# RCSI/COSECSA COLLABORATION PROGRAMME

Annual Report for 2018

Submitted to Irish Aid

# **Table of Contents**

EXECUTIVE SUMMARY	4
KEY NUMBERS	5
INTRODUCTION: THE RCSI/COSECSA COLLABORATION PROGRAMME	6
Partnership	
OVERSIGHT AND ADMINISTRATION	
GOALS AND OUTCOMES	7
Expression of gratitude	7
PROGRESS TOWARDS RESULTS IN 2018	o
OUTCOME 1: COSECSA WILL HAVE THE CAPACITY TO MEET COMPLEX FINANCIAL MANAGEMENT AND R	
COMMITMENTS, ACHIEVE SUSTAINABLE FINANCING, AND MANAGE EFFICIENT OPERATIONS ACROSS MUL	
COUNTRIES	
Financial Management, income diversity, sustainability	
Other donors	
Member countries	
Analysis	
OUTCOME 2: COSECSA WILL HAVE THE CAPACITY TO CONDUCT AND DISSEMINATE MULTI-COUNTRY RE	
REGIONAL POLICY RELEVANCE AND ENGAGE SYSTEMATICALLY TO SHAPE POLICY AND RESOURCE ALLOCAT	
AREA	
Developing a Research framework	
Advocacy and policy impact	
Analysis	
OUTCOME 3: COSECSA WILL ENGAGE ITS MEMBERS, FELLOWS, TRAINEES AND THE WIDER SURGICAL, N	1EDICAL AND
GENERAL PUBLIC	13
Trainees and alumni	13
Surgical and medical community	13
Women in Surgery Africa (WiSA)	14
General public	15
Analysis	
OUTCOME 4 QUALITY IMPROVEMENT PROCESSES WILL BE EMBEDDED ACROSS ALL ASPECTS OF COSECS	,
EXAMINATIONS AND ACCREDITATION	
Curriculum revision	
Exam Writing	
Examiner exchange	
Two exam centres	
Analysis	
OUTCOME 5 COSECSA WILL ENSURE THAT ITS FELLOWS AND OTHER SURGEONS MAINTAIN AND ENHAN	
KNOWLEDGE AND SKILLS NEEDED TO DELIVER A HIGH QUALITY SURGICAL SERVICE IN THE REGION	
Master Training and Leadership Development for the Surgical Team	
New online curriculum for Basic Science	
Analysis	
OUTCOME 6 COSECSA WILL REACH OUT TO SURGICALLY UNDERSERVED COMMUNITIES THROUGH STRA	
PARTNERSHIPS WITH, AND SUPPORT FOR, COLLEGES OF ALLIED HEALTHCARE PRACTITIONERS, AND ALLIED	
CARE STAFF	
Liaising with allied health bodies	
EST training	
Analysis	
PROGRESS SINCE INCEPTION OF THE PROGRAMME	22

ANALYSIS OF TRENDS AND EMERGING LONG-TERM RESULTS	23
APPENDIX I RCSI/COSECSA STEERING COMMITTEE	25
APPENDIX II CP FINANCIAL RETURNS 2018	26
APPENDIX III THEORY OF CHANGE	27

### **Executive Summary**

In 2018, the Collaboration Programme (CP) made steady progress towards the twin goals for the 2017-2020 phase, which are a) ensuring the financial and operational sustainability of COSECSA, and b) ensuring the quality of the COSECSA training, examination and accreditation model and enhancing the quality of surgical care practice in the region.

COSECSA's financial sustainability received a boost in 2018 through a grant of \$254,000 from the GE Foundation. This award will be paid over two years to support COSECSA in providing Master Training and Leadership development to surgical teams in 12 countries in partnership with the RCSI Institute of Leadership and Safe Surgery 2020. COSECSA also significantly increased internally generated income in 2018 but there remains room to improve income from Membership and Fellowship annual subscriptions, and externally from public funding in the region.

Other notable highlights included the largest ever graduating class with 85 new Fellows, 17% of whom were women. Women graduates took the top prizes in 3 of the 8 Fellowship specialties. A short survey conducted in early 2019 indicates that the retention rate for graduates from 2014-2017 is 83%. COSECSA is now well positioned to exceed its top-line target of graduating 500 surgeons by 2020. Two new member countries joined in 2018 and COSECSA now reaches a population of more than 400 million people.

The CP focused many efforts on ensuring the quality of training and exams in 2018. This included the first comprehensive analysis of the surgeries that COSECSA trainees performed during their training, as recorded in the e-logbook. The CP facilitated an exam writing seminar and continued the reciprocal examiner exchange programme between RCSI and COSECSA. The CP also conducted a feasibility study and made recommendations on how COSECSA can continue to deliver a well-regarded exam to increasing numbers of candidates in the future. The CP also conducted a review of key corporate governance documents and a mid-term review of COSECSA's strategy.

The analyses of the e-logbook demonstrated the potential impact of data uniquely held by COSECSA as information resources for policy and health advocacy in the region. COSECSA published its principles for collaborative research in 2018 and the CP will work with COSECSA to develop its research framework further in 2019.

The CP also engaged in a communications project to raise awareness of RCSI's and Irish Aid's contribution to global surgery through the CP in 2018. In 2019, COSECSA will celebrate its 20<sup>th</sup> anniversary. The CP will work with COSECSA to develop a strategic communications plan around this milestone.

As the CP enters its penultimate year, the focus will be on consolidating the gains made and working with allied training bodies, such as anaesthesia, to improve the overall situation for surgical patients in Sub-Saharan Africa. The CP will facilitate COSECSA to work with new partners to further improve financial sustainability and to position COSECSA for success in the next phase of its development.

# **Key Numbers**

# RCSI/COSECSA COLLABORATION PROGRAMME









% OF GRADUATES WHO ARE WOMEN





% OF TRAINEES ENROLLED IN BASIC SURGERY WHO ARE WOMEN

COSECSA GRADUATES IN 2018 vs COMBINED YEARLY AVG OF ALL UNIVERSITIES IN REGION (1974-2013)

'SCHOOL FOR SURGEONS' E-LEARNING PLATFORM



MEMBER



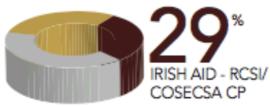


### INSTITUTIONAL CAPACITY BUILDING

- » Professional Secretariat
- » Regional and international advocacy
- Online enrolment for all programmes
- Online payments

### INCOME DIVERSITY 2018

OTHER DONORS



COSECSA INTERNALLY GENERATED FUNDS

WWW.RCSI/COSECSA

data as at 31st December 2018

# Introduction: The RCSI/COSECSA Collaboration Programme

### Partnership

Since 2007, RCSI and COSECSA have been working together to increase the number of trained surgeons in Sub-Saharan Africa and to make better surgery accessible to more patients.

RCSI is an international not-for-profit health sciences institution, with its headquarters in Dublin, focused on education and research to drive improvements in human health worldwide. COSECSA is a non-profit professional body whose mission is to promote excellence in surgical care, training and research in Sub-Saharan Africa. It is headquartered in Arusha, Tanzania and currently has 14 member countries reaching a population of over 400 million people.

The Collaboration Programme (CP) is a formal partnership between the two colleges which is funded by the Irish public, through Irish Aid. Irish Aid have identified the CP as a strategic partnership within the Development Cooperation Division's Multi-annual Financial Framework (MAFF) for Global Health and HIV/AIDS for the period 2017-2020.

### Oversight and administration

The CP is governed by a steering committee¹ which has equal representation from both partners. The number of staff in the CP reduced from two to one in July 2018, six months ahead of the planned reduction. This led to the postponement of some projects which will be incorporated into the 2019 work-plan. In addition, the partial sponsorship of some projects in the CP by third party donors led to an underspend of €121,000 (23%) of the planned budget of €531,408.² The CP will work with Irish Aid to incorporate the postponed projects and underspend from 2018 into subsequent annual work-plans and budgets.

The CP is staffed by a Coordinator who is based at RCSI with regular travel to the region. The Coordinator works closely with the professional Secretariat of COSECSA in managing and delivering the work-plan.

For RCSI's administrative purposes, the CP is housed within the Institute of Global Surgery (IGS), established in October 2018. This new institute aims to address the global surgical crisis through three pillars: education and training; research; and advocacy.<sup>3</sup> Much of the impetus and drive to establish the IGS arose from RCSI's experiences acquired through working in Sub-Saharan Africa with COSECSA and the CP over the previous eleven years. The IGS is financed directly by RCSI and a philanthropic gift.

6

<sup>&</sup>lt;sup>1</sup> See Appendix I CP Steering Committee Membership

<sup>&</sup>lt;sup>2</sup> See Appendix II CP Financial Returns 2018

<sup>&</sup>lt;sup>3</sup> https://www.rcsi.com/dublin/globalsurgery

### Goals and Outcomes

The CP has two overarching goals for the final, four-year period (2017-2020) of its mandate:

- Goal 1: Ensure the financial and operational sustainability of COSECSA.
- Goal 2: Ensure the quality of the COSECSA training, examination and accreditation model, and enhance the quality of surgical care practice in the region.

These goals have been broken down into six outcomes in the annual work-plans. This report will describe and analyse the progress achieved under these outcomes in 2018. It should be noted that many of the CP's projects are cross-cutting, they span more than one year, and contribute to more than one outcome. This is a strength of the programme as results are rarely dependent on a single project. The CP's Theory of Change<sup>4</sup>, provides a high-level illustration of the outcomes achieved since 2007.

### Expression of gratitude

Mr Jim Kiely resigned from the CP Steering Committee in July 2018 after five years of membership. As a co-opted member, his resignation did not require a new appointment to the Committee.

In July 2018, Mr Eric O'Flynn resigned from his position as Director of the CP in order to take up a new role as Programme Director (Education, Training and Advocacy) at the IGS. Mr O'Flynn had worked with the CP initially as Assistant Programme Director, then Director for over seven years.

The CP would like to sincerely thank Mr Kiely and Mr O'Flynn for the leadership, work ethic and positivity that they brought to the CP over their years of involvement.

<sup>&</sup>lt;sup>4</sup> See Appendix II Theory of Change

# Progress towards results in 2018

Outcome 1: COSECSA will have the capacity to meet complex financial management and reporting commitments, achieve sustainable financing, and manage efficient operations across multiple countries.

### Financial Management, income diversity, sustainability

Under funding and support provided by the CP, COSECSA had recruited its first Finance Officer in November 2017. The CP facilitated the Finance Officer to visit Dublin in June 2018 to meet with the RCSI Department of Finance and to develop reporting templates and plans for improving payment fulfilment.

Having full-time, in-house financial expertise has been extremely positive for COSECSA in 2018 as it has allowed for faster preparation of management accounts and the streamlining of payments. By the end of 2018, COSECSA had increased its internally generated funds<sup>5</sup> by 42% on 2017. It is notable that COSECSA has now been able to meet its core costs through internally generated funds for two years running.

The CP has been successful in helping COSECSA to increase and diversify its income. While funding from the CP to COSECSA remained stable as planned, funding from other donors to COSECSA increased by 48%. COSECSA's income diversity in 2018 was 29% from CP, 30% from Other donors and 41% Internally Generated.

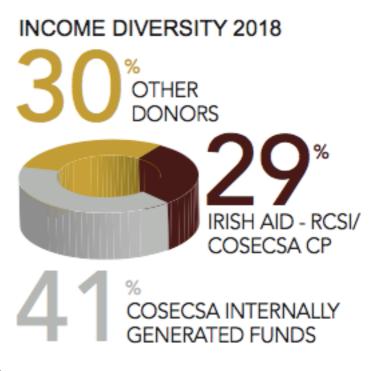


Image 1 COSECSA Income diversity in 2018

The COSECSA Secretariat now has a complement of five staff:

- CEC
- Senior Programmes Officer
- Exams and Training Officer
- Finance Officer
- Assistant Editor (part-time)

<sup>&</sup>lt;sup>5</sup> Internally generated funds include fees paid by trainees, Members and Fellows of the College for exams, training entry, and sales of merchandise

Plans are in place to recruit a full-time Education and Training Coordinator and a part-time Research Officer in early 2019.

### Other donors

In September 2018, COSECSA, the RCSI Institute of Leadership, and Safe Surgery 2020 announced a partnership to deliver master training and leadership development to surgical teams in 12 COSECSA countries over two years. This partnership was the result of an application and representations made by the CP. Under this partnership, the GE Foundation awarded a grant of \$254,000 to COSECSA to be paid over a two-year period.

In November, COSECSA signed an agreement with another new partner, NOREC, which also arose from an application coordinated by the CP. This agreement provides initial funding to conduct a feasibility study on setting up an exchange programme between COSECSA member countries. This exchange programme would give trainees in underserved surgery specialities the opportunity to travel to COSECSA-accredited hospitals in other countries to increase their skills and gain deeper clinical experience. The feasibility study will take place in 2019.

In 2018, COSECSA continued to receive support from the American College of Surgeons and Smile Train to provide partial scholarships for trainees.

### Member countries

COSECSA welcomed Sudan and Botswana as new member countries in 2018 bringing the total membership to 14 countries, and reaching a population of more than 400 million. Sudan paid a modest joining fee<sup>7</sup> but this was the only government or public funding that COSECSA received in 2018.

In April, the Tanzanian government finalised the leasing of 10-acre plot of land in Arusha to COSECSA for sixty-six years with a nominal annual rent. The CP facilitated an advisory discussion between RCSI's Corporate Strategy department and COSECSA's Finance and General Purpose Committee on managing the land. The Committee have announced plans to fence-off the site and conduct an architectural survey in 2019.

Part-time Country Coordinators have been appointed in eleven member countries to date, funded by the CP. The Country Coordinators help to ensure the smooth administrative running of the COSECSA training programme in that country. Coordinators work under the direction of the CEO and the COSECSA Country Representatives. Coordinators will be appointed in the remaining countries as numbers of trainees and accredited training hospitals in each increase.

<sup>1</sup> \$5.000

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<sup>&</sup>lt;sup>6</sup> Press release issued by Safe Surgery 2020 to announce the partnership https://www.safesurgery2020.org/updates/2018/9/19/public-private-partnership-to-transform-surgical-care-across-sub-saharan-africa

### **Analysis**

Despite the rapid scale-up in the number of trainees, graduates and the addition of two new member countries, COSECSA is increasingly able to manage its operations efficiently. The investments made by the CP in 2018 and previous years in funding and supporting a professional Secretariat at the COSECSA headquarters and part-time administrators in member countries have made this possible. COSECSA have announced plans to hold a meeting of all Coordinators at the Secretariat headquarters in early 2019. The CP will continue to partially fund staff salaries at the COSECSA Secretariat, albeit at a decreasing rate in line with the agreed budget.

COSECSA will continue to seek financial support from governments in the region. At Irish Aid's suggestion, the CP provided funding to recruit a short-term Public Finance and Fundraising Consultant to work with COSECSA in developing a strategy. The TOR for this position were published in November.<sup>8</sup> The CP will support COSECSA to identify suitable candidates to fulfil this role in 2019.

The CP is due to conclude in its current format on 31<sup>st</sup> December 2020. COSECSA's current strategic plan will conclude on the same date. Both the COSECSA Executive and the CP Steering Committee believe that it will be timely in 2019 to conduct an objective business assessment to enable COSECSA to better plan for the next phase of its development after 2020. The CP will seek approval from Irish Aid to reallocate unspent funds funding for an external consultant to undertake this work for COSECSA in 2019. Further context is given to this consultancy in the Analysis of trends and emerging long-term results chapter.

8

http://www.cosecsa.org/sites/default/files/COSECSA%20 Public%20 Finance%20 and%20 Fundraising%20 Consultant%20 Services%20 TOR%20%281%29.pdf

Outcome 2: COSECSA will have the capacity to conduct and disseminate multi-country research of regional policy relevance and engage systematically to shape policy and resource allocation in this area.

### Developing a Research framework

Through a competitive call to trainees in March, the CP directly sponsored four early-career research studies on "The Impact of COSECSA". Three trainees – from Uganda, Zambia and Cameroon - presented their findings at the COSECSA International Scientific Conference in Kigali, Rwanda in December, with the remaining trainee from Tanzania deferring his presentation until 2019. The sponsorship was a grant of \$2,500, with 50% paid up front and 50% paid following receipt of a satisfactory interim report and ring-fenced to cover costs of travelling to and registering for the conference.

In April 2018, the CP supported COSECSA to write and publish a Research Statement<sup>9</sup> laying out for the first time its areas of research interest and principles of collaborative research. This has sparked an increase in requests to conduct studies on data uniquely held by COSECSA, and the development of relevant protocols such as the establishment of a Data Governance Group, non-disclosure agreements and data sharing agreements. The CP has benefitted from guidance from RCSI's research community on best practice.

In August 2018, the CP funded and supported the first meeting of the COSECSA Institutional Research Board, a six-member panel registered by the United States' Office for Human Research Protections. COSECSA invited a bioethics expert from the Malawi College of Medicine and a member of RCSI's Research Office to attend and present at this meeting on how the IRB could best support and promote research. A number of key actions emerged which will be enacted over 2019.

Following the appointment of a professional Assistant Editor in November 2017, COSECSA's journal, the East and Central African Journal of Surgery (ECAJS) published three volumes in 2018, developed a fruitful academic partnership with the Journal of American College of Surgeons and launched a new website and social media presence.<sup>10</sup>

The Assistant Editor oversaw the building of an online editorial content management system which will be fully deployed in 2019. This will allow ECAJS to be considered for indexing.

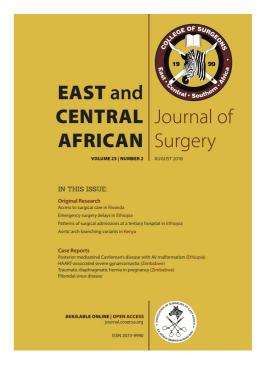


Image 2 ECAJS Journal, August 2018

<sup>10</sup> journal.cosecsa.org

http://www.cosecsa.org/sites/default/files/COSECSA%20Research%20Statement%20web.pdf

### Advocacy and policy impact

In February, the COSECSA president attended the annual scientific conference of the West Africa College of Surgeons held in the Gambia.

In March, COSECSA organised a preconference during the Health ministers conference in Dar es Salaam, Tanzania to engage policy makers on recognition, accreditation and licensing and share COSECSA's achievements. This resulted in the Health Ministers reconfirming their commitment to the collegiate model of training and calling on member states to mobilise resources to support the college.<sup>11</sup>

The CP participated at the 71<sup>st</sup> World Health Assembly in Geneva in May, and at the Global Surgical Frontiers Conference in London in July. COSECSA and RCSI engaged with the G4 Alliance<sup>12</sup> continuously throughout the year and RCSI made a submission to the new Irish International Development policy.

### **Analysis**

While the development of COSECSA's research framework was led from Dublin in 2018, COSECSA intend to appoint a part-time Research Officer in the region in early 2019 to ensure that research is managed closer to the field of study. The CP supports this approach in line with best research practice and will provide funding and guidance for this post through existing budget lines.

COSECSA, through the CP, has built up unique datasets of information which offer significant insights into the practice of surgery in the region. The CP will support COSECSA to enter collaborative research partnerships and disseminate findings that will enhance COSECSA's advocacy efforts around surgical training, practice and policy in the region. Research collaborations may potentially increase COSECSA's income diversity.

The College journal, ECAJS, provides a unique insight into the practice and impact of COSECSA surgeons in the region through a wide range of case reports, original research, manuscripts on surgical techniques and meta-analyses. ECAJS is an accessible platform for aspiring researchers in the region, being fully open-access. The CP will continue to support this in 2019 and 2020 through existing budget lines.

<sup>&</sup>lt;sup>11</sup> ECSA/HMC65/R5 http://ecsahc.org/wp-content/uploads/2018/11/HMC-Resolutions-1974-2018-v-final.pdf p.160

<sup>12</sup> http://www.theg4alliance.org/

# Outcome 3: COSECSA will engage its members, fellows, trainees and the wider surgical, medical and general public

### Trainees and alumni

By the end of 2018, more than 500 trainees were enrolled in COSECSA Membership and Fellowship programmes. COSECSA sends regular E-Newsletters to trainees and alumni, and notices about programme and training updates to current trainees. Supplementing this, the CP helped COSECSA to design posters for accredited hospitals and flyers to raise awareness at conferences and events. COSECSA also procured branded clinical coats, surgical scrubs and other accessories for distribution in the accredited hospitals to enhance visibility.

Maintaining up to date contact and engagement with alumni spread across the continent of Africa remained challenging in 2018. During their twinning visit to Dublin in June, the Finance Officer met with RCSI's Members and Fellows Officer to discuss approaches to engage more with Fellows and to increase the rate of payment of annual subscriptions from this cohort. In 2018, 18% of Annual Subscriptions were paid (up from 14% in 2017). This is clearly an income stream which could be improved. However, it is not uncommon for subscription rates to be low in other surgical institutions internationally, particularly where the use of post-nominals is not tied to subscription payment.

### Surgical and medical community

The CP (in collaboration with authors from Royal Colleges in the UK) and COSECSA were invited to contribute articles to Bulletin of the American College of Surgeons special issue on global surgery, which was published in May.<sup>13</sup>

In June, the CP facilitated the President of COSECSA to attend the official opening of RCSI's new building by Michael Bloomberg, WHO Global Ambassador for Noncommunicable Diseases and Injuries. The President was also invited to speak at the American College of Surgeons meeting held in Boston in October.

In November, the COSECSA Fellow who graduated top of the class in the 2017 exams travelled to Dublin. He spent a week observing at a Dublin hospital and was awarded the Gerald O'Sullivan medal at RCSI's Milin meeting.



Image 3 Journal of the American College of Surgeons, May 2018

<sup>13</sup> http://bulletin.facs.org/2018/05/

### Women in Surgery Africa (WiSA)

WiSA is a peer support group which assists female surgeons, trainees and medical students with an interest in surgery to actively seek out mentorship relationships. WiSA promotes, facilitates and enables women to take up leadership roles and positions in surgery. It is a recognised sub-group of COSECSA and was established in 2015 with the assistance of the CP to help increase the number of women in surgical training.

The CP maintained its funding line for WiSA in 2018. Women represented 15 of the 85 COSECSA graduates (17%) in 2018, and women were the top candidates in the three of the eight Fellowship exams: Urology, Plastic Surgery and Paediatric Surgery. Previous research published by the CP noted that 9% of practicing surgeons in the region were women.<sup>14</sup>

The CP provided a bursary to a WiSA member to attend the annual meeting held in conjunction with the international scientific conference in Kigali in December. The recipient was selected by WiSA on the basis of her research contributions and leadership potential. WiSA secured further travel bursaries for members through links developed with the University of Oxford and the Association of Women Surgeons. The WiSA Chair was invited to address the Association of Women Surgeons at their annual meeting in July 2018.



Image 4 Dr Aingaya Kaale and Dr Happiness Rabiel, Tanzania's first women neurosurgeons at the COSECSA graduation, December 2018

WiSA has a special interest in fostering general surgical research and surgical education research. WiSA is working with COSECSA to integrate research training to the curriculum for Membership trainees based across the College's 14 member countries. In December 2018, WiSA announced that it will allocate a proportion of its budget to research bursaries in 2019.

<sup>&</sup>lt;sup>14</sup> 'The Specialist Surgeon Workforce in East, Central and Southern Africa: A Situation Analysis', June 2016, World Journal of Surgery 40(11), DOI: 10.1007/s00268-016-3601-3, Eric O'Flynn, Judith Andrew, Avril Hutch, Caitrin Kelly, Pankaj Jani, Ignatius Kakande, Miliard Derbew, Sean Tierney, Nyengo Mkandawire, Krikor Erzingatsian

### General public

A COSECSA-qualified paediatric surgeon made history in February when he led an all-Zambian surgical team in successfully separating conjoined twins at University Teaching Hospital (UTH) in the capital, Lusaka. This was the first time that an operation of this magnitude was carried out in Zambia, and the team was not only led by a COSECSA surgeon, but also included COSECSA general surgeons and trainees, who assisted during the seven-hour operation.

The CP, with support from RCSI's Communications Department, brought the Health Editor from the Irish Times and a freelance videographer to Zambia to meet the twins, their family and the team involved in the surgery and recovery. This resulted in a cover story in the Irish Times published in November, and significant social media coverage. The CP would like to thank the Irish Embassy team in Lusaka for their support and assistance in making the trip successful.

# NEWS SPORT BUSINESS OPINION LIFE & STYLE CULTURE Health & Family > Parenting | Fitness | Get Swimming | Get Running | The Health Centre Separating conjoined twins: 'This is our landing on the moon' Earlier this year conjoined twins were separated with Ireland playing a major role in making the surgery possible Tue, Nov 6, 2018, 07.01 Damian Cullen Follow Tyldeo Tyldeo The first operation to separate conjoined twins in Zambia took place in February 2018. The complex surgery has not yet been attempted by many western countries. Video: Blaine Rennicks/Enda 0'Dowd

Image 5 The Irish Times, November 2018

### **Analysis**

2019 marks the 20<sup>th</sup> anniversary of COSECSA. The CP will support COSECSA to develop a communications-led plan around this event to raise awareness and deepen engagement with Members and Fellows. Given the multiple media markets where COSECSA's alumni reside, the CP will support COSECSA to engage in selective targeting that is most likely to generate success.

The CP funding for WiSA is due to decrease in 2019 as WiSA's internally generated funding will rise. The CP believes that WiSA is sustainable given its proven abilities to develop links and to identify broad-based projects where it can support COSECSA's strategic goals, while continuing to support women pursuing careers in surgery.

Face to face and person-led communications continue to be COSECSA's dominant means of engaging with and raising awareness within the wider surgical and medical community. This creates a high travel burden on individuals, particularly members of the COSECSA Executive and the Secretariat. However, this is not unusual within the surgical and academic sphere and is effective in building valuable relationships, and consequently decreases reliance on the CP and RCSI for support. The CP will continue to facilitate introductions and invitations for COSECSA to travel to and speak at relevant events, and maintain consistent funding for this.

https://www.irishtimes.com/life-and-style/health-family/separating-conjoined-twins-this-is-our-landing-on-the-moon-1.3680701

Outcome 4 Quality improvement processes will be embedded across all aspects of COSECSA training, examinations and accreditation

### Curriculum revision

In April, the CP undertook an analysis of over 80,000 operations logged by trainees as part of their training in the e-logbook. This was the first comprehensive analysis undertaken since the e-logbook was custom-built for COSECSA in 2014, by RCSI's IT department under the CP. This analysis was presented to the COSECSA Curriculum Review meeting in Addis Ababa to assist the Heads of each speciality in revising and updating the curricula.

The CP also produced an analysis of feedback submitted by trainees on their training posts, and from trainers on the trainees under their supervision. Both analyses were part of the CP's efforts to ensure that all aspects of the COSECSA training is quality-assured and benchmarked against international comparators.

### **Exam Writing**

Since 2016, COSECSA has held its Membership exam in the OSCE (Objective Standardised Clinical Exam) format. OSCEs require a specific number of scenarios to be produced, and a set of questions and answers developed for each. The CP funded an OSCE-writing seminar in Addis Ababa in April. 14 COSECSA Fellows from 12 countries participated and were guided in creating OSCE case scenarios by an RCSI expert. These scenarios were used in the Membership exam in December.

### Examiner exchange

Through the CP, an average of two examiners from RCSI and two examiners from COSECSA travel to serve as examiners or external examiners at the partner college each year. This is an integral activity of the CP.

In 2018, RCSI welcomed Dr Samwel Nungu, COSECSA Panel Head for Orthopaedics and Prof Emile Rwamasirabo, COSECSA Panel Head for Urology to the May and October diets of the Membership exam respectively.

Image 6 Minister of State for the Diaspora and International Development, Ciarán Cannon TD with Prof Emile Rwamasirabo at RCSI, October 2018

COSECSA welcomed Irish surgeons Mr Michael O'Sullivan, Mr Kieran O'Driscoll, Mr Neville Shine and Mr Joseph Hughes to the exams held in Kigali in December. <sup>16</sup>Mr O'Sullivan and Mr O'Driscoll were external examiners for the Orthopaedic and Otorhinolaryngology exams

 $^{16}$  The costs of Mr Hughes' trip were covered by a donation to the CP from the Tracheostomy Conference Fund, received in early 2019

respectively. Mr Shine and Mr Hughes served as Otorhinolaryngology examiners; COSECSA specifically requested extra support for the Otorhinolaryngology exam in 2018 as candidates were sitting this exam for the first time. In addition, Prof Sean Tierney and Mr James Geraghty travelled as members of the CP Steering Committee and served as examiners.

### Two exam centres

In 2018, the CP conducted a study to consider three different options for how COSECSA can continue to deliver a well-organised and highly-regarded exam to an increasing number of candidates. This study recommended that COSECSA establish a centre for the Membership exam and keep the Fellowship exam co-located and rotating with the AGM and International Conference each year. Subsequently, the CP supported COSECSA in drafting a Request for Tenders (RFT) for third-party venues in the member countries to host the Membership exam. The RFT will be published in early 2019.

### **Analysis**

The 2017 annual report noted that as COSECSA expands, maintaining quality could be a challenge. Consequently, in 2018, the CP concentrated a lot of resources in embedding a quality focus specifically in training and exams. The CP will continue these efforts in 2019. It should be noted that COSECSA successfully applied for funding to hold a Curriculum Review meeting in 2019, as part of the GE Foundation grant. This illustrates that COSECSA have embraced a quality improvement approach and annual evaluation, monitoring and benchmarking of the training programme.

The CP will focus on quality improvement for the hospital accreditation process in 2019. More than 120 hospitals have now been accredited by COSECSA as training sites across member and non-member countries. The CP will conduct a gap analysis and benchmark comparison to see if and how the accreditation process could be improved.

The increasing number of candidates seeking to sit the COSECSA exam each year – a 27% increase from 2017 to 2018 – and particularly the growing cohort of MMed candidates<sup>17</sup>, is testament to the excellent reputation of exam, how efficiently it is run, and the growing recognition of the COSECSA qualification across the region. The COSECSA Secretariat rose admirably to the logistic, technical and administrative challenges of delivering an exam to 150 candidates across five venues over two days in Kigali in December 2018, with the CP providing less assistance than in previous years.

With candidate numbers likely to increase further in 2019, the CP will work with COSECSA as needed to establish a separate centre for the Membership exam. Making this change to the current exam format in a steady, planned fashion will position COSECSA to maintain the quality of the exam even as more candidates apply. The CP will also continue to run the examiner exchange activity, provide funding for COSECSA's Court of Examiners and work with COSECSA to develop training materials for examiners all through existing budget lines.

<sup>&</sup>lt;sup>17</sup> An MMed degree is a degree in surgery from a university in the region. Candidates who hold this degree are already qualified to practice surgery.

Outcome 5 COSECSA will ensure that its fellows and other surgeons maintain and enhance the knowledge and skills needed to deliver a high quality surgical service in the region

### Master Training and Leadership Development for the Surgical Team

In September 2018, COSECSA, the RCSI Institute of Leadership, and Safe Surgery 2020 announced a partnership to deliver master training and leadership development to surgical teams in 12 COSECSA countries over two years. Safe Surgery 2020 is an alliance of global surgery actors, which is funded by the General Election (GE) Foundation.

While the CP had planned to fund Master Training workshops in 2018 and 2019, this grant enabled COSECSA to extend the training to participants from CANESCA (College of Anaesthetists of East, Southern and Central Africa), ECSACOG (East Central and Southern Africa College of Obstetrics and Gynaecology) and ECSACON (East, Central and Southern Africa College of Nursing).

The grant also provides for country-level training, the integration of Leadership skills into COSECSA's existing Train the Trainer programme and the recruitment of a full-time Education and Training Coordinator at the COSECSA Secretariat. These activities began in September with the first workshop for taking place in Tanzania. The workshops are facilitated by trainers from COSECSA, RCSI's Institute of Leadership and Jhpiego. <sup>19</sup> The activities under this grant will continue throughout 2019.



Image 7 Participants and facilitators at the Master Surgery and Leadership workshop funded by the GE Foundation, Dar es Salaam, September 2018

<sup>&</sup>lt;sup>18</sup> Press release issued by Safe Surgery 2020 to announce the partnership https://www.safesurgery2020.org/updates/2018/9/19/public-private-partnership-to-transform-surgical-care-across-sub-saharan-africa

<sup>&</sup>lt;sup>19</sup> https://www.jhpiego.org/

### New online curriculum for Basic Science

Basic Science is a mandatory element of the COSECSA Membership curriculum. Until 2018 trainees typically fulfilled this criteria by attending a Basic Science workshop facilitated by an external provider. However, COSECSA is aware of diversity of quality in workshops facilitated by different providers across different countries and is keen to ensure that all trainees receive a consistent quality of teaching.

In 2018, COSECSA began work to produce a uniform, comprehensive Basic Science module for Membership to trainees. This module will be delivered through www.schoolforsurgeons.net, COSECSA's Moodle-based e-learning platform which was developed by RCSI's IT department in 2016 under the CP. COSECSA Fellows and Trainers from across the region contributed to the course, which was then edited and formatted by Trainers based in Kenya, under the supervision of the Chair of the Education, Scientific and Research Committee. The CP provided modest funding through agreed budget lines to support this work. The CP also provided technical support for the pilot which launched in July. Following feedback and adjustments, the course is due to go live in January 2019.

### **Analysis**

The CP is keen to ensure that Fellows of the College maintain the skills to train the next generation of surgeons in sub-Saharan Africa, in parallel with investing in the quality of training that trainees receive. The CP will continue to support the GE Foundation-funded activity by supporting the integration of curriculum materials on the schoolforsurgeons.net platform, and providing supplementary funding for the programme from existing budget lines.

In the COSECSA model, trainees receive the bulk of their training in a hands-on manner at accredited hospitals, under the supervision of a COSECSA-trained trainer. As the number of both trainees and accredited hospitals has increased, COSECSA identified the need to appoint Programme Directors - typically senior surgeons and COSECSA Fellows - at each accredited hospital. A Programme Director acts as a focal point for trainers at each hospital and liaises with Country Coordinators in ensuring that the COSECSA programme is properly delivered at hospital level. This is particularly important as the Basic Science requirement moves online and thus compliance may be less visual than when trainees were attending workshops.

The CP will support training and orientation for Programme Directors through existing budget lines in 2019. It is intended that Programme Directors will lessen the administrative burden that trainers may experience in ensuring that their trainees fulfil all requirements of the COSECSA training curriculum.

Outcome 6 COSECSA will reach out to surgically underserved communities through strategic partnerships with, and support for, colleges of allied healthcare practitioners, and allied surgical care staff

### Liaising with allied health bodies

COSECSA is a member college of ECSA-HC (East, Central and Southern Africa Health Community)<sup>20</sup> and the COSECSA Secretariat is currently located at the ECSA-HC headquarters in Arusha. The COSECSA CEO regularly engages with counterparts from other member colleges at regional meetings.

In January, the CP met with the College of Anaesthesiologists Ireland (CAI) to discuss the latter's work in Malawi, and possible ways that COSECSA could support the development of the collegiate model for anaesthesia training in sub-Saharan Africa. Subsequently, the CP facilitated meetings between the President of COSECSA and immediate Past President of CAI in July around an all-stakeholder meeting for CANESCA (College of Anaesthesiologists for East Central and Southern Africa)<sup>21</sup>. This meeting is due to take place at the ECSA-HC headquarters in early 2019. COSECSA and the IGS will be active participants at this meeting.

In 2018, COSECSA drafted an MOU with ZACOMS (the Zambia Colleges of Medicine and Surgery). ZACOMS's mission is to increase equitable access to cost-effective quality specialist care as close to the family as possible for the people in Zambia<sup>22</sup>. ZACOMS's training programmes for Orthopaedics and Trauma surgery, General surgery and Urology are aligned to the relevant COSECSA curricula. In theory, trainees who enrol in this nationally-backed programme will be eligible to sit for COSECSA exams and receive a COSECSA qualification which is regionally recognised provided they fulfil all of COSECSA's requirements. The MOU is in the pipeline for signing in 2019.

ZACOMS is supported by the Royal College of Physicians of Ireland (RCPI). The CP liaises with the RCPI and other Irish institutions through the Forum of Irish Medical Postgraduate Training Bodies. The CP was also actively involved with the Irish Forum for Global Health, and the European ESTHER Alliance in 2018.

As described previously, COSECSA invited two participants from CANESCA, ECSACOG and ECSACON to attend the first Master Training and Leadership workshop funded by the GE Foundation and held in Dar es Salaam in September. COSECSA will similarly invite participants to the next workshop to be held in early 2019.

The CP, since becoming housed under the RCSI IGS in October, has been involved in discussions with other international healthcare institutions around collaborative approaches. These discussions are expected to evolve into projects that will help COSECSA and the CP achieve the goal of making better surgery accessible to more patients in 2019 and 2020.

<sup>&</sup>lt;sup>20</sup> http://ecsahc.org/ecsa-college-of-health-sciences/

<sup>&</sup>lt;sup>21</sup> https://www.canecsa.com/

<sup>&</sup>lt;sup>22</sup> http://www.zacoms.com/about/

### EST training

10 EST (Essential Surgical Training) courses took place in Rwanda with 127 doctors in rural areas receiving training. While the CP had hoped to attract match government funding for EST in Zimbabwe and Rwanda, this has not yet happened. In 2019, the CP will consider how to move forward with EST for the remaining two years, and if necessary make adjustments to the work-plan in consultation with Irish Aid.

### **Analysis**

The CP and COSECSA's focus has naturally been on developing surgical training but reaching out to allied professions has been an increasing focus in the 2017-2020 phase.

Following Irish Aid's suggestion, the CP will support COSECSA to engage further with allied health partners in 2019. The CP will develop a proposal to conduct a pilot project using unspent funds from the 2018 budget. This project will focus on unlocking the capacity of operating theatres to perform more operations with the same resources through quality and process improvements. This project also involves training to the whole surgical team and liaising with other Irish Aid funded projects in the region. The CP believes that positive results from the pilot will make the project attractive to industry funders which will boost COSECSA's income diversity, while also giving COSECSA a channel to connect with allied healthcare and surgical providers.

# Progress since inception of the programme

COSECSA has grown to become the largest surgical training institution in the region. In 2006, the year prior to the beginning of the partnership, COSECSA graduated just seven Fellows, to have a cumulative total since inception of 17 graduates. In 2018, COSECSA graduated 85 Fellows bringing the cumulative total to 346.

A study conducted by the CP and published in 2017 showed that over 83% of all graduates up to 2013 had been retained in their country of training.<sup>23</sup> An email survey of COSECSA graduates from 2014-2017 conducted in early 2019 indicated that this retention rate is holding. Following Irish Aid's suggestion, the CP will continue to track retention rate as a key indicator of progress.

COSECSA has gained a number of new international partners who are contributing to the goal of income diversity and financial sustainability. COSECSA's income diversity at the end of 2018 is very healthy.



Figure 1 COSECSA Fellows - Surgical Graduates - Cumulative and by Year

Samkange, Krikor Erzingatsian

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<sup>&</sup>lt;sup>23</sup> The Brain Drain Myth: Retention of Specialist Surgical Graduates in East, Central and Southern Africa, 1974–2013', October 2017 World Journal of Surgery 41(9980), DOI: 10.1007/s00268-017-4307-x; Avril Hutch, Abebe Bekele, Eric O'Flynn, A. Ndonga, Sean Tierney, Jane Fualal, Christopher

### Analysis of trends and emerging long-term results

In 2019, COSECSA will celebrate its 20<sup>th</sup> anniversary. It is no longer a start-up organisation although in academic terms it is still quite young. There has been a rapid growth in the number of trainees enrolling in the programme and COSECSA is set to exceed its top-line goal of graduating 500 surgeons by 2020. It remains an ambitious yet very lean organisation with just four full-time professional staff based at its headquarters.

Through the CP, RCSI has provided 'whole-college' support, i.e. assistance across the full spectrum of running a surgical training college for the past 11 years. The CP has helped COSECSA to develop professional organisational systems and robust corporate governance. This internal infrastructure has been shown to be able to manage the rapid scale-up in numbers of trainees and the widening geographic remit. There is scope to optimise these structures further and the CP will continue to provide support as requested.

Overall, in 2018, the CP has been less involved in administratively supporting COSECSA than in previous years and this trend is expected to continue. This has allowed the CP to concentrate on non-core work such as embedding quality across training and exams and developing the research framework.

Over the past 11 years, the external environment in which COSECSA operates has changed considerably. Particularly since the publication of the Lancet Commission on Global Surgery's report 2015<sup>24</sup>, a number of new and diverse global surgery actors have emerged. Academic research in global surgery is booming, as evidenced by the record 139 abstracts submitted to COSECSA's International Scientific Conference held in Kigali and which was attended by approximately 500 delegates representing at least 20 nationalities.

Actors such as ZACOMS and the resurgence of other colleges under ECSA-HC demonstrate that the non-classroom based, collegiate model for scaling up the healthcare workforce, largely pioneered by COSECSA, is catching on in the region. On the other hand, the opening of a private university in Rwanda, backed by donors including the Gates Foundation illustrates that there is also a market for traditional bricks-and-mortar models. Training institutions, whatever their format, pose possibilities around research collaborations, dual degree programmes etc. and may offer more ways for COSECSA to expand in the future

In the policy sphere, National Surgical, Obstetric, and Anesthesia plans (NSOAPs) have been developed or are under development in a number of countries in the region. While it is too early to determine these plans' contribution to strengthening surgical systems, NSOAPs shape a significant part of the current high-level conversation around global surgery.

<sup>&</sup>lt;sup>24</sup> https://www.lancetglobalsurgery.org/

<sup>25</sup> https://ughe.org/

<sup>&</sup>lt;sup>26</sup> https://ghd-dubai.hms.harvard.edu/files/ghd\_dubai/files/2018-dubai nsoap policy brief.pdf?m=1525866968

The advent of the IGS increases RCSI's capacity in global surgery across three pillars: education and training; research; and advocacy. Much of the impetus and drive to establish the IGS arose from RCSI's experiences acquired through working in Sub-Saharan Africa with COSECSA and the CP over the previous eleven years. The CP is a core part of the IGS. Over the next two years, the CP will benefit from the increased investment being made by RCSI in the new institute, including the recruitment of the world's first competitively, externally-advertised Chair of Global Surgery.

The CP is due to conclude in its current format on 31<sup>st</sup> December 2020. COSECSA's current strategic plan will conclude on the same date. Over the next two years, the CP will focus on consolidating the gains made and also ensuring that COSECSA is positioned to succeed after 2020 by facilitating new partnerships with entities who can add real value. As an initial step, the CP will seek approval from Irish Aid to reallocate unspent funds for an external consultant to undertake an objective business assessment to look more closely at internal and external factors, and help COSECSA to identify its strategic priorities for the next stage of its evolution.

# Appendix I RCSI/COSECSA Steering Committee

Prof	Abebe	Bekele	COSECSA
Prof	Eric	Borgstein	COSECSA
Prof	Ruairi	Brugha	RCSI
Prof	Krikor	Erzingatsian	COSECSA
Dr	Jane	Fualal	COSECSA
Mr	James	Geraghty	RCSI
Prof	Pankaj	Jani	COSECSA
Mr	James	Kiely	Co-opted (resigned July 2018)
Prof	Declan	Magee	RCSI
Dr	Wakisa	Mulwafu	COSECSA
Mr	Ciaran	O'Boyle	RCSI
Mr	Denis	Robson	Co-opted
Mr	Kieran	Ryan	RCSI
Prof	Sean	Tierney	RCSI
Dr	Russ	White	COSECSA

# Appendix II CP Financial Returns 2018

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Collaborative Activity	CP Budget 2018	Expended in 2018	Closing Balance 31- Dec-2018 <sup>27</sup>
Management strengthening	97,432	83,637	13,795
Research and policy	31,330	29,800	1,530
Engagement and communications	20,250	19,466	784
Quality improvement in training, examinations and accreditation	91,300	80,295	11,005
In-service training for surgeons	73,000	24,621	48,379
Support for allied healthcare practitioners and allied surgical care staff	-	-	-
Programme Administration	42,196	23,114	19,082
Programme Management	175,900	148,995	26,905
Totals	531,408	409,927	121,481

The annual external audit of the CP account will take place in Q1 2019. The auditors' report and final balances will shared with Irish Aid when complete.

# Appendix III Theory of Change

