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Progress with Airway Leads

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The establishment of departmental airway leads (AWLs) is a joint initiative supported by the College and Difficult Airway Society, as a direct result of their collaboration in the 4th National Audit Project (NAP4). The call for AWLs went out in November 2012,[1] and less than a year later an Airway Leads Day was held at the College to promote the role.[2] During summer 2014, we surveyed all AWLs to report on their progress in the four original activity domains, namely

i Overseeing local airway training for anaesthetists and more widely.

ii Ensuring local policies exist and are disseminated for predictable airway emergencies.

iii Ensuring that difficult airway equipment is appropriate to the local guidelines and standardised within the organisation.

iv Liaising with ICU and EDs to ensure consistency.

Respondents were also invited to provide details of AWL activities outside these domains, to report the time spent on the role and what they would like the College to do for them to assist them in their role.

There are 197 AWLs across the UK, and whilst this represents a phenomenal achievement (and an increase of 20 since last year) there is still some way to go before we catch up with the number of College Tutors (304). There are 120 AWLs registered with the DAS AWL forum, administered by Karthik Ponnusamy.

We received 103 responses from AWLs reporting a wide spectrum of activities. Some were running five difficult airway updates per year for anaesthetic staff, with additional sessions for ICU staff. One AWL working in a small department with no junior anaesthetic staff was busy teaching airway management skills to all the medical staff in the hospital!

The time spent was predictably variable, an average of 2.25 hours per week with a range from one hour per month to nine hours per week.

Ninety-four percent of respondents were actively engaged in, or were planning departmental airway teaching.

Rather than report the survey as pie charts and percentages, this article attempts to illustrate themes, using contributions from a variety of airway leads across the UK to demonstrate what some AWLs are achieving in these areas. E-mail addresses are included so readers can contact these innovating AWLs for further information.

Nilesh Randive

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AWL for Mid-Essex Hospital Services NHS Trust, reports on his achievements over the past year

I attended the first ever RCoA/DAS AWL meeting last year, when I was just on the cusp of becoming the AWL in my department. There was a lot of scope to change practice, but nothing concrete in place. My first year and a half has been a very interesting and satisfying journey. Inspired by the day, the first project I completed was 'The DATs Project: Difficult Airway Trolley Standardisation'. This involved standardising the difficult airway trolley in 11 locations across the trust, with an extra trolley dedicated to teaching and training.

As the role evolved, the next challenge was to improve and implement tracheostomy safety. I formed a

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tracheostomy safety group in the trust. We now have dedicated wards with trained staff for tracheostomy patients, standardised tracheostomy tubes, specific documentation and bed boards[3] for these patients, and escalation protocols for an emergency. This is supported by weekly MDT tracheostomy ward rounds.

I organise 'Airway Days' for all the core trainees in the region.

I have various projects planned for the future including:

- Education for front-of-the-neck airway training.
- Trials of new airway equipment.

The success of the projects is attributed to getting colleagues from various backgrounds together, and working as a team. I found group emails a much more effective method of communication, as it is rather difficult to be excused from clinical commitments to attend a meeting. I share the core essence of the project with the team and collate ideas from everyone.

I have a very supportive clinical director, who has given me the confidence and enthusiasm to innovatively improve practice and implement positive changes towards increased airway safety.

Damien Carson
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AWL for the Ulster Hospital in Northern Ireland and reports on the hospital's standardised approach to performing fibreoptic intubation which facilitates its popularity

Over the last ten years, our department has embraced sedated fibre-optic intubation (FOI) for difficult airway management in all non-obstructed airway cases. This has enabled lower thresholds for FOI to be accepted as a routine standard of care for cases that could pose difficulty – including a wide range of other indications beyond difficult airway management. Osteoporotic or frail necks, cardiovascular fragility, poor or expensive dentition and avoidance of muscle relaxation are just some of the many additional indications where a FOI technique is now employed. This has resulted in well over 500 FOI cases performed annually – enhancing patient safety, enabling skills to be maintained by all consultant staff and providing many opportunities for trainees to learn this essential skill.

Key aspects of success involve the department adopting a standardised approach to many aspects of the procedure, including choice of the fibrescope used, drugs employed and technique, i.e. patient sedation, nose preparation, patient and operator position etc. This creates familiarity, allowing all trainees, anaesthetic assistants and consultants to consistently work together to perform an accepted and reliable technique. Good sedation and amnesia is important, and is reflected in postoperative surveys which reveal very high patient satisfaction (over 97%) with the technique.

The standardised approach by the anaesthetic team, combined with good organisation, allows the technique to be integrated seamlessly into an operating list. Latest audit shows average time from first IV sedation to tracheal tube cuff inflation is nine minutes in supervised novices (0–10 previous FOI cases) and <6.5 minutes in more experienced anaesthetists (>20 FOI cases).

Rob McCahon
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AWL at Queens Medical Centre in Nottingham has produced a collection of training videos on YouTube, and has been developing an ODP education programme

I work in a large teaching hospital with over 100 ODPs. Following a number of airway-related incidents in early 2010, an ODP survey and learning needs assessment identified two major themes. Firstly, our ODPs had received very little difficult airway training, and secondly, they had a strong desire to gain knowledge and expertise in difficult airway management.

Early attempts to provide ODP difficult airway training involved two afternoon training courses at the Postgraduate Centre. This highlighted a number of barriers:

- Availability – ODPs could only attend in their own, unpaid time.
- Service delivery – rotas prevented attendance.
- Accessibility – we had to deliver training off-site.
- Resources – we needed considerable assistance from company representatives.

In early 2013, I began to deliver a rotating program of regular bite-size, drop-in airway training sessions on topics/skills mapped to the DAS guidelines and locally available equipment. These were delivered in a new and equipped multi-disciplinary training room within the main theatre complex. The sole aim of this programme was to provide ODPs with the skills and knowledge to effectively and safely contribute to unanticipated airway difficulty. Training occurred during paid duty hours, and consisted of a single topic repeated every 20–30 minutes. Attendance was made

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feasible by re-organisation of ODP rotas by Theatre Team Leaders. In eighteen months, 255 ODP attendances were recorded at these drop-in training sessions.

An essential step has been the early buy-in and involvement of senior ODP/nursing staff, and our Head of Service; without their help and advice, the airway training program for ODPs would have failed. Looking ahead, we have developed a spiral curriculum for ODP difficult airway management. Ultimately, this aspires to develop a faculty of 'expert' ODP airway trainers.

Rosie MacFadyen
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One of the AWLs in NHS Lothian has been developing a low-cost tracheostomy teaching tool for Critical Care (and elsewhere)

The critical care service in NHS Lothian produces the majority of tracheostomies within the health board. In keeping with the recommendations of NAP4,[4] training for nursing staff has been provided during a 45-minute session within a generic day-release 'Tracheostomy Care Study Day'. Attendance at this course is frequently limited by clinical pressures. Training for medical staff was not formalised at any stage in the training pathway. After several 'near-miss' events in ICU, we conceived and implemented a bedside approach to tracheostomy training to provide essential training to back up the introduction of the NTSP bedhead signs and tracheostomy safety boxes to all critical care areas. We used a Girl's World doll head (see image), modified to include a stoma and tracheostomy tube, and used this as a training manikin. Its benefits included small size, portability and low cost. In conjunction with a ten-minute tutorial, the doll, named 'Trachy Tracey' was used to train nursing, physiotherapy and medical staff to the level of 'primary responder' in management of the blocked or obstructed tracheostomy. Within three months, 70% of the ICU staff were 'Trachy Tracey trained', and we were able to demonstrate a measurable improvement in the number of staff able to describe the steps of the management algorithm. Trachy Tracey is now an integral part of the airway-training armamentarium in NHS Lothian, and is used to train all new-start nursing, medical and physiotherapy staff. The most challenging part of this project was delivering the teaching; we achieved good results delivering teaching sessions led by a single consultant, registrar and core trainee, but now need to build sustainability into the delivery of teaching. To this end we aim to train several of our senior nurses to deliver the bedside Trachy Tracey Training sessions.

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in Cheshire and Merseyside, report on the establishment of a regional airway network

The reason for setting up a regional airway group was the difficulties encountered when equipment and approach differs across organisations in the same region.

A number of factors came together over several years to give this project a successful start. Firstly, the NAP4 report focused attention on airway management, including training in areas such as fibre-optic intubation and cricothyrotomy. The creation of AWLs produced local contacts, and the recognition of Human Factors in the safety of systems and the production of regional audit data by our trainees all helped.

Consultants from 11 of the 13 anaesthetic departments in the region were present at our first meeting, covering a wide range of general and specialist services. Four trainee audit presentations were delivered leading to action plans agreed by all represented trusts:

1. Develop a list of the minimum paediatric airway equipment that should be stocked.
2. Standardise cricothyrotomy across the region to two pieces of equipment – there were nine different types across the region prior to this.
3. Make contacts and increase awareness regarding the performance of high-fidelity simulation.

A good example of a robust airway alert system was described which may tie in with national efforts in this area.

The next meeting is scheduled for April 2015. We will invite representation from other areas with airway responsibility such as neonatology, ICU, AED, head and neck surgery and pre-hospital care. First and foremost, we are a forum for airway leads to discuss, learn from and support each other in making the system safer. In the future I hope that we can become a local expert group to develop region-wide clinical policies, equipment procurement, standards and education and training.

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The Challenges of 2015

1. To ensure that every department has an AWL.
2. For AWLs to complete an audit of the NAP4 recommendations based on the tool downloadable from the Airway Leads Page (www.rcoa.ac.uk/node/16242).
3. To encourage engagement with the DAS AWL Forum (http://bit.ly/1z2XPKm).
4. For every AWL to organise an episode of airway teaching in their hospital in 2015.
5. To consider establishing regional networks.
6. To consider the possibility of mandating regular airway management training for all practising anaesthetists.
7. To investigate the extension of the AWL role to independent hospitals.

Resources for the Challenge

(on the website unless stated otherwise)

1. Access to eLA module for all staff with a valid NHS email address (not restricted to anaesthetists or those in other medical disciplines) – including a list of topical airway modules for ODPs.
2. The URLs for the Nottingham Teaching videos on YouTube.
3. Tips from Chris Goddard on setting up a regional network.
4. An audit tab (administered by Dr F Kelly) to give ideas for audit projects to improve safety in airway management.
5. A single point of contact for your ideas and questions, completed NAP4 Recommendations audits, examples of best practice, etc (awl@rcoa.ac.uk).

Looking forward

November 2015 sees the publication of the revised DAS Unanticipated Difficult Intubation Guidelines. AWLs will form a vital link in ensuring the safe introduction of and transition to these guidelines across the UK. To that end there will be another Airway Leads Day in early 2016 to look at further examples of good practice by AWLs and to consider guideline implementation, equipment provision and teaching issues.

Please use the AWL email to keep us informed of best practice in your hospital and region, the results of your NAP4 audit and any comments you might have.

References

1. www.rcoa.ac.uk/node/10209 (accessed December 2014)
2. www.rcoa.ac.uk/node/16720 (accessed December 2014)
3. http://bit.ly/1z2Yj3d (accessed December 2014)
4. www.rcoa.ac.uk/nap4 (accessed December 2014)