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## **Physician associates working in secondary care teams in England: interprofessional implications from a national survey**

### **Abstract**

Physician associates (PAs) are a new type of healthcare professional to the United Kingdom; however they are well established in the United States (where they are known as physician assistants). Physician associates are viewed as one potential solution to the current medical workforce doctor shortage. This study investigated the deployment of PAs within secondary care teams in England, through the use of a cross-sectional electronic, self-report survey. The findings from 14 questions are presented. Sixty-three PAs, working in a range of specialties responded. A variety of work settings were reported, most frequently in-patient wards, with work generally taking place during weekdays. Both direct and non-direct patient care activities were reported, with the type of work undertaken varying at times, depending on the presence or absence of other healthcare professionals. Physician associates reported working within a variety of secondary care team staffing permutations, with the majority of these being interprofessional. Line management was largely provided by consultants, however day-to-day supervision varied, often relating to different work settings. A wide variation in on-going supervision was also reported. Further research is required to understand the nature of PAs' contribution to collaborative care within secondary care teams in England.

**Key terms:** Physician associates; physician assistants; secondary care; secondary care teams

## **Introduction**

Ensuring that health care teams have a mix of skilled professionals to meet patient need and deliver safe and cost effective services is a major imperative in all health care services. The health services in the United Kingdom (UK), like a number of other countries, have been exploring the contribution that physician associates can make to health care teams. Physician associates, known internationally as physician assistants (both abbreviated as PAs), are a relatively new type of health professional in the United Kingdom (UK).

Established in the United States (US) for almost 50 years, the role has also seen recent growth in other countries including Canada, the Netherlands and Australia (Cawley & Hooker, 2013). Trained in the medical model at a postgraduate level, PAs work within the medical team as mid-level practitioners, under defined levels of supervision by a doctor (Cawley & Hooker, 2013).

In the UK, PAs are viewed as one of many potential workforce solutions to a shortage of doctors and rising demand for services; however they do not currently have authority to prescribe medications (Health Education England, 2015). The number of PAs working in the UK is set to rise rapidly – UK Universities intended to enrol around 580 PA students in 2016, to add to the 288 believed to be qualified PAs in the UK (Ritsema, 2016).

Physician associates responding to a UK national census reported working mostly in secondary care specialties (Ritsema, 2016). In the US, great variation has been described with regard to their supervisory arrangements and the specialties and types of teams they work in (Cawley & Hooker, 2013). Different models of PAs

working in medical ward care have also been described in the Netherlands (Timmermans et al., 2016).

While there is evidence about the ways in which PAs work within primary care teams in the UK (Drennan et al., 2012; Drennan et al., 2015), limited research has been conducted in secondary care (i.e. consultant led services provided predominantly in/by hospitals). As part of an on-going investigation exploring the contribution of PAs in secondary care in England (National Institute for Health Research, 2015), this paper reports on a survey that sought to describe the deployment of PAs in secondary care teams.

## **Methods**

This cross-sectional study utilised an online, self-report survey hosted by SurveyMonkey™.

### *Data collection*

The survey consisted of 19 questions, with the findings from 14 questions presented in this report. The survey questions focused on PAs' work setting, supervision and the secondary care teams within which they were working. Qualified PAs practising in secondary care in England were invited to participate through the Faculty of the Physician Associates at the Royal College of Physicians (FPARCP) and University course directors who approached their alumni; at least two reminders were sent. At the time that invitations were sent, it was believed that there were 288 qualified PAs working in the UK; however there was no information available as to how many were practising in secondary care in England. Anonymous responses were collected over a one month period in spring 2016.

### *Data analysis*

Data from closed questions were used to produce frequency counts and data from open questions were analysed thematically.

### *Ethical considerations*

This study was approved by the Faculty of Health, Social Care and Education Research Ethics Committee at Kingston University and St George's University London.

### **Results**

Of the 288 PAs believed to be qualified in the UK, 63 working in secondary care in England responded to the survey. There were missing data in 14 survey responses. Fifty-six PAs reported working in 33 secondary care specialties, with acute medicine having the largest number (n=10). Other specialties most frequently reported included elderly care medicine (n=8); trauma and orthopaedic surgery (n=8), accident and emergency (n=7), neuro-surgery (n=4), cardiology (n=3) and general medicine (n=3). Most PAs (n=42) were working in a single specialty, however two PAs reported being on rotational programmes that would subsequently involve experience of other specialties.

The most frequently reported work settings were inpatient wards (n=38), emergency departments (n=18), outpatient departments (n=13), medical assessment units (n=12) and operating theatres (n=9); missing data (n=8). Twenty-five PAs were working in multiple settings within their specialty and they frequently described how

their time was formally organised between different settings – by time of day, day of the week or weekly. As one respondent noted:

“Six-week rotation. Three weeks on ward, one week of evening shifts, one week of clinic/theatre/on-call. One week of [subspecialty] ward rounds” (Respondent ID 06)

Of the 50 PAs who provided information on their shift patterns during the past four weeks, 14 had worked on the weekend and one at night. A typical shift included both direct and non-direct patient care activities:

“...part of the consultant ward round, carry out jobs following ward round such as requesting tests, performing clinical procedures, discussions with other specialties or with families, writing discharge letters. Also I clerk new medical patients...” (Respondent ID 39)

Twenty PAs (of the 52 who answered this question) described various factors, predominantly the absence of healthcare professionals, which changed the type of work they performed:

“I cover the nurse specialist clinic if she is away. I cover the registrar clinic if they are on leave or busy” (Respondent ID 44)

Fifty-five physician associates reported working in secondary care teams comprising 18 different staffing permutations. Forty-one PAs reported working in interprofessional teams that included at least one type of doctor and one clinical nurse specialist (Table 1). Forty-six described working in a team with at least one other PA.

Table 1. Reported members of the teams PAs were working in

Team members							PA responses (not answered=8)
Consultant(s)	Specialty training doctor(s)	Non-career doctor(s)	Foundation programme doctor(s)	Physician associate(s)	Clinical nurse specialist(s)	Other healthcare professional(s)	
✓	✓	✓	✓	✓	✓		16
✓	✓	✓	✓	✓	✓	✓	8
✓	✓		✓	✓	✓		6
✓	✓	✓	✓	✓			4
✓	✓			✓			3
✓	✓	✓		✓	✓		2
✓	✓			✓	✓		2
✓			✓	✓	✓		2
✓	✓		✓				2
✓	✓				✓		2
✓	✓	✓	✓			✓	1
✓	✓		✓	✓			1
✓	✓	✓					1
✓		✓	✓				1
✓					✓	✓	1
	✓	✓		✓	✓		1
	✓		✓				1
				✓	✓		1

Of the fifty-four PAs who reported their line management arrangements, forty-four were managed solely by a consultant. Other line managers included a consultant plus another healthcare professional, a service manager, and a PA. However, for the forty-eight PAs (missing data n=13) who described having day-to-day supervision in place (two did not), this was not always reported as being provided by a consultant (n=18), but also jointly by a consultant and another grade of doctor (n=25), or solely

by another grade of doctor (n=5), with different arrangements reported by work setting:

“I am supervised by the registrar on the team when working on the ward and by the consultant when in clinic or theatre”  
(Respondent ID 02)

Of the forty-eight PAs who reported on their on-going educational and/or clinical supervision, 38 were receiving supervision, however this varied widely in terms of frequency and type of supervision. Twelve PAs reported no on-going supervision.

## **Discussion**

Sixty-three PAs working in a range of specialties reported information on their deployment in secondary care teams in England. The majority of PAs reported working as part of multi-level, interprofessional teams, mostly in ward settings and during weekday hours; with their work within these teams varying at times, depending on the presence or absence of healthcare professionals. Extending knowledge beyond the annual UK census (Ritsema, 2016), this paper highlights the diversity of work activities and interprofessional team working of PAs, reflecting work patterns in the US (Cawley & Hooker, 2013). Additionally, the variation in supervisory arrangements within the interprofessional setting for this new role is an issue that may warrant further attention.

This study has a number of limitations, including difficulty in determining an accurate response rate, as published numbers of PAs in secondary care in England are not available. Moreover, the self-report, cross-sectional design only provides a snapshot

in time. However, the range of specialties reported reflects those already known (Ritsema, 2016), suggesting a breadth of respondents.

### **Concluding comments**

This research provides novel evidence on the variety of ways in which PAs – a role new to the UK – are deployed and managed within secondary care teams in England. However, further investigation is required to understand the nature of PAs' contribution – including their impact on patient care, interprofessional practice, and the organisational context and costs within these teams.

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