

Annual Report of the Association of Paediatric Anaesthetists of Great Britain and Ireland

2019

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1. President's report

Welcome to the Annual report of the APAGBI and to the 45th AGM in Sheffield 2019.

Council

The current Council 2018/19 comprises:

Officers:

Dr. Charles Stack (President and Chair)

Professor Andrew Wolf (Immediate past President, Chair Professional Standards)

Dr. Chris Gildersleve (President Elect)

Dr. Alistair Cranston (Immediate past Treasurer)

Dr. Mark Thomas (Honorary Treasurer)
Dr. Simon Courtman (Honorary Secretary)

Elected representatives:

Dr. Judith Nolan (Peer Review Lead elect)

Dr Jonathan Smith (APAGBI representative on PICS)
Dr. Karen Bartholomew (Meetings Committee Chair)
Dr Colin Dryden (Meetings Committee Chair elect)

Dr. Christa Morrison (Trainee representative)

Dr Hannah Lonsdale (Newly Appointed Consultant)
Professor Walid Habre (Elected Overseas Representative)

Elected Home Member Vacancy

Co-opted Members:

Dr. Nirmala Soundarajaran (Linkman lead)

Dr Stephanie Bew (Lead for Peer Review)

Dr. Siobhan Cavanagh (Northern Ireland representative)

Dr. Fidelma Kirby (Ireland representative)
Dr. John Rutherford (Scotland representative)
Ms. Camilla Poulton (Lay Representative)

Prof Thomas Engelhardt (Chair Science Committee)

Dr Sumit Das (Webmaster)
Dr James Farrant (Social Media)

Dr Mary Lane (Chair Education and Training Committee)
Dr. Russell Perkins (RCoA Representative, RCoA Council)
Dr. Upma Misra (AAGBI Representative, AAGBI Council)
Dr. John van Pappachan (PICS Representative, PICS Council)

Dr. Hannah Lewis (PATRN)

Appointed Advisory non-Council Positions (not on Council):

Dr. Danielle Franklin (QI Lead)
Dr. Jill Mcfadzean (Ethics Advisor)
Dr. Harvey Livingstone (Equipment Lead)

Kester Brown

Since the last AGM, I am sad to report the death of Kester Brown before Christmas last year. He was a leading Australian and Internationally renowned paediatric anaesthetist and intensivist and friend to the APA. He will be sadly missed.

Dr. Geoffrey Burton from Bristol, also died over last summer. He was a founding member of the APAGBI.

Changes in Council

Dr Courtman will in his Honorary Secretary's report mention these changes. However, I would like to particularly give my thanks to both Andy Wolf and to Alistair Cranston, both of whom will be completing their terms of office on the Council at the AGM. The APA has benefited enormously from their wise counsel.

Mark Thomas has been elected as the President Elect. Congratulations to him.

Hannah Lonsdale from Sheffield has been appointed to the Newly Appointed Consultant role for 2019 and 2020. I am very encouraged that there was considerable interest and competition for this role.

I would also like to welcome Ms Camilla Poulson as our new Lay Representative on Council. I would like to thank Sara Payne very much for her input and wish her well in the future.

Unfortunately, Phil Arnold has decided to step down from Council, mostly due to work commitments. We would like to thank him for his input over the last couple of years.

There is therefore a vacancy on Council and there will be an election this autumn. I would encourage you to stand.

Election Governance

The Election Governance policy had been circulated and was approved. It will be included in Standing Orders.

Overseas Council Member

We discussed the position of the overseas council member. This post has effectively been a nominated position in recent years. We feel that it would be more sensible if this were formalised. Also currently, the overseas council member is a Director of the Company and as such is responsible with the other directors if anything were to happen to the APAGBI financially. This is possibly more difficult to administer as he/she is not resident in the UK. For this reason we have agreed that we should ask the members at the AGM if they are happy for this to cease. I must state that this does not devalue our appreciation of the overseas member on Council at all. He/she will remain a voting member.

APA Sub-Committees

During the winter, we have agreed that the Pre-operative Assessment Group and PATRN will both become sub-committees of the APA, the former part of the Professional Standards and the latter part of the Education Committee. This we hope will give both them and the APA advantages

New Membership process

Currently new members have to be nominated by an APA member. This seems rather outdated. We need to change the process for SAS doctors too.

We agreed that application for membership should be broadened to any doctor who was interested in paediatric anaesthesia - "Membership open to any medically qualified interested practitioners"

NHSE review of PIC

This has been a thorny issue this year. It derives from the problems of under capacity of PICUs in the UK, at least in part because of patients on long term ventilation. The NHSE have decided that the best way forward would be to repatriate these children to local DGHs.

There has been very little happening recently. There are a couple of networks, which are trialling the way forward, but these have not reported yet. It is clear that it is unlikely that any one proposal will fit all regions of England and Wales.

APA Officers have met with the RCoA President and been involved with the NHSE discussions. We have continued to stress the need for exposure to paediatrics within anaesthetic training

- There is a curriculum review due within the college and within FICM during the next few months. The APA has been told that we will be consulted on this when it is in draft form. Still awaited.
- There was a general consensus that in many ways the important thing for anaesthetists was exposure to paediatrics either in anaesthesia, PIC or retrieval. Clearly there is a need for core paediatric anaesthesia training but further training could be in any or all of these. In fact in many ways retrieval would be best for trainees considering a career in DGHs who are concerned about looking after the sick child.
- We have been asked to be involved in the next edition of PICS standards

Anaesthetic Toxicity

Tom Engelhardt has led on updating this in light of the recent published evidence and it reads very sensibly with good advice for how to approach questions on this from parents. It will shortly be available via the website.

Roddie McNicol prize for Regional Analgesia

We are very pleased that this Prize will be awarded this year in Sheffield. Prof Ann-Marie McNicol will join us in Sheffield and award the prize to the winner on the Friday morning.

Professional Conference Organisers

As you will be aware we changed from the AAGBI to Index as our conference organisers for the ASMs in 2017 and 2018. In general, we think that the conference went well although there were a few hiccoughs, which hopefully have been ironed out for the meeting in

Sheffield. We would welcome your thoughts about the organisation and the more informal social programme as we would wish to have most people attend these. They have given us a number of good ideas to take the ASM forward.

Annual Scientific Meetings

During the last couple of meetings, we have undertaken to video most of the lectures at the ASM. This is primarily as an educational tool for members and departments. We are going to continue at this meeting to do so as this is a charitable action for the members. It is quite expensive, however, and it is not clear how often these are viewed. We believe that the Jackson Rees lecture is viewed fairly often. Please use these videos as a basis for your CPD.

We will be having a joint meeting with SPANZA in Brisbane in the autumn of 2019 and a joint meeting with ESPA in London in May 2020.

Charles Stack
President APAGBI

C & Sheet

April 2018

2. Honorary Secretary's report

Membership of the association remains relatively unchanged with total membership at 1044. At present 949 members have renewed their membership (excluding honorary and retired members) and 95 members yet to pay. Reminder notices have been issued as per usual by the administration team and final member numbers, taking applications prior to the ASM and renewals, will be presented to council at the September AGM.

Category	April 2018	April 2019
Full £90	604	596
Trainee £60	220	161
Affiliate £60	23	20
Overseas £90	74	41
Retired £0	86	86
Honorary £0	48	45
Outstanding		95
Total	1055	1044

Changes and Elections to Council

There have been several changes to the composition and structure of the council. A new position on council for a "newly appointed consultant" has been created to give the opportunity for newer consultants to gain experience in the work of the APAGBI and also bring an important additional perspective to discussions. The post is aimed at consultants who have been in post for < 5 years and is selected by council from submitted applications. Also, reflecting the excellent work of PATRN (Paediatric Anaesthestic Trainee Research Network), it was felt that they should also have representation at council meetings alongside the trainee representative.

The overseas member of council has always been a highly valued member of the team. After recent discussions, it has been decided to change the appointment process to more closely reflect the actual selection over the last few years (see president's report for more).

There will be two vacancies on the council this Autumn and so if you are interested in being involved in the development and promotion of paediatric anaesthesia, in specialist and non-specialist settings, please consider applying or get in touch with me to find out a bit more about the roles.

Recent elections have highlighted the need for additional clarity on the governance of the election process for both candidates and voters. An election governance guide has now been added to the new standing orders of the association which will be available on the website after the AGM in June.

Subcommittees and Roles

The increasing recognition of the importance of perioperative care and pre operative preparation of children undergoing surgery has led to organisational changes in the RCOA and APAGBI to recognise this. The APAGBI has created a new subcommittee within professional standards for perioperative care consisting of a group of enthusiastic leads from departments around the UK. The first meeting was held in February and we hope to link closely with the RCOA in advancing paediatric perioperative care.

PATRN have continued to grow and go from strength to strength. In order to provide the necessary administrative support and organisational governance, it was decided after discussions with the PATRN leads that PATRN should be formally recognised as a subcommittee within the APAGBI and report to the Science Committee.

It has been decided that the guidelines lead role should be ended as a standalone position and instead become part of the terms of reference of the education committee. This is in response to the challenges of developing guidelines.

The audit and survey lead role has also been move into the science committee, where it was felt there could be better oversight and reviewing of potential projects sent to the APAGBI.

Articles and Standing Orders

The articles and standing orders of the association, which define the organisation and processes of the APAGBI, are revised every two years and approved at the AGM. This year there have been quite a few changes to draft in. Within the articles, there have been changes relating to the change in the membership process and the selection of the overseas member. In the standing orders, there have been a number of additions which include most of the points raised in the accompanying reports. These will be shared om the website prior to the AGM where final approval will be required before they can be formally adopted.

Meetings with Other Organisations

The APAGBI have continued to hold regular meetings with the Children's Surgical Forum and the RCPCH Liaison meeting which have been dominated recently by the NHSE reviews of children's surgery and critical care. We have also met with the lead for the GIRFT reviews of paediatric general surgery, Simon Kenny, and discussed the issues identified from his review visits of >80 hospitals. It is expected there will be a report published on this later in the year.

I had a meeting with Sam Shinde, vice president of the Association of Anaesthetists, and their sustainability and environmental lead. She shared the AoA's work so far on this within anaesthesia and we have subsequently appointed an environmental champion on the APAGBI council to lead this work within the APAGBI (Karen Bartholomew).

I held a meeting with the RCOA to discuss a proposal to develop a generic short course designed to train all clinicians involved in working with children in anxiety management skills. The RCOA have approved the proposal and we hope to progress this over the next year.

GPAS and ACSA

GPAS for Paediatrics has published its 2019 document. These are now phased into paediatric specific standards within the RCOA departmental accreditation process (ACSA). I attended the ACSA standards review meeting at the college to contribute to the review of existing standards and consider new standards.

Consultations

Over the last year, the APAGBI has contributed to numerous consultations:

- UK Paediatric ENT Surgery Strategy Review awaiting publication in June 2019
- MBRRACE-UK The APAGBI responded to the care guidelines on CDH circulated by MBRRACE indicating we did not feel we could endorse them currently. The letter was sent to Prof Fielding and Dr Juliet Wolfe-Barry (Leeds) who were part of the group.
- Non therapeutic male circumcisions (CQC guidance for inspectors)
- British Association of Dermatologists draft guidelines for the management of paediatric SJS/TEN
- Anaesthesia and peri-operative care for Jehovah's Witnesses (AAGBI)
- Professional Advisory Group for the National Child Mortality Database (NCMD).
- NICE Guideline Update Sedation in Under 19s
- European Standards of Care for Newborn Health endorsement (EFCNI)

Simon Courtman Honorary Secretary

3. Honorary Treasurer's report

Firstly, many thanks to Alistair Cranston for his hard work in this role and for his efficient handover. I have been at the financial helm for a year now and fully appreciate the work he has put in!

I am pleased to report that the financial state of the Association remains healthy. Although I am yet to receive the final amount from our professional conference organisers (PCO), the Liverpool ASM is estimated to have made a surplus of approximately 20k. This is in line with the surplus made at Bristol in 2017. This is in no small part to the hard work and efficiency of the Liverpool team and our PCO 'Index' and due thanks must go them.

The detailed accounts are posted on our website. The accounts for 2018-19 have been audited and approved by Thomas Barrie, our accountants.

Here is a written summary confirming that out total assets as at December 31st 2018 stood at £443,772. This a reduction in approximately £19,561 compared with the previous year. This is partly due to grant payments, the increased cost of website maintenance, and the increased costs of travel (mainly rail) and accommodation in relation to meetings. This figure also reflects the fact that we are yet to receive the surplus from Liverpool which, as stated above, should be in line with this figure. The good news is that sub-committee expenditure has fallen due to the increased use of web meetings as have the Trustees' expenses, being about £1,000 less than last year (£16,408 vs £17,524). Membership numbers remain stable as does the subscription income which was £73,931 in 2017 and £73,699 in 2018.

Investment income remains stable at £2,030 compared with £2,001 last year. I have moved £50,000 from the Principality account to our Charities aid managed (CAF) portfolio to try to improve this going forward.

In light of the above, and to guard against any potential drift in our financial position, Council have agreed to raise the annual subscription by 5 pounds for full members from next year (2020) to 95 pounds and by 3 pounds for reduced subscription members taking it to 63 pounds. This is still well below inflation since the last increase was 6-7 years ago. Membership now comes with the added benefit of full text access to the Journal of 'Pediatric Anesthesia' so the increase represents, after tax rebate, a cost of less than 30 pence per copy of the Journal.

The Linkman meeting in Bath made a small loss of 542 pounds (£5915 cost vs £5373 income), so essentially cost-neutral for a very successful and well organised meeting.

Other running expenses (election costs, stationary etc) stood at £3,114 which is a reduction of nearly half compared to the previous year (£6,479).

We continue our support of the WFSA, to the tune of £2,500 per annum.

Web costs run at more than £500 per month but this is the 'shop window' of the Association and is comparable with other providers so felt to be worth the investment.

We pay Wiley £12,000 pa for society access to the Journal of 'Pediatric Anesthesia' and plan to continue to do so for the foreseeable future.

Proposed financial plans for 2019

We are paying £8,000 for a database at the University of Aberdeen to help securely manage big data projects.

We are expecting to pay £40,000 as an NIAA grant this year as we traditionally support this in alternate years.

PATRN (trainee research network) costs for both 'PAPAYA' (day case surgery) and 'PEACHY' (childhood obesity) are due and will amount to approximately 12,000 pounds each. This year's linkman meeting is being held jointly with the Scottish network in Edinburgh. We have agreed to underwrite any loss that may result in order to support the meeting.

The expenses policy has been updated and is now more generous to speakers at the ASM as well as recognising the increased cost of accommodation in London for council meetings.

Many thanks to Rebecca Davenport and her team at the AAGBI for her continued support of our Association. All the minutiae of direct debit collection and the membership database is organised by them and we are very grateful.

Mark Thomas Honorary Treasurer

4. Professional Standards Committee Report

1. NHS Review of Paediatric Intensive Care and Specialised Surgery

In the last 2 years there has been a National NHS review of Paediatric Intensive Care and specialised paediatric surgery. This review was commissioned because of the current limitations on paediatric intensive care facilities within specialised paediatric hospitals and difficulties in dealing promptly with children who need surgical care. The problems in part have been due to progressive centralisation of paediatric services and the gradual loss of the necessary resources to deal with children who previously were managed outside specialised paediatric centres. In particular this refers to children who are sufficiently complex or unwell to require high dependency or limited intensive care management, and those children who could (with adequate resources) be managed surgically outside the specialised paediatric centres.

The early phase of the review centred on models of care and workforce provision that would organise regional networks to allow a degree of decentralisation within the emerging resources that would be made available. It has been acknowledged that different hospitals would have differing responsibilities depending on the resources and adjacencies. This would be determined as part of the network solutions. Several paediatric anaesthetists have been involved in this review: Liam Brennan (then President of RCoA), Kathy Wilkinson, Simon Courtman and me. All disciplines from medicine and nursing were involved along with transportation services, administrators, health planners/statisticians and others. It emerged quite quickly that this would not be a "one size fits all" approach and that different regions would need to deploy regional decentralisation at different time frames. The overall plan has been broadly approved by the NHS and there is an acknowledgement that decentralisation into a more regional network approach will require enhanced resources to maintain or improve quality. There have been some concerns of the process, particularly with the issue of adequate human and physical resources for anaesthesia and other disciplines to help provide the service safely. With this in mind we have been liaising with the RCoA to enhance paediatric training within the training curriculum. Discussions on this continue Having discussed viable models at some length, two regional sites were selected to be audited for how such a new model would work: these were South Thames and Humberside. The data collection was made over the winter period (at a time that the paediatric services are usually under some strain). This exercise has been completed and results and outcomes used to help deploy the eventual rollout of the networks. The last meeting of the NHS review was in February, and there are no organised meetings planned at present. The current NHS view is that the overall models of care and requirements have now been defined. I expect in due course there will be further announcements. This review and the eventual implementation will affect our practice. More information on this process can be found at

https://www.england.nhs.uk/commissioning/spec-services/npc-crg/paediatric-critical-care-and-specialised-surgery-in-children-review/

and an update from the Paediatric Intensive Care Society which contains the review slides http://picsociety.uk/wp-content/uploads/2018/07/Review-Update-Presentation-for-distribution-July-18.pdf

2. Paediatric Intensive Care CRG.

Much of the recent work has been concerned with supporting the implications of the NHS review of Paediatric Intensive care services

Recently we have discussed how level 2 paediatric intensive care can be implemented safely outside specialised paediatric intensive care units. It was universally agreed that those units which will manage critically ill children will need to have agreed personnel and physical resources combined with enhanced network support for transportation, training and updates with careful audit and discussion of outcomes. Funding for Operational Networks.: Funding for the new networks remains a concern for the CRG. Coupled with this has been revision of the plan when surges in activity occur in the winter months. However, until the NHS National review has completed its process, this remains largely advisory.

We have also recently discussed management of long-term ventilated patients through a 2019 NHS specifications document. There is recognition that the numbers of children needing this service continue to rise and that they present significant ongoing costs and needs. No decisions have been yet proposed but are likely to fall in line with the thrust for decentralisation from the NHS review.

3. ACCEA 2019

There has been a recent ACCEA awards Round in 2019 that was advertised via the usual NHS channels as well as via APAGBI, RCoA etc. There were 4 applicants and these were all supported by the APA. Achieving success in these awards has become much more difficult and renewal of awards need to be treated with the same intensity as new awards. We wish the best of luck to all applicants.

Professor Andrew Wolf Immediate Past President

5. Information for parents and children report

The excellent and much-loved "Rees Bear" and "Davy the Detective" patient information leaflets are approaching their tenth birthday. However rather than push for replacements for these resources, the APAGBI is working with the RCOA Patient Information Group to update and improve the stories. We plan to bring any outdated situations and instructions up to date and potential expand further into digital resources, to reflect the way today's children and their families access information.

The Royal College of Paediatric and Child Health are collaborating on an appraisal of the full set of current resources- this includes the "You and Your Anaesthetic" young person's guide, "Your Child's General Anaesthetic" information for parents and the "A Little Deep Sleep" animation- by consulting age-appropriate focus groups. A general feeling is that we need to concentrate the majority of our attention to providing fresh and useful resources to young people, in a format they feel comfortable to engage with. The RCPCH are due to report back from their focus groups in June 2019.

Other discussions centre around the value of the costly *Crystal Mark* standard from the Plain English Campaign. Virtual reality resources look interesting as the technology advances but still remain prohibitively expensive within the current patient resource budget. Expect an APAGBI member survey in the coming months to canvas your opinion on current resources and the direction of travel for this area.

Hannah Lonsdale APAGBI Council

6. Education and Training Committee Report

Personnel changes

There are no personnel changes to report currently.

Meetings

Our annual committee meeting was held on the 22nd of November 2018 and was well attended.

Electronic Resources

Website:

There have been some updates to the E&T pages for the new website.

ASM videos:

We will continue to film all lectures at the ASM as feedback suggests that this is a valued part of membership. This will now be filmed by a new company at considerable cost saving to the APA. We are liaising with the previous company to obtain copies of ASM recordings from 2016-18.

Hot topics

These have been reformatted and the content now has a more uniform and professional look. This will continue going forward. These continue to be very popular with visitors to the website.

We have tried monthly new topics however feedback from the Webmaster suggests that "hits" increase for about two months. We are thus reverting to 2 monthly new topics.

All summaries will continue to be reviewed by the committee prior to publication for an added level of peer review. These changes have been highlighted on the website.

Article Watch

International Journal watch (with SPANZA) continues with Christa as trainee rep leading on this.

Trainees/Training

Christa Morrison was voted in as the new trainee representative at the end of 2018.

Changes to Standing Orders

The standing orders relevant to the E&T committee were reviewed and changes were proposed to the wording in the background and some of the terms of reference. Changes to the membership were also proposed. A minimum number of committee members to make meetings quorate was proposed as being 5. Members can be deemed present if joining via video-/teleconferencing as well. This will need to be added in as it was not covered previously. These changes will be updated with the other changes due this year.

Other initiatives:

Audit Recipe Book

The committee is currently engaged with updating the paediatric section of the RCoA recipe book. This work is underway and will conclude before the summer.

Mary Lane Chair, Education and Training Committee

7. Science Committee Report

1. Membership

The following constitute the APAGBI Scientific Committee:

James Armstrong, Nottingham
Philip Arnold, Liverpool
Peter Brooks, Chelsea & Westminster
Thomas Engelhardt, Aberdeen (Chair - January 2017)
Velu Guruswamy, Leeds Teaching Hospital NHS Trust, currently SIDRA, UAE
David Mason, Oxford
Richard Newton, Brighton
John Rutherford, Dumfries
Natasha Woodman, Kings

2. Research Grants

The APAGBI provided £40,000 for NIAA research grant funding with a closing date 26 April 2019.

A process for small grants at the discretion of the council is currently being reviewed and should be made available later in 2019.

3. NECTARINE (NEonate-Children audiT of Anaesthesia pRactice IN Europe)

Twenty centres completed recruitment in the UK for the Nectarine (NEonate-Children audiT of Anaesthesia pRactice IN Europe: UK participation in a European prospective multicentre audit of practice) study. First data will be presented at the ASM in Sheffield 2019.

4. APRICOT(Anaesthesia PRactice In Children Observational Trial)

The secondary analysis of the UK data has completed and been published:

Engelhardt T, Ayansina D, Bell GT, Oshan V, Rutherford JS, Morton NS; APRICOT Group of the European Society of Anaesthesiology Clinical Trial Network. Incidence of severe critical events in paediatric anaesthesia in the United Kingdom: secondary analysis of the anaesthesia practice in children observational trial (APRICOT study). Anaesthesia. 2019 Mar;74(3):300-311.

It demonstrates the excellent perioperative paediatric anaesthesia care provided in the UK.

5. CASAPP (Children's Acute Surgical Abdomen Programme Pilot)

This project (PI Professor Ramani Moonsinghe, UCL) continues to be supported by the APAGBI and is now projected to start autumn 2019.

6. PAPAYA (Paediatric unplanned sAYcase Admissions)

The largest trainee led, prospective national paediatric audit was funded and supported by the APAGBI. The data have been analysed and the paper submitted for publication. A detailed presentation is expected at the ASM 2020 in London.

7. PEACHY (PErioperAtive CHildhood obesity)

This PATRN project was funded by a small grant from the APAGBI and will be supported by the Scientific Committee. Expected start date autumn 2019.

8. PaEdiatric Airway Registry (PEAR)

The PaEdiatric Airway Registry (PEAR) UK has been setup and will be launched at the ASM. A direct link will be available via the APAGBI website. Alternatively, it can be accessed here: https://w3.abdn.ac.uk/clsm/pear/home.aspx

9. Surveys and QI

Surveys: A limited number of high quality surveys were circulated to the membership with David Mason coordinating. It is essential that any survey submission will follow the guidance published on the website.

QI: Velu Guruswamy and Richard Newton are acting as the SciCom link with the QI Lead Danielle Franklin.

10. Annual Scientific Meeting

Sheffield 2019: abstract submission / revision processes

Abstracts reviewed and highest ranking were selected for oral presentation and poster prize sessions. The process was further simplified following a change of software. The selected oral presentations will again be published in 'Pediatric Anesthesia'.

The inaugural Roddie McNicol prize submissions were scored and the submission from Dr Gupta, Great Ormond Street Hospital on 'Paediatric Epidural Analgesia: A 20-year Review of Practice in a Tertiary Hospital' was selected as winner.

11. HSRC (RcOA) collaboration

The APAGBI is represented at the HSRC board (Thomas Engelhardt and Reema Nandi).

12. NIAA engagement

Suellen Walker continues to represent the APAGBI interests at the NIAA

13. Paediatric Anaesthesia Trainee Research Network

Trainee Representative: Dr Andrew Selman and Dr Deborshi Sinha.

The Scientific Committee wishes to acknowledge success of PATRN and work by its members. Peter Brooks and Natasha Woodman are acting as the Scientific Committee Liaison with the Trainee Network.

Thomas Engelhardt Chair Science Committee

8. Quality Improvement Report

It has been two years since I took the lead for the quality improvement arm of the science committee. In this time, I believe we have raised the profile of quality improvement and safety science within the APA.

The quality of projects submitted as QI projects has improved with the redesign of the submission form for QI. We successfully awarded a QI prize at the Liverpool 2018 ASM to a project on reducing starvation times in children undergoing emergency surgery. Many of the linkman projects too have used quality improvement methodologies which is very exciting to see. We are looking forward to judging this year's submissions at the ASM in Sheffield 2019, where the standard of abstract submission has improved again and includes a wide range of important topics in paediatric anaesthesia.

With the launch of the new website the QI links have been updated allowing APA members to access high quality resources to help them in their QI journey. The opportunity for senior anaesthetists to develop their skills in mentoring junior anaesthetists is available at the ASM with a workshop dedicated to QI. Session 8 in the Sheffield programme is dedicated to QI and Human Factors.

Looking forward I hope to continue to raise the profile of safety science in the paediatric anaesthesia community. Together with the science committee we are working on the next version of the RCOA audit recipe book, to be renamed QI book. There is a whole section on paediatric anaesthesia and hopefully this will inspire anaesthetists and organisations to improve the care for children using validated techniques.

We in QI continue to support the science and education committees and hopefully some of the PATRN projects can inspire local QI. With the launch of CASAP supported by the APA organisations can hopefully use this national project on outcomes in children's laparotomies to develop QI projects as seen in the adult NELA study. The QI team wish to support this work. I look forward to leading QI for the APA for another year.

Danielle Franklin QI Lead, APAGBI Council

9. Meetings Committee Report

Sheffield 2019 -5th-7th June

Meetings website; http://apaconferences.com/

The meeting venue is Cutlers' Hall, the welcome reception will be held in The Winter Gardens and the dinner will be held in Sheffield Cathedral.

As of the 27th April, 181 delegates have registered for the main meeting, and 99 for the pre meeting, the paediatric difficult airway half-day, which is being run in conjunction with DAS. For the social programme, so far we have 53 registrations for the evening reception at the Sheffield Winter Garden, and 46 registrations for the dinner, to be held in Sheffield Cathedral.

Our target to break even is 300 delegates. The trade stands at 14 registrations with an approximate income of £30,750. There are 17 faculty engaged for the Wednesday Airway update, 28 faculty for the main meeting, and some recent adjustments made to the programme timing, in order to facilitate overseas speakers travel arrangements. The abstract process has worked well again this year, thanks again to the extremely efficient team. 74 abstracts were submitted and although we aimed to adhere to strict timelines, as intended, in order to allow eight weeks notification between acceptance and the beginning of the meeting, for the processing of study leave applications, this hasn't happened as planned.

The inaugural Roddie McNicol prize for Regional Anaesthesia in children will be presented following the abstract presentations on Friday 7th June. Prof Andy Wolf will introduce the presentation and Prof Ann Marie McNicol will present the prize.

London 2020 --13th-15th May

Venue 2 Savoy Place - scientific programme to be announced at ASM in Sheffield

Cardiff 2021 – 5th-7th May

Newcastle 2022

Edinburgh 2023

10. Trainee Representative's Report

Article Watch

The first edition of the new 'International Journal Watch' was published in joint collaboration with SPANZA in Australasia. Our latest edition has just been released in April 2019. In this, trainees from across the UK are contributing to increasing the knowledge of the latest paediatric articles of interest. We will continue to alternate in producing a joint quarterly summary of the latest paediatric headlines.

http://www.apagbi.org.uk/professionals/education-and-training/article-watch

APAGBI Training Survey

We are currently looking at where paediatric anaesthetic training is happening nationally. This is to increase our understanding of where fellowships are offered, to whom and how these are funded. In turn this may provide a more robust understanding of training and opportunities.

PATRN

We are working together to provide a cohesive link between the APA and PATRN. We are in discussions regarding a 'trainees' corner' at the APAGBI Annual Scientific Meeting in order to allow for easy networking and discussion amongst trainees nationally.

Christa Morrison Trainee Representative, APAGBI Council

11. Website and Social Media Report

I hope you are enjoying the new and improved website. Content is updated regularly, our most popular areas include the monthly Hot Topic, with accompanying poll, our database of Paediatric Anaesthesia Fellowships, and our courses section which provides an up to date list of all courses and meetings relevant to paediatric anaesthesia in the UK and internationally. Our podcasts of past lecturers from the Scientific meetings continue to be a popular area, receiving regular downloads each week. The PATRN group will be hosting a new section on the website, posting details of their latest research projects. If you would like to highlight something via the website, then please email me details that can be added as news on the homepage. We are looking into an alternative platform to host our videos from past and future ASMs.

APAGBI maintains a social media presence on Facebook and Twitter. We aim to use these social media channels in conjunction with the website to communicate to followers about APAGBI news and events, to highlight to followers content we feel is interesting and educational.

In the past year we achieved our 1000th Twitter follower and our audience has grown by over 400. Facebook has over 2200 followers and the audience has increased by 100 during the year.

Sumit Das, Webmaster James Farrant, Social Media

12. Patients' Interests Report

I was appointed to take over from Sara Payne in January 2019 and my involvement with the APAGBI has necessarily been limited as at the date of writing. However, following my first Council meeting in January, the following month I was involved in my first Peer Review visit in Yorkshire. This gave me great insight into the work done by paediatric anaesthetists as well as the opportunity to ensure that the experience of patients and families was at the centre of the service provided, and I am looking forward to my second Peer Review visit in June, also in Yorkshire.

Camilla Polton
Patient Representative, APAGBI Council

13. Peer Review Report

The new Peer review process is now underway, and the first visit took place in February. The request via the linkmen for centres to trial the new process generated a lot of interest, and we have dates fixed for 3 further visits in 2019.

After the first visit two separate reports were written, an APA report similar to the ones written in the past, and a report looking specifically at the ACSA standards. The final APA report has been sent to the centre reviewed. The ACSA report has been sent to the College ACSA team and we are awaiting their reply. In the agreement between the APA and the College the actual form of this report had not been discussed, it was just described as a 'short report' so they may require it in a different format rather than the ACSA report template which we used.

In the future we think that 3 visits a year would be manageable, but we need to recruit more clinical reviewers and patient representatives to make this sustainable.

We need to discuss secure storage for the reports and a way of highlighting examples of good practice seen on reviews. Judith and I are working as a team with a gradual transfer of lead over the next few visits.

Stephanie Bew Judith Nolan

14. Linkman report

The APA Linkman Scheme connects paediatric anaesthetists facilitating collaboration and partnership. Our 2018 conference took place in picturesque Bath on 12th October 2018. For the first time, we used a differential pricing system offering early bird discounts and discounts for non-consultant delegates. The early bird discount was 21% of the standard fee for consultants and was available till 17th September 2018.

The non-consultant delegate fee applied to all junior Doctors i.e. all trainees and SAS doctors including Trust grade doctors, Speciality doctors and clinical fellows. The early bird discount was nearly 20% of the standard fee for non-consultants and was available till 22nd September 2018.

Trainee attendance and tweeting at the linkman conferences have been steadily growing. The Linkman prize competition has become a regular feature of the conference. We received 15 abstracts on the theme subject which was 'Networking for patient centred care'. The winner, Philippa Horsfield, made an oral presentation and ten posters were displayed on the day. Certificates of commendation were presented to the top three submissions.

The 2018 Linkman Conference had two unique features:

- 1. A session by an 'Expert by experience'
- 2. An optional pre-conference workshop on the use of twitter.

Check out #APAL18 to get a flavour of the meeting.

The next Linkman Conference is scheduled for Monday, 4th November 2019 at the King Khalid Building, Royal College of Surgeons of Edinburgh and will be a joint APA Linkman/SPAN meeting. Registration opens on 10th June 2019 and will be via BookCPD. https://bookcpd.com/course/2019-joint-apa-linkman-span-conference

The theme for the 2019 Linkman Prize is 'Paediatric Peri-operative Medicine'. The project can involve any teamwork project, pathway or activity that promotes the ethos of 'Paediatric Peri-operative Medicine'.

The first prize is 'One-day registration (day of choice) at the APAGBI ASM 2020 at London'.

Timeline for the Linkman Prize

- Call for abstracts (opens at the Sheffield ASM)
- The deadline for submissions is Friday 13th September 2019.
- Results will be intimated by 1st October 2019.

The winner will be expected to make a five-minute oral presentation at the Linkman Meeting on 4th November 2019 at Edinburgh.

Our ethos 'Link, learn, connect and collaborate' has led to increased engagement with the APA Linkman Scheme. In November 2018, I received a query relating to 'How should general anaesthetists keep up with revalidation/appraisals when covering on-calls involving care for paediatric population?'. This question had come up at the DGH's GIRFT review.

The APA's response to this query is:

'No specific number of cases needed - no specific courses needed'. In general, paediatric life support courses/competencies and safeguarding training are needed.

This is in accordance with the GPAS document which is available on this link.

https://www.rcoa.ac.uk/document-store/guidelines-the-provision-of-paediatric-anaesthesia-services-2019

The paragraph 4.6 of the document (pasted below) is most relevant.

Anaesthetists who do not have regular children's lists but who do have both daytime and out-of-hours responsibility for providing care for children requiring emergency surgery should maintain appropriate clinical skills. There should be arrangements for undertaking regular supernumerary attachments to lists or secondments to specialist centres. The Certificate of Fitness for Honorary Practice⁵³ may facilitate such placements and provides a relatively simple system for updates in specialist centres. Paediatric simulation work may also be useful in helping to maintain paediatric knowledge and skills. There should be evidence of appropriate and relevant paediatric CPD in the five-year revalidation cycle.⁵⁴

The APA council and anaesthetists in specialist centres sought the opinion of the 'Link-persons' on various topics including 'Strategies for managing peri-operative anxiety', 'Gentamicin use' and 'Anaesthesia related mortality and Morbidity'. Thank you for completing these surveys. A request for your input into 'Current Paediatric training will soon be coming your way. Our participation will be invaluable.

Your engagement is central to the success of the Linkman Scheme. Please connect with me via email either on linkman@apagbi.org.uk or on nimmajan@gmail.com

Nirmala Soundararajan APAGBI Linkman Lead

15. Reports from Other Organisations

A. Report on Behalf of the Royal College of Anaesthetists

There have been a number of notable developments at the RCoA over the last 6 months that should be reported to the Council of the APA.

The RCoA Technology Strategy Project (TSP) has completed work on the life-long learning platform and is now moving to deliver other projects such as a new college website and ACSA portal. This will be the member-facing part of the project and will be undergoing a lot of user-testing before going live late 2019.

Three new elected council members have been sworn-in. Of the two Consultants: Mike Swart and Felicity Platt neither has a significant interest in paediatric anaesthesia.

Tom Grinyer the current CEO has resigned to take up a similar role at the BMA. In the interim, Sharon Drake will be acting CEO until the recruitment process in completed, hopefully by late summer 2019.

In October 2018 it was my great pleasure to present the ACSA award to the first children's hospital in the UK: Alder Hey. Hopefully there will be a second accredited before the summer! The first APA Peer-Review using the ACSA standards as part of the visit has taken place and the report is with the ACSA Committee. There is still some discussion to be had about how ACSA and APA Peer-Review can best work together.

After several meetings with Dr Rich Martin the RCoA is putting together a business plan for the design of a new open access resource for the teaching of anxiety management in children. Once the business plan is approved then the material will be placed on the College's website. It is planned to include this teaching as a requirement for CCT in the new curriculum.

The RCoA is moving the peri-operative agenda forward with the formation of CPOC the Centre for Perioperative Care. This is a collaborative venture with several Royal Colleges including surgeons, physicians, GPs and nursing input. CPOC will drive innovation, research and guideline development. It has ambitions of paediatric involvement and close working with the APA's peri-op Committee should be encouraged. I will push for board representation.

The NIAA has two paediatric research projects: both are about to commence data collection, Little Journeys and CEASP.

There have been two reports that have drawn close collaboration from the APA and RCoA:

NHSE Model of Care - Children's Surgery v2

The AoMRC discussed this document in detail last week and following disquiet from those

present has issued the following action statement:

The official action from the AoMRC is:

Management of critically ill children

It was agreed that the RCoA, RCPCH and other relevant Colleges would meet to discuss issues over the effective team management of critically ill children and bring proposals back to the Council.

To this end the RCoA is hosting a joint meeting and the APA has been asked to provide several representatives.

SAFE DELIVERY OF PAEDIATRIC ENT SURGERY IN THE UK: A NATIONAL STRATEGY

ENT UK and BAPO are seeking RCOA support for their document:

This is currently being considered by the President but as there was official RCoA representation on the working party this should not be contentious.

Russell Perkins Manchester and Royal College of Anaesthetists

B. Report on Behalf of the Association of Anaesthetists

Elections:

Election for 3 Board members has been announced. One post is for a SAS member in the first instance.

Nominations for Hon Secretary elect and President elect have been announced and an election will take place soon.

Appointments

The *Anaesthesia* Editorial Board has recommended to our Board the appointment of the following individuals as part time Editors of *Anaesthesia*:

- Kariem El-Boghdadly, London (former Trainee Fellow and also 50% Anaesthesia Reports Editor)
- Laura Duggan, Vancouver, Canada
- Seema Agarwal, Manchester
- Helen Laycock, London (former Trainee Fellow)

Working Parties update

Currently being prepared for publication

- Guidelines for the safe provision of anaesthesia in magnetic resonance units 2019 (on early view, May print issue of *Anaesthesia*)
- Guideline for day case surgery 2019 (*Anaesthesia* early view 9 April 2019)
- The 'NAP5 Handbook': concise practice guidance on the prevention and management of accidental awareness during general anaesthesia (joint press release being planned with RCoA)
- Infection prevention and control
- Controlled Drugs in Peri-operative Care Approved for publication and being endorsed
- Checklist for draw-over anaesthetic equipment
- Management of glucocorticoids for patients with adrenal insufficiency during the peri-operative period - Next for Board approval (online member consultation completed)
- Safe transfer of the brain-injured patient: trauma and stroke Next for online member consultation
- Peri-operative management of patients with sickle cell disease
- Recording of doctors in hospitals Next for Board consultation
- Neurological monitoring practice after obstetric neuraxial block Underway
- Malignant hyperthermia
- Management of proximal femoral fractures
- Catastrophes in anaesthetic practice, navigating the aftermath
- Anaesthesia and analgesia for trauma patients at risk of compartment syndrome

- Suicide and anaesthetists
- Substance use disorder amongst anaesthetists
- Returning to work
- Organising a year abroad
- Packaging and labelling: drugs infusions and flushes
- Who is the anaesthetist
- SAS handbook
- Trainee handbook

Working parties being set up

- DNAR membership and first meeting being organised
- Anaesthesia for emergency bowel surgery membership and first meeting being organised
- Anaesthesia for women who are breastfeeding first meeting held at WSM

Working parties to be started

• Ergonomics in anaesthesia – approved at March 2019 Board of Trustees

Advocacy and Campaigns update

Please find below a summary of the Advocacy and Campaigns work that has taken place recently.

Update on Previous Work "Fight Fatigue" Campaign

Meeting with Jonathan Ashworth MP

 Outcomes included: Potential support for Fatigue campaign and introductions to other supporters

Legislation

- Health Care (International Arrangement) Bill Committee
- Committee and report stages read and summarised
- Welsh Assembly committee reports and statements read and summarised

Policy papers

- Commission on Mental Wellbeing report Summary produced
- Drafted long position statement on long term plan

Royal College meetings

- Follow up actions collated and started
- Support for the Fatigue campaign from Royal College of Pathologists and Royal College of Surgeons of Edinburgh

Select Committee

Summary produced Health and Social Care Committee session on Kark report on Fit and Proper Person Test

Website

- First summaries produced of consultation responses and guidelines
- Briefings being developed

Political Monitoring

Weekly emails produced summarising the main developments in Parliament, Government and within other organisations continuing.

Upma Misra Honorary Membership Secretary, Association of Anaesthetists

16. National reports

A. APAGBI Report from Scotland

Staffing to cover paediatric anaesthesia across Scotland remains challenging (both in DGHs and tertiary centres).

There is variation in access to tertiary paediatric anaesthetic training from different health boards across Scotland which was highlighted by Grant Rodney. There is a challenge in organising 6 months specialist paediatric anaesthetic training for senior trainees considering becoming a Designated Paediatric Anaesthetist in a DGH.

In addition, the challenges of finding paediatricians to fill the paediatric medical posts across Scotland continues, and this has had an impact on some hospitals no longer performing inpatient procedures.

On a positive note, the team in Tayside has produced podcasts and pictures to help prepare children and families who are going to have an anaesthetic:

http://www.thebigbrave.com/about-us/ and produced a video of the process of a child going to theatre:

https://www.youtube.com/watch?v=j InWeAjt88&feature=youtu.be&fbclid=IwAR3uoYlhNC SET-hXbN4HDqPAF9FCH2bXx6LwWD8 Es-jDUI 8UmYgj0 gJg

SPAN held its annual spring meeting this year in Dundee at the Discovery Centre, and the quality of the meeting was excellent. Highlights included the development of the Scottish Trauma Network, Virtual reality and paediatric peri-operative anxiety, the new PaEdiatric Airway Registry (PEAR) and Learning from excellence.

The APA linkman meeting will be jointly hosted by SPAN in Edinburgh this autumn, 4th November 2019. Put the date in your diary and it is time to get your abstracts and posters ready! We look forward to seeing you there!

B. APAGBI Report from Wales

1. PAGW Annual meeting

The PAGW Annual Scientific meeting was held in Swansea in November 2018. This was a joint meeting with AWAG (All Wales Airway Group) and attracted a strong, mixed audience with common themes featuring throughout the day. The APA was represented with a swathe of speakers: Simon Courtman, Stephanie Bew, Ollie Bagshaw and myself. Simon Courtman and I marked the Trainee presentations.

A huge debt of thanks must go to the invited speakers who braved awful weather on extended train journeys home, with Dr. Courtman bagging the prize for the most adventurous travelogue, being obliged to hitch a lift with a drunk Australian when the train could go no further!

This successful joint meeting format will continue in 2019 with a planned meeting with the Welsh Paediatric Society, a first with this group for PAGW. This will talk place at Coldra Court, Newport, on Friday 8th November 2019. Details will be advertised in due course.

2. Proton Beam service

The projected service in at the Proton Partners International centre in Newport, S. Wales for children seems to be confined to the long grass at present following a visit by commissioners, the Welsh Health Specialist Services Committee (WHSSC). It remains unclear when or if this service from an independent provider will start at all. The potential for commissioning a Proton Beam service from an NHSE provider, such as the Christie Hospital in Manchester remains a possibility. We await the decision of commissioners. Currently Welsh children requiring PBT are sent abroad, usually to Germany, for treatment.

3. APA Annual Scientific Meeting, Cardiff 2021

The primary conference and social venues for the meeting to be held on 5-7th May 2021: City Hall, the National Museum and Reardon Smith Lecture theatre are all booked. A working group has held a preliminary meeting to draft some scientific and social programme ideas and to brainstorm potential Jackson Rees speaker choices.

Chris Gildersleve, Children's Hospital for Wales President Elect

17. Equipment report

In May 2018 I attended the 47th meeting of the International Standards Organization (ISO) committee TC/121 which deals with "anaesthetic and respiratory equipment" as part of the British delegation, acting as clinical expert and representative of the AAGBI and APAGBI. TC121 currently is responsible for 92 international standards. The meeting was hosted by the Swedish Standards Institute (SIS) at the Medicon Village in Lund, Sweden. The village hosts a number of private sector research facilities.

The University of Lund has made a number of notable discoveries including ultrasound scanning, artificial kidneys, various asthma treatments and Bluetooth technology.

The majority of the work is carried out in sub-committees (SC) within TC121 with each SC setting standards for specific devices as detailed below. As many standards refer to other standards "owned" by other SC's, plenary sessions and joint meetings take place at the start and end of the week's business. As usual I represented the AAGBI and APA in SC/2.

ISO/TC 121/SC 1 ISO/TC 121/SC 2 ISO/TC 121/SC 3 ISO/TC 121/SC 4 ISO/TC 121/SC 6 ISO/TC 121/SC 8

Breathing attachments and anaesthetic machines Airways and related equipment Lung ventilators and related equipment Terminology and semantics

Medical gas systems

Suction devices for hospital and emergency care use

Issues discussed at the opening plenary included liaison reports from other technical committees which hold standards that cover devices related to TC121's equipment and is relevant to our work.

CEN TC/215 report.

The CEN representative, Terry Longman, explained that the EU medical device directives (MDD) are being replaced by the Medical Device Regulations (MDR). This will require all of the Annex ZAs in the ISO standards to be revised which are required for standard harmonization within Europe. The current proposal is that all standards will be deharmonized and then re-harmonized with the MDR.

It remains unclear how the UK's standards work and its relationship with CEN will be affected by leaving the EU.

ISO/TC 210 JWG 4 – Small Bore Connectors

It was reported that the specimen reference 80369-2 connectors for respiratory therapy have now been ordered and should be shipped in the next two weeks. It remains unclear who will conduct the testing, what the test protocol will be and who will fund the testing at

a cost of \sim \$10,000 so the project and those others dependent on those connectors remains somewhat stuck.

Other liaison reports received included:

ISO/TC 194 EC/SC62D CEN/TC205 CEN/TC215 ISO/TC58

Biological and clinical evaluation of medical devices

Electromedical equipment

Non-active medical devices

Respiratory and anaesthetic equipment (CEN mirror for ISO TC121) Gas cylinders

ISO/TC184/SC2-IEC62A/JWG – Medical robots

Contains complex standards around the way electronic equipment communicates across data networks including such things as the specification for data packets on a hospital backbone network.

ISO/TC198 Sterilization of health care products

ISO/TC 220 Cryogenic vessels

World Federation of Societies of Anesthesiologists (WFSA)

The WFSA liaison, Dr Mainland told us that there is a move to develop a basic anaesthesia "kit" for low income economies including such things as facemasks, a self-inflating bag, Sp02 monitor such as the lifebox and a capnograph. She asked that if any of the industry members had a suitable capnography product to contact her.

SC2 Tuesday 21st –Wednesday 22nd May

After the usual housekeeping business, review of the minutes and the appointment of the drafting committee (who prepare the text of the resolutions) the committee began its work. SC2 is responsible for the following published standards:

ISO 5361:2012

ISO 5362:2006

ISO 5364:2008

ISO 5366-1:2000

ISO 5366-3:2001

ISO 5366-3:2001/Cor 1:2003 ISO 5367:2014

ISO 7376:2009

ISO 8836:2014

ISO 11712:2009 ISO/TR 11991:1995 ISO 14408:2016 ISO 16628:2008 ISO 27427:2013 ISO

18190:2016 ISO 5361:2016

ISO 5366:2016 ISO 5364:2016

Tracheal tubes and connectors Anaesthetic reservoir bags Oropharyngeal airways

Tracheostomy tubes -- Part 1: Tubes and connectors for use in adults Tracheostomy tubes -- Part 3: Paediatric tracheostomy tubes (Technical Corrigendum)

Breathing sets and connectors
Laryngoscopes for tracheal intubation
Suction catheters for use in the respiratory tract
Supralaryngeal airways and connectors
Guidance on airway management during laser surgery of upper airway Tracheal tubes designed for laser surgery - Requirements for marking and accompanying information
Tracheobronchial tubes -- Sizing and marking
Nebulizing systems and components
General requirements for airways and related equipment
Tracheal tubes and connectors
Tracheostomy tubes
Oropharyngeal airways

Standards currently under development or Review:

ISO/DIS 19211 Automatic fire safety valves for use during oxygen therapy ISO/CD21917 Voice prostheses – General requirements and test methods for the

evaluation of physical characteristics

ISO16628 - Tracheobronchial tubes -- Sizing and marking

This is a relatively small standard which predominantly deals with the sizing nomenclature and marking requirements that is due for re-confirming, systematic review or withdrawal. It was decided that the committee would indeed revise the standard in order to align it with the new format which references the general requirements standards (ISO18190).

ISO CD/8836 – Suction Catheters for use in the respirator tract

A number of comments were received on the latest committee draft (CD) of this standard which were discussed and resolved. The standard was initially revised and published 2014 but needed revising again early to allow the re-introduction of catheters with a female connector which are prevalent at a lower price point. These were initially removed from the standard due to safety concern but this was widely contested. As above, the standard has also been re-formatted to align it with ISO18190. This has resulted in a change in the methods of biocompatibility testing from using the ISO 10993 series to the "ISO 18652"

series" which are a more stringent set of tests and will require the re-testing of a great number of products. Many industry members believed this was excessive as the complete series of tests were not appropriate for this class of device. It was agreed to make the requirement for using the 18652-1 section which will allow the manufacturer to use the

appropriate parts of the series of tests rather than being mandated to use them all for each device.

There followed a number of technical discussions including testing for resistance to kinking/collapse, the relative dimensions of the catheter shaft to the connector and the environmental conditions (temperature) under which certain tests are conducted.

ISO/CD 21917 – Voice prostheses – General requirements and test methods for the evaluation of physical characteristics

This is a new standard under development and is currently at the committee draft (CD) stage. A number of comments that were received with the voting result were reviewed and resolved. As I am in pure paediatric practice, I have not seen such a device in nearly 15 years so had little clinical expertise to contribute towards this document.

ISO/NP 23368 – Anaesthetic and respiratory equipment -- Nasal Cannulae for respiratory therapy

This is a new work item which has been accepted for development into a new international standard. Generally at the stage of new work item only a few comments are received with most development work being done in the subsequent stages. Details regarding the biocompatibility testing, how other features such as a capnography sampling port were dealt with in the standard were discussed and resolved. It was decided that these additional features would not be specifically dealt with in the document but the specifications in the standard did not exclude them being incorporated into the design. It was felt that this would still allow innovation while detailing the basic safety related requirements for the device.

This standard pertains only to cannulae that are intended for delivery of respiratory therapy gas and not those that provide any form of therapeutic positive pressure or flow for the purpose of reducing respiratory effort or non-invasive ventilation.

The document will be circulated as a committee draft for the next stage of investigation and comment.

ISO/NP 23371 Anaesthetic and respiratory equipment - Airway cuff pressure measurement devices

This is a new standard that has recently been accepted for development regarding devices that measure or indicate airway cuff pressure and may incorporate a method of cuff inflation. I have been acting as the convener for this task force which will be disbanded (as the proposed new work item has been accepted) and a new working group will be formed to take it forward. A small number of comments were received which were reviewed and resolved and a new committee draft will be produced and circulated for comment.

ISO/WD 23372 Anaesthetic and respiratory equipment – Air entrainment Devices

This is another new work item that has been accepted (we have been busy!) for development into a standard. A European standard for venturi masks exists (EN13544-3)

which the CEN215 committee kindly offered to the ISO. This was accepted as a new work item and circulated as with the other new items. Only a single technical comment was received and the document will progress to a committee draft.

Update from TF04 – 22mm non-conical tracheostomy connectors

This task force is looking at a particular 22mm connector used to attach filters and similar devices to end-airway-stomas and are unrelated to 22mm conical connectors found on breathing sets and circuits. The TF is currently scoping the market as there are a great number of proprietary incompatible connectors in existence and it was reported that it is a greatly disparate group of products and considerable further research is needed before a new work item could formally be put forward for a vote.

The SC/2 meeting closed with the drafting committee presenting the resolutions of the committee meeting (which summarize the progress and decisions made by SC2 during the meeting). One particular interesting item concerns the proposal that the standards for heat and moisture exchange (HME) filters are currently held by SC/3 despite them being within the scope of SC/2. A case is being made for them to be transferred to SC/2 and it is hoped that this can be done cooperatively with SC/3 and would need to be ratified by a vote of the member bodies for both SC/2 and SC/3. If agreement cannot be made a case can be made to the ISO technical management board (TMB) but it is highly unlikely that the latter route would be taken.

Our thanks were offered to the Chairman, Dr David Feinstein, the committee secretary Ms Colleen Elliot and to the SIS for hosting the meeting.

SC/2 will hold an interim meeting $5^{th} - 7^{th}$ 2018 December in London at the BSI Building.

Thursday 24th May

On Thursday morning I attended the SC/6 meeting at the request of their secretary. An incident report from France which involved the death of a child and the use of a variable orifice flowmeter was discussed. While the report lacked any sort of detail it became apparent that such flowmeters can essentially deliver up to 60I/min of the relevant gas when fully open regardless of its nominal operating range.

I was able to give them a paediatric perspective and explained the potential unexpected consequences of some of the proposed changes including being unable to deliver a adequate flow of oxygen in an emergency resuscitation situation. I believe that they will be publishing a second amendment to the relevant standard (ISO 15002:2008) immediately in the interim prior to a full review with the aim of giving such devices a maximum flow rate when fully open.

Following this meeting, I attended the joint working group 3 (JWG3) with SC/2 and SC/3 where the testing methodology for HME filters was discussed in some detail. Again, I was happy to offer a paediatric perspective on the various flow and tidal volume values which are clinically relevant to children.

The SIS kindly arranged a bus tour over lunchtime around the site of the new European spallation source which is under construction in Lund. This facility will use high energy neutrons to examine molecular structures in a similar way to x-ray crystallography but in greater detail and will prove a valuable resource to life science when it comes on line.

ISO TC/121 Cyber-security update

I attended a meeting to discuss TC121's response to the ISO/IEC's directives regarding cyber security of medical devices. While airways have limited scope for electronic attack, a large number of standards under the remit of TC121 are electronic and have network connection ports. They are there for venerable to cyber-attack which could have catastrophic consequences and this was brought sharply into focus following the WnnaCry attack last

year. It is proposed that TC121 will produce a technical report which will include recommendations for risk analysis and risk control measures which can be incorporated into TC121 standards where appropriate.

FDA Report to SC/2

On Thursday evening we received a report from the FDA in the USA via webex. They have searched the MAUDE database for incidents involving devices covered by the standards for which SC/2 is responsible. A great number of incidents resulting in injury and death were presented which proved very informative.

The FDA database has a search facility which is publically available via the internet at https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfmaude/search.cfm including all details apart from those that are commercially sensitive.

Closing Plenary Meeting.

The closing plenary meeting was held in the afternoon of Friday 25th May. The various subcommittees presented their reports and resolutions from their meetings. I am unclear as to the cause (possibly the pleasant weather we experienced during the meeting) but this was probably the most uneventful plenary meeting I have attended and there were no contentious discussions! The resolutions of the plenary were accepted, thanks were offered to the meeting organizers and the meeting was closed.

SC2 will hold an interim meeting $5^{th} - 7^{th}$ December in London with next year's full TC121 meeting being in Kobe Japan $13^{th} - 17^{th}$ May 2019 both of which I hope to attend.