

## TRAINING

# Cardiovascular innovations: role, impact and first-year experience of a physician assistant

Susan Collett, Devan Vaghela, Ameet Bakhai

## Authors

**Susan Collett**  
Physician Assistant, Cardiology

**Devan Vaghela**  
SHO Cardiology

**Ameet Bakhai**  
Consultant Cardiologist

Department of Cardiology,  
Barnet General Hospital,  
Wellhouse Lane, Barnet,  
Hertfordshire, EN5 3DJ

Correspondence to:  
Dr A Bakhai  
([abakhai@nhs.net](mailto:abakhai@nhs.net))

## Key words

health manpower, health  
personnel, physician assistant,  
physician extenders

doi: 10.5837/bjc.2012.032

*Br J Cardiol* 2012;**19**:178–9

**I**mproving patient access and implementation of the European Working Time Directive has proved a challenge for the National Health Service (NHS), particularly adding to workforce pressures and reducing continuity of care for patients. Innovative service and workforce redesign led to the introduction of new and extended roles based on service need. This paper outlines the introduction of one such new role, physician assistant (PA), introduced in the NHS in 2006, based on the established US PA model. UK-trained PA graduates are taking up newly created posts in primary and acute healthcare trusts and the aim of this paper is to share the first-year experience of introducing a newly qualified UK-trained PA within a busy district general hospital cardiology department, describing the internship year, achievements, limitations and how the role has evolved in line with service need. We believe the role has ideal potential in a cardiology department and, in particular, in the management of long-term chronic conditions, such as heart failure, where the number of specialist contacts with the patient can directly impact admissions, re-admissions, length of stay, adherence to medications and protocols of care positively.

## Introduction

In 2004, struggling to meet primary-care access targets due to shortages of general practitioners (GPs) and nurse practitioners, several primary care trusts (PCTs) in the West Midlands recruited a small number of experienced US-trained physician assistants (PAs) to work in local GP practices. The Department of Health (DoH) commissioned an evaluation of the pilot led by the Changing Workforce Programme (CWP), which resulted in



Susan Collett (centre) with Ameet Bakhai (left) and Devan Vaghela

recommendations to introduce the PA role more widely in the National Health Service (NHS), with a preference for UK-recruited and trained individuals.<sup>1</sup> Following a national consultation regarding the role and scope of PA practice, led by the DoH National Practitioner Programme and supported by the Royal College of Physicians (RCP) and Royal College of General Practitioners (RCGP),<sup>2</sup> a degree-level training programme was developed with agreed national standards of training, assessment and accreditation, with the aim of producing healthcare professionals working to the medical model, capable of maintaining and delivering clinical management of patients on behalf of supervising physicians.

For the past four years, small cohorts of PAs have been graduating from four PA programmes in England with plans underway to establish further PA training programmes in England, Scotland and Ireland. Graduates are taking up newly created PA posts, and clinical leads within primary and secondary care trusts are keen to understand more about the role and to explore how it could be effectively incorporated within existing medical teams.

## Physician assistant – internship year in cardiology

A full-time PA post was established in the cardiology department of a busy district general hospital (DGH) and a newly qualified UK-trained PA recruited in July 2009. The first PA cardiology post in the UK, the position was salaried, providing service with direct impact upon patient care. The supervising consultant cardiologist, a teacher on the PA course, was responsible for determining the scope of duties and responsibilities, with overall accountability for the work of the PA, similar to that of junior medical trainees.

The role was introduced as part of the multi-disciplinary team, complimenting existing roles, delivering care in a variety of settings including inpatient and out-patient cardiology clinics, at various points during patient episodes of care, including acute coronary syndrome, heart failure and arrhythmias. The role transitioned during the internship period from predominantly ward-based to an increased number of clinics supporting service developments including an expanding heart failure service. Time was allocated for involvement in national and local audits and for continuing professional development (CPD) and appraisal. The PA was accountable for her own practice within the boundaries of delegation of scope of practice, under the supervision of a consultant cardiologist or in some circumstances a senior specialist registrar (SpR).

## Evaluation of the PA role

The PA cardiology role was formally evaluated at the end of the one-year pilot, based on the achievements, patient case load, impact and limitations of the role, informed by an annual appraisal, in addition to monthly feedback meetings. The findings were presented to senior and junior colleagues at the trust's medical grand round

by the PA and lead consultant cardiologist and disseminated more widely to the trust chief executive and senior management team. Income generation from the role from rapid access chest pain clinic (RACPC) referrals and earlier referrals to the cardiac catheter lab were key highlights that contributed to the efficiency of facilitated discharges, while the satisfaction and confidence of heart failure patients was seen as a major role for reducing needless re-admissions. Heart failure patients and importantly carers, developed close and continued relationships and lines of communication enabling elective admissions and rapid clinic review to avoid admissions where possible. Palliative stages were also well facilitated. Local GPs also expressed appreciation for the access and support provided by the PA to their patients and a 360 evaluation found many positive perspectives and acknowledgements. In particular, the PA role was valuable during junior doctor turnover when continuity of care and processes were crucial, and also in supporting the learning of the new foundation year trainees to the new role and expectations from the department and its staff, including the consultant body.

## Achievements and limitations of the PA role

Over 700 patients were reviewed in clinics by the PA during the 12-month period. Consultation times varied anywhere between 30 and 60 minutes, dependent upon numerous factors including new or follow-up patient, patient diagnosis, comorbidities and complexity, and time taken accessing the supervising consultant to discuss patient management. The income to the trust for every referral for conditions such as heart failure to a heart failure team is £127.00 per patient. Therefore, by seeing patients on behalf of the consultant during the same time, there is a reduction in waiting times

and a potential income of £80,000 brought into the trust.

A patient satisfaction survey showed positive results with patients satisfied to be reviewed by the PA prior to the specialist as demonstrated in a US study.<sup>3,4</sup> Once the mid-level dependent practitioner role was better understood, junior doctor colleagues appreciated the role and senior nursing colleagues, initially sceptical, recognised the value of the role.

The benefits of employing a PA within cardiology resulted in efficiency gains in a high-turnover, high-pressure and high impact speciality with a wide range of conditions where continuity of care is critical to decision making. The role was limited due to lack of sufficient specialty training during the foundation years, the need for close supervision and relying on others to prescribe.

Given the appropriate environment in terms of preparation, internship and ongoing support, this pilot demonstrated a PA adds value, acting as a physician 'extender' as documented in the Scottish PA pilot evaluation in 2009.<sup>4,5</sup>

## Conclusion

Evaluation of the PA cardiology pilot demonstrates that a PA can be clinically and economically effective, when incorporated within an established multi-disciplinary team within a busy DGH cardiology department, in close proximity to supervising consultants, who are good educators and motivated to innovate and provide time ●

## Acknowledgement

We thank the cardiology team that supported the introduction of the new physician assistant role at Barnet General Hospital.

## Conflict of interest

None declared.

## References

1. Health Services Management Centre. Evaluation of US trained physician assistants working in the NHS in England. Birmingham: Birmingham University, 2005.

2. Department of Health. The competence and curriculum framework for the medical care practitioner – a consultation document. London: DoH, November 2005.

3. Tirado NC, Guzman M. Workload

contribution of a physician assistant in an ambulatory care setting. *P R Health Sci J* 1990;**9**:165–7.

4. Buchan J, O'May F, Ball J. New role, new country: introducing US physician assistants to Scotland.

*Hum Resour Health* 2007;**5**:13. <http://dx.doi.org/10.1186/1478-4491-5-13>

5. Mainous AG, Bertolino JC. Physician extenders: who is using them? *Fam Med* 1992;**24**:201–04.