



RCSI/COSECSA COLLABORATION PROGRAMME

Annual Report for 2019

Submitted to Irish Aid

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Executive Summary

In 2019, the Collaboration Programme (CP) continued to make 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.

Trainee numbers increased significantly in 2019 and the exams at the end of the year once again broke records for the highest number of candidates examined over two days, 229, and the highest number of resulting graduates, 104. While COSECSA's overall income decreased by 6%, the subscription payment rate of Members and Fellows increased to 21%. Burundi and Tanzania became the 13th and 14th member countries to officially recognise the COSECSA qualification. COSECSA is now recognised across all member countries.

The Business Assessment undertaken in the summer months indicated that COSECSA is on target to achieve most of the goals of its five-year strategic plan, which will conclude in 2020. The findings identified areas to focus on in 2020, and recommended that the subsequent plan be fully costed.

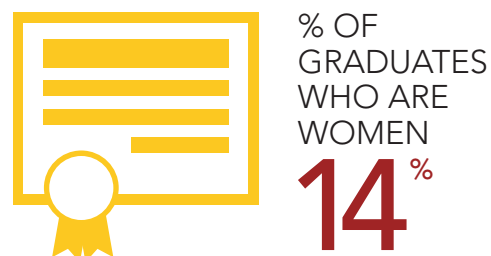
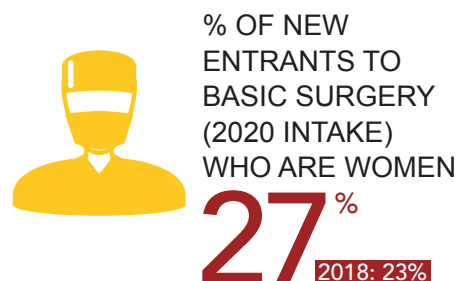
The COSECSA Secretariat grew to a team of seven full-time staff in 2019, six of whom are based in Arusha and one who works remotely. An additional part-time assistant is based in Ethiopia, and a further 11 part-time Country Coordinators are based in member countries. This expansion has demonstrably increased the operational capacity and client-focused service of COSECSA. With the increased capacity in place, the CP launched the first significant upgrade to the e-logbook since its inception in 2015. The CP also supported the roll-out of the online Basic Science course, undertook an updating of Accreditation guidelines and published a book "Operating Together: 12 Years of Collaboration Between RCSI and COSECSA." Organisationally, COSECSA is increasingly robust and sustainable.

While maintaining the activities in the agreed workplan, the CP also initiated two new projects in 2019: Quality and Process Improvement in Operating Theatres and Building the Anaesthesia Workforce. Both involved additional funding and represent a new strategic direction for the CP as they are not focused on the training of surgeons. They contribute strongly to the overall goal of making better surgery accessible to more patients in the region.

Quality was a key focus of the programme in 2019 and remains as priority in 2020, particularly in relation to the training programme.

Both partners in the CP began discussions on what issues have emerged since the beginning of the CP, and have not been addressed in the current workplan. These include reaching out to allied health professional bodies in nursing and obstetrics/gynaecology. Combined with the findings of the Business Assessment and the "A Better World" policy, both partners are keen to submit a proposal to Irish Aid in the summer of 2020 for future funding from 2021.

RCSI/COSECSA COLLABORATION PROGRAMME



200,000+

OPERATIONS RECORDED IN THE
E-LOGBOOK



INSTITUTIONAL CAPACITY BUILDING

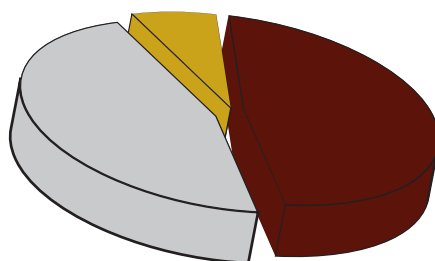
- » Editorial Board for journal inaugurated
- » Professional Secretariat Expanded
- » Trainee operative experience standardised

INCOME DIVERSITY 2019

7%
OTHER
DONORS

48%

COSECSA INTERNALLY
GENERATED FUNDS

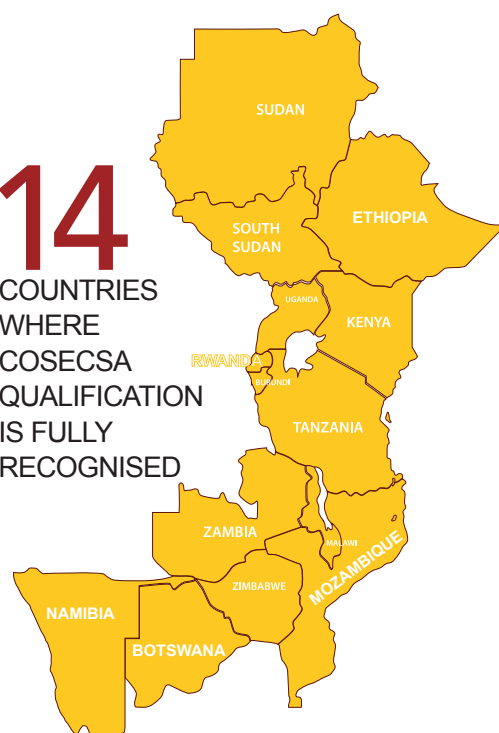


45%

IRISH AID - RCSI/COSECSA CP

14

COUNTRIES
WHERE
COSECSA
QUALIFICATION
IS FULLY
RECOGNISED



WWW.RCSI/COSECSA

data as at 31st January 2020

Introduction: The RCSI/COSECSA Collaboration Programme

Partnership

Since 2007, the Royal College of Surgeons in Ireland (RCSI) and the College of Surgeons of East, Central and Southern Africa (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 University of Medicine and Health Sciences is an international not-for-profit university, 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 with accredited training sites in a further three countries, thus reaching a population of over 400 million people.

The Collaboration Programme (CP) is a formal partnership between the two organisations 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, administration and budget

The CP is governed by a Steering Committee¹ which has representation from both partners. The CP employs a full-time Coordinator who is based at RCSI and who travels regularly to the region. The Coordinator works closely with the professional Secretariat of COSECSA to implement the agreed CP workplan.

The approved budget for the CP was €551,160.95 from 1 January 2019 – 31 December 2019 of which Irish Aid contributed €400,000 in May. The same month, the CP received an additional donation of €10,000 from medical device company Acelity² as a contribution towards a pilot project on quality in operating theatres.³

In November, Irish Aid contributed an additional €100,000 to support a newly-developed project under the auspices of the CP: "Building the Anaesthesia Workforce in the East, Central and Southern Africa region." This project involves four partner organisations: RCSI, COSECSA, the College of Anaesthesiologists of Ireland (CAI), and the College of Anaesthetists of East, Central and Southern Africa (CANECSEA).

For RCSI's administrative purposes, the CP is housed within the Institute of Global Surgery (IGS), established in October 2018, and receives in-kind support from IGS Staff members.

¹ See Appendix I CP Steering Committee Membership

² <https://www.kciireland.ie/>

³ See 'Quality and Process Improvement in Operating Theatres (QPOT)' page 22

The two new CP projects mentioned above are managed by Eric O'Flynn, Programme Director (Education, Training and Advocacy) at the IGS. The CP receives in-kind support from departments across RCSI, particularly Surgical Affairs; IT; Finance; and Communications. This support multiplies and accelerates the impact of the CP.

Goals and Outcomes

The CP has two overarching goals for the 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 2019. 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.

Expression of gratitude

Ms Rosemary Mugwe, CEO of COSECSA resigned from the role in December 2019 having served for five years. The CP would like to warmly thank her for her professionalism and enthusiasm as CEO. We are pleased that she remains committed and active in the global surgery sector.

We would also like to acknowledge and thank those who generously volunteered their skills and time to the CP during the year with particular thanks to Mr Dermot O'Flynn, Dr Cuan Harrington, Ms Sophie Jang and Mr Ciarán Mooney.



Image 1 Rosemary Mugwe, CEO COSECSA with Ken Mealy, President RCSI. Dublin, June 2019

Progress towards results in 2019

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.

Business Assessment

Following approval of a budget amendment in early 2019, the CP supported COSECSA in developing terms of reference to hire an external consultant to conduct a business assessment of COSECSA. Tayler and Associates were successful in tendering for the work, which was undertaken between May and August.

The consultants found that COSECSA was on track to achieve most of the goals of its current five-year strategy. Most notably, COSECSA will comfortably exceed the headline target of graduating 500 surgeons by 2020. The consultants recommended that COSECSA focus on six areas in their 2021-2025 strategic plan:

- Quality of Training;
- Operational capacity;
- Accountability;
- Sustainability;
- Research; and
- External Relations

The interim findings were shared with COSECSA at the Council Meeting in Bujumbura, Burundi in July of 2019, and the final report was shared with the COSECSA Executive committee, the CP Steering Committee and Irish Aid at the end of August.

Finance and Income Diversity

COSECSA's income in 2019 was \$792,154, a decrease of 6% on the previous year. However, 2018's income included a significant grant from the GE Foundation/Safe Surgery 2020 which continued to fund activities in 2019.

COSECSA's income diversity in 2019 was 48% Internally Generated, 45% from the CP and 7% from other donors who included Smile Train, Operation Smile, NOREC, BEIT Trust, PAACS and the American College of Surgeons.

By the end of 2019, COSECSA had increased its internally generated funds⁴ by 10% on 2018. It is notable that COSECSA has now been able to meet its core costs through internally generated funds for four years running.

⁴ Internally generated funds include fees paid by trainees, annual subscriptions paid by Members and Fellows of the College for exams, and any other income derived by COSECSA from core business

Management capacity

By the end of 2019, the COSECSA Secretariat had grown to a team of seven professional staff:

- Chief Executive Officer
- Finance Officer
- Exams and Training Officer
- Exams Assistant Officer
- Education Assistant Officer
- Research and Publications Officer/Assistant Editor (remote)
- Administration Officer

Additionally, COSECSA has recruited a part-time Copy Editor to support the College journal. The copy editor works remotely under the direction of the Assistant Editor.

In April, COSECSA held a three-day meeting at the Secretariat headquarters in Arusha, Tanzania for all the Country Coordinators. There are eleven Country Coordinators in place who support the administration of COSECSA training in each member country.

Coordinators will be appointed in the remaining three countries as numbers of trainees and accredited training hospitals in each warrant the role. The Country Coordinators are funded by the CP.



Image 2 Country Coordinators' Meeting. Arusha, April 2019.

Analysis

COSECSA became more organisationally robust and self-sufficient in 2019. The successful recruitment and orientation of new staff members in the second quarter greatly enhanced the College's capacity to provide professional, client-focused service to the growing number of trainees who are enrolling in the COSECSA training programme across 14 countries. It should be noted that the roles are not funded by the CP, but from COSECSA's internally generated funds and the partnership with the GE Foundation's Safe Surgery 2020 initiative.

The impact of having additional capacity in the Secretariat was clearly demonstrated in the past year through the successful roll-out of the first new feature to the electronic surgical logbook (e-logbook) since its launch in 2015. While the feature was built in Ireland, the integration, communication with trainees and front-line response was managed by the

Secretariat team. This new feature is a key quality and standardisation tool for the training programme.⁵

As noted in the Introduction, Ms Rosemary Mugwe, CEO resigned her role on 31st December 2019. At the time of writing, COSECSA has advertised for a Chief Operating Officer to replace the CEO. The CP will support the recruitment process as COSECSA have requested. When the post-holder is in place, the basic pay for the position will be partially funded by the CP (approx. 30%), along with that of the Exams and Training Officer and the Administration Officer to the same proportion. This funding line has been present in the annual budgets for the past three years, but has steadily decreased as planned from 50% in 2017. This reflects COSECSA's increasing ability to cover its core costs from internally generated funds.

The Business Assessment undertaken in the summer noted that COSECSA has undergone rapid growth and now has a large geographic footprint. The assessment highlighted the need for COSECSA to focus on developing a clear and costed strategy, and to ensure that Training, which is the lifeblood of the College, can continue to be delivered in a quality-assured manner across all member countries and at all accredited training sites. The CP will take the report into consideration in assisting COSECSA to develop its new strategy in 2020.

While COSECSA's income decreased slightly, it is important that this is seen in the context of the significant grant from GE Foundation/Safe Surgery 2020 which COSECSA received in 2018. In 2019, the payment rate for Members and Fellows' subscriptions rose to 21.5%, up from 18% in 2018 and 14% in 2017⁶. Again, this reflects the increased capacity within the Secretariat to manage payment systems and the increased engagement of the College with its Members and Fellows.

Unfortunately, COSECSA did not receive any financial support from governments in the region in 2019. There were no suitable applicants for the Public Finance and Fundraising consultancy which was advertised in November 2018 and early 2019. In assisting COSECSA to develop its next strategy in 2020 the CP will re-look at the Terms of Reference (TOR) for this role, and discuss with the COSECSA Executive and the incoming COO how to achieve the desired outcome.

The CP is due to conclude in its current format on 31st December 2020. COSECSA has passed its start-up phase and is clearly in a growth phase. Since the inception of the current programme, and associated with COSECSA's growth, new areas for collaboration have emerged. The CP has begun discussions on a future partnership between both organisations, and will liaise closely with Irish Aid in 2020 as a proposal is developed. Further details are given in the Analysis of trends and emerging long-term results chapter at the end of this report.

⁵ See "Standardising training" page 17

⁶ See "Trainees, Members and Fellows" page 14

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 and strengthening research

In January, the CP launched a survey of COSECSA trainees to look at their use of e-learning and the e-logbook. There were four co-authors from Ireland and four co-authors from the COSECSA region. With a response rate of over 70%, we believe that this is the largest ever survey on e-logbooks in a low-resource setting. In August, lead author Dr Cuan Harrington presented the initial findings of the survey on COSECSA trainees' use of e-logbook and e-learning resources at the World Congress of Surgery in Warsaw, Poland. In December the Programme Coordinator presented initial findings at the COSECSA International Scientific Conference in Kampala, Uganda with publication to follow in 2020.

COSECSA appointed Dr Andrew Mataya to the role of part-time Research and Publications Officer in early 2019. Dr Mataya is based in Blantyre, Malawi, and his role is supported by funding lines in the CP budget. In March, in keeping with the plan to have COSECSA's research programme led from the region, the CP handed over management of the Small Research Grants programme and the set up and development of processes for managing research queries to him.

Through a competitive call to trainees in June, the CP directly sponsored four early-career research studies on "The Impact of COSECSA". Four COSECSA trainees - from Tanzania, Zimbabwe, Zambia and Kenya - presented their findings at the COSECSA International Scientific Conference in Kampala, Uganda in December.

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.



Image 3 Ken Mealy, President RCSI with the four winners of the RCSI/COSECSA research grants directly sponsored by the CP. Kampala, December 2019

The COSECSA journal

The COSECSA journal⁷ published three volumes in 2019. The journal's new website <http://journal.cosecsa.org/> was launched in January. It incorporates Open Journal System (OJS) software which allows prospective authors to submit their manuscripts online. Peer review and correspondence with authors also now takes place through the OJS.

In March a meeting of the journal's editorial board was held in Windhoek, Namibia. 27 members were appointed to the newly-established board including 19 COSECSA Fellows. All members give their time freely to serve the journal.



Image 4 Members of the ECAJS Editorial Board. Windhoek, March 2019

Since switching from email to OJS, the journal has been oversubscribed with manuscripts from authors based in Africa and further afield for every issue.

In September, a part-time Copy Editor based in Ethiopia was recruited to support the Assistant Editor in proofing peer-reviewed, accepted manuscripts. With the support of the CP, COSECSA intend to submit the journal for PubMed indexing in 2020.

Advocacy and policy impact

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

In July, following talks in the run up to the COSECSA half-Council meeting in Bujumbura, Burundi, the Minister of Public Health and Fight Against AIDS announced that Burundi would officially recognise COSECSA qualifications. Burundi thus became the 13th of 14 member country governments to fully recognise COSECSA.

In December, members of the CP Steering Committee, the COSECSA Executive and the COSECSA local organising Committee accompanied the Irish Embassy teams to bilateral meetings with the Minister of Health and the Prime Minister of Uganda. The same month, COSECSA received notification that the Tanzanian authorities now officially recognise the COSECSA qualification. With this announcement, the COSECSA qualifications are now recognised across all 14 member countries.

⁷ The COSECSA journal's official title is the East, Central and Southern Africa Journal of Surgery (ECAJS)

Analysis

The bank of data that COSECSA has acquired through systems to manage the training programmes can offer significant insights into the practice of surgery in the region. The e-logbook contained over 200,000 operative records at the end of 2019. COSECSA retains ownership of this data. During the year the CP worked with RCSI's Data Protection Officer to advise and clarify the ways that data in the e-logbook may be used, and added appropriate messaging to the platform to reflect this. COSECSA has received requests from different sources to access this dataset. The CP will continue to support the COSECSA IRB (Institutional Research Board) and COSECSA Data Governance Group to respond to these requests in a way that complies with the agreed usage and which aligns with COSECSA's strategy.

The CP will not be supporting trainees to do research projects in 2020. This is a planned development and also reflects the growing number of research grants made available to trainees by other entities⁸. By stepping back from this activity, the CP is giving space for other partners to find an entry point to supporting COSECSA. The CP will also undertake a situational analysis of the surgical workforce and the anaesthesia workforce in 2020.

The recognition of the COSECSA qualification across all member countries is a significant achievement. The CP has played a minor role here; the outcome is due to the sustained advocacy efforts by members of the COSECSA Council and the growing reputation of COSECSA as a training body. Now, COSECSA Fellows are on-par with university-trained surgeons in the region.



Image 5 COSECSA Council Members with Minister for Public Health and Fight Against HIV. Bujumbura, July 2019

The COSECSA journal has gone from strength to strength. It 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. It is free and open access. As the CP evolves to include building the anaesthesia workforce in the region, the journal editorial staff are looking at incorporating anaesthesia papers into the journal. The CP will continue to support the journal through existing lines and at the same rate. We are cautiously optimistic that the journal will receive Pub-Med indexing in 2020; this would make it a much more attractive outlet for established researchers and enhance the reputation of COSECSA.

⁸ E.g. <http://www.cosecsa.org/sites/default/files/JSS%20Presentation%20Opportunity%202020%20new.pdf>

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

Trainees, Members and Fellows

The number of trainees enrolling in COSECSA training programmes grew strongly over 2019, to reach 748 at the outset of 2020. This represents a 40% increase over the past year.

COSECSA Fellows were engaged in writing or providing content for COSECSA's online Basic Science course throughout the year. 16 Fellows from seven countries in the region were co-authors on modules for the course, along with surgeons from the US and Ireland.

In 2019 annual subscriptions from Members and Fellows increased to 21.5%. This compares to a payment rate of 18% in 2018 and 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

COSECSA deepened its engagement with the wider surgical and medical community in the region in 2019. 2019 marked the twentieth anniversary of the College. The CP supported COSECSA to publish a small book describing the history of the College to mark the occasion. The CP also worked with RCSI's Design department to design a logo celebrating the 20th anniversary which subsequently featured on all materials throughout the year.

In accepting the invitation to join the ECAJS editorial board in March many COSECSA Fellows engaged formally with COSECSA for the first time since becoming a Fellow. Likewise, the inclusion of Fellows from the American College of Surgeons has further opened up COSECSA to the wider surgical and medical community.

In October, the CP facilitated Prof Pankaj Jani, President of COSECSA to be a key speaker at the inaugural Global Health Education Ireland conference. The following month, Dr Robert Mangwiro, the COSECSA Fellow who graduated top of the class in the 2018 exams travelled from his home in Harare, Zimbabwe to Dublin. He spent a week observing at a Dublin hospital and was awarded the Gerald O'Sullivan medal at RCSI's Millin meeting.

Women in Surgery Africa (WiSA)

WiSA is a peer support group which assists surgeons who are women and surgical trainees who are women 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.

In May, the Lancet published a letter co-authored by RCSI and COSECSA highlighting the work of WiSA – Women in Surgery Africa. This letter was initiated through the collaboration programme.

Previous research published by the CP noted that 9% of practicing surgeons in the region were women.⁹ Of the 748 trainees enrolled in COSECSA at the time of writing, 18% are women. Notably, 27% of the 2020 programme intake for basic surgery are women. COSECSA appears to be on target to achieve its goal of increasing the overall number of surgical trainees who are women to 20% by 2020.

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.

24 of the 104 graduates at the 2019 exams were women (23%). The comparable figure in 2018 was 17%.

General public

The CP produced a book “Operating Together: 12 Years of Collaboration Between RCSI and COSECSA.” The foreword is written by Minister of State for the Diaspora and International Development, Ciarán Cannon, T.D. RCSI’s department of Surgical Affairs sponsored the production of the book.

The book was officially launched in December at the Kampala event. It will be distributed to stakeholders in 2020 and sold at relevant events in RCSI and COSECSA. Income from sales will be donated to COSECSA training.

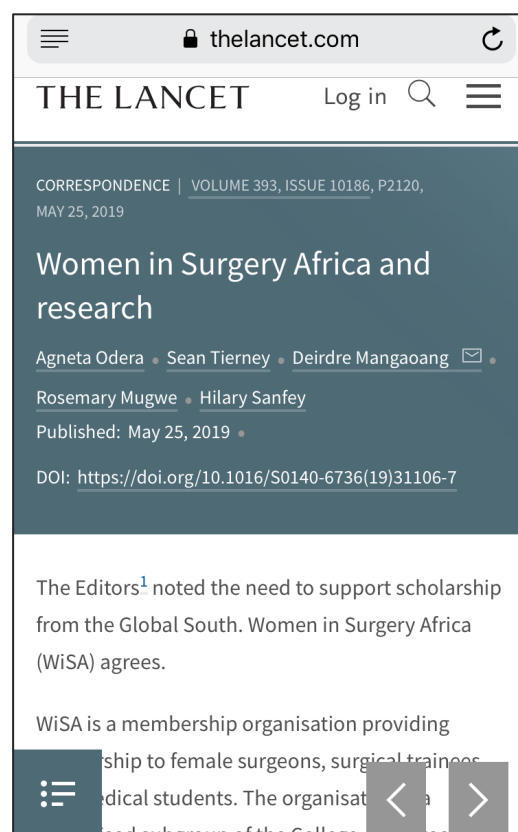


Image 6 Letter to the Editor. The Lancet, May 2019



Image 7 Dr Wakisa Mulwafu and Eric O'Flynn. Dublin, November 2019

⁹ '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

Analysis

COSECSA now has a number of touchpoints where it can engage with Trainees, Members, Fellows and others in the wider community. Previously, much participation in COSECSA activities was limited to Fellows of the College by the nature of the work, e.g. College governance. But with the newly inaugurated ECAJS editorial board; the online Basic Science course; WiSA; and the expansion of the COSECSA IRB due to take place in early 2020, there are now more ways for surgeons and others in the health and wider community to engage.

While WiSA offers surgeons who are support and mentorship in pursuing their career, as a sub-group of COSECSA it is also a significant engagement initiative for the college.

In 2019, CP funding to WiSA decreased by 37%, yet the group continued to thrive, increasing to 92 members and diversifying income streams to include merchandise.

Notably, last year WiSA launched two bursaries funded by members themselves.¹⁰ In 2020, the CP will provide a very small amount of funding to the group yet WiSA looks to be sustainable.



Image 8 At the 2019 Graduation Ceremony. Kampala, December 2019

One could infer a causal relationship between the increased engagement and increased rate of subscription payments. However, it is also likely that the increase has been driven by the greater capacity of the Secretariat to manage invoicing and payments and the follow-up work of Country Reps in each member country.

2019 marked the 20th anniversary of COSECSA. The CP was very pleased to be able to acknowledge this milestone with a reception at the Irish Ambassador's residence in Kampala, Uganda in December. We would like to take this opportunity again to thank the Ambassador and the team for their support last year.

In 2020, the CP will work with the incoming COO of COSECSA to develop a communications strategy for the organisation. From initial discussions with RCSI's Communications team in 2019, we are aware that this will be challenging given the cultural diversity and plethora of media outlets in the region. The strategy will therefore be quite focused and target specific niches rather than mass audiences.

¹⁰ <http://www.womeninsurgeryafrica.org/scholarships-grants/>

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

Standardising training

Following analysis undertaken by the CP in 2018 on the 80,000 operations recorded by COSECSA trainees in the e-logbook, work began on setting guideline minimum numbers for specific bundles of operations at the COSECSA curriculum conference in Windhoek, Namibia in March 2019. The purpose of setting such numbers is to give Trainers and Trainees across all 100+ training hospitals a clearer indication of what is an acceptable standard of operative exposure to have prior to sitting the Fellowship exam.

This work carried on for a number of months year involving the Panel Heads of all eight COSECSA Fellowship programmes. In October, the guideline numbers were published to the e-logbook.

Trainees can now see whether they are gaining sufficient operative exposure to meet the guideline minimum numbers in advance of the exam. Trainers and Programme Directors of hospitals can now see, in real-time, the operative exposure that their trainees are getting and whether this exposure is reaching the guideline minimum numbers set by COSECSA. Panel Heads can see this information for all trainees on enrolled in the programme they oversee. By December, more than 200,000 operations had been recorded to the e-logbook.

Trainee Evaluation and Training Post assessment

In June, the CP successfully sought permission from the Accreditation Council for Graduate Medical Education (ACGME) to adapt their trainee evaluation form for use in the COSECSA training programme. The adapted form was posted to COSECSA's e-learning platform schoolforsurgeons.net (SFS) the following month. After a trainee completes a surgical rotation, this form is used by their supervisor to note the trainee's performance and is saved directly to the trainee's record on SFS.

In July the Training Post assessment form was updated on the SFS platform to incorporate changes requested by COSECSA's Education, Scientific and Research committee. This form is completed by the trainee themselves, and is saved directly to SFS.

Hospital accreditation

In 2019, COSECSA continued to receive a high number of applications from hospitals to be accredited by the College as surgical training sites.

In August, the CP published an updated set of Accreditation Regulations, incorporating latest international best practice and collating a number of previously individual forms into a single document. The regulations outline the accreditation process in a step-by-step manner. They describe the standards required for a site to be accredited, and clarify the roles played by key post-holders in the process. The regulations are available on the COSECSA website.

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 May 2019, RCSI welcomed Dr Wakisa Mulwafu, COSECSA Panel Head for Otorhinolaryngology to attend Examiner training and participate in the Membership exam. The CP also arranged for Prof Abebe Bekele, COSECSA Panel Head for General Surgery and Chair of the Examination and Credentials Committee to observe a Fellowship of General Surgery exam.¹¹ Due to timing around visa processing, this visit was deferred until early 2020.



Image 9 Mr Kieran O'Driscoll, Mr Neville Shine, Mr Michael O'Sullivan, Professor Krikor Erzingatsian, Mr Joe Hughes at the Examiners Briefing. Kampala, December 2019

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.¹² Mr O'Sullivan and Mr O'Driscoll were external examiners for the Orthopaedic and Otorhinolaryngology exams respectively. Mr Shine and Mr Hughes served as Otorhinolaryngology examiners.

In addition, Mr Ken Mealy, President of RCSI¹³ and Mr James Geraghty travelled and served as examiners. A memo on the Exams was shared with Irish Aid in December 2019.

¹¹ Fellowship exams are conducted for all four Royal Colleges by the Joint Committee for Intercollegiate Exams (JCIE) and take place at locations across Ireland and the UK. Prof Bekele visited the General Surgery exam in Liverpool in February 2020.

¹² The costs of Mr Hughes' trip were covered by a donation to the CP from the Tracheostomy Conference Fund, which was received in early 2020

¹³ The costs of Mr Mealy's trip and that of other members of the travelling group - Mr Kieran Ryan, Managing Director Surgical Affairs and Mr Eric O'Flynn – were covered by RCSI.

Analysis

Ensuring quality across COSECSA's training, exams and accreditation model was a key focus of the CP's work in 2019. The introduction of minimum guideline numbers to the e-logbook was a milestone in terms of the journey towards standardisation. The numbers will be refined in 2020 and subsequent years; a number of research papers are underway which will shed some light on the correlation between operative exposure (i.e. the number and type of operations a trainee has recorded) and their performance in clinical exams.

The 2019 exams again broke the record for the number of candidates - 229 - examined over two days, and the number of new graduates produced – 104. In early 2019, with the support of the CP and RCSI's Exams office, COSECSA issued a Request for Tender for venues in the region to host a standalone Membership exam. The Council have decided to continue with the usual format for 2020, i.e. holding the Membership and Fellowship exams together.

COSECSA have requested the CP's support to develop an online Examiners Training course to help ensure that all visiting examiners are examining in a standardised manner. At the time of writing, work has begun on this course with assistance from RCSI's E-learning unit and the corporate social responsibility initiative of an external partner. The course is targeted to be ready for the cohort of examiners travelling to Lusaka, Zambia where the 2020 exams will be held in December. The CP will also help in exploring technical solutions so that the exam can be delivered to a high standard.

COSECSA is receiving an increasing number of requests to accredit hospitals as surgical training sites. The updated regulations prepared by the CP in 2019 have helped to make the process clearer to all involved. However, the accreditation process is by necessity a detailed exercise involving a committee visit to the site and standardised reporting to ensure an objective assessment. COSECSA now faces the challenge of receiving more requests than it can accommodate in any consistent, quality-assured manner. This is exacerbated by the fact that many requests come from hospitals that are not in member countries¹⁴, and thus there is an increased burden on COSECSA to coordinate the logistics for the visit. At the end of 2019, COSECSA appointed two deputy Registrars to assist the Registrar who manages the Accreditation process on behalf of the College. The CP will continue to support and advise COSECSA in 2020 in this activity, leveraging the experience of the Quality Assurance team in RCSI's Surgical Affairs department.

¹⁴ COSECSA also received a request to accredit a hospital outside of Africa in 2019. This request was refused.

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

Basic Science online

Basic Science is one of three mandatory courses that COSECSA trainees in the Membership programme are required to take. In prior years, trainees typically fulfilled this criterion by attending a Basic Science workshop facilitated COSECSA's basic science faculty or by an external provider. However, COSECSA was aware of diversity of standards and the uneven spread across the region in terms of frequency of these workshops. The College was keen to ensure that all trainees receive a consistent quality of teaching.

In 2019, COSECSA rolled-out its own Basic Science course online, thus providing, for the first time, a standardised course for all trainees across the region. The CP supported COSECSA with the technical aspects of getting the course on the e-learning platform, schoolforsurgeons.net. This course follows the "flipped classroom" model and includes a Facilitator version to support Trainers and Programme Directors to teach the course locally. Trainees' progress through the course is monitored centrally by the COSECSA Secretariat.

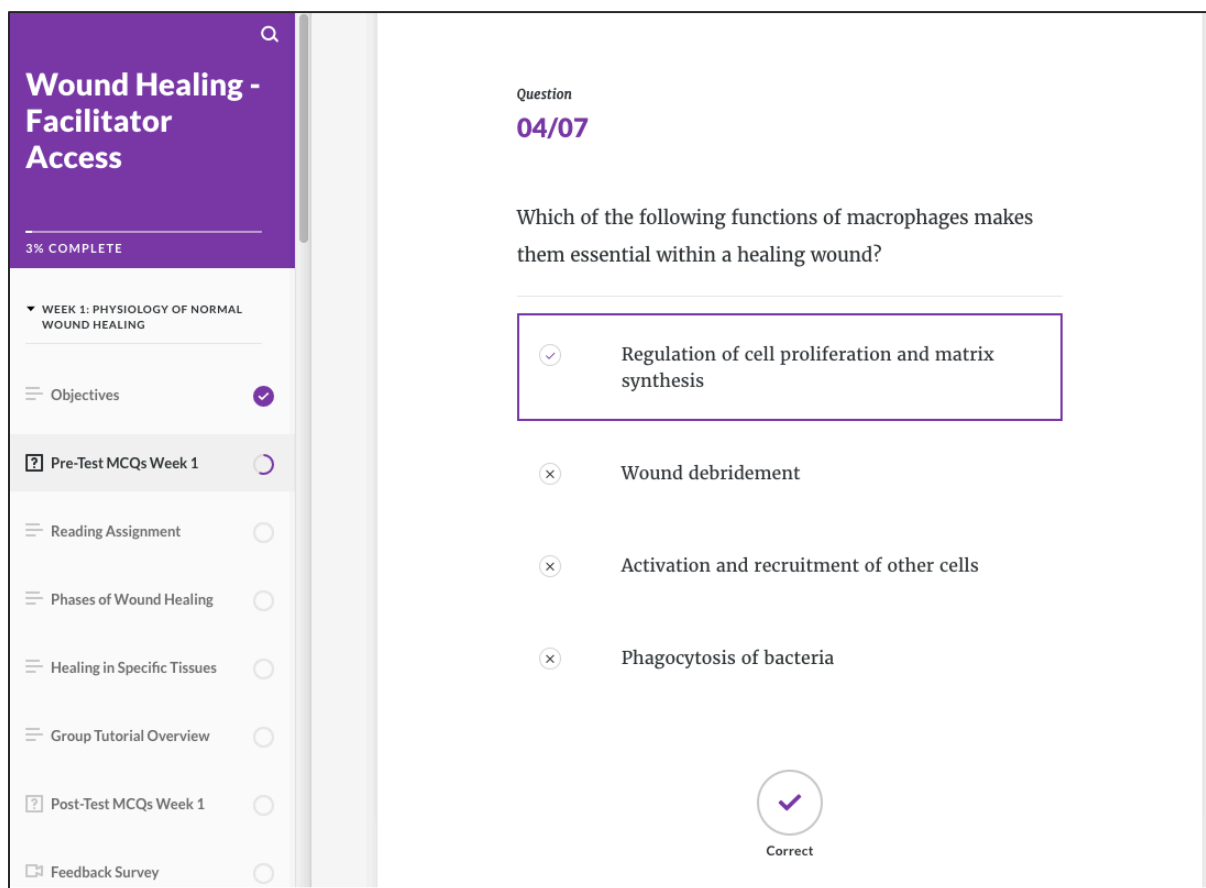


Image 10 A module on the online Basic Science course www.schoolforsurgeons.net

Programme Directors

In parallel with the roll-out of the Basic Science course, the CP supported COSECSA's plan to hold meetings of Programme Directors in each country. Programme Directors are Fellows who are nominated by their hospital to be the focal point for COSECSA training in the hospital. The first Programme Director country meeting was held in Nairobi, Kenya in September.

Programme Directors can support both trainees and trainers with the day to day administrative aspects of the training model, e.g. ensuring that evaluation forms and assessment forms are completed; that e-logbooks are updated and verified; and that trainees are gaining the sufficient operative exposure. The CP will continue to support Programme Director meetings linked to workshops and training courses in 2020.

Master Trainers and Leadership

In February, through the CP, Dermot O'Flynn of RCSI's Institute of Leadership travelled to Addis Ababa, Ethiopia to deliver a Master Trainer and Leadership workshop to 21 participants. These included representatives from ECSACON (nursing), CANECSA (anaesthesia) and ECSACOG (Obstetrics and Gynaecology). This was the second planned Master Trainer workshop in the partnership between RCSI, COSECSA and Safe Surgery 2020.

In December, Dermot O'Flynn won an ESTHER "Unsung Hero" Award for his support for the CP. The award recognised his contribution over a number of years and a number of airmiles to deliver Master Training to COSECSA surgeons and allied health professionals.



Image 11 Master Training and Leadership course. Addis Ababa, February 2019

Analysis

Over the past year, COSECSA has increasingly recognised that investing in Programme Directors, i.e. Fellows who are nominated by their hospital to be the focal point for COSECSA training in the hospital, is an effective way of managing the training programme at the hospital. This is particularly the case in countries where there are a large number of accredited training sites. The COSECSA Secretariat put considerable effort into identifying and updating contact details for all Programme Directors in the early months of 2019.

Programme Directors can support both trainees and trainers with the day to day administrative aspects of the training model, e.g. ensuring that evaluation forms and assessment forms are completed; that e-logbooks are updated and verified; and that trainees are gaining the sufficient operative exposure. The CP will continue to support Programme Director meetings linked with workshops and training courses in 2020.

With the successful roll-out of the Basic Science course the CP now has a proven, workable format for delivering online training across a wide area. In 2020, the CP will support the development of an online Research Methodology course and an online communications course. Master Training courses will continue and the supplementary online videos have been upgraded in early 2020. The CP would like to thank RCSI's Institute of Leadership for sponsorship of the cost. These courses will be accessible to all trainees and Fellows, and can be opened up to guest users from other colleges or allied health professions as COSECSA deems appropriate.

The CP envisages that these courses will form the basis of a portfolio of Continuous Professional Development (CPD) courses for Fellows and others involved in surgical care in the region. Work will begin on this activity in 2020 and will likely be a key part of a future proposal between both partners.

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

Essential Surgical Training (EST)

In 2019, four EST (Essential Surgical Training) courses took place in Rwanda with 60 doctors in rural areas receiving training. One EST course was held in Zimbabwe at which 16 doctors were trained.

Building the Anaesthesia Workforce

At a meeting in May, Irish Aid requested that the CP explore how to support the development of the Anaesthesia workforce in the region. The CP responded by reaching out to the College of Anaesthesiologists of Ireland (CAI) and the College of Anaesthetists of East, Central and Southern Africa (CANECSA). A concept note was developed between all four colleges and was submitted to Irish Aid at the end of July. In November, all four partners were delighted to receive the news that Irish Aid would grant an additional €100,000 to the CP for this project.

As all partners were already familiar with each other, and had worked closely on developing the concept note, work kicked off before the end of the year. Over 2020, the project aims to advance training; develop a curriculum; design exams; develop e-learning and staffing; and carry out an analysis of the anaesthesiology workforce. CANECSA is using many of the administrative, educational and examination structures put in place by COSECSA and the CP. This project is managed by Eric O'Flynn, Programme Director (Education, Training and Advocacy) of RCSI's IGS on behalf of the CP. The project was formally launched with a joint press release in early 2020.

Quality and Process Improvement in Operating Theatres (QPOT)

The CP developed a pilot project at the outset of 2019 to unlock the capacity of operating theatres in the region to perform more surgeries with the same resources in a safe and effective manner. This project engages the full surgical team, including nurses, anaesthetists, porters, data managers, in introducing quality measurement that has been shown to lead to significant improvements in Irish hospitals without additional resources.

In September, following a tender process, two hospitals were selected as sites for the pilot: St Pauls Millennium Medical Centre, in Addis Ababa, Ethiopia and Bugando Medical Centre in Mwanza, Tanzania. A kick off meeting took place in November and the first training with two people from each hospital took place in Dublin in December. This project will continue throughout 2020. It is project managed by Eric O'Flynn, working closely with Kieran Tangney of RCSI's Quality and Process Improvement Centre. This project incorporates a grant of €10,000 from Acelity representing 25% of the overall project cost.

Analysis

In 2020, the CP will seek to carry out an evaluation of the EST courses to assess their impact for the participants. EST courses have been funded by the CP for a number of years; previously they were managed directly by the CP but since 2017 have been managed at country level in Rwanda and Zimbabwe.

In 2020, the CP will seek to carry out an evaluation of the EST courses to assess their impact for the participants.



Image 12 Doctors learn how to insert a suprapubic catheter at EST course. Kadoma, June 2019

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. This was particularly noticeable in 2019 with two new projects.

The QPOT project represents a strategic niche for both partners in the CP. It represents a response to the increasing emphasis on quality and patient safety that has become more prevalent globally over the past few years, and has a multi-disciplinary focus. QPOT leverages the expertise of RCSI's in-house Quality and Process Improvement Centre (QPIC). The project was developed in consultation with the Health Service Executive (HSE) and their ongoing work on quality with partners in sub-Saharan Africa. The Project Manager will travel to both pilot sites in Q1 of 2020 to support the teams in carrying out the work on the ground and designing quality improvement interventions that will address the real needs of their hospitals.

While the pilot is envisaged as one-year, it includes a specific commitment to research so that results can be published and disseminated thus creating a path for a larger project covering more sites in 2021 and beyond. The pilot incorporates a small degree of industry funding (€10,00,00, 25% of budget). The CP believes that, if the results of the pilot are positive, this could be an area that is attractive to industry funders and thus help COSECSA improve its income diversity.

The announcement in November last that Irish Aid would fund the proposal to Build the Anaesthesia Workforce was successful was warmly received by all four partners. The CP appreciates the trust that Irish Aid have demonstrated in our programme by encouraging us to begin this project and in providing the additional funding required. The bulk of the activities will get underway in 2020.

Progress since inception of the programme

The progress of the CP is evidenced in COSECSA's progress on an annual basis and over the long-term. Many of the results achieved are products of activities that began a number of years earlier. This is the inherent nature of a long-term partnership that spans a range of cross-cutting activities. We greatly appreciate Irish Aid's commitment to the partnership over the past 12 years.

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 2019, COSECSA graduated 104 Fellows bringing the cumulative total to 450.

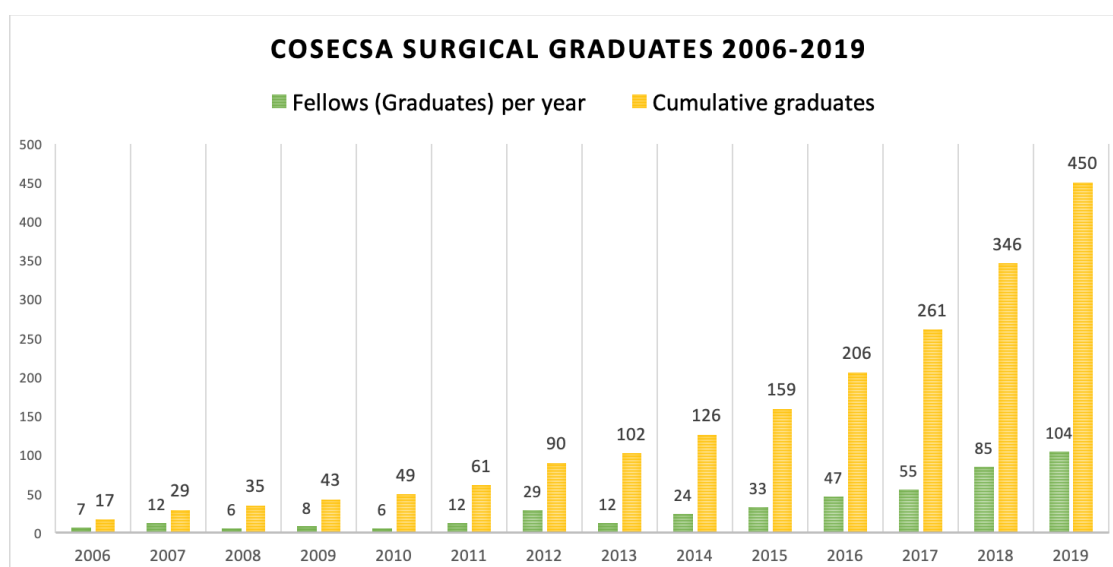


Figure 1 COSECSA Fellows - Surgical Graduates - Cumulative and by Year

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.¹⁵ 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.

In 2019, the respective authorities in Burundi and Tanzania announced that they would officially recognise COSECSA in their countries. With these announcements, COSECSA has now achieved full recognition of its Membership and Fellowship qualifications across all member countries. This success comes after many years of sustained advocacy and diplomacy in the region by COSECSA Council Members and Fellows.

The CP is very pleased to have begun two new projects in 2019 while continuing with the agreed workplan. While neither focus on surgical training, we strongly believe that they are

¹⁵ '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 Samkange, Krikor Erzingatsian

both in keeping with the ultimate goal of making better surgery accessible to more patients in the region. We are eager to see the initial results in 2020.

The Business Assessment conducted in the summer indicated that COSECSA is on track to achieve most of its strategic goals; the CP has played a part in this. However, the findings also highlighted areas where COSECSA – due to its rapid growth and expansion – may struggle to maintain quality and sustainability. The CP will support COSECSA in developing its 2012-2025 strategy over the coming year, taking into account the progress achieved to date and the gaps remaining as identified in the strategy.

Analysis of trends and emerging long-term results

Last year's report noted the rapid growth in the numbers of trainees entering COSECSA training programmes. The numbers increased again in 2019. The CP sought information about the number of medical students and number of surgical training places in each member country from the Country Coordinators; this information gathering is ongoing. However, initial feedback indicates that the numbers of students entering medical school will rise while places to subsequently pursue surgical training will not rise as quickly or will remain at current levels. Combined with full recognition of the COSECSA qualifications across all member countries this suggests that COSECSA will continue to attract an increased numbers of trainees for at least the next 3-5 years.

In order to respond to increasing numbers of trainees, COSECSA needs to ensure the quality of its training model. Quality was the watchword in 2019 and continues to be the priority in 2020. Quality is relevant to every area of the College's work, but particularly to the training programme. This is COSECSA's core business, its "lifeblood". Equipping Programme Directors and Trainers with the skills and resources to deliver the training to trainees in a consistent, standardised manner, whether they are located in Ethiopia or Zimbabwe, or based in a busy referral centre or in a rural hospital, will be key.

So too will be the engagement of Fellows. COSECSA now has 450 Fellows by Exam (Graduates) and over 1,000 Foundation and/or Fellows by Election. In 2019 COSECSA increased its engagement with Fellows and with the wider surgical community. The CP has begun exploring how to tap into Fellows' experience and presumed positive disposition towards COSECSA to support the CP's goals. The CP will explore options around CPD courses in 2020 and flesh out the concept of a "College for Life" as one of the themes of the next proposal between both partners to Irish Aid.

It has been very positive to witness the increased operational capacity of the Secretariat over the past year. COSECSA's Council committees have also proven an effective arm of governance. There is scope to optimise both operational and governance infrastructure, particularly by replacing manual, time-consuming administrative processes with more efficient systems. The CP will support this effort in 2020 but is confident in the College's progress towards sustainability.

New actors and alliances such as the Global Surgery Foundation¹⁶ continue to emerge in this sector. Through RCSI's IGS, the CP has benefitted by having a platform to begin conversations with potential partners and make introductions in COSECSA's interest. It is vital that any partnerships COSECSA enters ensure cost-recovery given the still small size of the professional Secretariat and the time involved in setting up partnerships. The CP is very pleased that RCSI IGS has agreed to host the Permanent Council meeting of the G4 Alliance¹⁷ in early November 2020. This event gives COSECSA and the CP a key platform

¹⁶ <https://www.globalsurgeryfoundation.org/>

¹⁷ <http://www.theg4alliance.org/>

to engage with up to 100 active global surgery delegates, philanthropists and industry partners from around the world in Dublin.

The CP is also looking closely at the activities in our current workplan, and those areas where we can facilitate other donors to begin or increase their involvement with COSECSA. In 2020, the CP will step back from funding trainee research grants and providing core funds to WiSA. While not wishing to pre-empt the future proposal before it is fully scoped out between both partners, we believe that COSECSA's needs and goals in terms of organisational capacity, IT systems, governance, and advancing the development of allied professions such as nursing, and obstetrics and gynaecology, are areas where the CP can offer effective support. The CP intend to submit a proposal to Irish Aid in summer of 2020, which will be aligned with Irish Aid's "A Better World" policy.

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
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 2019

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Collaborative Activity	CP Budget 2019	Expended in 2019	Closing Balance 31-Dec-2019 ¹⁸
Management strengthening	120,323.41	114,237.37	6,086.04
Research and policy	46,859.79	57,033.22	-10,173.43
Engagement and communications	21,533.68	21,560.02	-26.34
Quality improvement in training, examinations and accreditation	65,623.11	49,386.65	16,236.46
In-service training for surgeons	106,542.88	95,157.88	11,385.00
Support for allied healthcare practitioners and allied surgical care staff	30,000.00	30,000.00	-
Programme Administration	38,316.38	28,296.36	10,020.02
Programme Management	121,961.70	112,957.38	9,004.32
Totals	551,160.95	508,628.88	42,532.07

¹⁸ These figures are provisional; the annual external audit of the CP account will take place in Q1 2020. The auditors' report and final balances will be shared with Irish Aid when complete.

Appendix III Theory of Change

