivery of programme / Educators N=21	Nursing	19	
	Pharmacist	2	
	Employer May also be mentors N=12	Nursing	9
		Paramedic	1
	ACP Practitioners May also be mentors N=9	Non clinical	2
		Radiographer	1
		Radiology	1
	Mentor (non ACP) N=4	Speech and Language Therapist	1
		Radiographer	1
		Pharmacist	1
Nursing		2	
OT		1	
Trainee ACP N=13	Dietician	1	
	Physio	1	
	Doctor	2	
	Nurse	1	
	Pharmacist	3	
	Physiotherapist	3	
Regulator N=4	Nursing & Paramedic	1	
	Paramedic	2	
	Nursing	2	
	ODP	1	
	OT	1	
	Pharmacist	2	
Total n =63	Nursing	1	
	Non-clinical	1	

within current and predicted demands of healthcare provision, including the current pandemic context.

Our findings were largely mirrored across a range of studies included in the 2004 review (Sibbald et al., 2004). However, our study demonstrates that in England, and certainly in the NHS, ACP is multi-professional and is undertaken in a wide range of clinical contexts, with high levels of variability and ambiguity in understanding and application. There are a range of studies which consider the contribution of individual professions, such as reviews of the contribution of pharmacists (Cardwell and Smith, 2018; Cohen et al., 2009), physiotherapists (Thompson et al., 2019), paramedics (Bigham et al., 2013) and radiographers (Hardy et al., 2016) adding to the growing body within nursing (Sibbald et al., 2004; Ladd et al., 2020). The work by Evans, Poku, Pearce et al. et al (Evans et al., 2021) draws some interesting comparisons to our findings in reporting the breath and activity of ACP roles. This was consistent with systematic reviews of international evidence on advanced roles across settings, professions and sectors (Cardwell and Smith, 2018; Cohen et al., 2009; Laurant et al., 2018; Thompson et al., 2019; Spacey et al., 2020; Weeks et al., 2016; Bigham et al., 2013; Hardy et al., 2016; Martínez-González et al., 2014).

Our study identifies some problems occurring through the organic growth of advanced practice in England and in particular the lack of protection for the ACP title. This is consistent with current evidence (Sibbald et al., 2004) identifying distinctions between job titles and initiatives was weak, even amongst ACP nurses. This is not just related to England as Carter's scoping review (Carter, 2010) identified similar problems in Canada. Leary et al.'s (Leary et al., 2017) work in this area articulately identifies 595 different job titles in the UK alone for specialist and advanced nursing practice titles. The work by Ladd et al.'s (Ladd et al., 2020) in this area and a global SWOT demonstrates the wide variance in protection and regulation of advanced practice in globally across the nursing profession noting that this appears to be a consensus model for advanced nursing practice across most of North America and Canada, and some parts of Europe, Africa and Asia. Indeed in Australia (Lowe and Plummer, 2019) the role is clearly defined and understood and points to the benefits for healthcare providers and their patients. Along with our study findings this growing body of evidence provides the scope for a debate about the real understanding of the ACP role and its value in the global marketplace, particularly as these professions are highly valued across borders.

As we know, the ACP roles are driven to address the supply-demand imbalance, and as such it is key that they are able to practice independently and autonomously. WHO (World Health Organization, 2007) outlined the importance of considering which tasks can be performed autonomously by which professionals in order to address this imbalance. Despite this intention, almost a decade later a review of skill mix in primary care across six developed nations showed limited roles beyond nursing (Freund et al., 2015). Our study showed a much wider range of AHP roles in all contexts in England. The UK has the most extended nurse prescribing rights (Courtenay, 2019) and widest range of non-medical (or independent) prescribing professionals in the world (Courtenay, 2019; Cope et al., 2019). Other countries follow closely in examining the benefits of non-medical prescribing in specific professions for example, Borthwick et al.'s examination of non-medical prescribing in Australasia and the UK with reference to the podiatry profession (Borthwick et al., 2010). Our study identified advanced practice in England as an autonomous practice, usually including independent prescribing. A global scoping review of non-medical prescribing (Ecker et al., 2020) highlighted that only half of all countries allow non-medical or independent prescribing and those who do often limit it to registered nurses. The Ladd et al (Ladd et al., 2020). global SWOT analysis of advanced nursing identified that prescribing is a developing part of the advanced nursing role in the majority of the global North and emerging as an important role in other areas. England leads the world on the proportion of both nurses and AHPs certified to prescribe which is a key facilitator of the multi-professional advanced clinical practice function

(Courtenay, 2019).

6.1.1. Facilitating the ACP role

Our findings indicate that education and training is an enabler to the implementation of a national ACP scheme. Likewise, Evans, Poku, Pearce et al.'s review (Evans et al., 2021) reported on 19 papers in the UK literature which identified challenges in education and training which impacted negatively on ACP role development. The concerns identified largely related to variation in experiences, which HEE are currently addressing through the HEE accreditation process outlined in our study. Our findings also demonstrated clinical supervision as an important factor to the implementation of the scheme which duplicates findings from by Evans, Poku, Pearce et al.'s (Evans et al., 2021) review.

Our data showed that organisational support can be a facilitator or barrier to the implementation of the scheme which is a finding underpinned by five studies in Evans, Poku, Pearce et al (Evans et al., 2021). Our study showed differences between the uptake of the ACP role in hospital and other community organisations which are not dissimilar to reported findings in other studies both nationally and globally (Cardwell and Smith, 2018; Laurant et al., 2018; Martínez-González et al., 2014).

6.1.2. ACP Impact on health services

Our study highlights a wide range of ways that ACPs perceived their impact on patient outcomes across the NHS in England. This had striking similarities with a wide range of other studies. For example, one study (Sibbald et al., 2004) showed a wide range of changing skill mix and extended roles. The review by Evans, Poku, Pearce et al.'s (Evans et al., 2021) asserted that in the majority of UK studies, ACPs were reported to achieve positive clinical outcomes related to health status, symptoms and health behaviours. Where direct comparisons were made with medical professionals, the overwhelming majority of studies reported that ACPs achieved outcomes that were equivalent to, or better than, medical doctors (Martínez-González et al., 2014). These findings are consistent with our work in relation to acute setting perceptions.

Our study highlights that ACPs in England contributed markedly to changing workforce and patient need and is in line with WHO's task redesign plans (World Health Organization, 2007). This meets the NHS People Plan (Bailey, 2020); to utilise existing capacity and expertise to deliver the right care at the right time. The evidence is compelling that the role of the ACPs roles are achieving significant benefits to patients and the healthcare system in terms of improved service accessibility, appropriateness and efficiency (Evans et al., 2021).

7. Conclusion

Overall, our work conducted in the context of implementation of ACPs in to England during 2020, outlines the contribution that multi-professionals can make to health services and some of the contributing factors to the success of the role in England thus far. We showed the scope of the role and the range of professionals and contexts in which the role operated in England with examples included. We identified key facilitators to implementing this role nationally including the need for an accreditation training pathway, good quality clinical supervision and ongoing support at an organisational level. Finally, the work shows the positive contribution that ACPs made to service redesign and workforce development as well as patient outcomes, whilst accepting that there is much work to do to ensure protected status going forwards and parity across all allied health professions and clinical contexts.

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Contribution statement

All authors contributed to the study conception and design. Material preparation, data collection and initial analysis were performed by authors CM and CO. The first draft of the manuscript was written by CM and all authors conducted iterative secondary analysis of data and commented on versions of the manuscript. All authors read and approved the final manuscript. The research was commissioned and funded by HEE.

CRedit authorship contribution statement

Claire Mann: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Roles/Writing – original draft, Writing – review & editing. **Stephen Timmons:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Supervision, Validation, Visualization, Roles/Writing – original draft, Writing – review & editing. **Catrin Evans:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Supervision, Validation, Visualization, Writing – review & editing. **Ruth Pearce:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Supervision, Validation, Writing – review & editing. **Charlotte Overton:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Validation, Roles/Writing – original draft, Writing – review & editing. **Kathryn Hinsliff-Smith:** Conceptualization, Supervision, Writing – review & editing. **Joy Conway:** Conceptualization, Supervision, Writing – review & editing..

References

- Bailey, S. (2020) The NHS people plan.
- Bigham, B.L., Kennedy, S.M., Drennan, I., et al., 2013. Expanding paramedic scope of practice in the community: a systematic review of the literature. *Prehospital Emergency Care* 17(17), 361–372.
- Borthwick, A.M., Short, A.J., Nancarrow, S.A., Boyce, R., 2010. Non-medical prescribing in Australasia and the UK: the case of podiatry. *J. Foot Ankle Res.* volume 3. Article number: 1.
- Bryman, A., Burgess, R.G. (Eds.), 1994. *Analyzing qualitative data*. Routledge, London.
- Cardwell, K., Smith, S.M., 2018. Clinical pharmacists working within family practice: what is the evidence? *Fam Pract* 2018 (35), 120–121.
- Carter, N., 2010. Clinical nurse specialists and nurse practitioners: title confusion and lack of role clarity. *Nursing Leadership* 189.
- Cohen, V., Jellinek, S., Hatch, A., et al., 2009. Effect of clinical pharmacists on care in the emergency department: a systematic review. *Am J Health Syst Pharm* 2009 (66), 1353–1361.
- Cope, L.L., Aseel, S.A., Tully, M.P., 2019. Nonmedical prescribing: where are we now? *Therapeutic advances in Drug Safety*.
- Courtenay, M., Carey, N., Stenner, K., 2011. Non medical prescribing leads views on their role and the implementation of non medical prescribing from a multi-organisational perspective *BMC Health Services Research* volume 11. Article number: 142.
- Courtenay, Molly, 2019. An overview of developments in nurse prescribing in the UK. *Nursing Standard*, e11078.
- Ecker, S., Joshi, R., Shanthosh, J., Ma, C., Webster, R., 2020. Non-Medical prescribing policies: a global scoping review. *Health Policy*.
- Evans, C., Poku, B., Pearce, R., et al., 2021. Characterising the outcomes, impacts and implementation challenges of advanced clinical practice roles in the UK: a scoping review. *BMJ Open* 11, e048171. <https://doi.org/10.1136/bmjopen-2020-048171>.
- Freund, T., Everett, C., Griffiths, P., Hudon, C., Naccarella, L., Laurant, M., 2015. Skill mix, roles and remuneration in the primary care workforce: who are the healthcare professionals in the primary care teams across the world? *Int. J. Nursing Stud.* 52 (3), 727–743.
- Hardy, M., Johnson, L., Sharples, R., et al., 2016. Does radiography advanced practice improve patient outcomes and health service quality? a systematic review. (2016). *Br J Radiol* 89, 1062.
- Health Education England., 2017. *Multi-professional framework for advanced clinical practice in England*. Health Education England, London.
- HEE (2021) Analysis of the online workshop to consider the impact of Covid-19 and the implications for the future of advanced and consultant practice, accessed online 22/10/21, available online at https://www.hee.nhs.uk/sites/default/files/documents/Analysis%20of%20the%20online%20workshop%20to%20consider%20the%20impact%20of%20Covid_0.pdf.
- Ladd, E., Miller, M., Wheeler, K., Wainaina, S., Aguirre, F., McGrath, H., Lee, S., Nashwan, A., Neary, A. and Core, K., (2020). A Global SWOT Analysis of Advanced Practice Nursing: Policy, Regulation, and Practice.
- Laurant, M., van der Biezen, M., Wijers, N., et al., 2018. Nurses as substitutes for doctors in primary care. *Cochrane Database Syst Rev* 2018 (7), Cd001271.
- Leary, A., Maclaine, K., Trevatt, P., et al., 2017. Variation in job titles within the nursing workforce. *J Clin Nurs* 26, 4945–4950.
- Lowe, G., Plummer, V., 2019. Advanced practice in nursing and midwifery: the contribution to healthcare in Australia. *Adv. Pract. Healthc. Dyn. Develop. Nurs. Allied Health Prof.* 51–63.
- Mann, C., Timmons, S., Evans, C., Pearce, R., 2020. *HEE Centre for Advancing Practice: Independent Evaluation Report*.
- Martínez-González, N., Djalali, S., Tandjung, R., et al., 2014. Substitution of physicians by nurses in primary care: a systematic review and meta-analysis. *BMC Health Services Research* 2014 (14), 214–214.
- Saxon, R.L., Gray, M.A., Oprescu, F.I., 2014. Extended roles for allied health professionals: an updated systematic review of the evidence. *J Multidiscip Healthc* 2014 (7), 479–488.
- Sibbald, B., Shen, J., McBride, A., 2004. Changing the skill-mix of the health care workforce. *J. Health Serv. Res. Policy* 28–38.
- Spacey, A., Hipperson, V., Gloster, A., et al., 2020. The role of the advanced clinical practitioner in breast diagnosis: a systematic review of the literature. *Radiography*. 2020.
- Thompson, J., McNall, A., Tiplady, S., et al., 2019. Whole systems approach: advanced clinical practitioner development and identity in primary care. *J. Health Organ. Manag.* 2019 (33), 443–459.
- Timmons, S., Coffey, F., Vezyridis, P., 2014. Implementing lean methods in the Emergency department: the role of professions and professional status. *J. Health Organ. Manag.* Vol. 28 (2), 214–228.
- Weeks, G., George, J., Maclure, K., et al., 2016. Non-medical prescribing versus medical prescribing for acute and chronic disease management in primary and secondary care. *Cochrane Database Syst Rev* 2016, CD011227.
- World Health Organization. (2007). *Task shifting: rational redistribution of tasks among health workforce teams: global recommendations and guidelines*. Available from: <https://apps.who.int/iris/handle/10665/43821> (accessed 08/07/2020).