Physicians’ Assistants
(Anaesthesia)

Aintree University Hospital
NHS Foundation Trust
The organisation

Aintree University Hospital NHS Foundation Trust provides general acute services to 330,000 people across North Liverpool, South Sefton and Kirkby, and specialist services to a population of 1.5 million across the North Wales and the North West.

Background

Aintree’s theatre department is supported by operating department practitioners, nurses, theatre assistants, theatre porters and theatre administrators. These support teams work closely with the consultant surgeons, anaesthetists and physicians’ assistants (anaesthesia) (PA(A)).

The Royal College of Anaesthetists recognised a serious impending shortage of trained specialist anaesthetists. This led to the New Ways of Working in Anaesthesia (NWWA) programme, which was established in 2003 and led to the development of the advanced practitioner role and subsequent PA(A) role in 2004 to help facilitate the delivery of services.

In 2013, Aintree’s anaesthetic department found recruitment of local trust grade middle tier staff to be a real challenge. This had a significant impact on the department’s ability to meet the increased demands on service provision, resulting in regular cancelations on the day of surgery.

What the trust did?

Agreement

The department decided to explore the possibility of recruiting a qualified PA(A) and begin a training programme for two more. This was to improve continuity and flexibility in the care delivered by theatre teams, while continuing to maintain high standards of patient care.

The proposal started with an initial consultation with theatre staff to gain their support. Initially there was resistance among some members of the anaesthetic department, but good support from others. Surgeons were more resistant at first and were concerned that the complexity of patients they could book on lists would be altered by the use of PA(A)s. The department continued to discuss with the senior anaesthetists and surgeons around the benefits the role could provide and reached an agreement after a third consultation.

Recruitment

The trust made use of anaesthetic funding for the recruitment of two trainee PA(A)s and one qualified PA(A). It was successful in the recruitment of a lead PA(A) who had graduated from the first cohort of trained PA(A)s and worked with the Association of Physicians’ Assistants (Anaesthesia) (APAA) to raise awareness of the role and share good practice on a national level.

Establishing the role

The lead PA(A) had prior experience of integrating within challenging operating departments to provide care to patients and set out to establish the role around the needs of the department and service. The Lead PA(A) initially set out to work in each theatre area, which enabled the opportunity to help build credibility and a rapport with the consultant anaesthetists and surgeons. Working alongside the
anaesthetic department was vital to establish where the PA(A) team could assist in future service delivery and be most effective.

**Educational support and training**

The department was successful in a request for trust funding to recruit two trainee PA(A)s and support them to undertake training on the postgraduate diploma in anaesthetic practice with the University of Birmingham. The department also identified a consultant lead (CL) to assist the lead PA(A) in providing educational support, facilitate formal teaching sessions and exams and feedback for the two trainee PA(A)s.

Once qualified, the PA(A)s were provided with time and support to consolidate their learning and practice. They did this by working on lists on a 1:1 basis with a consultant anaesthetist and an anaesthetist in training. The benefits of this arrangement included more time for consultants to teach (as opposed to monitoring patients), faster turnaround of patients, and a reduction in downtime between cases. They then moved to a 2:1 basis within the same lists to maintain continuity between the consultant Anaesthetists and surgeons working with them.

**Preparing for employment**

During the training period of the two trainee PA(A)s, the lead PA(A) contacted local trusts that employed PA(A)s and were using the 2:1 model (one consultant supervising two lists staffed by PA(A)s) to learn from their practice and review local governance arrangements.

The lead PA(A) working with the clinical director and clinical lead developed local protocols and patient-specific directives for the department in key areas of service delivery, all of which were approved by the trust’s local governance committee. The lead PA(A) then facilitated a 2:1 service with an anaesthetist in training over a six-month period with good feedback from both the consultant anaesthetists and surgeons, with no safety concerns raised. They then explored opportunities within the department for an appropriate case mix and supervision for trainee PA(A)s on employment, and designed a job description around this and the needs of the patients and service.

**Outcomes**

The 2:1 model was safely implemented at Aintree and all three PA(A)s now carry out 2:1 lists on a regular basis. Work is audited every year on annual appraisal and feedback sought from the consultants involved. With the newly qualified PA(A)s safely and productively working in the 2:1 model, the lead PA(A) and clinical lead began to examine other areas that the PA(A) role could have a positive influence.

Aintree hospital had recently been made the trauma centre for the region with two dedicated theatre suites. Data collected across these theatres showed a theatre utilisation of 68 per cent. It was decided that the lead PA(A) would spend a period of time in the area working between the two theatres, to assess whether the role could have a positive impact.

The lead PA(A) undertook an initial audit after six months by collecting data from the period July to December 2016. The aims of the audit were to assess whether the employment of PA(A) assisting in trauma theatres helped to facilitate additional flexibility, increase efficiency and maintain patient safety.
Data collected showed that theatre utilisations across both trauma theatres improved by 15 per cent, with one PA(A) floating between the two theatres and supporting both. The lead PA(A) also kept a clinical diary that highlighted a number of benefits.

- **Patient safety** – examining the diary, there were multiple instances where the consultant was available to either support another consultant (in another theatre) with a challenging patient/problem or provide assistance in a period of emergency in the recovery area. The PA(A) was able to care for the patient within the operating theatre during this time and care was not compromised nor the flow of the list disrupted. On one list, the PA(A) was able to transfer a patient following trauma surgery to the ECC for further ophthalmic surgery, allowing the consultant to continue in trauma theatres.

- **List flexibility** – there were examples of being able to add cases either from other lists, existing trauma and, on occasion, patients requiring procedures that were on the intensive care unit. The PA(A) was able to review these patients in a timely manner and in some cases assist in their transfer to theatres.

- **Consultant time** – during the day-to-day running of the list, the PA(A) assisted in the checking of equipment, preparation of medications and carrying out clinical skills in support of the consultant. They were also able to provide breaks for the team and allowed the consultant to complete administrative tasks and teach trainees.

**Next steps**

The department has recognised that with clear arrangements for education and governance, PA(A) activity can be much more varied than the original 2:1 model envisaged. The department has recently enabled its PA(A)s to complete courses sanctioned by the Royal College of Anaesthetists on local anaesthesia in ophthalmic surgery and sedation. Because of this, these PA(A)s can now extend their scope of practice to include these areas and have begun to work in trauma theatres. There is a predicted requirement for workforce expansion and the department plans to recruit an additional two PA(A)s as part of this.

**Top tips**

- Seek agreement and buy in from the consultant body.
- Establishing funds within the department or the wider trust.
- Review existing practice on a local, regional and national basis to help you prepare for employing PA(A)s.
- Design the role of the PA(A) to meet the individual needs of your trust.
- Extend the scope of practice because of clinical need through educational governance, support and training.