Annual Update 2017

Contents

Page no.

Scottish Airway Group Update 3

SAG Committee Members 5

How to do a Project with the Scottish Airway Group 6

SAG Sponsored Projects

- Airway Alert Card 11
- Neuromuscular Blockade Project 12

Local Updates

- Dumfries & Galloway Royal Infirmary 14
- Forth Valley Royal Hospital, Larbert 15
- Hairmyres Hospital, East Kilbride 16
- Monklands Hospital, Airdrie 17
- NHS Lothian 18
- Ninewells Hospital, Dundee 19
- Perth Royal Infirmary 20
- Queen Elizabeth University Hospital, Glasgow 21

- Raigmore Hospital, Inverness 22
- Royal Alexandra Hospital, Paisley 24
- Royal Hospital for Sick Children Edinburgh 25
- University Hospital Ayr 26
- Victoria Hospital, Kirkaldy 26
- Western Isles Hospital, Stornoway 27
- Wishaw General Hospital 28

Scottish Airway Group Update

Welcome to the first SAG newsletter. An idea of a Scottish Airway Group was first conceived by Dr Barry Maguire, on the back of a highly successful DAS meeting in Perth in 2009. Interested individuals met, discussed ideas and the first SAG educational meeting was born in 2011, funded by the local share of profits from Perth. It was a sell-out! Bigger venues were sought as the annual meeting's popularity increased, with a reputation for good value, interesting and practical talks by leaders in their field. Delegate numbers have reached over 180. Abstracts from both trainees and career grades are encouraged for both poster and oral presentation.

SAG was granted charitable status last year. The aims of the society are 'to further the study, education and practice of Airway Management and associated anaesthetic interests; and the proper teaching and education thereof; and to conserve and advance the interests of Airway Management and Anaesthetics in Scotland and in general.'

The current executive committee consists of:

Chair – Caroline Brookman (Edinburgh)

Past Chair – Valerie Cunningham (Glasgow)

Vice Chair – Alistair McNarry (Edinburgh)

Secretary – Simon Crawley (Dundee)

Treasurer – Suzie Thomson (Glasgow)

Education & Research Coordinator – Craig Urquhart (Glasgow)

Meetings Coordinator – Kevin Fitzpatrick (Glasgow)

Trainee reps – Rajib Ahmed & Cara Marshall (West of Scotland)

Regional Reps – Rosie Baruah (Edinburgh), Rhona Younger (Perth), Raj Padmanabhan (Wishaw), Kathryn Bennett (Wishaw) & Steve Jeffrey (Paisley)

SAG has sponsored several projects:

FONA action cards – Alistair McNarry, Rachel Harvey et al. Published in Anaesthesia.

Airway Alert Cards – Carol Grey. Now in use in many Scottish hospitals.

FONA-friend – Craig Urquhart & Myra McAdam

Neuromuscular Blockade – Yvonne Bramma & Grant Rodney

Bursaries for up to £1000 are available for suitable airway related projects. Applications should be made to the Secretary, with closing dates of 31st Jan and 31st July. Details are available on the SAG website: www.scottishairwaygroup.co.uk

SAG had its first collaboration with another society. A successful SPAN-SAG paediatric airway meeting was held in 2014. SAG was also educational affiliate at WAMM, Dublin 2015.

Caroline Brookman
Chair SAG

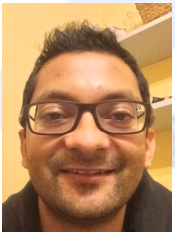
SAG Committee Members

Dr Caroline Brookman (Chair)

Dr Simon Crawley (Secretary)

Dr Suzie Thomson (Treasurer)

Dr Rajib Ahmed (Trainee Rep)



Dr Cara Marshall (Trainee Rep)

How to do a project with the Scottish Airway Group

Many of you will have received an email or read about the Scottish Airway Group's willingness and indeed enthusiasm to support research projects in airway management across Scotland.

Sometime this year 'our' article will appear in Anaesthesia (you can read it here
http://onlinelibrary.wiley.com/doi/10.1111/anae.13643/full
if you want) but we thought rather than tell you about the article, it might be more interesting to look at what happens when you apply for our funding. Our work was entirely funded by the Scottish Airway Group and the 'our' appears in ' ' because the author team was actually 7 people (Harvey, Foulds, Housden, Bennet, Falzon, McNarry and Graham)

Where to start?

As a general rule you need to approach SAG with an idea for a project that you need funding for. The more detail you can put into this idea the better:

A literature search.

Input from a senior colleague who has managed to publish something before.

Some idea of how much it will all cost.

Some idea of how long it might take (and virtually everything takes longer than you imagined it might).

Some thought about the ethical processes involved.

Write these up into a proposal, but please don't get hung-up on covering everything mentioned above. The main purpose of a proposal is to explain to SAG what is in your head - i.e. what your idea actually is. Do ask a trustworthy friend to read it though to make sure that it makes sense and actually explains what you think it does.

A project examining endotracheal tubes doesn't tell us as much compared to a project examining the different inflation volumes required to generate an effective seal at 30 cm H20 of different endotracheal tubes.

Whilst letting your imagination run riot probably won't help….

A project examining the different inflation volumes required to generate an effective seal at 30 cm H20 of different endotracheal tubes, when lemon juice is used to inflate the cuffs, and raspberry jam is used as the lubricant… in reptilian airways… might not get very far…

Literature Search

Once you have explained what you want to do the next important thing for SAG to know is "what is already known on this topic" or the dreaded literature search. Professional help (aka the hospital or university library) is always best when conducting a literature search, but you can safely search PubMed from the comfort of your own computer (https://www.ncbi.nlm.nih.gov/pubmed/). Google Scholar is another easy to use option, but no one is quite sure how it generates its search results so you may generate some quite interesting articles.

Most importantly: The number of references in your proposal doesn't have to be lots, in fact a few will probably do.

What's already known in this topic - and where does your work fit into to adding to or reproducing that knowledge.

The Hows and the Whos

Next you need to make a stab at answering four questions:

1. How are you going to find out whether awake videolaryngoscopy is well tolerated in medical students with or without topicalization (this isn't a full study protocol or methodology- that will have to come later, but a guide as to what you are planning to do)?

2. How much will it cost?

3. Who do you need to help you conduct the study - colleagues, other SAG members?

4. Who are you going to do it to?

The difficult bits AKA, **statistics and ethics**

If you were like us and diligently attended all of you statistics lectures at medical school (☺) then this is probably the bit that fills you with fear the most. However, statistics are necessary to give you that magic P <0.05 outcome. The best solution is to ask someone that knows - there will usually be someone in your department that understands more than rudimentary statistics and so will be able to get you started - at the end of the day you may have to seek real statistical help and that might cost money – SAG understands that.

ETHICS: this is another scary topic.

In general questionnaires of medical staff about their practice don't require ethical approval.

But…. questionnaires involving patients probably require at least a discussion with your local Regional Ethics Service.

Even studies involving manikins can require ethical consideration, have a look at the instructions for authors on Anaesthesia's website (http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2044/homepage/ForAuthors.html) for more info.

Doing anything to patients will require ethical approval, or at least defining by an ethics service as a service evaluation.

Doing anything involving children or those who lack the capacity to consent will always have more safeguards and checks.

IF IN DOUBT ASK- ask SAG, ask your local ethics service, there are even online tools to help (http://www.hra-decisiontools.org.uk/research/).

The ethics don't have to be finalized before you apply but you probably wont actually see any of the money until they are sorted out….

So what happens after I submit my proposal or application?

The nice people at SAG will read it- their prime objective is to help you do research in airway management- but to achieve that they may do several things:

i) Say this is marvellous and give you money.
ii) Say this is marvellous but we need more information about certain bits.
iii) Say this is marvellous but suggest you have a consultant assisting you with your work.

iv) Say this is marvellous but suggest that a multisite project may yield better results.

v) Say this might be marvellous, but you will need to explain it again.

vi) Send your proposal for external review to ensure that it makes sense (this is most likely if one of the SAG committee is involved in your proposal).

Whatever happens between SAG and you, there will eventually have to be:

a) A methodology statement (what are you actually going to do).
b) A statement about ethics (required, not required etc. and all that that entails).
c) Some statistical considerations.
d) An agreement about the amount of money required.

All of which is quite a long way from what we suggested you wrote down first - your idea…

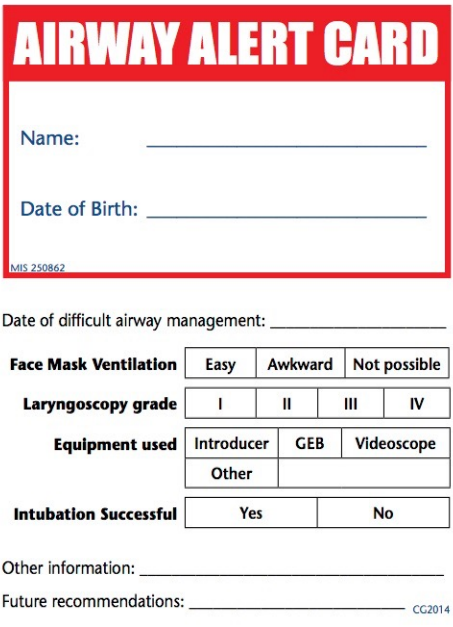
But that is the point. SAG are here to help you get your research off the page and into a journal

What do you want to investigate with SAG? Let them know!

Rachel Harvey, Alistair McNarry

SAG Sponsored Projects

Airway Alert Card



AIRWAY ALERT CARD

Name: _____

Date of Birth: _____

MIS 250862

Date of difficult airway management: _____

Face Mask Ventilation	Easy	Awkward	Not possible	
Laryngoscopy grade	I	II	III	IV
Equipment used	Introducer	GEB	Videoscope	
	Other			
Intubation Successful	Yes	No		

Other information: _____

Future recommendations: _____ CG2014

The Airway Alert Card was designed in 2013 after a Scotland wide survey amongst consultant anaesthetists demonstrated that there was considerable inconsistency in methods of alerting patients after a difficult airway experience. The card contains pertinent information regarding the patient's airway episode and is given to the patient after the event. SAG kindly sponsored printing the card and all anaesthetic departments in Scotland were contacted and offered a supply of cards for use. A large number of anaesthetic departments are now using the card to give to patients after a difficult airway, either alone or in combination with a standardised GP letter. Patients are advised to keep the card with them and to always show it to the anaesthetist for any future operations. This should be invaluable in the times of fewer case notes being available. If anyone wishes any more information email carol.gray11@nhs.net

C. Gray, C. McIntyre, B. Dawson

Neuromuscular Blockade Project

Aims

In conjunction with the Scottish Airway Group, we conducted an audit of over 1000 patients, looking at practice relating to neuromuscular blockade. The audit was trainee-led and was the first national audit in Scotland to collect data electronically, using desktops computers, laptops, tablets, and phones.

Specifically, the aims were to:

- Determine the agents most commonly used to establish NMB
- Determine the availability of different types of nerve stimulator and how/when they are used
- Determine how anaesthetists evaluate the degree of NMB at the end of surgery
- What reversal agents are commonly used and at what doses
- In relation to sugammadex, how often is it used as a first line agent (and for what reasons) and how often it is needed as a rescue agent
- How often there is clinical evidence of residual curarisation, resulting in the initial decision to omit a reversal agent to be changed

Background

Post-operative residual curarisation (PORC) is an under-estimated problem and has been repeatedly shown to increase the risk of aspiration, upper airway obstruction, hypoxaemia and other respiratory complications. NAP5 reported that 18% of cases of awareness occurred during the emergence phase of anaesthesia. Almost all were as a result of PORC and were potentially preventable with the use of a peripheral nerve stimulator.

Previously conducted surveys in the UK, Europe and the US have shown that many anaesthetists don't use any form of nerve

stimulator to monitor depth of NMB, instead relying on clinical factors such as muscle strength and adequacy of tidal volume. However, these surveys were small, had a poor response rate and reflect the opinion of the anaesthetist, not actual practice.

The 2015 AAGBI Monitoring Standards state that the use peripheral nerve stimulator is mandatory for all patients receiving a neuromuscular blocking drug. They also encourage all anaesthetic departments to replace their existing qualitative monitors with quantitative devices, which have been shown to be more accurate. This would require significant financial input and a lot of education and training. As a specialty, we have been resistant to a change in practice in this area before, despite evidence to the contrary. The introduction of sugammadex is also likely to have changed practice significantly.

In order to guide changes in our practice appropriately, we felt that it was first important to establish what our current practice actually is and use this information to guide changes in future practice appropriately.

Y Bramma, K Zealley

Local Updates

Dumfries & Galloway Royal Infirmary

One of the frustrations of being the airway lead is that just when you think you have standardised airway practice in a certain area, you turn your back and someone messes it up. For example who places that obsolete bit of airway kit in drawer 4 of the airway rescue trolley, or where has that rogue make of LMA come from? It is often very hard to get the correct answer. It probably should not be a surprise that the changes to bring about standardisation in our practice can be quite hard to sustain. There have been a number of changes to our airway equipment recently, and this is coupled with what seems to be an ever increasing staff turnover and sickness rates. It is quite easy to see why the anaesthetic nurse who is on a phased return to work struggles to identify the first from the second generation supraglottic airway device when they are tasked with restocking. What's more they probably are not going to approach the consultant airway lead for advice. They may however contact the "lead airway nurse" for advice.

Last year we created the role of lead airway nurse and one of our existing ODPs (David Caldwell) was appointed. He was given 6 hours a week for this role and is tasked with:

- Being involved with local airway training.
- Providing a link for nursing staff involved with airway management outside a theatre setting (A&E, ICU, Recovery, Galloway Community Hospital) to ensure consistency of standards and practice
- Actively engage in airway device procurement and help implement the changes recommended by the West of Scotland airway and associated products technical users group.

- Ensuring local policies are disseminated for predictable airway emergencies and management of patients at risk of aspiration and the obese.
- Attending national airway meetings and educational events.

With David now in this role we are starting to see changes being more sustained, he gives nursing and medical staff a “go to person” with everyday problems that arise, and we have been able to demonstrate efficiency savings to management.

Dr Stephen Wilson, Airway Lead for Dumfries & Galloway Royal Infirmary

Forth Valley Royal Hospital, Larbert

Over the past year we have been focused on consolidating training around the 2015 DAS guidelines. To facilitate this we have introduced a mobile training trolley, based on the 'tea trolley' concept. This is consists of an Airsim model attached to an angle adjustable chartboard, drawers stocked as per rescue trolley guidelines, and with Ambu scopes and monitor affixed. This enables training in the full range of airway procedures and has greatly simplified the ability to capture both anaesthetists and anaesthetic assistants for combined training.

In addition we have been exploring options to update our equipment for videolaryngoscopy, and encouraging the use of flexible fiberoptics for training purposes.

Finally, following some in house work demonstrating superiority, we are re-organising our difficult airway trolleys in line with the Scottish Airway Rescue Trolley project.

Dr Peter Beatty, Airway Lead for Forth Valley Royal Hospital

Hairmyres Hospital, East Kilbride

Hairmyres is actively involved in pan-Lanarkshire training within Kirklands medical education centre in providing a variety of simulation based training sessions to promote airway management. We have sessions for new start trainees for management of failed RSI using DAS guidelines, a joint airway simulation day with our A&E colleagues to facilitate co management of airway problems within the emergency department, an ITU simulation day managing a variety of critical incidents including blocked tracheostomy & failed intubation. There is a specific course called LEAT where candidates are able to learn awake fibreoptic intubation. We also run theatre team days where we involve the entire theatre team in managing airway / anaesthetic emergencies. On an annual basis we have the mobile skills unit where we are able to offer on-site simulation and often include sessions to practice front of neck access and intubation using Aintree catheter & fibreoptic bronchoscope.

Within the hospital we are actively involved in developing checklists for ITU / theatre and A&E for RSI intubations in emergency situations. We have already embraced the standardisation of the airway rescue trolley for difficult airways based on DAS guidelines which are located in theatre / ITU / A&E, and cardiac cath lab. This is standardised throughout Lanarkshire. We have a training airway trolley within the theatre suite so trainees can become familiar with various pieces of equipment. We are also actively involved with our A&E colleagues in training their staff to assist with airway management in the resus room. We have modified the DAS airway alert forms to allow these alerts to be easily accessed within our ecase note clinical portal as well as highlighted to the patient & GP.

Dr Christina McLellan, Airway Lead for Hairmyres Hospital

Monklands Hospital, Airdrie

Here at Monklands, the jewel in the crown of NHS Lanarkshire, the anaesthetic department has moved to salubrious new accommodation above the mortuary and we are busier than ever with shared airway work. The place is riddled ENT, Maxillofacial, and community dental surgeons insatiably demanding 30 theatre sessions per week to operate on humans over 2 years old. We share airways like a toddler shares sweets; the airway is ours but we may occasionally, begrudgingly, let the surgeon have a nibble and then only after they have a tantrum. The free flap service has recently been withdrawn (boo!) but major ENT procedures with rotational flap reconstructions keep us working into the small hours. Where else would you want to be on a Friday night? We provide higher and advanced airway training and currently are entertaining our 18th Airway Fellow.

We have a good coffee machine.

Recent and ongoing projects include: development of multidisciplinary training programme for laryngectomy and tracheostomy care, FONA- mastery learning programme, update of difficult airway alert system, guideline development for peri-operative management of patients with OSAH, pan-Lanarkshire updates of 1) DAS trolleys, 2)review of optical laryngoscope (standardised McGrath) and 3)review of 2nd gen SAD (standardised iGel). We routinely have multidisciplinary airway training as part of our monthly CME programme.

Monklands Hospital Anaesthetic Department- stunning the community since 1977.

Dr David Blacoe, Airway Lead for Monklands Hospital

NHS Lothian

Is a Board based on 4 sites-
The Royal Infirmary of Edinburgh
The Royal Hospital for Sick Children
St. John's Hospital, Livingston
The Western General Hospital

They are in turn represented by 4 airway leads (Kate Theodosiou, Alistair Baxter, Claire Gillan and Caroline Brookman) although we all work together, or at least try to…

The main airway experience is delivered at St. John's Hospital, which isn't a surprise given its role as the regional centre for all Head and Neck surgery. We provide anaesthesia for a varied range of ENT and Maxillo-facial surgery, ranging from day cases to complex resections and reconstructive work. In doing so we are able to expose our trainees to a broad mix, with teaching in advanced airway management skills.

For similar reasons, they are also the focus of most (see below) airway research in Lothian although participation is spread across all 4 sites when appropriate and possible. We've recently developed funding for an Airway Fellow, based at St. John's and we're hoping that they will take on several new projects that we have in the pipeline… (interested individuals should make contact with Claire Gillan).

Clinical airway teaching takes place across all four sites and includes experience in video and fibreoptic laryngoscopy.

Teaching too is a pan-Lothian affair with regular multidisciplinary teaching afternoons happening twice a year on each site, but with additional teaching for trainees Initial Assessment of Competence, medical students, recovery staff and ICU staff. Trachy-Tracey was

born in the Western, but she and her associated very popular teaching programme now tour the region, whilst a comprehensive tracheostomy teaching package is offered at St. John's.

Edinburgh's fibre-optic course is probably the longest running fibre-optic course in the UK, and it's still going with dates for 2017-18 due out shortly.

TEAM Courses and College Workshops also run in Edinburgh.

All of our trainees are encouraged to attend these courses and sessions, and more senior trainees very much encouraged to help teach on them.

Research Interests
Training and Education in Airway Management
THRIVE
Ultrasound in Front of Neck
Videolaryngoscopy (including in children)
Surveys and procurement based evaluations

And much more if we had more volunteers….

Dr Alistair McNarry, Consultant Anaesthetist St. John's & Western General

Ninewells Hospital, Dundee

We are all feeling financial constraints in all but we continue to work hard to develop our service, enhancing patient safety and training. We have successfully launched our new updated Airway Rescue Trolley to the department, in line with the 2015 DAS Guidelines. The launch followed a period of retraining on a surgical neck access technique for medical staff and updates for nursing colleagues. Hyper

angulated X-blades for the McGrath Mac have joined our difficult airway armory, and we successfully procured Optiflow systems for our operating theatres and obstetric suites. Quantitative neuromuscular monitoring is gaining momentum now with the introduction of a handful of new monitors. Big thanks must go to Dr Grant Rodney and Dr Pavan Raju for their work in this field. Our mission to replace our ageing intubating fibrescopes continues. We mourn the loss of our enthusiastic and understanding Clinical Services Manager, Ally Adams, who supported us greatly in much of what we were able to achieve.

We are planning to expand our training opportunities for colleagues and nursing colleagues and will run our 3rd local "Consultant only" airway course in early 2017. Dr Barry McGuire has handed over the Airway Lead role to Dr Simon Crawley, who now has big shoes to fill!

Our local Airway Fellowship continues to thrive with our most recent Fellow, Dr Karen Pearson being kept busy with numerous projects including a CCEACP review on head and neck surgery with Dr McGuire to complement last years published review on Predicting the Difficult Airway by Dr Andrew Dalton and Dr Crawley.

Dr Simon Crawley, Airway Lead for Ninewells Hospital

Perth Royal Infirmary

The last 12-18 months has seen us introduce some new equipment to the PRI site, one of the main aims is that airway equipment should be as standard as possible across the whole of NHS Tayside.

Education sessions have been run for the nursing staff regarding ETCO2 monitoring in recovery, ET/SAD cuff pressure monitoring and Ambu aScopes.

We took the opportunity to run a multi-disciplinary session at the start of 2016. The stations covered

- Update to the DAS difficult intubation guidelines with specific focus on the change of emphasis for front of neck access
- Set up and indications for newly introduced Optiflow oxygen delivery system
- Mid-fidelity simulation of local anaesthetic toxicity
- Mid-fidelity simulation of failed intubation scenario

The "Anticipated Difficult Intubation Trolley" which is separate from our Airway Rescue Trolley has some items that are gathering dust and as such it is under review at present.

I am personally involved in data collection for a study looking at Supraglottic airway devices set up by Dr Farquharson and Dr Crawley at Ninewells Hospital.

Dr Rhona Younger, Airway Lead for Perth Royal Infirmary

Queen Elizabeth University Hospital, Glasgow

We have a major ENT and our mix of awkward patients. The training opportunities are at all levels and include an Advanced Airway / ENT Trainee. There is active encouragement of airway audit and quality improvement. There is good access to video laryngoscopy and a reasonable amount of fibre optic intubation. Optiflow is increasingly being used within the department.

We have a mix of airway training aimed at both trainee, consultants, nurse and other specialities including ED. We have a programme of half day airway workshops for CT1s, advanced airway workshops for more senior trainees and consultants. We have a Trache safety course and an airway workshop for ED based on the DAS guidelines.

We have also been running "pop-up" teaching for our anaesthetic nurses covering primarily airway related topics. We are also reintroducing the shared airway workshop with ENT which is planned to run in June.

As part of our weekly teaching we have regular airway talks.

Dr Craig Urquhart, Airway Lead for QEUH

Raigmore Hospital, Inverness

Recent and ongoing Airway Activity at Raigmore,

Equipment:

- McGrath Mac videolaryngoscopes now on every Airway trolley in every anaesthetic room / area
- F&P THRIVE Optiflow systems x2 set up with "List tubing" and Ambu aView videoendoscope screens / aScope 3 slim for difficult airway and emergency airway use. Baskets now attached with additional equipment required for AFOI in conjunction with THRIVE.
- TOF Scan qualitative NMB monitors available in all theatre areas
- Capnography in all recovery bays including peripheral theatres
- Handheld capnography availability for in hospital transfers of anaesthetised / recovering / sedated patients with Pro-Act Creative devices
- Additional Airway trolleys for temporary & peripheral theatres. Standardisation of Airway trolleys across all hospitals within NHS Highland.

- Revision and updating of ICU transfer bags including handheld capnography

Signage & documentation

- New drawer front stickers for airway trolleys in line with updated DAS guidelines
- Drawer liner laminated dump sheets to aid stocking of airway trolleys
- ICU dump sheets / emergency intubation forms

Teaching & training

- Rolling programme of capnography teaching in recovery
- Video clip airway tutorials for theatre staff on use of airway equipment
- Annual Multidisciplinary Airway Training day June 2017-02-22 anaesthetic room based difficult airway simulation training for anaesthetic trainees and anaesthetic assistants
- Reorganisation of airway training equipment in line with revised guidelines

Audit & Research

- Case series of THRIVE apnoeic oxygenation for microlaryngoscopy
- Online survey exploring potential barriers to AFOI
- Audit of duration of capnography requirement in recovery

Dr Gordon Bathgate, Airway Lead for Raigmore Hospital

Royal Alexandra Hospital, Paisley

Airway Management Related Activities 2016

- **Mastery learning based introductory airway management** programme for new starts
- **Failed Intubation drills**
- **Airway Rescue Trolley** training- regular updates and training for theatre staff
- **Airway Rescue Workshop programme–** including FONA and Aintree assisted intubation through LMA - 6 monthly for all anaesthetic staff, anaesthetic nurses. Also offered to ICU nurses
- **Difficult Airway Management Workshop Programme**
- **Tracheostomy Emergency Management workshop programme**- multidisciplinary- 4-6 monthly

RAH Anaesthetic Department Airway Training Resource Development

- **RSI Checklist**
- **RSI Checklist podcast –**supports new start training
- **A Simplified Tracheostomy Emergency Management Algorithm For Non Specialists-** based on NTSP guidelines- undergoing final evaluation using simulation.

Dr Sofie Chaudhry, Airway Lead for Royal Alexandra Hospital

Royal Hospital for Sick Children Edinburgh

Airway advances are continuing apace (if anything could be called apace in paediatrics) at the RHSCE. We are delighted that after being in the forefront of its development, the McGrath Mac size 1 blade is now available to all centres UK wide. We are continuing to look at the X2 blade and maybe will be able to provide some information regarding the value of this soon.

We are developing the use of High flow humidified oxygen (Optiflow) in paediatric anaesthesia, where combining this with our excellence in TIVA techniques for airway surgery and tubeless field anaesthesia in children. This has shown great promise and we hope to get a formal study completed this year.

More disappointing has been our experiences with 2nd gen SADs. None of the current paediatric devices are perfect, but we hope that we can work with developers to try and improve these products for all children. However, the use of new disposable fibre optic bronchoscopes have proven more successful, and we are hoping that the manufacturers will listen to our pleas for a sub 3.0 mm scope soon.

The devastating news that we have lost our superb cleft lip and palate surgery with its outstanding results, will leave a big hole in our departmental airway profile and we hope that Glasgow will endeavour to match the world leading outcomes from that patient group when all surgery moves there later this year. In the aftermath, we at the RHSCE will keep striving to improve the techniques used in paediatric airway management and hope to lead it out of the dark ages of volatile fog!

Dr Alistair Baxter, Airway Lead for RHSCE

University Hospital Ayr

We did couple projects in Ayr in the past. We are not involved in any research at the present.

For the training:
1. we can provide simulation training in difficult airways scenarios,
2. we have training kit for front of neck access
3. we have ORSIM training system for fibreoptic intubation and bronchoscopies.

Dr Barbara Parrish, Airway Lead for University Hospital Ayr

Victoria Hospital, Kirkaldy

May 2016 saw the introduction of the new DAS Guidelines with a change in layout of our airway trolleys reflecting Plans A to D on the drawers from top to bottom. Multidisciplinary training was carried out over three days – going through the new algorithm, practicing front of neck access and allowing familiarisation with videolaryngoscopy. At the start of 2016 pressure manometers were introduced and training carried out – allowing us to meet the 2015 AAGBI Standards of monitoring and measure the cuff pressures of airway devices. Airway ALERT cards, as developed in Tayside, have also been introduced this year.

Dr Kayann Dell, Airway Lead for Victoria Hospital

Western Isles Hospital

In Western Isles Hospital the work of Airway Lead is fully supported by Critical Care Providers Group (CCPG) that consists of nurses and doctors involved in managing critically ill patients.

Our achievements are:

1. After reading an article in BMJ *"Improving the safety of remote site emergency airway management"*(2014) and contacting the helpful author Julian Wijesuriya, I introduced **airway drug bags** for three, remote from theatre, hospital locations. I was helped by pharmacology department that kindly agreed to check the bags contents regularly to make sure that the drugs are not out of date and that the content is unchanged after every use. The bags are sealed and are designed to be used by anaesthetists only. The use of the bag means that in case of a need for quick intubation and resuscitation anaesthetist does not need to wait for drugs to be supplied.
2. With help of CCPG there have been trainings organised for the use of **Optiflow** and **Thrive**. The equipment gained popularity and currently we are working on providing protocols for the use of both devices adjusted to WIH environment.
3. There have been regular checks of the resuscitation trolleys by our two resuscitation officers. They are both members of CCPG and they report any issues and changes to the group.
4. During retrieval team representative's visit, a simulation training of RSI using their checklist was organised. The plan is to introduce wider use of RSI checklists for emergency cases with a regular training, and that is one of the current CCPG goals.

5. Organising airway training for the staff who may be involved in emergency airway management is currently on the CCPG agenda.

Dr Beata Pantak, Airway Lead for Western Isles Hospital

Wishaw General Hospital

Several courses have been run at Wishaw:

- Basic airway day – attended by NHS Lanarkshire, NHS Dumfries & Galloway, NHS Ayrshire & Arran and NHS Forth Valley
- Advanced airway day/workshop – attended by NHS Lanarkshire and NHS Dumfries & Galloway
- LEAT (Lanarkshire Endoscopic Airway Training) Course – over 40 candidates have been trained with 9 courses completed

A mannequin and simulator based structured training programme has been in place in NHS Lanarkshire for several years. A basic airway training day has provided structured and standardised airway training to new start anaesthetic trainees from NHS Lanarkshire, Dumfries & Galloway, Ayrshire & Arran and Forth Valley.

Based on information provided by Dr Rajmohan Padmanabhan, Airway Lead for Wishaw General Hospital

SAVE THE DATE