College of Surgeons of East, Central & Southern Africa



Regulations and Syllabus relating to Fellowship Examination In Paediatric surgery

FCSpaed(ECSA)

2016 edition

COLLEGE OF SURGEONS OF EAST, CENTRAL AND SOUTHERN AFRICA

Regulations and Syllabus for Fellowship Examination in Paediatric surgery leading to the qualification of FCSpaed(ECSA)

Table of Contents

1.	Introduction	. 2
2.	Registration as a Trainee	. 3
3.	Training Requirements	. 3
	Logbook	
	Application to Sit Examinations	
	Examination Format and Conduct	
	Syllabus	

1. Introduction

The College of Surgeons of East Central and Southern Africa awards Membership (MCS(ECSA)) and Fellowship (FCS(ECSA)) qualifications. Approved trainee surgeons shall be trained in the hospitals of the region with guidance and support provided by the College.

The Fellowship examination in Paediatric surgery leads to the qualification of Fellow of the College of Surgeons of East, Central and Southern Africa, FCSpaed(ECSA). This fellowship is recognition that the candidate has reached the level of knowledge, understanding and practice of surgery sufficient to practice independently at a consultant or specialist level. It should be recognised, however, that surgery is not a static art and fellows should continue to increase knowledge and skills by means of research, conferences, meetings and reading.

The information given in this document is intended as a guide to persons sitting the College examinations and shall not be deemed to constitute a contract or the terms thereof between the College and a candidate or any third party, or representations concerning same.

The College is not responsible and shall not be bound by errors in, or omissions from these regulations; the College reserves the right to revise, amend alter or delete academic regulations at any time by giving such notice as may be determined by COSECSA Council in relation to such changes.

2. Registration as a Trainee

Applications to register as a trainee must be made online on the COSECSA website. In order to register you will need an electronic copy of your primary medical qualification, your medical council (or equivalent) registration, a passport-style photo, and, if applicable, copies of any other surgical qualifications you may have. Applications will only be accepted online. Applications will be assessed by COSECSA, and if found suitable, applicants will be accepted to the training programme provisional upon payment of the programme entry fee.

The programme entry fee can be paid online, by bank transfer to the COSECSA Secretariat bank account in Arusha, Tanzania or to the COSECSA Country Representative. Please see the COSECSA website for details of all fees.

On receipt of the registration fee, the Secretariat will send the candidate:

- Personal login details, which will allow access to the COSECSA Electronic Logbook and e-learning platform (School for Surgeons)
- Assessment forms to be filled in at the end of every training post by the trainee and the supervising consultant.
- A registration number, which remains unique to the candidate.

3. Training Requirements

All requirements below will need to be fulfilled without exception.

- 3.1. Before being eligible to sit for the fellowship examination in paediatric surgery, candidates will be required to be registered with the College (see Section 2 above).
- 3.2. Candidates must be registered in the FCS Paediatric surgery training programme for at least three years before appearing in the FCSpaed Examination. Registration by the end of February in a given year allows that year to count as a full year of training and will enable the candidate to sit the Clinical/Oral examination at the end of the following year.

- 3.3. Candidates for the fellowship examination in paediatric surgery should normally have passed the membership examination of this College and possess the qualification MCS(ECSA).
- 3.4. Two of these three years have to be spent in large paediatric surgical units dealing with a broad spectrum of paediatric surgery. If the primary training centre has only one consultant, the trainee should spend at least one year at other sites. The remainder of the time can be spent in units specialising in other branches of paediatric surgery for example: urology, plastic surgery, ENT, neurosurgery, reconstructive surgery.
- 3.5. Of the three years, up to six months may be spent outside the region in a post that has been prospectively agreed with the COSECSA Examinations and Credentials Committee.
- 3.6. Candidates are reminded that it is in their interest to experience a wide spectrum of surgical disciplines.
- 3.7. Exemption to the requirement of possessing the MCS(ECSA) qualification may be given to those who have passed an equivalent examination. In order to obtain an exemption, applicants must either:
 - Have completed an MMed(Surgery) qualification in one of the constituent COSECSA countries or in a COSECSA accredited training centre outside the COSECSA region, and provide evidence of three years of specialty training in paediatric surgery as described in section 3.4. For applicants completing a four year MMed(Surgery) programme the minimum further requirement is one year in a COSECSA accredited training programme. For candidates completing a four year MMed(Surgery) programme the minimum further requirement is two years in a COSECSA accredited training programme.
 - Have completed FRCS, FCS(SA) or another similar specialist qualification and be working as a specialist in a COSECSA country. The basic surgical training examinations of other colleges and institutions may also be acceptable but each one will have to be reviewed by the Examination and Training Committee of the College before exemption can be given.
 - Candidates who are granted exemptions will be required to register with COSECSA by the end of February in the year in which they intend to sit the examination.

4. Logbook

COSECSA is transitioning from the use of a paper-based logbook to an electronic logbook. FCSpaed candidates for the examination in 2017 and in all subsequent

years are required to use the COSECSA electronic logbook. Candidates for the 2016 examination may use the paper based logbook as used in previous years.

Paper based Logbook (for candidates for the 2016 FCSpaed examination)

During the training period candidates must keep a logbook recording all of their training experience. The book should be available for inspection at any time by the Country Representatives. Consolidation sheets should be filled in every 6 months and a final consolidating sheet filled in to cover the whole training period. The logbook should also contain details of all courses attended and the trainee and post assessment forms for the whole training period.

More detail on completing logbooks is provided in the logbook itself.

Before submission to the examination the Country Representatives should check the logbook for completion, fill in and sign a checklist which remains at the front of the logbook.

At the August council meeting of each year, the Country Representatives will hand over to the Examinations and Credentials Committee Panel head, a copy of the checklist together with copies of the Training post assessment form, Trainee assessment form and the final consolidation sheet (up to August) of all the candidates taking the examination that year.

Before the start of the clinical and oral examinations, the logbook should be handed to the examination administration secretary. Proof of attendance at an approved Basic Surgical Skills course, Basic Surgical Science course and Critical Care or Trauma Course should be brought to the oral examination. Candidates will not be allowed to sit for the examination if this is not done.

Electronic Logbook (for candidates for the 2017 FCSpaed examination, and all subsequent examinations)

Candidates are required to log all operations for the duration of their training period in the electronic logbook. In advance of the examinations, details from each candidate's electronic logbook will be made available to their Country Representatives and the COSECSA Examinations and Credentials Committee. At the examinations details from each logbook will be provided to the relevant oral examiners. Only operative experience logged in the electronic logbook will be taken into account and candidates will not be allowed to sit for the examination if operative experience is not adequately recorded.

At the August council meeting of each year, the Country Representatives will hand over to the Examinations and Credentials Committee Panel head, a copy of the Training post assessment form and Trainee assessment form.

Before the start of the clinical and oral examinations, a print out of the electronic logbook operations list (signed by the trainee's supervisor) and consolidation sheet

should be handed to the examination administration secretary. Proof of attendance at an approved Basic Surgical Skills course, Basic Surgical Science course and Critical Care or Trauma Course should be brought to the oral examination.

5. Application to Sit Examinations

- 5.1. Candidates should submit the examination fee by the end of July in the year of their exam. Please see the COSECSA website for details of all fees. Examination fees can be paid online, by bank transfer to the COSECSA Secretariat bank account in Arusha, Tanzania or to the COSECSA Country Representative.
- 5.2. On receipt of the examination fee, candidates will be informed of the precise times, dates and places for the exams.
- 5.3. By applying to the examination a candidate agrees to be bound by the rules and regulations of the College.
- 5.4. If a candidate withdraws from an exam not less than 12 weeks before the exam is due, then the fee can be transferred to the next exam date. Fees will not normally be returned if the candidate withdraws permanently, unless due to special circumstances as determined by the College Council.
- 5.5. Candidates must pass the examination within four years of their first attempt. After this they will not be allowed to re-sit. A total of four attempts only will be allowed.
- 5.6. Candidates who pass the written examination but fail the oral and clinical examinations, may attempt the oral and clinical examinations for a maximum of two more years without having to rewrite the written examination, all within a period of four years in total.

6. Examination Format and Conduct

6.1. The standards of the examination will be set by the Examinations and Credentials Committee of the College, which will recommend to Council those standards required by both examiners and candidates. A panel of examiners will be chosen by the Examinations and Credentials Committee from amongst Fellows of the College for each examination. A register of examiners will be kept by the chairman of the Examinations and Credentials Committee. An examination board will be constituted for each diet of examinations, comprising the chairman of the examination committee, two members from each examination panel and at least one external examiner

who will be appointed by Council on recommendation of ECC. The role of the external examiner(s) is to:

- Moderate the written question papers
- o Assist with the examination of candidates
- o Provide external independent assessment of the examination
- o Report on the conduct of the examination to the College Council.
- 6.2. The written FCSpaed (ECSA) examination will be comprised of 2 papers. The first paper will consist of single best answer multiple-choice questions. The second paper will consist of extended matching and/or short answer questions and/or single best answer multiple-choice questions.
- 6.3. Candidates who pass the written examination will be invited by the Chair of the Examinations and Credentials Committee to the clinical and oral examination. Candidates who do not pass the MCQ section will not be invited to the clinical and oral examination.
- 6.4. Candidates who pass the written examination will be invited by the Chair of the Examinations and Credentials Committee to the clinical and oral examination. Candidates who do not pass the MCQ section will not be invited to the clinical and oral examination.
- 6.5. There will be two 30 minute orals. A clinical examination takes place at the same time and at the same site as the oral. This will be comprised of six 20 minute cases.
- 6.6. Candidates have to pass the written examination and the clinical and oral examination in order to pass overall. The written examination may be held in any of the countries of the region. In exceptional circumstances the examination committee may approve an examination site outside the region. The written examinations are held simultaneously on the first Wednesday of September, at a recognised examination centre with impartial invigilation. The COSECSA Country Representative shall be the Chief Examiner.
- 6.7. The examination papers will be set by members of the examination committee and independently moderated by an external examiner.
- 6.8. No details of marks will be issued to Country Representatives or candidates. Candidates should bring proof of identity. As discussed in Section 4, candidates using paper logbooks should bring these, and candidate using the COSECSA electronic logbook should bring signed printouts of these.
- 6.9. If a candidate fails their clinical examination then they may attempt the clinical examination for a maximum of 2 more years without having to rewrite the written examination.
- 6.10. The chairman of the examination panel will endeavour to minimise the chance of a candidate being examined by an examiner from their own training institution.

- 6.11. The panel of examiners will give the results to the Examination Board who will meet on the day of examination. The Board will then approve the results on behalf of Council and publish them.
- 6.12. For each candidate who fails the exam, the Board will allocate a Fellow of the College (usually a member of the panel of examiners) who will communicate with the candidate and offer advice as may be indicated. Details of marks will not be given.
- 6.13. Appeals against results must be made in writing to the Council within 60 days of the completion of the examination. The President of the College will then appoint an impartial Appeals Committee to investigate the appeal, and require a written report to be filed by the Chairmen of the panel of examiners and the Examination Board. The Appeals Committee will then take all considerations and its own findings into account and recommend a decision which will remain final and binding.

7. Syllabus

DEFINITION

Paediatric Surgery is the field of medicine that encompasses a broad range of diseases and malformations, both operative and non-operative, from the foetal period until the late teenage years. In addition to the body areas/systems covered by General Surgery, Paediatric Surgery also deals with non-cardiac thoracic conditions and genito-urinary and gynaecological problems in children. These are detailed in the Primary Objectives. Other topics that may be covered by Paediatric Surgery, under some circumstances, are listed in the Secondary Objectives.

GENERAL OBJECTIVES

The objectives of training in Paediatric Surgery are to develop a Paediatric Surgeon who can assume complete responsibility for the preoperative, operative, and postoperative management of the problems relegated to his/her area of special expertise and who can interact appropriately with other colleagues involved in the care of paediatric patients. Additionally, it is expected that the trainee in Paediatric Surgery will develop the sensitivity required to deal not only with children, but also with their families. Blended within these objectives will be those of an ethical and academic nature that will reflect the conscience of modern Paediatric Surgery and help shape its future. The summary objectives are to ensure that Paediatric surgeons maintain the leadership and direction of the profession of Paediatric Surgery.

Different geographic locations place different demands on Paediatric surgeons, and the African setting differs considerably from the Western settings where most training programs are found. Particularly, trained paediatric surgeons are typically rare in African countries, and therefore must fulfil a multitude of roles. They must of necessity be the final resource and authority in the surgical care of children in their country, dealing with an overwhelmingly referral practice. They must also fulfil a significant training role, helping train health care professionals at all levels in the care of children. Finally, they must be advocates for the care and safety of children, who by their nature are a vulnerable group unable to advocate for itself.

Not only are the demands placed on Paediatric surgeons different in the African setting, but the nature of their clinical practice is also different. Due to limited resources in prenatal and postnatal care, children with major surgical congenital anomalies often do not survive to reach the Paediatric Surgeon. On the other side, non-lethal congenital conditions are often not repaired promptly, presenting to the Paediatric surgeon as late, disabling conditions, often making their treatment more challenging.

Some educational objectives are considered mandatory and basic to the practice of Paediatric Surgery and will be referred to as *Primary Objectives*. Certain other objectives are considered desirable and appropriate to include under the umbrella of Paediatric Surgery, but are dependent on the environment in which the trainee will work. These are referred to as *Secondary Objectives*.

For both sets of objectives, comprehensive and thorough understanding of the subjects listed will be expected. This will include, where appropriate, embryology, anatomy, physiology, pathology, natural history (both pre- and postnatal), diagnosis and management.

GENERIC OBJECTIVES

Communication

The paediatric surgeon will be a good communicator, able to:

- Obtain and synthesize relevant history from children, their families and the community.
- Discuss appropriate information with parents / families and the health care team.
- Demonstrate effective communication and listening skills.
- •Demonstrate an appreciation of the unique psychological needs of paediatric patients.
- •Demonstrate an appreciation of the unique relationship between paediatric patients and their families and be able to deal effectively and compassionately with family members by establishing therapeutic relationships.

Collaboration

The paediatric surgeon will be an effective team player, able to:

- Consult effectively with other physicians and health care professionals.
- Contribute effectively to other interdisciplinary team activities.
- •Use effectively the team approach in the management of critically and chronically ill patients, such as newborns with congenital anomalies and children with cancer, inflammatory bowel disease, or transplantation.

Management

As a care provider in settings with frequently limited resources, the paediatric surgeon should be able to:

- Utilize resources effectively to balance patient care, learning needs, and outside activities.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.
- Utilize health care technology to optimize patient care, life-long learning and other activities.
- Demonstrate an appreciation of the economic factors that influence decision-making and the impact of such factors on families.
- Understand the principles and practice of quality assurance and improvement, and actively participate in hospital-based quality assurance and improvement programs.

Health Advocacy

As a leader and spokesperson, the paediatric surgeon must be at all times an advocate for her/his patents and their families, being able to:

- Identify the important determinants of health affecting patients, such as malnutrition and poverty.
- Contribute effectively to improved health of patients and communities and injury prevention.
- Recognize and respond to those issues where advocacy is appropriate, such as public education, vaccination and folic acid supplementation.
- Contribute to health-maintenance advocacy for children, including such areas as travel safety, helmet use, children operating machinery and accessibility to firearms.

Scholarship

The paediatric surgeon is expected to promote the acquisition, synthesis and dissemination of knowledge in the profession, by being able to:

- Develop, implement and monitor a personal continuing education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, housestaff / students and other health care professionals through formal and informal teaching opportunities.
- Contribute to development of new knowledge to foster the academic growth of the specialty of Paediatric Surgery by participating in scholarly work.

Professionalism

The paediatric surgeon must be a model professional, able to:

- Deliver highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interpersonal professional behaviours.
- Practise medicine ethically consistent with obligations of a physician.
- Demonstrate sensitivity to age, gender, culture and ethnicity in dealing with patients and their families.
- Understand the ethical principles as related to the complex issue of congenital abnormalities and as applied to children submitted to medical treatment, research, etc.
- Recognize the importance of maintenance of competence and evaluation of outcomes.

 Understand the legal issues related to consent, confidentiality, and refusal of treatment.

SPECIFIC REQUIREMENTS

The specific training requirements are presented in outline form below. The detailed list of pathological conditions is found in Appendix 1. It must be stated, however, that that is NOT an all-inclusive list as the spectrum of the specialty is wide and continuously changing.

General surgery

Assessment and management of children with:

- acute abdominal pathology
- · abdominal wall herniae
- trauma (including APLS certification) and other critical illness

Neonatal

Assessment and management of neonates with:

- acute abdominal pathology
- · abdominal wall defects
- major index conditions e.g. Hirschsprungs disease, anorectal malformations, oesophageal atresia

Urological

Assessment and management of children with:

- both upper and lower urinary tract abnormalities to include hypospadias
- haematuria

Oncological

Assessment and management of children with:

· oncological conditions

Tropical

Assessment and management of children with:

tropical and infectious diseases of surgical consequence.

Reconstructive

Assessment and management of children with:

- cleft lip and palate
- · spina bifida and hydrocephalus
- burn contractures

Other

Assessment and management of children with:

- head and neck pathology
- · gynaecological conditions
- · endocrine anomalies

SKILLS OBJECTIVES

By the end of training, the resident should have acquired and demonstrate the following generic skills, as they apply to a Paediatric surgical practice.

a. Surgical Skills

• The resident is expected to be able to perform independently the full spectrum of operative interventions related to the primary Paediatric Surgery conditions listed above. Several additional areas of skill expertise are listed below.

b. Trauma

The Paediatric Surgery resident is expected to:

- function as a trauma team leader
- function as the operating surgeon for Paediatric multiple trauma patients, and as supervising surgeon in an operating room in which several specialty groups may be working simultaneously
- have primary responsibility for the non-operative care of the trauma patient including major burns
- be able to obtain airway and vascular access in the trauma patient, and perform appropriate diagnostic procedures

c. Endoscopy

The resident should be familiar with the indications, techniques and complications of:

- laryngoscopy, bronchoscopy
- esophagoscopy / gastroscopy / duodenoscopy
- laparoscopy
- proctosigmoidoscopy / colonoscopy

d. Other Procedures

The resident should be familiar with the indications, techniques and complications of:

- central line insertion (temporary and long-term), implantable ports
- tracheostomy