



SCTS

**Society for Cardiothoracic Surgery
in Great Britain and Ireland**

Annual Report

2020-21

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SCTS Administrative Office	
Isabelle Ferner	Society Administrator & Conference Organiser
Tilly Mitchell	Finance & Exhibition Coordinator
Emma Piotrowski	Education Administrator

SCTS Executive Committee

Committee Members	
President	Simon Kendall, James Cook Hospital, Middlesbrough
Honorary Secretary	Narain Moorjani, Royal Papworth Hospital, Cambridge
Treasurer	Amal Bose, Blackpool Victoria Hospital
Meeting Secretary	Maninder Kalkat, Queen Elizabeth Hospital, Birmingham
Elected Trustee	Carin Van Doorn, Leeds Teaching Hospitals
Elected Trustee	Mobi Chaudhry, Castle Hill Hospital, Hull
Elected Trustee	Enoch Akowuah, James Cook Hospital, Middlesbrough
Elected Trustee	Aman Coonar, Royal Papworth Hospital, Cambridge
Elected Trustee	Betsy Evans, Leeds General Infirmary
Elected Trustee	Andrew Parry, Bristol Royal Hospital for Children
Lay Representative	Sarah Murray, Dorset Healthcare University NHSFT
Education Secretary	Sri Rathinam, Glenfield Hospital, Leicester Carol Tan, St George's Hospital, London
Trainee Representative	Duncan Steele, Blackpool Victoria Hospital Abdul Badran, Southampton General Hospital
Nursing & AHP Representative	Bhuvana Krishnamoorthy, Wythenshawe Hospital
Perfusion Representative	Phil Botha, Birmingham Children's Hospital Chris Efthymiou, Glenfield Hospital, Leicester
Co-opted Members:	
Congenital Sub-Committee	Rafael Guerrero, Alder Hey Children's Hospital, Liverpool
Audit Sub-Committee	Doug West, Bristol Royal Infirmary
Research Sub-Committee	Eric Lim, Royal Brompton Hospital, London Mahmoud Loubani, Castle Hill Hospital, Hull
Transplantation Sub-Committee	Steven Tsui, Royal Papworth Hospital, Cambridge
Innovation Sub-Committee	Hunaid Vohra, Bristol Royal Infirmary

Executive Summary 2020-21

- **SCTS response to the COVID-19 pandemic.**

Over the past 18 months, cardiothoracic surgery has been severely affected by the COVID-19 pandemic. The SCTS has helped support the national response, including nationwide escalation plans, cross-regional cover and dissemination of information through a specific COVID-19 section on the SCTS website, including practice guidelines and treatment options. SCTS members were involved in many ways, including redeployment, maintaining acute cardiothoracic surgical activity and contributing to COVID-19 research studies. Moving forward, information is being shared to help units recover throughput, as well as consideration for developing cardiothoracic surgery hubs through negotiations with NHS Specialist Commissioning, the Royal College of Surgeons and Federation of Surgical Specialty Associations to deal with lengthening waiting lists.

- **Unit specific outcome monitoring in Adult Cardiac Surgery.**

Bringing it into line with the outcome monitoring programmes in thoracic surgery and congenital cardiac surgery, adult cardiac surgery outcomes from April 2021 will be published on a unit-level basis, as opposed to the surgeon-level reporting that has been occurring over recent years. In addition to mortality, it will also assess morbidity, including post-operative rates of stroke, acute kidney injury, deep sternal wound infection and return to theatre for bleeding. It will be combined with a unit quality assurance programme that will aim to look at the quality of care throughout the whole patient pathway from pre-admission decisions to post-operative care and discharge. A series of webinars were run during the year to inform members of the new changes. This evolution of outcome monitoring has been supported by other professional societies, including the Association for Cardiothoracic Anaesthesia & Critical Care (ACTACC), British Cardiovascular Society (BCS) and Society for Clinical Perfusion Scientists (SCPS), as well as the NHS Cardiac Services Clinical Commissioning Group and National Institute for Cardiovascular Outcomes Research (NICOR).

- **SCTS Equality, Diversity and Inclusion Strategy**

Over the past 12 months, the SCTS are very proud to have introduced a number of initiatives to help develop a diverse cardiothoracic workforce, and to provide equal opportunities and an inclusive environment for all those wishing to develop a career caring for patients undergoing cardiothoracic surgery. These include the Women in Cardiothoracic Surgery Mentorship Programme, expanding the student outreach and immersion programme to increase the opportunities to encourage those from all backgrounds to consider cardiothoracic surgery as a career, and the Trust Appointed Doctors Mentorship Programme. In addition, the SCTS has formed the Women in Cardiothoracic Surgery Sub-Committee and Equality, Diversity and Inclusion Sub-Committee to further develop these themes to support the cardiothoracic surgical workforce or those aspiring to work within the specialty. In addition, the SCTS have surveyed the membership to get a greater understanding of the issues that exist in cardiothoracic surgery in relation to equality, diversity and inclusion, and how members feel the SCTS can contribute to this important agenda.

- **Transforming the Cardiothoracic Surgery Workforce.**

The SCTS has developed a toolkit to transform the cardiothoracic surgery workforce by expanding the nursing and Allied Health Professional role. It will provide improved patient care, enhanced opportunities for clinical career progression for nurses and Allied Health

Professionals, and give surgeons in training (both nationally appointed and trust appointed) more access to theatre to develop and refine their operative skills. Examples have been provided from units that have successfully developed a multidisciplinary team model that will help to provide an infrastructure for other units to follow suit and for all to understand the importance of working together to provide excellent services.

- **MDM standards.**

In collaboration with the Association for Cardiothoracic Anaesthesia and Critical Care (ACTACC), British Cardiovascular Intervention Society (BCIS), British Cardiovascular Society (BCS) and British Heart Valve Society (BHVS), the SCTS have developed standards for multi-disciplinary team meetings (MDMs) to offer a framework of how MDMs should run and how they can be used to improve patient outcomes. *'Getting the best from the Heart Team: Guidance for the structure and function of cardiac multidisciplinary meetings'* has been produced using a structured approach, based on evidence and guidelines, to support the decision-making process for each individual patient.

- **Publication of the 7th Cardiac Surgery Blue Book.**

The 7th edition of the SCTS Blue Book published analysed cardiac surgical outcomes between 2001-2016, during a time of rapid expansion of percutaneous coronary intervention and the introduction of transcatheter aortic valve implantation. It includes results from 534,067 operations, with more consultant surgeons, each doing fewer operations but with better results. Although the patients aged (by an average of 2 years) and their risk profile has increased (logistic EuroSCORE of 5.6 to 8.5), more survive surgery, with the crude mean in-hospital mortality rate falling from 4.0% to 2.8% during this era. Members of the cardiothoracic surgical community should be very proud of these outstanding results.

- **Annual meeting, SCTS-Ionescu University and Cardiothoracic Forum.**

Due to the disruptions caused by the COVID-19 pandemic, the 2020 Annual Meeting was cancelled and the 2021 Annual SCTS Meeting, CT Forum and SCTS-Ionescu University were held virtually in May 2021, without any face-to-face attendance for members for the first time in its history. Despite this, the meeting was a great success, with over 1000 delegates and members of the industry attending. The educational content was delivered by national and international experts in the field of Cardiothoracic Surgery, with a life-time achievement award presented to Professor Bill Walker for his outstanding contributions to cardiothoracic surgery.

- **Publication of Validated Cardiothoracic Surgery Outcome Data on the SCTS Website.** Current adult cardiac surgery and congenital cardiac surgery outcome data from NICOR and thoracic surgery data from the Lung Cancer Clinical Outcomes Publication (LCCOP) team have been published on the SCTS website (Appendix 1).

- **SCTS Education Programme of Cardiothoracic Surgical Training Courses.**

This continues to expand, including a wide range of courses for Consultants, NTN trainees, Trust Appointed Doctors (TAD), nurses and allied health professionals, core surgical trainees, foundation year doctors and medical students interested in a career in cardiothoracic surgery (Appendix 2).

- **Portfolio of Educational Fellowships.**

The SCTS is truly grateful for the benevolence of Mr Marian Ionescu, as this year marks the 10th year of support from him, during which time over 150 travelling fellowships have been awarded, enabling colleagues and our specialty as a whole to advance practice (Appendix 3). The SCTS is also indebted to Ethicon, long-standing supporters of the NTN Fellowships. Further industry partners have approached the SCTS to develop sub-speciality specific fellowships for 2022.

- **4th SCTS National Research Meeting.**

The online meeting held in November 2020 was a great success, providing opportunities for trainees, nurses and allied health professionals, to get involved in national cardiothoracic research projects. Keynote speeches were delivered by Professor John Dark (Newcastle) and Professor Gavin Murphy (Leicester).

- **Board of Representatives (BORs) Annual Meeting.**

This was held online in October 2020 and focussed on the SCTS 5-year strategy, changes in the adult cardiac surgical audit, SCTS equality, diversity & inclusion strategy, and plans to increase operative exposure of cardiothoracic surgical trainees and enhance clinical career progression for nurses and allied health professionals. In addition, there were sessions on adult cardiac, thoracic and congenital cardiac surgery best practice in the new normal, with lessons learnt from COVID-19.

- **New Cardiothoracic Surgical Curriculum.**

In conjunction with the Cardiothoracic Surgery Speciality Advisory Committee (SAC), a new cardiothoracic surgical curriculum has been developed and will be introduced for doctors entering cardiothoracic surgical training in August 2021, following approval by the General Medical Council (GMC).

- **SCTS Innovation Sub-Committee.**

The Society has recently developed an Innovation Sub-Committee, with the purpose of providing a leadership role in supporting both technological innovations (such as minimally invasive or robotic surgery) and non-technological innovation (that improve processes and patient pathways) in all aspects of cardiothoracic surgery. The sub-committee will focus on facilitating an environment where the development of innovative techniques and the adoption of new procedures in cardiothoracic surgery is encouraged and allowed to flourish. In addition, the sub-committee will produce examples of best practice and quality improvement projects in innovation in cardiothoracic surgery, as well as develop protocols and guidance documents to support the introduction of new procedures. The sub-committee will work with Specialist Commissioning Groups, British and Irish Society for Minimally Invasive Cardiac Surgery (BISMICS) and industry partners to support the safe introduction of innovation.

- **SCTS website.**

The new SCTS website was launched in May 2021 with its user-friendly design to allow increased communication between the Society and its members. The website has patient specific sections, with information and videos about cardiothoracic surgical disease processes and operations, surgical outcomes and access to support groups. The professional pages give members the opportunity to access educational resources, such as operative videos, recently published research studies, and examples of best practice and quality improvement projects from other units in the country. In addition, the website provides an opportunity for members to be kept informed of all the educational courses and travelling fellowships offered by the

SCTS.

- **SCTS Bulletin.**

The Society has produced 2 high quality publications over the past 12 months reflecting all the changes occurring in the cardiothoracic community during that time, including SCTS activities, travelling fellowship reports and new initiatives being introduced, as well as focussed articles aimed at Consultants, surgeons in training, nurses and allied health professionals.

- **SCTS Mentoring Programme.**

The SCTS has developed a mentoring scheme to support trainees, newly appointed Consultants and Consultants in difficulty, to provide support and advice for cardiothoracic surgeons throughout their career. In parallel with this, the SCTS has run several training courses for cardiothoracic surgical practitioners wishing to become mentors.

- **Congenital Cardiac Surgery National Priority Setting Partnership.**

In collaboration with the SCTS and British Congenital Cardiac Association (BCCA), Nigel Drury and the team at the University of Birmingham will be working with the James Lind Alliance to develop the Congenital Heart Disease (CHD) Priority Setting Partnership (PSP). The outputs from the PSP will be used to develop a national CHD research strategy.

- **SCTS Transplantation Sub-Committee.**

The SCTS has developed a Transplantation Sub-Committee with the main aim of coordinating opinion from the sub-specialty nationally and thereby fulfilling a leadership role in advising the SCTS Executive and its members regarding all aspects of the conduct and practice of cardiothoracic transplantation within Great Britain and Ireland.

- **Unit engagement sessions.**

Changes during the COVID pandemic brought about an opportunity for SCTS to connect with individual units using virtual platforms bringing the Executive closer to the membership. 15 Unit Engagement Sessions have taken place, run as informal meetings, and allowed the SCTS senior executive to interact with units around the country. It gave all members of the cardiothoracic surgical community (Consultants, NTN Trainees, TAD trainees, nurses, allied health professionals and clinical managers) the opportunity to raise issues, ask any questions and allowed the SCTS to find out what members want from the Society.

Adult Cardiac Surgery Sub-Committee

Sub-Committee Members	
Co-chair	Enoch Akowuah, James Cook Hospital, Middlesbrough
Interim Executive co-chair	Simon Kendall, James Cook Hospital, Middlesbrough
Appointed Member	Steven Billing, New Cross Hospital, Wolverhampton
Appointed Member	Shakil Farid, John Radcliffe Hospital, Oxford
Appointed Member	Thanos Athanasiou, Hammersmith Hospital, London
Appointed Member	Mobi Chaudhry, Castle Hill Hospital, Hull
Audit Lead	Uday Trivedi, Royal Sussex County Hospital, Brighton
Education Lead	Debbie Harrington, Liverpool Heart & Chest Hospital George Asimakopoulos, Royal Brompton Hospital, London
Nursing & AHP Representative	Kathryn Hewitt, Queen Elizabeth Hospital, Birmingham Lisa Carson-Price, Glenfield Hospital, Leicester
Trainee Representative	TBC
Co-opted Members	
NICOR Audit Lead	Andrew Goodwin, James Cook Hospital, Middlesbrough
UK Aortic Surgery	Manoj Kuduvali, Liverpool Heart & Chest Hospital
NHS Commissioning	Peter Braidley, Northern General Hospital, Sheffield

Adult Cardiac Surgery Sub-Committee Summary for 2020-21

- Cardiac Surgery and COVID.** Over the past 12-18 months, adult cardiac surgery has been severely affected by the COVID-19 pandemic. The SCTS has disseminated information via the website on the management of patients during the pandemic, including screening and management protocols. As expected, the recently released NACSA report demonstrates a significant drop in overall activity, with significant regional variation. Moving forward, information is being shared to help units recover throughput, as well as consideration for developing cardiac surgery hubs through negotiations with NHS Specialist Commissioning, the Royal College of Surgeons and Federation of Surgical Specialty Associations to deal with lengthening waiting lists.
- Unit specific outcome monitoring.** From April 2021, adult cardiac surgery outcomes will be published on a unit-level basis, as opposed to the surgeon-level reporting, that will assess morbidity (such as post-operative rates of stroke, acute kidney injury, deep sternal wound infection and return to theatre for bleeding), as well as mortality. This will be combined with a unit quality assurance programme that will aim to look at the quality of care throughout the whole patient pathway from pre-admission decisions to post-operative care and discharge. This programme will look at departmental governance processes and internal audit mechanisms for addressing variation in outcomes, as well as measures of process, such as rates of day of surgery admission,

hospital length of stay, wait for in-house urgent surgery, multidisciplinary team meetings, quality indicators related to infrastructural support such as

accreditation of both perfusion and echocardiography services, as well as indicators of working practices (e.g., consultant of the week). This programme has been discussed and supported by other professional societies, including the Association for Cardiothoracic Anaesthesia & Critical Care (ACTACC), British Cardiovascular Society (BCS) and Society for Clinical Perfusion Scientists (SCPS), as well as the NHS Cardiac Services Clinical Commissioning Group and National Institute for Cardiovascular Outcomes Research (NICOR).

- **MDM standards.** The Cardiac Surgery Sub-committee has developed standards for multi-disciplinary team meetings (MDMs) to offer a framework of how MDMs should run and how they can be used to improve patient outcomes. *'Getting the best from the Heart Team: Guidance for the structure and function of cardiac multidisciplinary meetings'* is a joint report that was published in May 2021. It has been produced in collaboration with the Association for Cardiothoracic Anaesthesia and Critical Care (ACTACC), British Cardiovascular Intervention Society (BCIS), British Cardiovascular Society (BCS) and British Heart Valve Society (BHVS), using a structured approach, based on evidence and guidelines, to support the decision-making process for each individual patient. They will help units to introduce best practice from around the country in relation to MDMs for revascularisation, aortic valve disease, mitral valve disease, endocarditis and high-risk cases, thereby assuring that all units have a consistency of MDM structures, consider all patients in appropriate MDMs, discuss patients in a timely manner, and have quality assurance and audit of decisions and outcomes.
- **Innovation in Cardiac Surgery.** Over the past 12 months, the SCTS has developed an innovation Sub-committee and is collaborating with the British & Irish Society for Minimally Invasive Cardiac Surgery (BISMICS). This includes developing consensus documents on the introduction of minimally invasive cardiac surgical procedures and proctoring, as well as the reintroduction of MICS following the COVID pandemic.
- **Consultation and Review of National Guidelines.** The Adult Cardiac Surgery Sub-committee has also been active in submitting responses to national guidelines and processes, such as the draft NICE Valve Guidelines, cardiology GIRFT project, Ozaki procedure to NICE, NHS Evidence Based Commissioning and cardiothoracic surgery GIRFT project relating to urgent CABG and infective endocarditis pathways.

Adult Cardiac Surgery Sub-Committee Plans for 2020-21

- **Increasing sub-specialisation in cardiac surgery.** This process will be supported by the cardiothoracic surgery GIRFT project 2.0 and the NICE guidance on valvular disease, which is due to be published in September 2021, with the aim to increase quality and patient outcomes, such as by increasing repair rates for degenerative mitral valve disease.
- **Increasing the uptake of minimally invasive cardiac surgery.** The Adult Cardiac Surgery Sub-committee will continue to collaborate with the Innovation Sub-committee and BISMICS to increase the dissemination of minimally invasive cardiac surgery throughout the country supported by unit level outcomes, in line with the draft NICE valve guidelines.
- **Development of a job plan template.** The Adult Cardiac Surgery Sub-committee is in the process of developing draft Consultant Cardiac Surgeon job plan templates that can be forwarded to units to help with the job planning process. This will be especially

important with the increase in MDMs required to meet the national standards in coronary artery disease, aortic valve disease, mitral valve disease, infective endocarditis and aortovascular disease.

Thoracic Surgery Sub-Committee

Sub-Committee Members	
Co-chair	Aman Coonar, Royal Papworth Hospital, Cambridge
Executive co-chair	Simon Kendall, James Cook Hospital, Middlesbrough
Appointed Member	Steve Woolley, Liverpool Heart & Chest Hospital
Appointed Member	Kandadai Rammohan, Wythenshawe Hosp., Manchester
Appointed Member (Research)	Babu Naidu, Queen Elizabeth Hospital, Birmingham
Appointed Member	Juliet King, Guy's Hospital, London
Appointed Member	Joel Dunning, James Cook Hospital, Middlesbrough
Appointed Member	Leanne Harling, Guy's Hospital, London
Appointed Member	David Healy, The Mater Hospital, Dublin
Appointed Member	Mark Jones, Royal Victoria Hospital, Belfast
Audit Lead	Doug West, Bristol Royal Infirmary
Education Lead	Sri Rathinam, Glenfield Hospital, Leicester
Education Lead	Carol Tan, St. George's Hospital, London
Nursing & AHP Representative	Xiaohui Liu, Southampton General Hospital
Trainee Representative	Jennifer Whiteley, Scotland
Trainee Representative	Oliver Harrison, Southampton
Co-opted members:	
British Thoracic Society	Emma O'Dowd, Nottingham City Hospital
Trauma Representative	Richard Steyn, Queen Elizabeth Hospital, Birmingham
NHS Commissioning	Ian Hunt, St George's Hospital, London

Thoracic Surgery Sub-Committee Summary for 2020-21

- Thoracic surgery and COVID.** The tumult of the COVID pandemic was met by a committed response from the Thoracic Surgery Sub-committee, including the dissemination of vital information, such as practice guidelines and treatment options. Members of the thoracic surgery community were involved in many ways, including contributing to international research on COVID (such as the COVIDSURG studies), delegation to ITU, covering other services, as well as maintaining thoracic surgery activity.
- National Thoracic Audit Activity.** The 7th Lung Cancer Clinical Outcomes Publication (LCCOP) 2021 (from 2018 data) has recently been published. It shows that the number of lung cancer operations have increased by 3.1%, from 2017 to 6894 in 2018. There has been a 20% increase in resections since 2014, with year-on-year increases in every year of the LCCOP project so far. Survival at 30 days and at one year is 98.46% and 89.6%, respectively, which represent the highest survival rates ever recorded in LCCOP at both 30 days and one year. No units were identified as outliers for patient survival. More lung cancer patients are receiving potentially curative surgery, with 18%

of all patients diagnosed with lung cancer undergoing surgery in 2018. This, however, varies across the country and there is scope to provide a more

uniform service. The morbidity of surgery is falling and open surgery is becoming less common, with 60% of all operations completed using minimal access techniques, and patients spending a median of 5 days in hospital. 2.6% of all resections were completed with robotic assistance. Only 3.5% of lung cancer resections required a pneumonectomy.

- **MERITS study (Multi-centre Evaluation of Renal Impairment in Thoracic surgery).** This was presented at the SCTS Annual Meeting in 2021 and showed an important variation in post-operative AKI rates between centres, with the opportunity to improve outcomes. It included over 15,000 patients from 17 units, representing over 50% of thoracic surgery activity in the UK for the study period, and is the largest study of its kind in thoracic surgery and showed unprecedented collaboration between units, with the data collection supported by SCTS Students.
- **Lung Volume Reduction Surgery.** After a prolonged effort, lung volume reduction by surgery and valves has been formally commissioned by NHS England. The Thoracic Surgery Sub-Committee will now lead a multi-national collaborative process of engagement to deliver this service equitably, efficiently and effectively and do so in a timely fashion.
- **Thoracic Surgery Workforce.** An increase in thoracic surgery activity and workforce projections indicate that approximately a 25-50% increase in the thoracic surgery consultant workforce is required over the next 5-10 years. The essential minimally invasive, robotic, interventional bronchoscopy, airway, open surgery, and lung transplant skills, as well as the MDT process of decision making, make it imperative that a dedicated workforce be thoroughly trained and developed. The Thoracic Surgery Sub-Committee has written to the Cardiothoracic Surgery SAC requesting the introduction of themed thoracic surgery programmes from ST1 and ST4 within the umbrella of cardiothoracic surgery.

Thoracic Surgery Sub-Committee Plans for 2021-22

- **National Service Specifications.** The pace of technological change and impact of COVID have changed the face of thoracic surgery. Over the next 12 months, the Thoracic Surgery Sub-committee is planning to review the Thoracic Surgery National Service Specification in order to make it more suitable for contemporary and future practice, with the main focus being on the individual patient pathway.
- **Impact of lung cancer screening and precision lung-sparing surgery.** Screening for lung cancer is predicted to increase thoracic surgical workload by approximately 30%, most of which will be for the treatment of small nodules. There is an emerging body of evidence which shows that outcome equivalence or superiority is seen with precision lung sparing surgery as compared to lobectomy. This requires targeted localisation techniques using hybrid theatres with real-time imaging or navigational techniques. The Thoracic Surgery Sub-committee is planning to develop processes and pathways to help increase access to these techniques.
- **Representation & Inclusion.** The diversity of the Thoracic Surgery Sub-committee is expanding to ensure representation from all of the UK and Ireland, thoracic surgeons in training (both nationally appointed and trust appointed), robotic surgeons and mixed practice cardiothoracic surgeons, as well as collaboration with allied specialities, such as respiratory medicine and thoracic anaesthesia. The thoracic surgery trainee network will also be expanded to all units and will develop a programme of focused networking

and career development webinars.

- **Development of new guidelines.** The Thoracic Surgery Sub-committee is in the process of developing new pathways to optimise the management of patients developing pneumothorax and also those requiring airway intervention and surgery. In addition, ongoing negotiations are occurring with the Specialist Commissioners to recommission pectus surgery.
- **Robotics and Innovation.** There is considerable variation in access to these technologies with an emerging body of evidence demonstrating utility and improved patient experience and outcomes in mediastinal disease with complex minimally invasive surgery. The Thoracic Surgery Sub-committee will collaboratively lead the process to help disseminate access to robotic surgery and other innovations, as indicated.
- **Advanced thoracic surgery anaesthetic techniques.** The Thoracic Surgery Sub-committee is planning to work with the specialist thoracic anaesthetic community to increase the availability of techniques that accelerate recovery and other patient related outcomes, including opioid-free and non-general anaesthesia surgery and intervention.

Congenital Cardiac Surgery Sub-Committee

Sub-Committee Members	
Co-chair	Rafael Guerrero, Alder Hey Children's Hosp., Liverpool
Executive co-chair	Narain Moorjani, Royal Papworth Hospital, Cambridge
Unit Representative	Mark Danton, Royal Hospital for Children, Glasgow
Unit Representative	Andrew Parry, Bristol Royal Hospital for Children
Unit Representative	Mohammed Nassar, Freeman Hospital, Newcastle
Unit Representative	Osama Jabber, Leeds Teaching Hospitals
Unit Representative	Guido Michelon, Royal Brompton Hospital, London
Unit Representative	Phil Botha, Birmingham Children's Hospital
Unit Representative	Martin Kostolny, Great Ormond Street Hospital, London
Unit Representative	Conal Austin, Evelina London Children's Hospital
Unit Representative	Mark Redmond, Our Lady's Children's Hospital, Dublin
Unit Representative	Branko Mimic, Glenfield Hospital, Leicester
Unit Representative	Nicola Viola, University Hospital Southampton
Audit Lead	Carin Van Doorn, Leeds Teaching Hospitals
Deputy Audit Lead	Serban Stoica, Bristol Royal Hospital for Children
Education Lead	Attilio Lotto, Alder Hey Children's Hospital, Liverpool
Nursing & AHP Representative	TBC
Trainee Representative	Joseph George, University Hospital Cardiff

Congenital Cardiac Surgery Sub-Committee Summary for 2020-21

- **Congenital Cardiac Surgery and COVID.** The Congenital Cardiac Surgery Sub-Committee led the national response for the provision of Congenital Cardiac Services during the COVID 19 pandemic, including escalation plans, cross regional cover and dissemination of practice guidance.
- **Workforce Survey.** A congenital cardiac surgery consultant workforce survey was carried out in 2021, which demonstrated 16% were born in the UK, 53% had a UK-CCT and only 16% of consultants were graduates from the post-CCT national congenital training programme (GOSH- BCH). In addition, 20 Consultants have emigrated abroad leaving the UK over the past 13 years. Discussions are ongoing amongst the congenital cardiac surgical community, British Congenital Cardiac Association (BCCA) and NHS England to tackle retention issues and attracting nationally appointed trainees into the sub-speciality, including the formation of a working group involving all stakeholders.
- **Collaboration with NICOR.** Serban Stoica has been appointed as the NICOR

Congenital Cardiac Surgery Deputy Clinical Lead, as a representative of the Congenital Cardiac Surgery Sub- committee. This will give the SCTS an opportunity to provide surgical leadership to influence the outcomes and quality reporting, as well as give an input on the various aspects of the NICOR annual report and future quality improvement initiatives.

- **Congenital Cardiac Surgery National Priority Setting Partnership.** In collaboration with the SCTS and British Congenital Cardiac Association (BCCA), Nigel Drury and the team at the University of Birmingham will be working with the James Lind Alliance to develop the Congenital Heart Disease (CHD) Priority Setting Partnership (PSP). The outputs from the PSP will be used to develop a national CHD strategy and plan to address the prioritised uncertainties through multi-centre clinical trials via the BHF Clinical Research Collaborative.
- **Representation on the BCCA board.** It has been agreed that there will be a permanent surgical SCTS representation at board level of the BCCA, which is open to all consultants.
- **Congenital section of SCTS website.** This has been developed by Attilio Lotto, with sub-sections on service development and examples of best practice; national recommendations and guidelines; advanced operative techniques; education with surgical drawings and presentations; recent national clinical trials; as well as information about outcomes from nationally submitted data to the National Congenital Database Audit.
- The new SCTS Annual Meeting Congenital format was tested during the 2021 virtual meeting, with an educational case discussion for complex decision making and surgical planning.

Congenital Cardiac Surgery Sub-Committee Plans for 2021-22

- **Congenital Cardiac Surgery Mentorship Programme.** A position statement describing the best practices for mentoring in congenital cardiac surgery is being developed, with a mentorship training course planned for 2022, with an opportunity for all Congenital Cardiac Surgeons to attend.
- **Job Plan Templates.** Draft Consultant Congenital Cardiac Surgeon job plan templates are being developed to help achieve a good work life balance to ensure that all work performed is properly recognised for ward rounds, multidisciplinary meetings, out-patient clinics, operating and mentoring. This will help to support those currently in post and to help attract trainees into the sub-speciality. To support this, the sub-committee are planning on publishing '*The Gold Standard Congenital Cardiac Surgery Unit. A Team of Teams*'
- **Audit.** The SCTS Congenital Cardiac Surgery Sub-committee are co-leading the new NICOR Working Group for Complications and Annual report, which will include the publication of agreed definitions, a data collection system and reporting. In addition, there are plans to develop a National Clinical Consensus Group for rare and complex surgical 'decision-making' cases.
- **Innovation.** Plans are being made to develop a digital archive of 3D printed models by using immersive technology for virtual communication and mentoring.
- **Education.** The SCTS National Education Programme in Congenital Cardiac Surgery will commence in October 2021 and will be extended to all cardiothoracic NTN and TAD trainees. The webinars will be based on the established virtual Alder Hey CHD

MDT Teaching Programme, with ongoing work to ensure that the content matches the national curriculum.

- **SCTS Annual Meeting Congenital Lead.** The Congenital Cardiac Surgery Subcommittee is planning on appointing a Lead to coordinate congenital sessions at the Annual Meeting and make it more attractive for Congenital Cardiac Surgeons.

Audit Sub-Committee

Sub-Committee Members	
Co-chair	Doug West, Bristol Royal Infirmary
Executive co-chair	Simon Kendall, James Cook Hospital, Middlesbrough
Adult Cardiac Lead	Uday Trivedi, Royal Sussex County Hospital, Brighton
Regional Deputy Adult Cardiac Lead (Wales)	Indu Deglurkar, University Hospital Wales, Cardiff
Regional Deputy Adult Cardiac Lead (Scotland)	Zahid Mahmood, Golden Jubilee National Hospital, Glasgow
Regional Deputy Adult Cardiac Lead (Northern Ireland)	Alistair Graham, Royal Victoria Hospital, Belfast
Deputy Thoracic Lead	Kandadai Rammohan, Wythenshawe Hosp., Manchester
Congenital Cardiac Lead	Carin Van Doorn, Leeds Teaching Hospitals
Deputy Congenital Cardiac Lead	Serban Stoica, Bristol Royal Hospital for Children
Nursing & AHP Representative	Hemangi Chavan, Royal Brompton Hospital, London Nisha Bhudia, Royal Brompton Hospital, London
Co-opted members:	
NICOR	Andrew Goodwin, James Cook Hospital, Middlesbrough

Audit Sub-Committee Summary for 2020-21

- Unit specific outcome monitoring in Adult Cardiac Surgery.** Bringing it into line with the outcome monitoring programmes in thoracic surgery and congenital cardiac surgery, adult cardiac surgery outcomes from April 2021 will be published on a unit-level basis, as opposed to the surgeon-level reporting that has been occurring over recent years. It will assess mortality and morbidity, including post-operative rates of stroke, acute kidney injury, deep sternal wound infection and return to theatre for bleeding, and will be combined with a unit quality assurance programme that will aim to look at the quality of care throughout the whole patient pathway from pre-admission decisions to post-operative care and discharge. A series of webinars were run during the year to inform members of the new changes and answer any

questions.

- **Lung Cancer Clinical Outcomes Publication (LCCOP) Report.** The 7th LCCOP report has recently been published describing data from 2018. It has shown improvement in the delivery of care given to patients with lung cancer, including an increase in the number of lung cancer operations, resections rates and survival rates. The report has also allowed strategies to be

developed to address the significant regional variations in outcomes across the country. The Royal College of Physicians have withdrawn from bidding to deliver the National Lung Cancer Audit, and HQIP has not formally recommissioned LCCOP from 2021.

- **Cardiac Surgery Outcome Monitoring in Scotland.** The Scottish Government has withdrawn from NICOR and is developing a new reporting infrastructure within Public Health Scotland. An SCTS devolved nations and Republic of Ireland Audit Working Group has been set up to address this and other regional variations pertaining to outcome monitoring.

Audit Sub-Committee Plans for 2021-22

- Deliver the adult cardiac unit quality assurance programme in 2021.
- Work with the current NLCA provider team and HQIP to secure a continued commitment to national reporting of thoracic surgery outcomes.
- Deliver webinars aimed at unit data managers to support high quality data submission and validation.
- Work with NICOR to deliver the planned Blue Book in Congenital Cardiac Surgery.

Education Sub-Committee

Sub-Committee Members	
Co-chairs	Sri Rathinam, Glenfield Hospital, Leicester Carol Tan, St George's Hospital, London
Executive co-chair	Narain Moorjani, Royal Papworth Hospital, Cambridge
Surgical Tutor	Deborah Harrington, Liverpool Heart & Chest Hospital
Surgical Tutor	George Asimakopolous, Royal Brompton Hospital, London
Congenital Lead	Attilio Lotto, Alder Hey Children's Hospital, Liverpool
Transplant Lead	Espeed Khoshbin, Harefield Hospital, London
Nursing & AHP Representative	Bhuvana Krishnamoorthy, Wythenshawe Hosp., Manchester
Trainee Representative	Duncan Steele, Blackpool Victoria Hospital Abdul Badran, Southampton General Hospital
Communication Lead	Vivek Srivastava, John Radcliffe Hospital, Oxford
Consultant Lead	Prakash Punjabi, Hammersmith Hospital, London Shazad Raja, Harefield Hospital, London
Trust Appointed Doctor Lead	Zahid Mahmood, Golden Jubilee National Hospital, Glasgow Kandadai Rammohan, Wythenshawe Hospital, Manchester
Medical Student Lead	Karen Booth, Freeman Hospital, Newcastle Farah Bhatti, Morriston Hospital, Swansea
Accreditation Lead	Shaffi Mussa, Bristol Royal Hospital for Children
Education Administrator	Emma Piotrowski

Education Sub-Committee Summary for 2020-21

- **Committee Expansion**

The Education sub-committee has expanded to address previously unmet educational needs of the membership. In addition to the appointments of joint leads in several areas (Trust Appointed Doctor Leads, Student Leads and Consultant Leads), there has also been the addition of two new leads (Transplant and Communication). The focus this year has been to reduce the gap between the NTN and Trust Appointed Doctors (TAD) courses.

- **Impact of COVID-19**

The COVID-19 pandemic has resulted in the need to adapt the way education is delivered with the loss of face-to-face courses and travel restrictions resulting in the cancellation of live animal simulation courses in Hamburg. The virtual platform has been utilised to deliver many of the courses, either as a full virtual format or in a hybrid format (part virtual, part face-to-face) where necessary.

- **Consultant Education**

The 3rd SCTS Consultant Masterclass on Mentorship was postponed from March 2020 to October 2020 and was held as a virtual meeting. This was well attended and

received in spite of the change in format. The 4th Masterclass on Mental Training and Mindfulness for Surgeons was delivered jointly with the Royal Colleges of Surgeons in Edinburgh on the virtual platform on the Saturday before the SCTS Annual Meeting in May 2021. This was

opened to all surgical specialities and included a national and international faculty. It was well received by over 100 attendees. The Team Human Factors Course which is normally held at Harefield Hospital has been postponed due to the COVID-19 pandemic.

- **NTN Education**

The COVID-19 pandemic has had a major impact on the NTN portfolio of courses. Live animal simulation courses in Hamburg have been put on hold since March 2020 due to travel restrictions. Courses scheduled during the first wave of the pandemic were put on hold to allow the medical workforce to focus on the needs of the pandemic, as many were re-deployed. Recommencement of courses took place from September 2020 utilising the virtual platform for courses without a practical simulation component, and in a socially distanced manner for wet lab simulation courses. The virtual platform meant that several of the NTN courses could be extended to TADs at an equivalent level of experience.

- **Trust Appointed Doctors (TAD) Education**

Two Leads for the Trust Appointed Doctors were appointed this year with the view to develop the education portfolio to match that of the NTNs. TADs at appropriate level of competencies attended the virtual ST7A (FRCS C-Th Exam Revision) and virtual ST8B (Leadership and Professionalism) courses.

- **Nursing & Allied Health Professional (AHP) Education**

The portfolio of courses for nurses and AHPs has been converted to regular webinars, usually run as a 90-minute session on Saturday evenings. These have attracted not only SCTS members, but also international attendees and have been well received. Webinars have been uploaded onto YouTube with >2000 views.

- **Medical Student Education**

The Student Engagement Day took place in June 2020 on the Go-To-Webinar platform which was well attended. Driven by the enthusiasm of medical students interested in a career in Cardiothoracic Surgery, the two leads have appointed the first SCTS Student Education Committee.

- **Education Travelling Fellowship**

Mr Ionescu has continued his exceptional generosity and offered 3 rounds of fellowship grants this past year to SCTS members with categories for Consultants, Teams, NTNs at senior and junior levels, TADs, NAHPs and medical students. Financial support from Ethicon for the NTN fellowships was also gratefully received and awarded following a process of shortlisting by the Education Sub-committee.

- **Collaboration with the Cardiothoracic Surgery Specialty Advisory Committee (SAC)**

SCTS Education has worked with the SAC on a number of projects, including a national simulation roll out, which is sponsored by Ethicon, and has appealed to the SAC to consider thoracic-themed NTN appointments, with entry at ST1 and ST4.

- **SCTS Podcasts**

SCTS Education has continued to offer podcasts addressing a wide area of clinical and professional affairs, led by Caroline Toolan.

- **SCTS and Royal College of Surgeons of Edinburgh Webinars**

There was a pause for a short period during the first wave of the pandemic but these

webinars are now back on a regular basis, covering both cardiac and thoracic topics.

- **Egypt Collaboration**

The 2nd SCTS-Ismailia Masterclass took place as a webinar in March 2021 and was very well received by an international audience.

- **Pericardial Heart Valve Book**

The Pericardial Heart Valve book celebrating 50 years of the pericardial valve was published with support from Mr Ionescu, and has been sent out to the membership.

- **Financial support**

SCTS Education has maintained its long-standing partnership with Ethicon, Medistim and Medtronic, but has also developed new partnerships with BD Interventional, Terumo, Edwards, Cryolife and Baxter. SCTS Education has also gratefully received financial support from Mr Ionescu for fellowships and courses.

Education Sub-Committee Plans for 2021-22

- **Expansion of TAD education portfolio**

The Education Sub-committee is planning to expand the portfolio of courses offered to TADs, with the aim of mirroring that offered to the NTN. A database of TADs in all units nationally is being collated by the TAD Education Leads.

- **Consultant Education Academy**

Following announcement of the launch of the Consultant Education Academy, the Leadership Masterclass consisting of 4 sessions run virtually has been planned. Further webinars on The Virtues of a Cardiothoracic Surgeon are in the pipeline for the coming year, along with the Team Human Factors courses that are due to resume.

- **NTN education portfolio**

Plans are being made to catch up with the courses that were postponed during the pandemic, especially the live animal operating simulation courses. Consideration is also being given to running these courses in the UK at The Griffin Institute pending assessment of cost and UK regulations.

- **NAHP subcommittee**

The NAHP subcommittee with regional tutors has been appointed, with a view to running courses covering all groups of the nursing and allied health professional community. The webinar format will remain in place with the resumption of face-to-face courses, and addition of virtual full-day courses.

- **School Students**

The 6th form work experience project will be launched in January 2022, providing work experience and mentorship to school students in their final two years at school.

- **Education Sub-Committee posts**

Expressions of interest will be sought for a new Education Secretary to replace Sri Rathinam who is due to complete his tenure at the end of 2021, as well as a Thoracic Surgical Tutor.

Research Sub-Committee

Sub-Committee Members	
Co-chairs	Eric Lim, Royal Brompton Hospital, London Mahmoud Loubani, Castle Hill Hospital, Hull
Executive co-chair	Narain Moorjani, Royal Papworth Hospital, Cambridge
Cardiac Surgery Representative	Enoch Akowuah, James Cook Hospital, Middlesbrough
Cardiac Surgery Representative	Gianluca Lucchese, St Thomas' Hospital, London
Thoracic Surgery Representative	Babu Naidu, Queen Elizabeth Hospital, Birmingham
Congenital Representative	Nigel Drury, Birmingham Children's Hospital
Congenital Representative	Massimo Caputo, Bristol Royal Hospital for Children
ASSL Cardiac	Ricky Vaja, Royal Brompton Hospital, London
ASSL Cardiac	Luke Rogers, Derriford Hospital, Plymouth
ASSL Thoracic	Akshay Patel, Queen Elizabeth Hospital, Birmingham
ASSL Thoracic	Edward Caruana, Glenfield Hospital, Leicester
Academic Trainee Representative	Marius Roman, Glenfield Hospital, Leicester
Nursing & AHP Representative	Rosalie Magboo, St Bartholomew's Hospital, London Zainab Khanbhai, Royal Brompton Hospital, London
Trainee Representative	Azar Hussain, Castle Hill Hospital, Hull
Medical Student Representative	Rishab Makam, Hull York Medical School

Research Sub-Committee Summary for 2020-21

- Restructuring of Research Sub-Committee.** Following an interview selection process, two new Co-Chairs of the Research Sub-committee have been appointed to represent Cardiac Surgery (Mahmoud Loubani) and Thoracic Surgery (Eric Lim). In addition, Gianluca Lucchese has been appointed as a Cardiac Surgical Representative.
- Congenital Cardiac Surgery National Priority Setting Partnership.** In collaboration with the SCTS and British Congenital Cardiac Association (BCCA), Nigel Drury and the team at the University of Birmingham will be working with the James Lind Alliance to develop the Congenital Heart Disease (CHD) Priority Setting Partnership (PSP). The outputs from the PSP will be used to develop a national CHD strategy and plan to address the prioritised uncertainties through multi-centre clinical trials via the BHF Clinical Research Collaborative.
- Cardiac Research Collaborative.** A Cardiac Research Collaborative has been established for delivery of output from the Cardiac Surgery Research Priority Setting Partnership (PSP).

Research Sub-Committee Plans for 2021-22

- The SCTS Virtual National Cardiothoracic Research Meeting will take place on Friday 5th November 2021.

- The Research Sub-committee plans to establish a Medical Students Research Mentorship Scheme and an SCTS Research Grant and Fellowship Programme.

Transplantation Sub-Committee

Sub-Committee Members	
Co-chair	Steve Tsui, Royal Papworth Hospital, Cambridge
Executive Co-chair	Simon Kendall, James Cook Hospital, Middlesbrough
Appointed Member	Philip Curry, Golden Jubilee National Hospital, Glasgow
Appointed Member	Fabio De Robertis, Harefield Hospital, London
Appointed Member	Rajamiyer Venkateswaran, Wythenshawe Hosp., Manchester
Appointed Member	Stephen Clark, Freeman Hospital, Newcastle
Audit Lead	Jorge Mascaro, Queen Elizabeth Hospital, Birmingham Marius Berman, Royal Papworth Hospital, Cambridge
Education & Website Lead	Aisling Kinsella, The Mater Hospital, Dublin
NAHP & AHP Representative	Emma Matthews, Royal Papworth Hospital, Cambridge
Trainee Representative	Abdul Badran, Southampton General Hospital

Transplant Sub-Committee Summary for 2020-21

- **Formation of SCTS Transplantation Sub-Committee.** The SCTS developed a Transplantation Sub-Committee with the main aim of coordinating opinion from the sub-specialty nationally and thereby fulfilling a leadership role in advising the SCTS Executive and its members regarding all aspects of the conduct and practice of cardiothoracic transplantation within Great Britain and Ireland.
- **Transplantation Job Planning Template.** The Transplantation Sub-Committee has developed a transplantation job planning template to ensure that Cardiothoracic Transplant Consultant job descriptions are configured to support colleagues to build a career in the generality of cardiac or thoracic surgery, as well as transplantation.

Transplant Sub-Committee Plans for 2021-22

- **Transplant workforce.** A review of the current senior transplant surgical workforce is being planned with a workforce survey, as well as getting views from trainees regarding developing an interest in transplantation as a career. The first round achieved 57 respondents, with a further cycle underway to seek more responses. In addition, there are plans to encourage non-consultant career grade surgeons for donor organ retrieval to become members of the SCTS and provide career development support.
- **Training in cardiothoracic transplantation.** A proposal has been submitted to the SAC to consider providing NTN with increased exposure to surgical management of advanced heart and lung failure. In addition, whilst the next peri-CCT Transplantation fellowship will rotate between 3 centres (Royal Papworth Hospital, Wythenshawe Hospital and Freeman Hospital), there are ongoing discussions whether this should be expanded to all English transplant centres.

- **SCTS-led national transplantation audits.** Plans are being developed on how the SCTS might complement the well-established Annual Cardiothoracic Transplantation Report from NHSBT, with the development of heart and lung transplantation data fields.

Nursing & Allied Health Professionals Sub- Committee

Sub-Committee Members	
Chair	Bhuvana Krishnamoorthy, Wythenshawe Hospital, Manchester
Meeting Lead	Daisy Sandeman, Royal Infirmary of Edinburgh
Cardiac Lead	Kathryn Hewitt, Queen Elizabeth Hospital, Birmingham
Thoracic Lead	Xiaohui Liu, Southampton General Hospital, Southampton
Audit Lead	Hemangi Chavan, Royal Brompton Hospital, London
Education Lead	Bhuvana Krishnamoorthy, Wythenshawe Hospital, Manchester
Regional Tutors	Libby Nolan, Morrison Hospital, Swansea Michael Martin, King's College Hospital, London Namita Thomas, Royal Stoke University Hospital, Stoke Yi (Sophia) Wang, Harefield Hospital, Middlesex
Transplantation Lead	Emma Mathews, Royal Papworth Hospital, Cambridge
Innovation Lead	Una Ahearn, Liverpool Heart & Chest Hospital, Liverpool
Membership Lead	Jane Dickson, The Beacon Hospital, Dublin, Ireland
Communication Lead	Jeni Palima, New Cross Hospital, Wolverhampton
Pharmacy Lead	Nisha Bhudia, Royal Brompton Hospital, London
ODP Lead	TBC
Critical Care Lead	Anna Gesicka, Royal Sussex County Hospital, Brighton
Perfusion Lead	Noel Kellerher, University Hospital, Llandough Lisa Carson-Price, Glenfield Hospital, Leicester
Physiotherapy Lead	Zoe Barrett-Brown, Royal Papworth Hospital, Cambridge
Occupational Therapy Lead	Amy Chadwick, Royal Papworth Hospital, Cambridge
Surgical Care Practitioner Lead	ACTSSCP President
Physician Associate Lead	TBC
Research Lead	Rosalie Magboo, St Bartholomew's Hospital, London Zainab Khanbhai, Royal Brompton Hospital, London

Nursing & Allied Health Professionals Sub-Committee Summary for 2020-21

- **SCTS toolkit.** The SCTS has developed a toolkit to transform the cardiothoracic surgery workforce. It will provide Allied Health Professionals enhanced opportunities for clinical career progression, as well as improving patient care and experience and giving surgeons in training more access to theatre to develop and refine their operative skills. Examples have been provided from units that have successfully developed a multidisciplinary team model that will help to provide an infrastructure for other units to

follow suit and for all to understand the importance of working together to provide excellent services. Great thanks to Tara Bartley for her enthusiasm for driving this project forward.

- **Virtual Cardiothoracic Forum.** A very successful virtual Cardiothoracic Forum took place in May 2021 at the SCTS Annual Meeting, led by Mrs. Daisy Sandeman who put a fantastic programme together with the team. Although the attendance of NAHPs were decreased

compared to face-to-face annual meeting last year, the interactions and enthusiasm of colleagues were excellent.

- **Ionescu Fellowship for NAHP 2020/2021.** There were two successful applicants for this year's fellowship. We are grateful to Mr. Ionescu for his continued generosity in supporting the development of NAHP's passion of working. The seven previous winners presented their work at the virtual annual meeting.
- **NAHP Education portfolio.** Despite the impact of the COVID-19 pandemic, the NAHP education team delivered 18 successful webinars and 2 one day virtual courses, with over 800 delegates. Great thanks to all the faculty who have shared their knowledge and given their time, despite many of the webinars being held in evenings and over the weekend.
- **Nursing and AHP Research Group (NARG).** We are grateful to Professor Julie Sanders and her team for running a successful series of research events at the Annual Meeting and for developing a fantastic programme to support our NAHP members to develop their research and audit skills at work.
- **Regulation for Surgical Care Practitioners (SCP).** Both the Royal College of Surgeons of England and Edinburgh are working together to set up voluntary registration for surgical care practitioners, to protect the profession and provide an infrastructure for continuous professional development. Ultimately, the aim is to inform the Department of Health and Health Education England about the importance of statutory registration under the umbrella of Medical Associate Practitioners. In addition, the SCTS are working with the Royal College of Surgeons of Edinburgh towards a quality assured examination for surgical care practitioners.
- **New Curriculum for trainee surgical care practitioners.** Currently, 3 universities run the academic training programme for trainee surgical care practitioners (SCP), which varies from 2 to 3 years with a PG Diploma to MSc degree. The aim of the new curriculum is to restructure and standardise the training for SCPs to align with the Health Education England advanced level practice. This new format will standardise the Masters' degree programme across the country, with a competency-based curriculum by eliminating the time-based curriculum. In addition, the SCTS are working with the Royal College of Surgeons of Edinburgh towards a quality assured examination for surgical care practitioners.

Nursing & Allied Health Professionals Sub-Committee Plans for 2021-22

- **NAHP Website development.** The NAHP section of the new SCTS website has been developed and has been successful in linking the educational programme registration and providing educational materials for members. Great thanks to the NAHP website lead Mrs. Zoe Barrett- Brown, who put an enormous amount of time working with the website development team to make this happen. This new website will provide various themes to encourage non-members to become active members. We are looking forward to the new developments and for members to contribute in adding to the educational materials, videos and guidelines.
- **Unit representative engagement.** The SCTS has developed an NAHP representative network in most units in the United Kingdom and Ireland. Over the next 12 months,

there are plans for members of the NAHP sub-committee members to meet each unit virtually or face-to-face, to

provide an excellent opportunity to understand what members and non-members require from the SCTS.

- **Restructuring of NAHP sub-committee.** Twelve new posts have been created to represent the complete spectrum of professional activities of all allied health professionals, including operating department practitioners and perfusionists. The role of these new sub-committee members will include developing educational activities and representing NAHPs in various sub- committees within the SCTS. We look forward to working with these talented individuals to further develop and create a flourishing NAHP stream within the SCTS.
- **Development of informal online discussion seminars.** As part of the educational activities expanding portfolio, informal online discussion seminars are being developed to support members with difficult case scenarios.
- **NAHP Heart and Lung Transplant Training course.** A one-day virtual heart and lung transplantation training course will be run in September 2021, led by the recently appointed NAHP Transplant Lead Emma Matthews from Royal Papworth Hospital, Cambridge.

Meeting Team Sub-Committee

Sub-Committee Members	
Meeting Secretary	Maninder Kalkat, Queen Elizabeth Hospital, Birmingham
Deputy Meeting Secretary	Cha Rajakaruna, Bristol Royal Infirmary
Associate Meeting Secretary	Sunil Bhudia, Harefield Hospital, London
Nursing & AHP Representative	Daisy Sandeman, Royal Infirmary of Edinburgh
Conference Organiser	Isabelle Ferner, Society Administrator
Exhibition Organiser	Tilly Mitchell, Society Finance Administrator

Meeting Team Sub-Committee Summary for 2020-2021

- **84th Annual Meeting and SCTS-Ionescu University**

Due to the disruptions caused by the COVID-19 pandemic, the 2020 Annual Meeting was cancelled and the 2021 Annual SCTS Meeting, CT Forum and SCTS-Ionescu University were held virtually, without any face-to-face attendance for members for the first time in its history. Despite this, the meeting was a great success, with over 1000 delegates and members of the industry participating in the meeting. The educational content was delivered by national and international experts in the field of Cardiothoracic Surgery. This year, 3 plenary sessions were held, focusing on transforming the cardiothoracic workforce and equality, diversity & inclusion in cardiothoracic surgery, with a life-time achievement award presented to Professor Bill Walker. In addition, there was a virtual 5k run, online scavenger hunt and big quiz.

Attendance:

Complimentary registrations	221
Exhibitor	155
Consultant/Surgeon Member	157
Consultant/Surgeon Non-Member	61
Trainee/Medical Practitioner Member	170
Trainee/Medical Practitioner Non-Member	95
Nursing & AHP Member	104
Nursing & AHP Non-Member	73
Total	1036

- **Annual Meeting Feedback**

Responses were obtained from 588 delegates, who were very impressed with the conduct and content of the meeting, especially with it being the first virtual edition. There are opportunities to have better engagement with industry partners, for example with industry driven seminars, which could be integrated into the scientific sessions, and live interaction with industry reps but overall the entire meetings team were congratulated for delivering a fantastic Annual Meeting in the current circumstances.

Meeting Team Sub-Committee Plans for 2021-22

- **85th Annual Meeting, Cardiothoracic Forum and SCTS-Ionescu University**
The 2022 Annual Meeting will be once again held at the ICC Belfast, providing both an excellent venue and competitive pricing.

Contributors

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Sub-committee reports

Executive summary

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Annual Meeting

Mr Maninder Kalkat
SCTS Meeting
Secretary
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Appendix 1

- **Lung Cancer Clinical Outcomes Publication (LCCOP) report 2021**

[https://nlcastorage.blob.core.windows.net/misc/LCCOP%202021\(2018\).pdf](https://nlcastorage.blob.core.windows.net/misc/LCCOP%202021(2018).pdf)

- **National Adult Cardiac Surgery Audit 2021 Summary Report (2017/18-2019/20 data)**

https://www.nicor.org.uk/wp-content/uploads/2021/10/NACSA-Domain-Report_2021_FINAL.pdf

- **National Adult Cardiac Surgery Audit 2020 Summary Report (2016/17-2018/19 data)**

<https://www.nicor.org.uk/wp-content/uploads/2020/12/National-Adult-Cardiac-Surgery-Audit-NACSA-FINAL.pdf>

- **SCTS Blue Book 2020 (National Cardiac Surgery Activity Report 2002-2016)**

https://scts.org/_userfiles/pages/files/sctscardiacbluebook2020_11_20tnv2.pdf

Appendix 2

SCTS Education Programme of Cardiothoracic Surgery Training Courses 2020-21

Consultant

- Consultant Masterclass 'Innovation and Novel Techniques' Course
- Virtual SCTS Masterclass on Mental Training and Mindfulness for Surgeons
- SCTS Consultant Education Academy: SCTS Leadership Consultant Masterclass - Series 1 – 4
- SCTS Consultant Education Academy: The Virtues of a Cardiac Surgeon - Series 1 and Series 2
- SCTS-Ionescu University
- UKI Ethicon New Thoracic Consultant Academy - VATS Managing Complications

NTN

- Introduction to Cardiothoracic Surgery Course
- ST2 Essential Skills in Cardiothoracic Surgery Course
- ST3A Introduction to Specialty Training in Cardiothoracic Surgery Course
- ST3B Operative Cardiothoracic Surgery Course
- ST4A Core Cardiac Surgery Course
- ST4B Core Thoracic Surgery Course
- ST5A Intermediate Revision and Viva Course
- ST5B Non-Operative Technical Skills for Surgeons (NOTSS) Course
- ST6A and ST6B Cardiothoracic Surgery Sub-Specialty Course
- ST7A Revision and Viva Course for FRCS (C-Th)
- ST8A Cardiothoracic Surgery Pre-Consultant Course
- ST8B Professional Development Course

Trust Appointed Doctors

- Cardiothoracic Surgery Update and Wet-lab Course for Trust Appointed Doctors
- Professional Development Course for Trust Appointed Doctors
- ST7A Revision and Viva Course for FRCS (C-Th) (March 2020 and September 2021)
- ST8B Professional Development Course
- SCTS Mentoring in Cardiothoracic Surgery course for Trust Appointed Doctors and Women in Cardiothoracic Surgery

Nursing and AHP

- SCTS-Ionescu University Wet-lab
- CT Forum Skills Stations
- Surgical Skills in Cardiothoracic Surgery Course
- NAHP Core Cardiac Surgical Skills course
- NAHP Core Thoracic Surgical Skills course
- Core Principles in Cardiothoracic Surgery Course
- Surgical Care Practitioner Exam Revision Course
- Novice to experienced Endoscopic conduit harvesters Virtual course
- Virtual study day on Core Cardiac transplant course

Medical Student

- National Student Engagement Day for Cardiothoracic Surgery
- Medical Student Session at the SCTS Annual Meeting

Appendix 3

SCTS Education Portfolio of Fellowships 2020-21

Consultant

- Ionescu Final Fellowship – Ionescu Consultant Team Fellowship
- SCTS-Ionescu Round 2: Consultant Travelling Fellowships
- The Marian and Christina Ionescu Travelling Fellowship for a consultant 2021
- SCTS-Ionescu 90 Consultant Team Fellowships 2020
- SCTS- Ionescu 90 Travelling Fellowship for a consultant 2020
- Annual SCTS-Ionescu Consultant Team Fellowships 2020
- 50 years of the Pericardial valve: Ionescu Travelling Fellowship for a consultant

NTN

- SCTS Education Ethicon NTN Trainee Fellowships
- Ionescu Final NTN Trainee Travelling Fellowship 2021
- Ionescu Final NTN early years (ST1-4) Trainee Travelling Fellowship 2021
- SCTS-Ionescu Round 2: NTN Trainee Travelling Fellowship 2021
- SCTS-Ionescu Round 2: NTN early years (ST1-4) Trainee Travelling Fellowship 2021
- SCTS-Ionescu NTN Trainee Travelling Fellowship 2021
- 50 years of the Pericardial valve: Ionescu NTN Trainee Travelling Fellowship
- 50 years of the Pericardial valve: Ionescu NTN early years (ST1-4) travel award
- Annual SCTS-Ionescu NTN Trainee Travelling Fellowship 2020
- SCTS-Ionescu 90 NTN Trainee Travelling Fellowship 2020
- SCTS-Ionescu 90 NTN small travel award 2020

Foundation Year and Core Trainee Doctors

- Ionescu Final small travel awards for FYs and CTs
- SCTS-Ionescu Round 2: small travel awards for FYs and CTs: 2 awards 2021
- SCTS-Ionescu small travel awards for FYs and CTs: 2 awards 2021
- 50 years of the Pericardial valve: Ionescu small travel awards for FYs and CTs

Trust Appointed Doctors

- Ionescu Final TAD Surgical fellowship 2021
- Ionescu Final TAD small travel awards 2021
- SCTS-Ionescu Round 2: Ionescu Hospital Appointed Doctors Surgical Fellowships 2021
- SCTS-Ionescu SAS/Hospital Appointed Doctors Surgical Fellowships 2021
- 50 years of the Pericardial valve: Ionescu SAS Surgical Fellowships
- Annual SCTS-Ionescu Non-NTN small travel awards 2020
- Annual SCTS-Ionescu Non-NTN Surgical Fellowships 2020
- SCTS-Ionescu 90 Non-NTN small travel awards 2020
- SCTS-Ionescu 90 Non-NTN Surgical Fellowships: 2020

Nursing and AHP

- Ionescu Final Nursing & Allied Health Professional Fellowships 2021
- SCTS-Ionescu Round 2: Nursing & Allied Health Professional Fellowships 2021
- 50 years of the Pericardial valve: Ionescu Nursing & Allied Health Professional Fellowships
- Annual SCTS-Ionescu Nursing & Allied Health Professional Fellowships 2020
- SCTS-Ionescu 90 Nursing & Allied Health Professional Fellowships 2020

Medical Student

- Ionescu Final Medical Student Fellowships 2021
- SCTS-Ionescu Round 2: Medical Student Fellowships 2021
- SCTS-Ionescu Medical Student Fellowships 2021
- 50 years of the Pericardial valve: Ionescu Medical Student Fellowships
- Annual SCTS-Ionescu Medical Student Fellowships 2020
- SCTS-Ionescu 90 Medical Student Fellowships 2020

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