



الهيئة السعودية للتخصصات الصحية  
Saudi Commission for Health Specialties

## Pediatric Gastroenterology



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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# PREFACE

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- The primary goal of this document is to enrich the training experience of postgraduate trainees by outlining the learning objectives aimed at developing the trainees into independent and competent future practitioners.
- This curriculum may contain sections outlining several training regulations; however, such regulations must be sought from the training's "General Bylaws" and "Executive Policies" published by the Saudi Commission for Health Specialties (SCFHS), which can be accessed online through the official SCFHS website. In the event of discrepancies between regulation statements, the one stated in the most updated bylaws and executive policies will be the reference that must be applied.
- As this curriculum is subject to periodic refinements, please refer to the electronic version posted online for the most updated edition at [www.scfhs.org.sa](http://www.scfhs.org.sa).

# I. CONTRIBUTORS

## Curriculum Development Committee

- Dr. Areej Alsunaid,
- Dr. Bader ALSaleem,
- Dr. Sami Alrashidi

## Reviewed and Approved by the Specialty's Scientific Committee Members:

- Dr. Wajeeh Aldekhail, Committee Chairman
- Dr. Wadha Aldosari
- Dr. Mona Alasmi
- Dr. Awadh Alqahtani
- Dr. Razan Badr
- Dr. Ghassan Sukr

## Curriculum Review Committee Members:

- Dr Nouf Alrumaihi MBBS, Msc.MedEd., PMP
- Dr Mai Alajaji, Msc.MedEd, PhD

## Approved by Head of Curriculum Review Committee:

- Dr.Ali Alassiri , MBBS, Msc.MedEd. FRCSC, FACS



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## II. COPYRIGHT STATEMENTS

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We would also like to acknowledge that the CanMEDS framework is a copyright of the Royal College of Physicians and Surgeons of Canada, and many of the description's competencies have been acquired from their resources (Please refer to: CanMEDS 2015 physician competency framework; Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015.).

Correspondence: Saudi Commission for Health Specialties, P.O. Box: 94656 Postal Code: 11614 Contact Center: 920019393

E-mail: [Curricula@scfhs.org.sa](mailto:Curricula@scfhs.org.sa)

Website: [www.scfhs.org.sa](http://www.scfhs.org.sa)

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## III. FOREWORD

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The Pediatric Gastroenterology/Hepatology and Nutrition Fellowship curriculum development team acknowledges valuable contributions and feedback from the scientific committee members in the development of this program. We particularly extend our appreciation and gratitude to all the members who have been pivotal in the completion of this booklet, especially the Curriculum Group, the Curriculum Specialists, and the Scientific Council. We would also like to acknowledge that the CanMEDS framework is a copyright of the Royal College of Physicians and Surgeons of Canada, and many of the descriptions' competencies have been acquired from their resources.



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# V. INTRODUCTION

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## 1. Context of practice

The Saudi Pediatric Gastroenterology, Hepatology, and Nutrition Fellowship is a training program in a sub-specialization of pediatrics, the care for pediatric patients with gastrointestinal, liver, pancreatic, and nutritional problems. The prevalence of these diseases has increased over the past few years; for example, around 25% of children suffer from functional gastrointestinal disorders. Mass screening of celiac disease in Saudi school-aged children has revealed that the prevalence of the disease is 1.5%, which is at least twice the average prevalence rate in Europe and North America. Additionally, inflammatory bowel disease has increased worldwide from 5/100000/year to 10/100000/year in some countries.

Pediatric liver transplant rates have shown increases in several liver transplant centers in Saudi Arabia due to early recognition and intervention of diseases that require liver transplantation, such as progressive familial intrahepatic cholestasis, metabolic disorders, and biliary atresia.

Consequently, demands have increased for a national training program that adequately trains physicians to investigate, diagnose, and manage these diseases. Such training involves diagnostic and therapeutic endoscopic procedures that require a skilled trained physician to perform. The program was established in 2010, and since then, it has increased the acceptance capacity to meet the increasing demand for the subspecialty.

Trainees in the Pediatric Gastroenterology, Hepatology, and Nutrition Fellowship program will be trained in different rotations, including gastroenterology (GI) services, hepatology and transplants, endoscopy, research, and nutrition.





In the future, we aim to provide additional subspecialty training programs in pediatric GI, including pediatric hepatology, pediatric inflammatory bowel disease, and motility fellowships.

## 2. Goal and responsibility of curriculum implementation

The ultimate goal of this curriculum is to guide trainees to become competent in pediatric GI subspecialties. This goal will require a significant amount of effort and coordination from all stakeholders involved in postgraduate training. As an “adult-learner”, trainees will have to demonstrate full engagement with a proactive role through: careful understanding of learning objectives, self-directed learning, problem solving, openness and readiness to apply what they have learned by reflective practice from feedback and formative assessment, and self-wellbeing and seeking support when needed. The program director plays a vital role in ensuring the success of the implementation of this curriculum. Training committee members, particularly the program administrator and chief resident, have a significant influence on program implementation. Trainees should be able to share the responsibility in curriculum implementation. The SCFHS will apply the most efficient models of training governance to achieve the highest quality of training. Academic affairs in training centers and regional supervisory training committees will play a major role in training supervision and implementation. The Specialty Scientific Council members will be responsible for ensuring that the content of this curriculum is constantly updated to match the best-known standards in postgraduate education in their respective specialties.

## 3. What is new in this edition?

- 1- A competency-based curriculum has been established with an explicit representation of the learning domains (knowledge, skills, and attitude).
- 2- Significant changes have been made to the rotations based of feedback from fellows and the fellowship committee as follows:

- The genetics rotation has been moved to F3
  - The nutrition rotation has been moved to F1
  - The pediatric surgery rotation has been added to F3
  - General GI has been reduced to 5 months in F3
- 3- Research in the current curriculum is mandatory to earn the certificate



## VI. ABBREVIATIONS USED IN THIS DOCUMENT

| Abbreviation | Description                                    |
|--------------|--|
| SCFHS        | Saudi Commission for Health Specialties        |
| GI           | Gastroenterology                               |
| F(1)         | (First) year of Fellowship                     |
| F(2)         | (Second) year of Fellowship                    |
| F(3)         | (Third) year of Fellowship                     |
| OSCE         | Objective Structured Clinical Examination      |
| DOPS         | Direct Observation of Procedural Skills report |
| CBD          | Case-Based Discussion report                   |
| CBE          | Competency-Based Education                     |
| ITER         | In-Training Evaluation Report                  |
| EGD          | Esophagogastroduodenoscopy                     |

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## VII. PROGRAM ENTRY REQUIREMENTS

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Please refer to the updated executive policy of SCFHS on admission and registration.  
Website: [www.scfhs.org.sa](http://www.scfhs.org.sa)



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# VIII. LEARNING AND COMPETENCIES

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## 1. Introduction to learning outcomes and competency-based education

Training should be guided by well-defined “*learning objectives*” that are driven by targeted “*learning outcomes*” of a particular program to serve specific specialty needs. Learning outcomes are supposed to reflect the professional “*competencies*” and tasks that are aimed to be “*entrusted*” by trainees upon graduation. This will ensure that graduates will meet the expected demands of the healthcare system and patient care in relation to their particular specialty. *Competency-based education* (CBE) is an approach of “*adult-learning*” that is based on achieving *pre-defined, fine-grained, and well-paced* learning objectives that are driven from complex professional competencies.

Professional competencies related to healthcare are usually complex and contain a mixture of multiple learning domains (knowledge, skills, and attitude). CBE emphasizes the critical role of informed judgment on a learner’s competency progress, which is based on a staged and formative assessment driven by multiple workplace-based observations. Several CBE models have been developed for postgraduate education in healthcare (e.g., CanMEDs by the Royal College of Physicians and Surgeons of Canada (RCPSC), the CBME-Competency model by the Accreditation Council for Graduate Medical Education (ACGME), Tomorrow’s Doctors in the UK, and several others).

Trainees are expected to progress from the novice to the mastery level in a certain set of professional competencies. The SCFHS has endorsed the CanMEDs for articulating professional competencies. This curriculum applies principles of competency-based medical education, where the “CanMeds 2015 framework” has been applied in this curriculum to

identify the competencies required in medical training to achieve satisfactory patient care and meet the needs of the community.

The reference for the CanMED competency is: Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Ottawa: Royal College of Physicians and Surgeons of Canada; 2015

\*Upon completion of the training experience, the fellow should acquire the following CanMEDs-based competencies:

### 1- Medical Expert:

- Describe the pediatric anatomy, pathophysiology, epidemiology, immunology, and genetics related to GI/hepatology, pancreas, and hepatobiliary systems.
- Explain the importance of nutrition, malnutrition, malabsorption, and related diseases to GI/hepatology, pancreas, and hepatobiliary systems.
- Outline the various classes of medication commonly used in practice and their side effects
- Contribute toward creating and implementing patient management plans through:
  - recording the full detailed history of the patients and overseeing physical examinations
  - supervising relevant laboratory and radiological examinations and interpreting the results
  - reviewing the medical records and the updated evidence-based management

### 2- Scholar

- Demonstrate commitment to lifelong learning
- Develop skills that will empower learners in assessing their strengths and weaknesses as clinicians
- Demonstrate the ability to utilize information technology to aid in their education and knowledge.
- Adopt a critical approach to analyze the literature and conduct journal club reviews related to their respective field.



### 3- Communicator

- Communicate effectively “both orally and in written form” with patients, their families, and other health professionals.
- Demonstrate respect to cultural and socioeconomic boundaries.
- Present research findings at scientific meetings

### 4- Professional

- Demonstrate honesty, accountability, advocacy, compassion, and respect for diversity in patient care at all times
- Demonstrate ethical conduct and practice in relation to patients, the profession, and society
- Demonstrate reflective practices and the ability to use and provide feedback constructively
- Demonstrate compliance with relevant professional regulatory bodies

### 5- Collaborator:

- Work effectively with physicians and other colleagues in the health care professions
- Use interpersonal skills to resolve any conflicts that might occur
- Respect the opinions of others
- Effectively participate in multidisciplinary meetings and decision making

### 6- Health advocate:

- Promote disease prevention strategies, high quality and equity in health care, and proper utilization of resources and positions

### 7- Leader:

- Participate in committees and administrative tasks within the healthcare system with proper utilization of health resources and effective budget planning
- Demonstrate leadership through personal skill development and time management

## 2. Program durations

This program requires three years of training. F1 and F2 are junior levels, whereas F3 is a senior level.

## 3. Program rotations

| Training<br>Year | Mandatory core rotations*  |   |                       | Elective rotations**           |          |         |
|------------------|--|---|-----------------------|--------------------------------|----------|---------|
|                  | Rotation name  | Duration  | Setting               | I Rotation name                | Duration | Setting |
| F1               | GI (mandatory)   | 6 months  | Inpatient/outpatient  |                                |          |         |
|                  | Endoscopy (mandatory)  | 2 months  | Endoscopy unit        |                                |          |         |
|                  | Pathology (mandatory)  | 1 month   | Laboratory Department |                                |          |         |
|                  | Radiology (mandatory)  | 1 month   | Radiology             |                                |          |         |
|                  | Nutrition (mandatory)  | 1 month   | Inpatient/outpatient  |                                |          |         |
|                  | Vacation   | 1 month   |                       |                                |          |         |
| F2               | GI (mandatory)   | 6 months  | Inpatient/outpatient  | Fellow can choose any rotation | 1 month  |         |
|                  | Transplant (mandatory)   | 1 month<br>1 month                                    | Inpatient/outpatient  |                                |          |         |
|                  | Research (mandatory)   |   |                       |                                |          |         |
|                  | Endoscopy (mandatory)  | 2 months  | Endoscopy             |                                |          |         |
|                  | Vacation   | 1 month   |                       |                                |          |         |
| F3               | GI (mandatory)<br>Endoscopy (mandatory)<br>Research (mandatory)<br>Pediatric surgery (mandatory)<br>Vacation | 5 months<br>1 month<br>2 months<br>1 month<br>1 month |                       | Fellow can choose any rotation | 2 months |         |

\*Mandatory core rotation: Set of rotations that represent the core components of the program, and that are mandatory.





\*\*Elective rotation: Set of rotations that are related to the specialty, as determined by the scientific council/committee; the trainee is required to complete some of these rotations

#### 4. Mapping of learning objectives and competency roles to program rotations:

| Rotation  | Duration  | Training settings/sites             | Objectives   |
|-----------|-----------|-------------------------------------|--|
| GI        | 17 months | Hospital (inpatient and outpatient) | <ul style="list-style-type: none"> <li>Recognize common problems affecting children and adolescents in transition (inflammatory bowel disease, celiac disease, cystic fibrosis, functional abdominal pain, irritable bowel syndrome, chronic liver diseases pancreatitis, liver failure), and determine the approach to disease management</li> <li>Discuss the evidence of pediatric GI diseases based on the latest publications and guidelines.</li> <li>Demonstrate effective problem-solving skills and judgment to address patient problems. This includes learning comprehensive history, undergoing physical exams, interpreting available data, and integrating information to generate extensive differential diagnoses for presenting problems and comprehensive management plans for GI diseases with effective use of available resources</li> <li>Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to GI</li> <li>Demonstrate milestone progression from junior to senior levels in all aspects: clinical aspects, procedure skills, and leadership.</li> <li>Demonstrate knowledgeable indications and contraindications, and know how to interpret the common GI tests, for example, pH study, v capsule, hydrogen breath tests, urea breath test, and common motility tests</li> </ul> |
| Pathology | 1 month   | Hospital, pathology department      | <ul style="list-style-type: none"> <li>Demonstrate knowledge of normal histopathology of GI, hepatology, and pancreas</li> <li>Identify the histopathological findings of the most common GI, hepatic, and pancreatic diseases</li> <li>Recognize the most common staining used</li> <li>Discuss the most common serology and molecular laboratory investigation used in GI, hepatology, and pancreas</li> </ul>   |

|                   |          |                                     |  |
|-------------------|----------|-------------------------------------|--|
| Nutrition         | 1 month  | Inpatient and outpatient            | <ul style="list-style-type: none"> <li>Describe the normal pediatric nutritional requirement in terms of calories, macro and micro nutrients, and the need for specific conditions</li> <li>Recognize the clinical and biochemical manifestations of nutritional deficiencies, obesity, and the approach of management in inpatient and outpatient settings</li> <li>Effectively perform enteral and parenteral nutrition</li> <li>Outline the indication, contraindication, and complications of enteral and parenteral nutrition</li> <li>Identify the contents of special formula used for the treatment of specific GI hepatic and pancreatic diseases</li> <li>Use different equations in nutritional assessments</li> <li>Describe the physiological consequences of malnutrition</li> </ul> |
| Radiology         | 1 month  | Hospital (radiology department)     | <ul style="list-style-type: none"> <li>Recognize the techniques of different radiological procedures commonly used in GI</li> <li>Interpret the results of common radiological exams used in practice and the related radiological findings</li> <li>Identify the indication, contraindication, and complications of radiological procedures with regard to GI, hepatic, and pancreatic disease</li> </ul>   |
| Research          | 3 months |                                     | <ul style="list-style-type: none"> <li>Develop research questions that fill the gaps present in the literature</li> <li>Identify and efficiently locate the best available information resources to address questions regarding the development of a research project.</li> <li>Recognize the indications for IRB approval.</li> <li>Use the best statistical analysis to analysis the data</li> <li>Write a scientific abstract/paper</li> </ul>  |
| Pediatric surgery | 1 month  | Hospital (inpatient and outpatient) | <ul style="list-style-type: none"> <li>Recognize the signs for abdominal surgery and management</li> <li>Explain the most common surgical abdomen procedures such as gastroenterostomy, jejunostomy insertion and fundoplication, KASAI procedure, cholecystectomy, pull through, colectomy, small bowel resection, and procedures for GI congenital anomalies such as stenosis, atresia, and fistula (indication, early complications, and long term follow-up in outpatient seating)</li> </ul>  |



|                     |          |   |   |
|---------------------|----------|---|---|
| Adult<br>Endoscopy  | 5 months | Endoscopy<br>suite                        | <ul style="list-style-type: none"> <li>Identify indications and contraindications of procedures, as well as specific issues in endoscopy such as antibiotic prophylaxis and the management of anticoagulants</li> <li>Perform both diagnostic and therapeutic endoscopy under supervision with insight into their own limitations</li> <li>Discuss different accessories and tools used in procedures</li> <li>Explain the procedure along with risk factors and possible complications to the patients and/or their guardians, and obtain informed consent</li> <li>Differentiate between the sedative pharmacological agents used during the procedure</li> <li>Maintain an accurate and complete electronic database for all procedures performed</li> </ul> |
| Liver<br>transplant | 1 months | Hospital<br>(inpatient and<br>outpatient) | <ul style="list-style-type: none"> <li>Outline basic knowledge of the liver (anatomy, embryology, and physiology).</li> <li>Outline the indications for liver transplant, and the management of acute and chronic liver failure in pediatric patients</li> <li>Perform pre- liver transplant workup and assessment of the recipient</li> <li>Evaluate the possible complications post-liver transplant and assess management for such cases; determine how to follow-up these patients in an outpatient setting</li> <li>Recognize the most common medications used in transplants along with their indication, contraindication, and complications</li> </ul>  |
| Elective            | 3 months |   | Help meet the needs, interests, and career goals of individual fellows, including rotations in GI to gain additional expertise in specific areas (e.g., endoscopy, motility studies, and nutrition) or in specific disease states (e.g., IBD and transplantation hepatology) and rotations in ancillary areas (e.g., pathology and radiology)   |

## IX. CONTINUUM OF LEARNING

This includes learning that should take place during each key stage of progression within the specialty. Trainees are reminded of their adherence to lifelong continuous professional development (CPD). Trainees should keep in mind the necessity of CPD for every healthcare provider in order to meet the demands of their vital profession. The following table shows how their role is progressively expected to develop throughout the junior, senior, and consultant levels of practice.

| Specialty General Practice  | F1 (Junior Level)   | F2 (Junior Level)   | F3 (Senior Level)  |
|---|---|---|--|
| Sub- specialty Non-practicing   | Dependent/supervised practice   | Dependent/supervised practice   | Independent practice/provide supervision   |
| Obtain basic health science and foundational level to core discipline knowledge | Obtain fundamental knowledge related to core clinical problems of the GI  | Apply knowledge to provide appropriate clinical care related to core clinical problems of the GI  | Acquire advanced and up-to-date knowledge related to core clinical problems of the GI  |
| Internship in the practice of the discipline                                    | Apply clinical skills such as physical examinations and practical procedures related to the core; present problems and procedures related to the GI | Analyze and interpret the findings obtained from clinical skills to develop appropriate differential diagnoses and management plans for the patient along with required endoscopic skills | Compare and evaluate challenging, contradictory findings and develop expanded differential diagnoses and management plan; being competent in diagnostic and interventional endoscopy |



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# X. TEACHING METHODS

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The teaching process in the Pediatric Gastroenterology, Hepatology, and Nutrition fellowship training programs is based mainly on the principles of adult learning theory. The trainees are made to understand the importance of learning and of playing active roles in determining the content and process of their own learning. The training programs implement the concept of adult learning in each feature of the activities where the residents are responsible for their own learning requirements. Formal training time includes the following three formal teaching activities:

- Program-Specific Learning Activities
- Universal Topics
- General Learning Opportunities

## 1. Program-specific learning activities:

Program-specific activities are educational activities that are specifically designed and intended for teaching the trainees during their training time. The trainees are required to attend these activities, and non-compliance can subject trainees to disciplinary actions. It is advisable to link attendance and participation in these activities to continuous assessment tools (see the formative assessment section below). Program administration should support these activities by providing protected - time for trainees to attend these activities and allow them to participate in such activities.

### A. Program academic half-day:

Every week, at least 2-4 hours of formal training time (commonly referred to as an academic half day) should be reserved. A formal teaching time is an activity that is planned in advance with an assigned tutor, time slots, and venue. Formal teaching time excludes bedside teaching and clinic postings. The academic half day covers the core pediatric GI topics, which are determined and approved by the specialty's

scientific council aligned with the specialty-defined competencies and teaching methods. The core specialty topics will ensure that important clinical problems of the specialty are adequately taught. It is recommended that lectures be conducted in an interactive, case-based discussion format. The learning objectives of each core topic must be clearly defined, and it is preferable to use pre-learning material. Whenever applicable, core topics should include workshops, team-based learning, and simulations to develop skills in core procedures. There should be an active involvement of the trainee in the development and delivery of the topics under faculty supervision; such involvement may include delivery, content development, and research. The supervisor should ensure that the discussion of each topic is stratified into three categories of the learning domain: knowledge, skill, and attitude.

The recommended number of half-days conducted annually is 40 sessions per training academic year with time reserved for other forms of teaching methods such as journal clubs and clinical/practical teaching.

## **B. Practice-based learning:**

Trainees are expected to build their capacity for self-directed learning.

Practice-based learning allows educators to supervise trainees to become competent in the practical skills of required programs, which will ensure fulfilling the knowledge, psychomotor, and/or attitude learning domains. Each trainee is expected to maintain a logbook documenting the endoscopy procedures observed, those performed under supervision, and those performed independently.

## **2. Universal topics**

Universal topics have been developed by the SCFHS and are available as an e-learning resource via personalized access to each trainee (to access the online modules). Each universal topic will have a self-assessment at the end of the module. As indicated in the “Executive policies of continuous assessment and annual promotion” section, universal topics are mandatory components of the criteria for the annual promotion of trainees from their current level of training to the subsequent level. Universal topics will be distributed over the entire training period.



### 3. General learning opportunities

- Journal Club
- Grand rounds
- Involvement in quality improvement committees and meetings
- CPD activities relevant to specialty (conferences and workshop)
- Morbidity and Mortality
- GI club meeting (monthly meeting between the centers in the region)



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# XI. ASSESSMENT AND EVALUATION

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## 1. Purpose of assessment

Assessment plays a vital role in the success of postgraduate training. Assessments will guide trainees and trainers to achieve defined standards, learning outcomes, and competencies. Moreover, assessments will provide feedback to learners and faculty regarding curriculum development, teaching methods, and the quality of the learning environment.

- a. **Assessment for learning:** Trainers will use information about trainees' performances to focus on improvements in their learning. This enables educators to use information about the knowledge, understanding, and skills of the trainees to provide them with feedback about how to improve their learning.
- b. **Assessment of learning** involves trainees in the learning process, which enables them to monitor their own progress. Trainees use self-assessment and the feedback of educators to reflect on their progression. It develops and supports the metacognitive skills of trainees. The assessment of learning is crucial in helping residents and fellows become lifelong learners.
- c. **Assessment of learning** is used to demonstrate the achievements of learning. This is a graded assessment and usually counts towards the end-of-training degree of the trainees.
- d. **Feedback and evaluation:** Assessment outcomes will represent quality metrics that can improve the learning experience.





## 2. Formative assessment

### 2.2 Formative assessment tools

| Learning Domain | Formative Assessment Tools  | Frequency / Discription  |
|-----------------|---|--|
| Knowledge       | <ul style="list-style-type: none"> <li>- Rubric for presentations</li> <li>- Rubric for case-based discussion (CBD)</li> </ul>                                    | <p>Weekly academic activity at the center and monthly GI club meetings between centers in the region can be physical or virtual through attendance and presentations</p> <p>Weekly. Fellows are expected to participate in discussions</p>   |
| Skills          | <ul style="list-style-type: none"> <li>- Log Book</li> <li>- DOPS: Direct Observation for Procedural Skills</li> <li>- Research Activities (checklist)</li> </ul> | <p><b>F1: (minimum of)</b><br/>20 EGD<br/>10 Colonoscopy<br/>5 Sigmoidoscopy</p> <p><b>F2: (minimum of)</b><br/>30 EGD<br/>15 Colonoscopy<br/>5 Sigmoidoscopy</p> <p><b>F3: (minimum of)</b><br/>30 EGD<br/>20 Colonoscopy<br/>5 Sigmoidoscopy</p> <p>Minimum of two DOPS in each year<br/>Continuous meeting with research mentor to review progress in F2 and F3</p> |
| Attitude        | ITER: In-Training Evaluation Report   | At the end of each rotation  |

### 3. Summative assessment

Summative assessment is a component of assessment that aims primarily to make informed decisions on trainee competency. Compared to formative assessment, summative assessment does not aim to provide constructive feedback.

| Learning Domain | Summative Assessment Tools                  | Frequency / Discription |
|-----------------|---|-------------------------|
| Knowledge       | - Annual written exam                       | Annual                  |
| Skills          | - Objective structured clinical exam (OSCE) | Once at the end of F3   |

- 1- The performance of the trainees is assessed using each evaluation formula according to the following scoring system:

**Description: Clear Fail; Borderline Fail; Borderline Pass; Clear Pass**

1. To upgrade the trainee from a training level to the next level, they must obtain at least a Borderline Pass in each evaluation form.
2. The program director may recommend to the local supervision committee to request the promotion of the trainee who did not meet the previous promotion requirement in the following cases:
  - A. If the trainee obtains a Borderline Fail result in one of the evaluation forms, at least one of the remaining evaluation forms must be passed with a Clear Pass result.
- 2- If the trainee obtains a Borderline Fail result in a maximum of two of the evaluation forms, provided they do not fall under the same theme (Knowledge, Attitude, and Skills), at least two of the remaining evaluation forms must be passed with a Clear Pass result.
- 3- The promotion must be approved in such cases by the Scientific Council for the respective specialization.



#### \*Blueprint outlines for written examinations

1. Small Bowel and Colon, 28%
2. Liver and Metabolic, 20%
3. Oesophagus and Stomach, 14%
4. Nutrition, 14%
5. Paediatric GI Emergency, 12%
6. Paediatric Surgery, 5%
7. Pancreas, 4%
8. Statistics and Ethics, 3%

#### Note:

The blueprint distributions of the examination may differ by up to +/-3% in each category.

## 4. Program evaluation

The SCFHS will apply variable measures to evaluate the implementation of this curriculum. The training outcomes of this program will undergo the quality assurance framework endorsed by the Central Training Committee at the SCFHS. Trainee assessment (both formative and summative) results will be analyzed and mapped to curriculum content. Other indicators that will be incorporated are as follows:

- Report of the annual trainee satisfaction survey
- Reports of trainees' evaluation of faculty members
- Reports of trainees' evaluation of rotations
- Reports from the annual survey of program directors
- Data available from program accreditations
- Reports from direct field communications with trainees and trainers

**Goal-based evaluation:** The intended milestone achievements will be evaluated at the end of each stage to assess the progress of the curriculum delivery, and any deficiency will be addressed in the following stage utilizing the time devoted to trainee-selected topics and professional sessions.

In addition to subject-matter opinion and best practices from benchmarked international programs, the SCFHS will apply a robust method to ensure that this curriculum will utilize all the data that will be available during the time of revision of this curriculum in the future.



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## XII POLICIES AND PROCEDURES

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This curriculum describes the means and materials outlining the learning objectives with which trainees and trainers will interact in order to achieve the identified educational outcomes. The SCFHS has a full set of “General Bylaws” and “Executive Policies” (published on the official SCFHS website) that regulate all processes related to training. General bylaws of training, assessment, and accreditation as well as executive policies on admission, registration, continuous assessment and promotion, examination, trainee representation and support, duty hours, and leaves are examples of regulations that need to be applied. Trainees, trainers, and supervisors must apply this curriculum in compliance with the most updated bylaws and policies that can be accessed online (via the official SCFHS website).

## References

- Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015.).

