

Annual Report

2019-20

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SCTS Administrative Office

Isabelle Ferner Society Administrator & Conference Organiser

Tilly Mitchell Finance & Exhibition Coordinator
Letty Mitchell Senior Education Administrator

Emma Ferris Education Administrator

SCTS Executive Committee

Committee Members	
President	Richard Page, Liverpool Heart & Chest Hospital
President Elect	Simon Kendall, James Cook Hospital, Middlesbrough
Honorary Secretary	Narain Moorjani, Royal Papworth Hospital, Cambridge
Treasurer	Amal Bose, Blackpool Victoria Hospital
Meeting Secretary	Maninder Kalkat, Heartlands Hospital, Birmingham
Elected Trustee	Stephen Clark, Freeman Hospital, Newcastle
Elected Trustee	Mahmoud Loubani, Castle Hill Hospital, Hull
Elected Trustee	Marjan Jahangiri, St George's Hospital, London
Elected Trustee	Carin Van Doorn, Leeds Children's Hospital
Elected Trustee	Mobi Chaudhry, Castle Hill Hospital, Hull
Lay Representative	Sarah Murray, Dorset Healthcare University NHSFT
Education Secretary	Sri Rathinam, Glenfield Hospital, Leicester
Senior Trainee Representative	Duncan Steele, King's College Hospital, London
Junior Trainee Representative	Abdul Badran, Southampton General Hospital
Nursing & AHP Representative	Helen Munday, St Bartholomew's Hospital, London
Perfusion Representative	Phil Botha, Birmingham Children's Hospital
Perfusion Representative	Chris Efthymiou, Glenfield Hospital, Leicester
Co-opted Members:	
Thoracic Sub-Committee	Steve Woolley, Liverpool Heart & Chest Hospital
Congenital Sub-Committee	Rafael Guerrero, Alder Hey Children's Hospital, Liverpool
Audit Sub-Committee	Doug West, Bristol Royal Infirmary
Research Sub-Committee	Gavin Murphy, Glenfield Hospital, Leicester

Executive Summary 2019-20

• Surgical Aortic Valve Replacement (SAVR) Project

The SCTS is in the process of collecting data nationally to study the real-world outcomes of patients undergoing surgical aortic valve replacement in the United Kingdom. This will be the first of many national audit projects that the SCTS will embark on to inform us on the outcomes of the patients that we operate on to help optimise clinical decision making.

Heart Surgery Priority Setting Partnership (PSP)

The heart surgery PSP, funded by Heart Research UK, was published in September 2019 (Appendix 1). It obtained the views and opinions of over 1000 surgeons, anaesthetists, researchers, and member of the public to identify the top 10 research priorities for adult cardiac surgery in the UK.

• Development of Dual Consultant Operating Policy

Agreement from the National Institute for Cardiovascular Outcomes Research (NICOR) and the Healthcare Quality Improvement Partnership (HQIP) has been obtained to accept dual consultant operating for high risk cases to be reported by Unit rather than against an individual surgeon GMC number (Appendix 2). This policy came into effect on 1st April 2019.

Annual meeting, SCTS-Ionescu University and Cardiothoracic Forum

The 2019 meeting was held in London and had almost 1200 attendees with a very successful scientific, education and research programme. The theme of the plenary session was Congenital Cardiac Surgery, with a life-time achievement award presented to Professor Marc de Leval.

• Operative Definitions Standards

Guidance has been developed to classify adult cardiac surgical operations according to the urgent and emergency status. Following feedback from members, an updated version of the guidance has been produced (Appendix 3).

• SCTS Education Programme of Cardiothoracic Surgical Training Courses

This continues to expand, including a wide range of courses for Consultants, NTN trainees, non-NTN fellows, nurses and allied health professionals, core surgical trainees, foundation year doctors and medical students interested in a career in cardiothoracic surgery (Appendix 4).

Portfolio of Educational Fellowships

These have increased this year due to significantly increased support from Mr Marian Ionescu, as well as continued industry partnership (Appendix 5).

• 3rd SCTS National Research Meeting

The meeting held in November 2019 was a great success with increased attendance of trainees, nurses and allied health professionals, providing great opportunities to get involved in national cardiothoracic research projects. Keynote speeches were delivered by Professor Eric Lim (Royal Brompton), who presented the work that led to the success of the VIOLET trial, Professor Gianni Angelini (Bristol Heart Institute), who described the changes in the technology platforms used in translational research over the course of the last 30 years, and Professor David Chambers (Kings College London), who described his career and journey towards the development of new and effective myocardial protection strategies.

• 'Provision of Cardiothoracic Surgical Cover for Trauma' position paper

The document describes an audit of cardiothoracic surgical trauma in the Major Trauma Centre (MTC) at King's College Hospital, London and a comprehensive survey of current trauma cover provided by all cardiothoracic surgical Units in the UK (Appendix 1). The principle recommendations are:

- 1.The initial management of patients with chest trauma should be by MTC trauma teams. It is not practical for on-call cardiothoracic surgeons to be able to attend MTCs in an appropriate timeframe for salvage procedures (i.e. immediately).
- 2. Cardiothoracic surgeons should be available for immediate telephone advice and attend urgently when available. Clear information should be provided for MTCs by cardiothoracic surgical Units so that this advice and help can be obtained seamlessly.
- 3. Cardiothoracic surgical cover of MTCs and hospital A&E departments can be provided by cardiac surgeons, thoracic surgeons or both.

Board of Representatives (BORs) Annual Meeting

This was held at the Royal College of Surgeons, London in September 2019 and focussed on the changes in adult cardiac surgical audit, including the introduction of dual consultant operating, definition of an emergency procedure, as well as reports from the SCTS subcommittees. In addition, there were sessions on adult cardiac, thoracic and congenital cardiac surgery best practice, where Units had the opportunity to showcase their practice, thereby providing an opportunity for Unit representatives to share and discuss best practice and quality improvement initiatives. All Units provided a written report for the BORS which is available to the membership and to all stakeholders. The combined report contains a wealth of helpful information as to what is happening in cardiothoracic surgery throughout the country.

Regulation of Surgical Care Practitioners (SCPs)

The SCTS has been working with the Royal College of Surgeons of England and Edinburgh, Association of Cardiothoracic Surgical Care Practitioners (ACT-SCP) and Federation of Specialty Surgical Associations (FSSA) in supporting the development of a regulatory infrastructure for Surgical Care Practitioners (SCPs).

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).

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 2020, following approval by the General Medical Council (GMC).

• Newsnight programme on the EXCEL Trial of patients with Left Main Stem (LMS) Stenosis
The SCTS (in a joint statement with the British Cardiovascular Society and the British
Cardiovascular Intervention Society) responded to the concerns raised by the programme,
emphasising that regardless of the uncertainties of the validity of the conclusions of the EXCEL
trial, individual patients with LMS stenosis in the UK could be assured that their treatment
would be discussed by both medical and surgical specialists in their local heart teams, so that
they receive the best intervention for their particular condition. For the vast majority of
patients this will be coronary bypass surgery rather than stenting. For further detail see the
Adult Cardiac Surgery report.

SCTS Executive Plans for 2020-21

- Expansion of the SCTS Education programme of training courses and portfolio of travelling fellowships.
- Re-design of the SCTS website to increase communication with SCTS members.
- Publication of the next Cardiac Surgery Blue Book.
- Develop formal mentorship programmes for members on behalf of the SCTS.
- Work with Surgical Care Practitioners to ensure appropriate professional regulation.
- Production of a joint SCTS & BISMICS (British and Irish Society for Minimally Invasive Cardiac Surgery) document describing general principles on 'How to safely introduce a new technique'

Adult Cardiac Surgery Sub-Committee

Sub-Committee Members	
Co-chair	Marjan Jahangiri, St George's Hospital, London
Executive co-chair	Simon Kendall, James Cook Hospital, Middlesbrough
Appointed Member	Chris Satur, Royal Stoke University Hospital
Appointed Member	Steven Billing, New Cross Hospital, Wolverhampton
Appointed Member	Shakil Farid, John Radcliffe Hospital, Oxford
Appointed Member	Thanos Athanasiou, Hammersmith Hospital, London
Audit Lead	Uday Trivedi, Royal Sussex County Hospital, Brighton
Education Lead	Sunil Bhudia, Harefield Hospital, London
Nursing & AHP Representative	Helen Munday, Barts Health NHS Trust, London
Trainee Representative	Jonathan Afoke, The Heart Hospital, London
Co-opted Members	
NICOR Audit Lead	Andrew Goodwin, James Cook Hospital, Middlesbrough
UK Aortic Surgery	Geoff Tsang, University Hospital Southampton

Adult Cardiac Surgery Sub-Committee Summary for 2019-20

Surgical Aortic Valve Replacement (SAVR) Project

The SCTS is in the process of collecting data nationally to study the real-world outcomes of patients undergoing surgical aortic valve replacement in the United Kingdom. Currently, the NICE heart valve guidelines are being revised and with the publication of PARTNER 3 and Evolut trials for low risk patients, there is no data on surgical AVR and AVR+CABG from the UK to enable patients and healthcare providers to make an informed decision. The analysis will be performed on the 2013-18 dataset (already submitted to NICOR) for patients undergoing AVR and AVR+CABG, with all patient, surgeon or Unit identifiable data excluded. The project is being done in conjunction with the Clinical Trials Unit at UCL, led by Professor Nick Freemantle, and with the approval of NHS Digital, to ensure all clinical data is stored safely and compliant with GDPR. From an SCTS perspective, we hope this will be the first of many projects that we will embark on to inform us on the outcomes of the patients that we operate on to help optimise clinical decision making.

EXCEL Trial

The EXCEL trial reported similar outcomes for stenting and coronary artery bypass surgery for

patients with low or intermediate anatomical complexity left main stem (LMS) stenosis and was the subject of a BBC Newsnight programme in December 2019. The programme raised concerns about the validity of the conclusions of the trial, whether important data had been withheld, and raised the possibility that the study was inherently flawed from the outset due to conflicts of interest amongst the investigators, given that it had been financed by stent manufacturers. As a result of these very serious allegations, the European Association of Cardiothoracic Surgery (EACTS) withdrew its support for the joint EACTS / European Society of Cardiology guidelines on the management of patients with LMS stenosis, until a full independent analysis of the EXCEL trial data had been carried out. The SCTS supports EACTS that on current evidence coronary bypass surgery is superior to stenting in the treatment of the vast majority of patients with LMS stenosis and remains the best treatment that we can offer. In some circumstances, when the risks of surgery are significant, stenting for LMS stenosis may be an acceptable alternative. A list of the relevant manuscripts, statements, commentaries and news articles have been put on the SCTS website for more information (Appendix 1).

The questions raised about the EXCEL Trial has many ramifications for the conduct of clinical research when it is sponsored by industry, especially the issue of actual or potential conflicts of interest for trialists, publishers of research and those clinicians involved in writing treatment guidelines. This issue (which encompasses the whole of medical research and therapy and not just the cardiovascular specialities) will continue to be debated for many months. The SCTS will comment and contribute to the debate if and when more information emerges.

• UK Working Group for Cardiogenic Shock

Professor Ulrich Stock (Deputy Director of Transplantation, Harefield Hospital) has been selected as surgical representative on the UK Working Group for Cardiogenic Shock, which has been set up by the British Society of Heart Failure.

Job Planning

Following submission of a recent flexible job plan (without fixed operating sessions) to the SCTS for approval, the sub-committee have recommended that flexible job plans should only be employed if applied to all surgeons in the Unit and not just confined to a newly appointed surgeon or one or more individuals. In general, it is recommended that all job plans should have at least 1-1.5 fixed operating sessions per week and that hospital managers should not demand changes to a surgeon's weekly schedule of work without adequate notice (minimum 6 weeks). If a surgeon of the week practice is employed in the Unit, then this should also be included in the job plan.

Adult Cardiac Surgery Sub-Committee Plans for 2020-21

• Consultation and Review of National Guidelines

This includes the NICE heart valve disease guidelines, which is due for completion in 2021.

Marjan Jahangiri and Norman Briffa are the surgical representatives on the writing committee, which will cover GP diagnosis, tertiary referrals, treatment and follow-up. A draft consultation document regarding the commissioning of the Frozen Elephant Trunk procedure has also been produced and circulated to NHS England and the Clinical Reference Groups. SCTS will comment on the document when it is released for review.

• Updating the Adult Cardiac Surgery Section of the SCTS Website.

Over the next 12 months, the SCTS website will be re-designed with an Adult Cardiac Surgery section to the website, which will include examples of how to introduce best practice and quality improvement initiatives, as well as contemporary international guidelines and recommendations for practice.

• Operative Experience for Nationally Appointed Cardiothoracic Surgical Trainees

Strategies will be developed to address the challenges in ensuring trainees gain enough operative experience over the course of the new 7-year cardiothoracic training programme, which has been approved by the GMC and is due to start in August 2020. Suggestions include 3 days of operating per week, better matching of trainee to trainer, and better defining the required achievements at 6 monthly intervals.

Thoracic Surgery Sub-Committee

Sub-Committee Members	
Co-chair	Steve Woolley, Liverpool Heart & Chest Hospital
Executive co-chair	Narain Moorjani, Royal Papworth Hospital, Cambridge
Appointed Member	Kandadai Rammohan, Wythenshawe Hospital, Manchester
Appointed Member	Babu Naidu, Heartlands Hospital, Birmingham
Appointed Member	Juliet King, Guy's Hospital, London
Audit Lead	Doug West, Bristol Royal Infirmary
Education Lead	Sri Rathinam, Glenfield Hospital, Leicester
Nursing & AHP Representative	Amanda Walthew, Liverpool Heart & Chest Hospital
Trainee Representative	Thomas Tsitsias, St George's Hospital, London
Co-opted members:	
British Thoracic Society	David Baldwin, Nottingham City Hospital
Trauma Representative	Richard Steyn, Heartlands Hospital, Birmingham

Thoracic Surgery Sub-Committee Summary for 2019-20

• National Thoracic Audit Activity

The Lung Cancer Clinical Outcomes Publication (LCCOP) 2019 (from 2017 data) has been released, with all Units having validated their results (Appendix 1). There were no negative outliers. The number of lung cancer operations has risen by 5.4% since 2016 to 6684, with the majority of lung cancer surgery now performed via VATS (55%). Although overall resection rates have risen, there are still large geographical variations.

• Thoracic Forum

The 2019 Thoracic Forum was held in Windsor in February as a joint venture between Guy's Hospital (Juliet King) and St George's Hospital (Carol Tan and Mel Jenkins). Richard Page attended and updated the audience on the SCTS activity for the last year. In addition, the programme included presentations on SCTS education, an overview of the 3rd Thoracic Surgery Blue Book and LCCOP 2016 outcomes, sessions on robotic thoracic surgery, current thoracic surgery UK research trials, an update on the PULMICC trial from Professor Tom Treasure, and a session on thoracic trauma. Professor Treasure also presented an overview of his recent book 'The Heart Club'.

SCTS Guidance Document on Proctoring in Cardiac and Thoracic Surgery

In response to some high profile cases, an SCTS guidance document has now been written

covering Proctoring in Cardiac and Thoracic Surgery. This was jointly written by Steven Woolley (Thoracic Surgeon, Liverpool Heart and Chest Hospital) and Stephen Billing (Cardiac Surgeon, New Cross Hospital, Wolverhampton). Following review by BISMICS (British and Irish Society for Minimally Invasive Cardiac Surgery), it will be circulated to the SCTS membership and placed on the SCTS website.

• Provision of Cardiothoracic Surgical Cover for Trauma in the United Kingdom and Ireland

This SCTS position paper has been produced by a working group comprising Donald Whitaker, Simon Kendall, Narain Moorjani, Steve Woolley, Juliet King, Marjan Jahangiri and Richard Page. The key point of the document is that the initial management of patients with chest trauma should be by the trauma team, as it is not practical for on-call cardiothoracic surgeons to be able to attend in an appropriate timeframe for salvage procedures (i.e. immediately). Cardiothoracic surgeons should, however, be available for immediate telephone advice and attend urgently when available. It was also identified that cardiothoracic surgical cover could be provided by cardiac surgeons, thoracic surgeons or both (Appendix 1).

National Optimum Lung Cancer Pathway (NOLCP)

The revised plan for surgical detail of National Optimum Lung Cancer Pathway was agreed with some minor changes (Appendix 1).

Lung Cancer Update Quality Standard 2019

It was agreed the SCTS would support the 2019 update of the Lung cancer quality standards (Appendix 1).

Thoracic Surgery Sub-Committee Summary for 2020-21

• Thoracic Content for the SCTS Website

A provisional plan for thoracic content for the thoracic part of the SCTS website has been agreed. This will incorporate guidelines, best practice articles, links to operative videos as well as patient information and videos.

• **Thoracic Forum.** The 2020 Thoracic Forum took place on the 7th - 8th of Feb 2020 at Low Wood Bay Resort, Windermere, organised by Mr Manoj Purohit (Blackpool Victoria Hospital).

Genomics UK

It was agreed that Michael Shackcloth would be the consultant representative for this RCS working group, with Akshay Patel as a trainee representative.

Urgent Patient Transfer Policies

It has been identified that Units have varying practices and policies for dealing with urgent referrals for patients requiring transfer for thoracic surgical input. It is planned to discuss this at the next sub-committee meeting and identify the various systems currently used with the eventual aim of improving the process.

Congenital Cardiac Surgery Sub-Committee

Sub-Committee Members	
Co-chair	Rafael Guerrero, Alder Hey Children's Hospital, Liverpool
Executive co-chair	Richard Page, Liverpool Heart & Chest Hospital
Unit Representative	Chuck McLean, 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 Children's Hospital
Unit Representative	Andreas Hoschtitzky, Royal Brompton Hospital, London
Unit Representative	Phil Botha, Birmingham Children's Hospital
Unit Representative	Ben Davies, 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
Audit Lead	Carin Van Doorn, Leeds Children's Hospital
Deputy Audit Lead	Serban Stoica, Bristol Royal Hospital for Children
Education Lead	Attilio Lotto, Alder Hey Children's Hospital, Liverpool
Nursing & AHP Representative	Karen Byrne, Birmingham Children's Hospital
Trainee Representative	Joseph George, University Hospital Cardiff

Congenital Cardiac Surgery Sub-Committee Summary for 2019-20

- Over the past 12 months, the Congenital Cardiac Surgery Sub-committee has undergone considerable change. Rafael Guerrero has been appointed as the new Co-Chair with refreshment of the membership of the sub-committee to ensure all 10 congenital cardiac surgery Units are represented. In his role as co-chair, Rafael Guerrero will represent the SCTS on the NHS Clinical Advisory Panel for the reconfiguration of congenital cardiac surgery services.
- Andrew Parry has been appointed as SCTS representative on the Congenital Cardiac Clinical Reference Group, with Massimo Caputo acting as a Deputy.
- Rafael Guerrero has been appointed as SCTS representative on the Royal College of Surgeons Genomic UK project.

Congenital Cardiac Surgery Sub-Committee Plans for 2020-21

- Establish a working group to address the workforce challenges in congenital cardiac surgery (UK Congenital Cardiac Surgery 2030)
- Increase SCTS membership and engagement of congenital cardiac surgeons with the Society.
- New SCTS Annual Meeting congenital cardiac surgery format to improve attendance and participation.
- Approve and publish the new congenital cardiac surgery section of the SCTS website
- Develop partnerships with the STS and EACTS congenital cardiac surgery domains (education, training, outcomes, innovation and research)
- Strengthen NICOR representation and leadership to streamline the use of national data with a collaborative and multi-institutional strategy.
- Develop a National Clinical Consensus Group for rare and complex surgical "decision-making" cases.

Audit Sub-Committee

Sub-Committee Members	
Sub-committee Members	
Co-chair	Doug West, Bristol Royal Infirmary
Executive co-chair	Simon Kendall, James Cook Hospital, Middlesbrough
Adult Cardiac Surgery Lead	Uday Trivedi, Royal Sussex County Hospital, Brighton
Thoracic Surgery Lead	Doug West, Bristol Royal Infirmary
Deputy Thoracic Surgery Lead	Kandadai Rammohan, Wythenshawe Hospital, Manchester
Congenital Cardiac Surgery Lead	Carin Van Doorn, Leeds Children's Hospital
Deputy Congenital Surgery Lead	Serban Stoica, Bristol Royal Hospital for Children
Nursing & AHP Representative	Julie Sanders, St Bartholomew's Hospital, London
Co-opted Members	
·	
Adult Cardiac Blue Book Editor	David Jenkins, Royal Papworth Hospital, Cambridge
NICOR Representative	Andrew Goodwin, James Cook Hospital, Middlesbrough

Audit Sub-Committee Summary for 2019-20

NICOR National Cardiac Audit Programme Report (2019)

The combined NICOR national cardiac audit programme (NCAP) report was published in September 2019 and contains information concentrating on 5 clinical areas, namely congenital heart disease, myocardial infarction, percutaneous coronary interventions (PCI), adult cardiac surgery and heart failure (Appendix 1). The report focuses on 3 broad quality improvement (QI) themes – timely care, specialist care and evidence-based care delivered to a uniformly high standard.

National Adult Cardiac Surgery Audit

Data for adult cardiac surgery performed between 2016 and 2019 has been analysed by NICOR, with 1 Unit outlier as an alert, 6 negative individual alerts and 2 positive individual alerts. There are no alarm level outliers. The relevant Unit and individuals have been contacted personally by the SCTS President.

Development of Dual Consultant Operating Policy

Agreement from NICOR and the Healthcare Quality Improvement Partnership (HQIP) has been obtained to accept dual consultant operating for high risk cases to be reported by Unit rather than against an individual surgeon GMC number. This policy came into effect on 1st April 2019. This was highlighted as good practice for a small number of selected complex and/or high risk patients by GIRFT. Although this change may affect only a limited number of patients, it is a fundamental change to data collection as it recognises team responsibilities rather than the

NHS England clinical outcomes publication (COP) that focuses on the individual consultant. The SCTS has developed guidance for this that has been circulated to members (Appendix 2).

• Operative Definitions Standards

Guidance has been developed to classify adult cardiac surgical operations according to the urgent and emergency status. Following feedback from members, an updated version of the guidance has been produced (Appendix 3).

Adult Cardiac Surgical Data Hosting

Over the recent past, it has become increasing difficult to get access to the data that has been collected by adult cardiac surgical centres and submitted to NICOR for audit and research projects. The processes in place at NICOR are not conducive to accessing data in a timely manner. The SCTS Adult Cardiac Surgery Audit Lead has no access to the dataset and it is not possible to answer some of the straightforward questions raised by members about activity and survival. SCTS is in discussions with Dendrite in the development of a project to collect Unit data and host it on their servers as they currently do for a number of other surgical specialties. This would allow the SCTS to have access to the data and within the current legal framework, for the data to be used for audit purposes. We are currently waiting for a formal proposal document from Dendrite as to how the process would work. There has also been interest from BISMICS (British and Irish Society for Minimally Invasive Cardiac Surgery) to either create their own dataset or to have new data fields included in the NICOR dataset to allow analysis by the surgical approach used.

3rd SCTS National Database Report in Thoracic Surgery

This was published in June 2019 and reports the SCTS thoracic registry data from 1980-2015, together with the 3-year SCTS Thoracic Database Project and the pilot pneumothorax and pleural sepsis audit, performed using Hospital Episode Statistics (HES) data in conjunction with the Royal College of Surgeons (England) Clinical Evaluation Unit. Data from the Blue Book has been presented at the Thoracic Forum, the SCTS Annual Meeting 2019, the European Society for Thoracic Surgeons 2019 meeting in Dublin, and at the SCTS BORS Annual Meeting.

• Lung Cancer Clinical Outcomes Publication (LCCOP) Report

The report documents lung cancer surgery in NHS England hospitals in 2017 and was released by HQIP in January 2020. It reports a continuing increase in lung cancer surgery volumes. For the second year, the majority of lobectomies and the majority of all lung cancer resections have been performed using minimal access techniques. The SCTS played a major part in drafting the report, working together with the audit provider, the National Lung Cancer Audit (NLCA). For the first time, the Society provided internal peer review before submission to HQIP, with Simon Kendall, KS Rammohan and Joel Dunning reviewing the manuscript. After discussions between the SCTS and the NLCA, this year's report added a new metric; the stage I/II performance status 0/1 specific resection rate. We hope that this measure will be a more effective measure of the quality of surgical care than the overall resection rate. The 90-day survival outcome has been discontinued from the LCCOP in favour of survival at 30-day and 365-day.

Audit Sub-Committee Membership Changes

Over the past year, there have been several changes in the audit sub-committee, allowing us to increase our contributions to audit and quality. David Jenkins stepped down in 2019 after a successful tenure as Sub-Committee Co-Chair and Adult Cardiac Surgery Lead. He was replaced by Doug West as Audit Sub-Committee Co-Chair and Uday Trivedi as Adult Cardiac Surgery Lead. David remains co-opted to the sub-committee, as he continues to lead the production of the adult cardiac surgery blue book. Carin Van Doorn has been appointed as Congenital Cardiac Lead, following David Barron's departure for Canada. In addition, significant interest in joining the Audit Sub-Committee has allowed two new deputy posts to be created, with Serban Stoica as Deputy for Congenital Cardiac Surgery and KS Rammohan as Deputy for Thoracic Surgery.

National Clinical Improvement Programme (NCIP)

The Society wrote to the NCIP team in October to formally respond to their plans for an online surgeon-level reporting tool. The SCTS has welcomed their vision for "dashboards" available to individual clinicians, but highlighted the importance of appropriately risk-adjusted clinical audit to safeguard quality and drive improvement. In congenital cardiac surgery, we have cautioned against further development of NCIP dashboards and instead advocated support for the existing national audit arrangements alone.

Audit Sub-Committee Plans for 2020-21

Adult Cardiac Surgery Blue Book

David Jenkins will continue to lead the development of this 15-year retrospective analysis of adult cardiac surgical data, with over 90% of the chapters submitted.

• Congenital Cardiac Surgery Blue Book

The SCTS is working with the University of Birmingham and NICOR to produce a Blue Book in Congenital Cardiac Surgery, led by Carin Van Doorn.

Online reporting portal for the SCTS thoracic returns data

The Society is exploring the possibility of developing an online reporting tool, to allow clinicians to easily access recent activity and survival data from the SCTS returns. Broad costings have been received from LightMedia, and initial discussions have taken place with Medtronic about the possibility of commercial funding.

Ongoing projects

Further engagement with Dendrite Clinical Systems to explore an adult cardiac surgical database containing pseudo-anonymised data alongside the NICOR audit; NHS Improvement to further develop the National Clinical Improvement Programme (NCIP) in cardiothoracic surgery; and the Getting It Right First Time (GIRFT) team for the 2020 project in Cardiothoracic Surgery in England.

Education Sub-Committee

Sub-Committee Members	
Co-chair	Sri Rathinam, Glenfield Hospital, Leicester
Executive co-chair	Narain Moorjani, Royal Papworth Hospital, Cambridge
Cardiac Tutor	Sunil Bhudia, Harefield Hospital, London
Thoracic Tutor	Carol Tan, St George's Hospital, London
Congenital Lead	Attilio Lotto, Alder Hey Children's Hospital, Liverpool
Nursing & AHP Representative	Bhuvana Bibleraaj, Wythenshawe Hospital, Manchester
Trainee Representative	Sudeep Das De, Golden Jubilee National Hospital, Glasgow
Consultant Lead	Donald Whitaker, King's College Hospital, London
Non-NTN Lead	Uday Dandekar, University Hosp. Coventry & Warwickshire
Medical Student Lead	Aman Coonar, Royal Papworth Hospital, Cambridge
Accreditation Lead	Mahmoud Loubani, Castle Hill Hospital, Hull

Education Sub-Committee Summary for 2019-20

Consultant Education

The 2nd SCTS Consultant Masterclass was held in London at the Annual Meeting on 'Innovation and Novel Techniques'. It was very well attended and received, with excellent feedback. In addition, SCTS Education supported a very successful SCTS-lonescu University, in conjunction with the Meeting Team. The 2nd SCTS Team Human Factors Course was held at Harefield Hospital.

NTN Education

This year represented the successful change-over of administration of the NTN portfolio of courses to be run in-house by the SCTS Education Administrative staff, which welcomed Emma Ferris as a new member of the team. Financial support was obtained from additional industry partners, as well as Mr Ionescu, to supplement the long-standing partnership that SCTS Education has developed with Ethicon.

Non-NTN Education

The non-NTN portfolio of courses expanded with the introduction of a residential course for non-NTNs and a wet-lab component to the clinical update course.

Nursing & Allied Health Professional (AHP) Education

The portfolio of courses for nurses and AHPs continues to expand with further plans to introduce new courses next year. The courses are run at the Abbott Training Facility, near Birmingham, with financial and logistic support from the company.

Medical Student Education

The 6th SCTS National Student Engagement Day was held in Liverpool in November 2019 jointly hosted by Liverpool and Manchester Universities. There were inspiring talks giving an insight into cardiothoracic surgical training, work-life balance and the various cardiothoracic surgical sub-specialties, followed by an opportunity for the students to get practical experience during the wet-lab sessions.

Education Travelling Fellowships

This year saw the considerable expansion in the number of educational fellowships (Appendix 3) offered to SCTS members for Consultants, NTN trainees, non-NTN fellows, nurses & AHPs, medial students, as well as multidisciplinary teams, due to the exceptional generosity of Mr lonescu, who offered SCTS-lonescu Exceptional Additional Fellowships for 2019. As ever, we are very grateful for the financial support from Ethicon for the NTN fellowships.

• Collaboration with the Cardiothoracic Surgery Specialty Advisory Committee (SAC)

SCTS Education has been working with the SAC in a number of projects, including revision of the cardiothoracic surgery curriculum that has been approved by the General Medical Council (GMC), development of peri-CCT fellowships and a survey of simulation provision within cardiothoracic surgical Units.

SCTS Podcasts

SCTS has offered podcasts as a new venture of education that address various aspects of clinical and professional affairs. Our thanks go to Caroline Toolan, ST8 in the North West Region, for leading on this.

• SCTS and Royal College of Surgeons of Edinburgh Webinars

SCTS continues to offer a series of educational webinars, in conjunction with the Royal College of Surgeons of Edinburgh.

Education Sub-Committee Plans for 2020-21

• SCTS Education website

The SCTS Education website will be integrated into the main SCTS website, which is currently being redesigned. As well as updated information and educational resources, the education section of the website will include a legacy page to Mr Marian Ionescu.

Reorganisation of the NTN portfolio of training courses

With the forthcoming changes to the cardiothoracic surgery curriculum, the portfolio of courses will be restructured to correlate with the new 7-year training programme.

Assessment of education

We are in the process of assessing the outcome of the SCTS Education portfolio of courses, as 2020 will see the first cohort of trainees that have completed the entire structured portfolio of cardiothoracic training courses that were introduced in 2013. In addition, a second quality assurance visit and report of the courses will take place from the Royal College of Surgeons of Edinburgh and an impact of training analysis will be performed in conjunction with the SAC.

• Education Travelling Fellowships

In addition to the Ethicon NTN Travelling Fellowships, further expansion of the SCTS-Ionescu Travelling Fellowships is planned for 2020, with an additional round to celebrate Mr Ionescu's 90th birthday.

Third Consultant Masterclass

On the Saturday before the 2020 Annual Meeting in Newport, a Mentoring Course will be held for Consultants.

Surgical Care Practitioners (SCPs) Examinations

SCTS, in collaboration with Royal College of Surgeons of Edinburgh, is formalising the SCPs examinations. The exams will be run by the Royal College of Surgeons of Edinburgh exams department, provisionally in Summer 2020.

Education Sub-Committee restructuring

Expressions of interest will be sought for the Cardiac Surgical Tutor, Consultant Education Lead, Medical Student Education Lead and Accreditation Lead posts, with Sunil Bhudia, Donald Whitaker, Aman Coonar and Mahmoud Loubani, respectively, demitting office.

Research Sub-Committee

Sub-Committee Members	
Co-chair	Gavin Murphy, Glenfield Hospital, Leicester
Executive co-chair	Richard Page, Liverpool Heart & Chest Hospital
Adult Cardiac Surgery	Mahmoud Loubani, Castle Hill Hospital, Hull
Thoracic Surgery	Eric Lim, Royal Brompton Hospital, London
Thoracic Surgery	Babu Naidu, Heartlands Hospital, Birmingham
Congenital Cardiac Surgery	Massimo Caputo, Bristol Children's Hospital
Congenital Cardiac Surgery	Nigel Drury, Birmingham Children's Hospital
Nursing & AHP Representative	Julie Sanders, St Bartholomew's Hospital, London
Trainee Representative	Marius Roman, Glenfield Hospital, Leicester
Co-opted Members	
SAC Representative	Stephen Clark, Freeman Hospital, Newcastle
NICOR Representative	Andrew Goodwin, James Cook Hospital, Middlesbrough
Associate Surgical Specialty Lead	Luke Rogers, University Hospital Southampton
Associate Surgical Specialty Lead	Ricky Vaja, Harefield Hospital, London
Congenital Cardiac Surgery Audit	Serban Stoica, Bristol Children's Hospital

Research Sub-Committee Summary for 2019-20

• Heart Surgery Priority Setting Partnership (PSP)

The heart surgery PSP, funded by Heart Research UK, was published in September 2019 (Appendix 1). It obtained the views and opinions of over 1000 surgeons, anaesthetists, researchers and members of the public, to identify the top 10 research priorities for adult cardiac surgery in the UK.

3rd SCTS National Research Meeting (November 2019)

The meeting was a great success with increased attendance of trainees, nurses and allied health professionals, providing great opportunities to get involved in national cardiothoracic research projects. Keynote speeches were delivered by Professor Eric Lim (Royal Brompton), who presented the work that led to the success of the VIOLET trial, Professor Gianni Angelini (Bristol Heart Institute), who described the changes in the technology platforms used in translational research over the course of the last 30 years, and Professor David Chambers (King's College, London), who described his career and journey towards the development of new and effective myocardial protection strategies. The meeting culminated with presentation

of prizes for the best oral research and poster presentations by the Society President, Richard Page.

RCS Associate Surgical Specialty Leads

The associate Surgical Specialty Leads, Luke Rogers and Ricky Vaja, have continued to expand the role of trainees and NAHPs in research. They have undergone training in Cochrane methodology, as well as in clinical trial design. They have completed their first Cochrane systematic review of interventions to reduce surgical site infection. They have established the Cardiothoracic Interdisciplinary Research Network (CIRN) with Professor Julie Sanders, completed a national survey of surgical site infection prevention strategies in UK cardiac surgery Units, and established an interdisciplinary research group who are developing an SSI prevention research programme.

• Cardiothoracic Interdisciplinary Research Network (CIRN)

The CIRN, established in 2018, now has representatives in 22 UK Units, composed of surgical trainees, nurses and allied health professionals. The CIRN is currently participating in the UK Mini-Mitral trial. Most recently, the CIRN has completed a national survey of variation in practice for surgical site infection prevention. It is expected that the CIRN will become an active partner in the national trials programme moving forward through the new National Institute for Health Research (NIHR) Associate Principal Investigator Scheme.

• Nurse and Allied Health Professionals Research

Led by Professor Julie Sanders (St Bartholomew's Hospital, London), there has been a significant increase in the level of NAHP participation in cardiothoracic research, with research activity in multiple centres, an annual NAHP research session at the SCTS Annual Meeting, and a break out session at the SCTS National Research Meeting. NAHP participation in the CIRN has been key to its success.

• NIHR Academic training

The SCTS Research Sub-Committee held the first meeting for academic trainees in March 2019. This led to a new educational initiative focused on clinical research with the completion of a successful grant writing workshop in September 2019.

British Heart Foundation Cardiovascular Research Collaborative (CRC)

This national initiative aims to support interdisciplinary clinical research that will address national and international research priorities. The CRC was launched in Manchester in June 2019, supported by a 3-year grant from the British Heart Foundation. This infrastructure will provide centralised administrative and networking support for researchers, clinicians, and members of the public to come together to develop proposals for world class clinical trials. The SCTS will lead the vanguard project and the BHF CRC provided a grant to support the National Cardiac Surgery Research Workshop in July 2019.

Research Sub-Committee Plans for 2020-21

National Cardiac Surgery Research Workshop (3rd July 2020)

Based on the Heart Surgery PSP, the SCTS, the BHF Clinical Research Collaborative and Heart Research UK are hosting a national workshop that will address the research priorities identified in the James Lind Alliance PSP (Appendix 1). The aim of the workshop is to pump prime new interdisciplinary research groups who will then develop study proposals to address key research priorities. The working groups will consist of roughly equal numbers of clinicians, methodologists and members of the public. Those who wish to attend can register at: https://forms.gle/CEFZgPyeVGDWTCS78, with over 120 delegates already registered. It is expected that these working groups will receive support in the future from the new BHF Clinical Research Collaborative.

RCS Surgical Specialty Leads/ CIRN

The associate surgical specialty leads, along with Professor Julie Sanders, have led a national collaborative who expect to submit an application for trial funding related to surgical site infection prevention in 2020.

Nurse and Allied Health Professionals Research Degrees

Led by Professor Julie Sanders, Queen Mary University of London aims to establish a programme of higher degrees for nurses and allied health professionals who wish to pursue a career in research.

• Thoracic Surgery Associate Surgical Specialty Lead

A thoracic surgery associate surgical specialty lead will be selected from nationally appointed surgical trainees who are members of the Society and wish to pursue an academic career in thoracic surgery. The appointee will join the established thoracic surgery clinical trials network, and will receive training in trial design and other clinical research methods.

NIHR Academic Training

The grant writing workshop, as well as a study day in Cochrane methodology, will be offered to trainees, nurses and allied health professionals in 2020. It is hoped that these will be incorporated into the SCTS Educational Programme.

4th SCTS National Research Meeting (Leicester, November 2020)

Nursing & Allied Health Professionals Sub-Committee

Sub-Committee Members	
Chair	Helen Munday, St Bartholomew's Hospital, London
Meeting Lead	Daisy Sandeman, Royal Infirmary of Edinburgh
Cardiac Lead	Helen Munday, St Bartholomew's Hospital, London
Thoracic Lead	Amanda Walthew, Liverpool Heart & Chest Hospital
Congenital Lead	Karen Byrne, Birmingham Children's Hospital
Audit Lead	Julie Sanders, St Bartholomew's Hospital, London
Education Lead	Tara Bartley, Royal Sussex County Hospital, Brighton
Education Lead (SCPs)	Bhuvana Bibleraaj, Wythenshawe Hospital, Manchester
Research Lead	Julie Sanders, St Bartholomew's Hospital, London
Patient Liaison	Chrissie Bannister, University Hospital Southampton

Nursing & Allied Health Professionals Sub-Committee Summary for 2019-20

Cardiothoracic Forum and SCTS-Ionescu University Day

There continues to be a year on year rise in the number of nursing and allied health professional delegates attending the Cardiothoracic Forum and SCTS-Ionescu University Day. The feedback from the London meeting was extremely positive.

SCTS-Ionescu Nursing & Allied Health Professional Fellowships 2019/20

The team are enormously grateful to the generosity of Mr Marian Ionescu who has supported no less than ten Fellowships to nurses and AHPs over the last 12 months. In addition to these, Mr Ionescu has kindly donated four further exceptional fellowships for nurses and AHPs in celebration of his 90th birthday.

NAHP Education Portfolio

There are a variety of courses that run throughout the year and take place mainly at the Abbott teaching facility in Solihull. The CT Forum University day offers a condensed version (in 1 day as opposed to 2-3 days) to give delegates an insight into what they can expect from the courses. Interactive practical wet-lab benches are interspersed with skills stations where delegates can practise a range of procedures from chest drain insertion and valve replacements to cardiac pacing and rhythm recognition. At the 2019 London meeting and for

the first time, we welcomed A-level students to join the CT Forum University day for an hour in the morning (for cardiac stations) and an hour in the afternoon (thoracic stations). The atmosphere was buzzing and the feedback excellent so we plan to extend the invitation again in 2020. Needless to say, none of this would be possible without the highly knowledgeable, highly skilled and enormously enthusiastic multidisciplinary faculty, led brilliantly by Dr Bhuvana Krishnamoorthy. The team are always keen to bring in new faculty members so if anyone is interested and keen to teach, please contact Bhuvana or myself via the SCTS office. Tara Bartley who has been instrumental in establishing the educational portfolio continues to develop international links through her involvement with the European Association for Cardiothoracic Surgery (EACTS) and the Society of Thoracic Surgeons in the US.

SCTS Nursing and AHP Research Group (NARG)

The NARG was set up in 2018 to create a community of NAHP cardiothoracic researchers of all levels, from those with a general interest to post-doctoral level and beyond. It is led by Professor Julie Sanders, Director of Clinical Research, Quality and Innovation at St Bartholomew's Hospital and all nursing and allied health professional members are invited to join.

• Cardiothoracic Interdisciplinary Research Network (CIRN)

Professor Julie Sanders is also the NAHP Lead for the CIRN, which aims to deliver a portfolio of multi-centre clinical trials. For any nurse or AHP who wishes to broaden their research knowledge or who might be considering an academic career but unsure how it would fit with their clinical role, please contact Julie (<u>j.sanders@qmul.ac.uk</u>). Julie will also be running a research workshop during the University day at the Annual Meeting in Newport.

Aortic Dissection Awareness Day UK 2019

Patient Liaison Lead, Christina Bannister, attended this national event in Leicester, hosted by Professor Gavin Murphy. Her article in the January 2020 issue of the Bulletin illustrates what a highly interactive day it was with patients, relatives, clinicians and academics working together to design a trial that will provide much needed evidence to support targeted screening. The 2020 event will be held on Thursday 17th September (WHO Patient Safety Day) and is to be hosted by the Bristol Aortic Service Team.

Association of Cardiothoracic Surgical Care Practitioners (ACT-SCP) Annual Meeting

This inaugural ACT-SCP annual conference and educational day for cardiothoracic surgical care practitioners was held on the 24th November 2019, in association with the SCTS. The programme included scientific presentations on the latest technologies in cardiothoracic surgery, as well as hand-on simulation techniques and poster presentations.

Regulation of Surgical Care Practitioners (SCPs)

The President of the Association of Cardiothoracic Surgical Care Practitioners, Dr Bhuvana Krishnamoorthy, has been tireless in her campaign for statutory regulation for SCPs, with common education and training pathways for SCPs. This is supported by the Royal College of Surgeons of Edinburgh, the Federation of Surgical Specialty Association and the SCTS, all of

whom continue to lobby the Secretary of State for Health and Social Care. In the meantime, there are plans to introduce voluntary registration through the Royal College of Surgeons of Edinburgh.

• Cardiothoracic Manual for Perioperative Practitioners

Congratulations to Dr Bhuvana Krishnamoorthy and all the contributors on the publication of this excellent book. It is aimed at all perioperative practitioners, including SCPs, anaesthetic, theatre and recovery practitioners, surgical trainees, nurses and perfusionists. It is a fantastic resource and really highlights the role and impact of the multidisciplinary team along the patient pathway, from preoperative assessment to discharge. *All profits from the book are to be donated to support the widening of educational opportunities for low-income students*.

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

• Continue to grow the membership

We are still a long way off having nurse or AHP representation in every cardiothoracic centre in the UK and Ireland. I am keen to hear from anyone whom might be interested in becoming involved in the SCTS to help raise awareness about the opportunities available to members.

Regulation for SCPs

There has been progress over the last 12 months despite the set-back at the beginning of 2019. It is crucial to keep this on the agenda.

Website development.

With external support and dedicated designers, it is likely that this project will develop considerably over the next 12 months.

Succession planning for the next Nursing and AHP Lead.

Following the SCTS Annual Meeting in March, the SCTS will be seeking expressions of interest from those keen to succeed Helen Munday as SCTS Nursing and AHP Lead. Consideration is being made to reduce the term of office for the post from 5 to 3 years, to potentially encourage more nurses and AHPs to engage with the Society by introducing fresh faces and new ideas.

Meeting Team Sub-Committee

Sub-Committee Members	
Meeting Secretary	Maninder Kalkat, Heartlands Hospital, Birmingham
Deputy Meeting Secretary	Cha Rajakaruna, Bristol Royal Infirmary
Associate Meeting Secretary	Awaiting appointment
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 2019-2020

• 83rd Annual Meeting and SCTS-Ionescu University

The 2019 Annual SCTS Meeting, CT forum and SCTS-lonescu University was held at the Queen Elizabeth II Centre, London in March 2019. The venue, located in the heart of London and surrounded by historic buildings, including Westminster Abbey, Houses of Parliament and the river Thames, was much appreciated by the attendees. Nearly 1200 delegates and members of the industry participated in the meeting. The educational content was delivered by national and international experts in the field of Cardiothoracic Surgery. The number of high-quality abstracts accepted for the meeting required the addition of more parallel sessions and extending the meeting by half a day. Building on the success of the previous meeting, a simulation session for minimally invasive surgery ran over two days and was well attended. The theme of the plenary session was Congenital Cardiac Surgery, with a life-time achievement award presented to Professor Marc de Leval.

Attendance:

Medically qualified SCTS members	153
Medically qualified non-members	63
CT Forum SCTS members	106
CT Forum non-members	118
CT Trainee/SAS Doctors SCTS members	129
CT Trainee/SAS Doctors non-members	60
Students	57
FY1/FY2/CT1/CT2 Category	59
Senior and Retired	11
Database Managers	8
Dinner Only Ticket	54

Exhibitor Staff	275
Other	76

Total 1169

Annual Dinner

The annual dinner was once again sold out and proved to be one of the highlights of the meeting. Taking place at the Underglobe beneath the Globe Theatre, guests enjoyed themed entertainment and dancing.

Annual Meeting Feedback

Responses were obtained from 588 delegates, who were satisfied with the conduct and content of the meeting. The location of the venue was particularly appreciated and the SCTS App was found to be user friendly and fit for purpose. Improvements suggested related to catering and in response to this, we will be bringing back complimentary catering to our delegates for the 2020 Annual Meeting.

• Sub-committee membership

Cha Rajakaruna and Daisy Sandeman adjusted seamlessly to their new roles as Deputy Meeting Secretary and Nursing & AHP CT Forum Lead, respectively. Clinton Lloyd completed his term as Meeting secretary and with his commitment, vision and organising capabilities, he made the Annual Meeting more inclusive, productive and well attended. He has very kindly agreed to guide the team for future meetings and we remain grateful to him. The advertisement for the next Associate Meeting Secretary has been posted.

Meeting Team Sub-Committee Plans for 2020-21

84th Annual Meeting, Cardiothoracic Forum and SCTS-Ionescu University

This year's Annual Meeting will be held on 22nd -24th March 2020 at the newly constructed ICC Wales conference centre in the salubrious surroundings of Celtic Manor Resort in Newport. A record number of 508 abstracts have been received this year and after reviewing, 427 have been accepted. The theme for the plenary session is Thoracic Surgery and Mr William Walker has been chosen for the lifetime achievement award for his contribution to minimally invasive thoracic surgery. Further additional plenary sessions have been added to the meeting on Tuesday enabling more delegates to attend talks on generic topics. The gala dinner will be held at the historic Exchange Hotel in Cardiff, befitting the proposed Great Gatsby theme. On Saturday afternoon, a 5K fun run has been organized with a course winding through the greens of Celtic Manor resort golf course, as well as the 3rd SCTS Education Consultant Masterclass on Mentoring.

• 85th Annual Meeting, Cardiothoracic Forum and SCTS-Ionescu University

The 2021 Annual Meeting will be once again held at the ICC Belfast, presenting both an excellent venue and competitive pricing.

• 86th Annual Meeting, Cardiothoracic Forum and SCTS-Ionescu University

The ICC Birmingham has been selected as the venue for the 2022 Annual Meeting. With the Commonwealth games scheduled for 2022, Birmingham should look very different to the last meeting in 2016.

Contributors

Editor

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Sub-committee reports

Executive summary

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Mr Simon Kendall SCTS President Elect and Adult Cardiac Surgery Sub-Committee Executive Co-chair Consultant Cardiac Surgeon, James Cook Hospital, Middlesbrough

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Nursing and Allied Health Professionals

Mrs Helen Munday
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Annual Meeting

Mr Maninder Kalkat SCTS Meeting Secretary Consultant Thoracic Surgeon, Heartlands Hospital, Birmingham

Heart Surgery Priority Setting Partnership (PSP)

http://www.jla.nihr.ac.uk/priority-setting-partnerships/heart-surgery/

http://www.jla.nihr.ac.uk/priority-setting-partnerships/heart-surgery/downloads/Heart-Surgery-PSP-report-of-results.pdf.

• 'Provision of Cardiothoracic Surgical Cover for Trauma' Position Paper

https://scts.org/wp-content/uploads/2020/02/SCTS-trauma-DW-NM-23rd-Feb-2020.pdf

• Lung Cancer Clinical Outcomes Publication (LCCOP) report 2018

https://www.rcplondon.ac.uk/projects/outputs/lung-cancer-clinical-outcomes-publication-2019-audit-period-2017

• National Adult Cardiac Surgery Audit 2019 Summary Report (2015/16-2017/18 data)

https://www.nicor.org.uk/wp-content/uploads/2019/09/ACS-2019-Summary-Report-final.pdf

• EXCEL Trial Manuscripts, Statements, Commentaries and News Articles

https://scts.org/news-articles-statements-and-commentary-regarding-the-excel-and-noble-trials/

National Optimum Lung Cancer Pathway (NOLCP)

https://www.cancerresearchuk.org/sites/default/files/national_optimal_lung_pathway_aug_2 017.pdf

Lung Cancer Update Quality Standard 2019

https://www.nice.org.uk/guidance/qs17

NICOR National Cardiac Audit Programme Report (2019)

https://www.nicor.org.uk/wp-content/uploads/2019/09/NCAP-Annual-Report-2019-final.pdf

Guidance for Dual Consultant Operating

Background

The following guidance is to assist Units in deciding how to allocate cases for dual consultant operating where the outcome will be measured at a Unit rather than surgeon specific level. The guiding principle for this is to provide best practice to ensure high quality care and outcomes for patients and counter any individual risk averse behaviour. This guidance is for elective and urgent cases where there would be time for discussion and scheduling to accommodate two consultant surgeons. In emergency situations, we do not recommend delay in treatment and the current system does not include emergency/salvage cases in surgeon specific outcomes.

Guidelines

- 1. The decision to allocate any patient for dual consultant operating has to be made prior to the date of surgery. This should be clearly documented at an MDT meeting and recorded in the notes.
- 2. The Unit audit lead is expected to keep a log of all cases which will have dual consultant operating. This will need to be presented at local clinical governance meetings on a regular basis.
- 3. Both consultant surgeons are expected to be present for the duration of the case and scrubbed for the majority of the time at the operating table.
- 4. There should be documented planning of the operative strategy that has been agreed by both surgeons.
- 5. Cases of mentoring will not count towards dual consultant operating and will still be allocated to a single surgeon.

Additional Information

It is recognised that individual Units vary significantly at a national level in terms of infrastructure, size and caseload. Due to this, no specific guidance can be given to Units about which cases should be included. It is expected that Units will be looking at high risk or complex cases in the main. A case could be made for dual consultant operating when innovative procedures are being introduced in order to maintain patient safety. This, however, would be for truly innovative surgery and not a procedure which is new to the Unit. In the latter case, the appropriate training, governance and proctoring are expected, and the cases will be attributed to a single surgeon.

This initiative is to ensure that high risk cases that would benefit from operative intervention are not denied surgery. NICOR will monitor the percentage of cases being allocated under this system and further feedback will be provided. Units may notice an increase in the risk score of the patients they operate on. The SCTS recognises that over a number of years, this may lead to a rise in raw mortality.

Operative Urgency Definition

In the new Euroscore II model, the previous definitions of operative urgency were expanded to 4 classes:

- 1. Elective routine admission for operation.
- 2. Urgent patients who have not been electively admitted for operation but who require intervention or surgery on the current admission for medical reasons. These patients cannot be sent home without a definitive procedure.
- 3. Emergency operation before the beginning of the next working day after decision to operate.
- 4. Salvage patients requiring cardiopulmonary resuscitation (external cardiac massage) en route to the operating theatre or prior to induction of anaesthesia. This does not include cardiopulmonary resuscitation following induction of anaesthesia.

Currently 1 & 2 are included in surgeon-specific outcomes reporting by NICOR and 3 & 4 are not (a number of other operative categories are also excluded by NICOR e.g. LVAD or pericardiectomy). The problem, however, is the definitions used here can be interpreted differently depending on the clinical scenario and the involvement of different surgeons at varying time-points. There is ambiguity in the definition of emergency as it does not state who makes the decision to operate and whether that decision is valid across all the surgeons in a Unit. A patient could have been in hospital a number of days before a decision to operate is made. One surgeon may choose not to operate and a day later another surgeon may decide to operate, would that be an emergency case?

The second issue is what constitutes completion of induction of anaesthesia? Arrival in the anaesthetic room or once patient intubated or when the patient is ready to enter the operating room? There are numerous ways to interpret the Euroscore definitions and variability in operative urgency classification may lead to invalid comparison between Units and surgeons.

To gain a better picture of how individuals and Units classify operative urgency a Survey Monkey poll was carried out by the Society. This consisted of 10 clinical scenarios and the respondents were asked to classify the operative urgency of each case. The results of this survey (https://www.dropbox.com/s/5igrqbjylaljnyb/Survey%20Results.pptx?dl=0) were presented at the Board of Representative meeting on 27th September 2019 and discussed at a meeting of the Adult Cardiac Surgery Sub-committee on 8th October 2019. From the findings and discussions, the following recommendations are made:

1. Cases that are admitted electively and go to surgery without significant clinical change should be classed as FLECTIVE.

- 2. Patients who are kept in for surgery following non-elective admission and not operated on within 24 hours (irrespective of weekday or weekend) should be classified as URGENT cases.
- 3. Case operated on within 24 hours of admission for life-threatening conditions (e.g. dissection; VSD) or where clinical deterioration of an inpatient warrants surgical intervention within 24 hours (such as ongoing ischaemia), should be classed as EMERGENCY
- 4. Patients in whom there is rapid clinical deterioration (irrespective of route of admission), who need to have surgery expedited as a life saving measure or need external massage/inotropes started/in shock prior to commencement of surgery (knife to skin) should be classed as SALVAGE. In some patients, it may be more appropriate for them to have non-surgical therapeutic interventions to either stabilise prior to deferred cardiac surgery or as a definitive treatment.

For patients who come under the definitions described in points 3 & 4, it is recommended that where possible a mini-MDT is convened and the decision documented in the notes.

SCTS Education Programme of Cardiothoracic Surgery Training Courses 2019

Consultant

- Consultant Masterclass 'Innovation and Novel Techniques' Course
- SCTS-Ionescu University
- Cardiothoracic Surgery Multidisciplinary Non-Operative Technical Skills Course

NTN

- 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)
- ST7B Clinical Examination Course for FRCS (C-Th)
- ST8A Cardiothoracic Surgery Pre-Consultant Course
- ST8B Professional Development Course

Non-NTN

- Cardiothoracic Surgery Update and Wet-lab Course for non-NTN Doctors
- Professional Development Course for non-NTN Doctors
- Essentials Skills in Cardiothoracic Surgery
- Introduction to Cardiothoracic Surgery

Nursing and AHP

- SCTS-Ionescu University Wet-lab
- CT Forum Skills Stations
- Non-Medical Prescribing Course
- Cardiothoracic Advanced Nurse Practitioner Course
- Core Principles in Cardiothoracic Surgery Course
- Theatre Surgical Course
- Surgical Skills Course
- Surgical Care Practitioner Exam Revision Course

Medical Student

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

SCTS Education Portfolio of Fellowships 2019

Consultant

- SCTS-Ionescu Consultant Travelling Fellowships
- Marian and Christina Ionescu Consultant Travelling Fellowships
- Exceptional Additional SCTS-Ionescu Consultant Team Fellowships

NTN

- SCTS-Ionescu NTN Trainee Travelling Fellowships
- Exceptional Additional SCTS-Ionescu NTN Trainee Travelling Fellowships
- SCTS Education Ethicon NTN Trainee Fellowships

Non-NTN

- SCTS-Ionescu Non-NTN Travelling Fellowships
- SCTS-Ionescu Non-NTN Small Travel Awards
- Exceptional Additional SCTS-Ionescu Non-NTN Travelling Fellowships

Nursing and AHP

- SCTS-Ionescu Nursing & Allied Health Professional Fellowships
- Exceptional Additional SCTS-Ionescu Nursing & Allied Health Professionals Fellowships

Medical Student

- SCTS-Ionescu Medical Student Fellowships
- Exceptional Additional SCTS-Ionescu Medical Student Fellowships