Pediatric Radiology
Sub-Speciality

2026

SCFHS4.1 VERSION 2026 ©
V. 01

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties


بسم الله الرحمن الرحيم

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II. COPYRIGHT STATEMENTS

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.

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ISBN: 978-603-8408-85-8

III. TABLE OF CONTENTS

IV. INTRODUCTION

1. Context of Practice

Pediatric radiology is one of the broadest areas within the field of radiological sciences. In Saudi Arabia, the demographics of our population show a high percentage of the pediatric population, which dictates the necessity for this subspecialty. The diversity of the clinical disciplines that this subspecialty serves is a testament to this fact. Disciplines, including general pediatrics, pediatric orthopedics, pediatric surgery, Neonatology, Transplant surgery, Pediatric Cardiology, Pediatric urology, pediatric oncology, pediatric nephrology, Pediatric Neurology, and Neurosurgery, all interact extensively with radiologists who conduct imaging examinations in pediatrics (1-6).

National demands, along with the diversity of subspecialties, underscore the need for highly trained Pediatric Radiology specialists who can answer the often complex clinical questions that arise during patient management within these clinical disciplines. In this program, we aim to take a major step toward fulfilling this goal.

The Pediatric Radiology Fellowship is a two-year training program offered at healthcare centers accredited by the Saudi Commission for Health Specialties (SCFHS). The candidates rotate through various imaging modalities, covering almost all body parts. This exposure enables trainees to work with various patient populations and encounter various medical and surgical disorders to enrich their experience in the field of imaging. The program follows the CanMEDS rules and goals as per the vision and mission of the SCFHS for all training programs in the Kingdom, which will be explained in detail below.

2. Goals and Responsibilities of Curriculum Implementation

The Pediatric Radiology Fellowship Program Curriculum aims to help trainees become competent in their specialty, which requires a significant amount of effort and coordination from all stakeholders involved in postgraduate training. As adult learners, trainees must demonstrate proactive and full engagement through a careful understanding of learning objectives, self-directed learning, problem-solving, openness, and readiness to apply what they have learned through reflective practice

from feedback and formative assessment, self-wellbeing, and seeking support when necessary.

The Program Director is essential to the success of implementing this curriculum, and training committee members, especially the Program Administrator and Chief Resident, significantly influence how the program is executed. Trainees should be able to share responsibility for implementing this curriculum, and the SCFHS should apply the best models of training governance to achieve the best quality of training. Additionally, academic affairs in training centers and regional supervisory training committees are essential in training supervision and implementation. The Pediatric Radiology Scientific Committee will be responsible for continuously updating the curriculum content to match the best-known standards in the postgraduate education within the specialty. The main goal of the Pediatric Radiology Fellowship Program is to provide high-level training and ensure competency in all aspects of Pediatric Radiology, thereby enabling graduates to serve as local and national experts in diagnosing and radiologically evaluating pathological processes in the pediatric population.

3. What is new in this edition?

1. All rotations in the fellowship program and educational activities were described in a competency-based format with clear objectives, following the CanMEDS competency framework: medical experts, communicators, collaborators, leaders, health advocates, scholars, and professionals.
2. The program structure has been revised, and the number of weeks required for each modality has been updated.
3. On-call duty guidelines have been updated to accommodate the different on-call policies and guidelines used in all hospitals.
4. A neuroradiology rotation has been introduced and approved as a basic program rotation each year.
5. Elective rotations have been updated.
6. The minimum expected workloads in each year have been revised.
7. The criteria for program admission, promotion, final exam eligibility, and fellowship certification were revised and updated to align with the recently updated SCFHS guidelines.

V. ABBREVIATIONS USED IN THIS DOCUMENT:

Abbreviation	Description
CT	Computed Tomography
MRI	Magnetic Resonance Imaging
US	Ultrasound
SCFHS	Saudi Commission for Health Specialties
GI	Gastroenterology
GU	Genitourinary
MSK	Musculoskeletal
F1	1st year of fellowship
F2	2nd year of fellowship
NICU	Neonatal Intensive Care Unit
SCAN	Stop Child Abuse Neglect
CPD	Continuous Professional Development
CBD	Case Based Discussion
SOE	Structural Oral Exam
OSCE	Objective Structural Clinical Exam
SAQ	Short Answer Question
DOPS	Direct Observation of Procedural Skills
ITER	In-Training Evaluation Report

Abbreviation	Description
FITER	Final In-Training Evaluation Report

VI. PROGRAM ENTRY REQUIREMENTS

Please refer to the updated executive policy of SCFHS on admission and registration.

Website: www.scfhs.org.sa

VII. LEARNING AND COMPETENCIES

The Pediatric Radiology Fellowship Program is guided by well-defined "learning objectives" that are driven by targeted "learning outcomes" to meet the fellowship's needs. These learning outcomes should reflect professional "competencies" and responsibilities that are "entrusted" to trainees upon graduation, ensuring they are prepared to meet the demands of the healthcare system and patient care. Competency-based education (CBE) is an "adult-learning" approach that focuses on achieving pre-defined, fine-grained, and well-paced learning objectives derived from complex professional competencies.

Professional competencies in healthcare are usually complex and contain various learning domains (knowledge, skills, and attitudes). CBE is expected to transform the traditional postgraduate training method. For instance, the time of training is important; however, it should not be used as a measure for competence (time of rotation in certain hospital areas is not the primary marker of competence achievement). Furthermore, CBE emphasizes the importance of informed judgment in learners' competency progress, which is based on a staged and formative assessment driven by multiple observations in the workplace. Trainees are expected to reach a mastery level in all professional competencies. The SCFHS has accepted the CanMEDs to clarify professional competencies. The CanMEDS is a globally accepted framework that outlines various competency roles. The Pediatric Radiology Fellowship Program has adopted the CanMED 2015 framework.

This reference outlines a general outline of CanMED competencies (Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015), which encompasses the seven CanMED competencies: medical experts, communicators, collaborators, leaders, health advocates, scholars, and professionals.

1- MEDICAL EXPERT

As Medical Experts, Pediatric Radiologists integrate all CanMEDS Roles, medical knowledge, clinical skills, and professional attitudes into their provision of patient-centered care.

Key and Enabling Competencies Pediatric Radiologists should be able to:

1. Establish and maintain clinical knowledge, skills, and attitudes appropriate to Pediatric Radiology

    2.1. Apply knowledge of the clinical, socio-behavioral, and fundamental biomedical sciences relevant to Pediatric Radiology

        1.1.1. Demonstrate in-depth knowledge in all aspects of pediatric plain radiography, Fluoroscopy, Computerized Tomography, and Sonography, as well as Fetal/Pediatric Magnetic Resonance Imaging

        1.1.2. Discuss pediatric patients' safety issues pertinent to radiology.

        1.1.3. Explain the radiological and pathological correlation of Pediatric diseases

        1.1.4. Demonstrate in-depth knowledge in dealing with various contrast reactions, children with asthma, and renal failure.

    2.2. Obtain lifelong learning skills of the Scholar Role to advance a personal program to keep up-to-date and improve areas of professional development

    2.3. Integrate the available best evidence and best practices to enhance the quality of care and patient safety in Pediatric imaging

        1.3.1. Explain the risks and potential complications of interventional procedures

        1.3.2. Outline patient protection and safety concepts about different Pediatric imaging modalities

2. Conduct a complete and appropriate assessment of a patient

    2.1. Identify the relevant clinical issues to be addressed in a patient encounter, including the patient context and preferences

2.2. Elicit a relevant, clear, concise history that is precise to context and preferences for the purposes of diagnosis, management, health promotion, and disease prevention

2.3. Conduct a focused physical exam that is accurate and relevant to pediatric care or procedures for diagnosis, management, health promotion, and disease prevention

2.4. Select the most appropriate imaging modality to answer the clinical question in a resource-effective and ethical manner

2.5. Demonstrate effective clinical problem-solving and judgment to address patients' problems, including interpreting available data and integrating information to generate a differential diagnosis and management plans

3. Use preventive and therapeutic interventions effectively

3.1. Implement a management plan in collaboration with the referring health practitioner and patient

3.2. Recommend appropriate and timely application of preventive interventions relevant to pediatric imaging

3.3. Recommend appropriate and timely application of therapeutic interventions relevant to pediatric imaging

3.4. Obtain appropriate informed consent for diagnostic and interventional procedures

4. Demonstrate appropriate use of procedural skills, both diagnostic and interventional

4.1. Demonstrate effective, appropriate, and timely performance of procedures relevant to pediatric imaging

4.1.1. Conduct and interpret various neonatal and pediatric sonographic studies

4.1.2. Conduct and interpret various neonatal and pediatric fluoroscopic studies

4.2. Document and disseminate information associated with procedures conducted and their outcomes

5. Recognize the limits of their own expertise and seek appropriate consultation from other health professionals when needed

5.1. Demonstrate insight into their own limits of expertise

5.2. Demonstrate effective, appropriate, documented, and timely consultation of another health professional as needed for optimal patient care

5.3. Arrange appropriate follow-up care services for patients

2- Communicator:

As Communicators, pediatric radiologists effectively facilitate the doctor-patient relationship and dynamic exchange that occurs before, during, and after the imaging examination.

Key and enabling competencies: pediatric radiologists should be able to:

1. Explain the procedure to the patient/family, including the risks and possible complications, and answer questions.
2. Generate clear, concise written reports and provide verbal reports whenever necessary.
3. Demonstrate effective communication skills when dealing with patients, staff, and referring physicians.
4. Demonstrate good consulting skills when interacting with other physicians and health team members.

3- Collaborator:

As Collaborators, Pediatric Radiologists work effectively within a healthcare team to achieve optimal patient care.

1. Use an appropriate history to guide decisions regarding the best imaging modality for a given clinical condition or issue.
2. Interact appropriately with other radiology department staff, demonstrating a team-based approach to patient care.

4- Leader:

As leaders, pediatric imagers are integral participants in healthcare organizations; they organize sustainable practices, make decisions concerning resource allocation, and contribute to the effectiveness of the entire healthcare system.

Key and enabling competencies: pediatric radiologists should be able to:

1. Gain experience in screening of computed tomography (CT) and magnetic resonance imaging (MRI) in the pediatric context.
2. Prioritize studies.
3. Gain expertise in the proper steps in the imaging investigation of various pediatric pathologies.
4. Demonstrate awareness of the indications for various gastrointestinal, genitourinary, sonographic, MRI, and CT examinations in children.
5. Outline the advantages and disadvantages of fluoroscopic studies, ultrasound (US), MRI, and CT.

6. Choose the appropriate available imaging resources when planning and recommending patient care, and use them effectively and efficiently.

5- Health Advocate:

As health advocates, trainees use their expertise and responsibly influence the health and well-being of individual patients, communities, and the population.

Key enabling competencies: pediatric radiologists should be able to:

1. Gain expertise in guiding referring clinicians to imaging studies or studies most appropriate for their patients.
2. Recognize issues associated with examinations conducted at all ages, including newborn babies, infants, toddlers, children, and adolescents, since interactions with patients and parents vary according to patient age.
3. Recognize and consider consent, patient comfort, and other patient-related issues when participating in and recommending imaging procedures.
4. Demonstrate knowledge of radiation protection (ALARA), contrast dose, and injection parameters.
5. Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance.
6. Contribute to a process to improve health in the community or population they serve.

6- Professional:

As Professionals, pediatric radiologists are committed to the health and well-being of individuals and society through ethical practices and high behavioral standards.

They are to function effectively as consultants, integrating all CanMEDS Roles to provide optimal, ethical, and patient-centered medical care.

1. Conduct effective consultation in response to a request from another healthcare professional.
2. Identify and respond to the relevant ethical issues arising in patient care.
3. Demonstrate the ability to prioritize professional duties when faced with multiple patients and/or problems.
4. Demonstrate compassionate and patient-centered care.

5. Recognize and respond to ethical dimensions other than patient care, such as providing expert opinions for legal testimony or advising governments when needed.
6. Demonstrate integrity, honesty, and compassion.
7. Demonstrate awareness of one's own limitations and seek consult.
8. Show sensitivity and care to the patient and the patient's family.

7- Scholar:

As Scholars, pediatric radiologists demonstrate a lifelong commitment to reflective learning as well as the creation, dissemination, application, and translation of medical knowledge.

Key enabling competencies: pediatric radiologists should be able to:

1. Present work at local, national, and international radiology meetings.
2. Prepare at least one manuscript for presentation and/or publication.
3. Attend and be present at various clinical rounds, including oncology, NICU, pediatric surgery, general pediatrics, stopping child abuse/neglect SCAN, and interesting case rounds.
4. Take a leadership role in the learning of others, with the teaching/supervision of junior residents in rotation, elective students, and off-service residents.

2. Program Duration

This is a 2-year fellowship program.

3. Program Rotations

TRAINING YEAR	ROTATIONS							
	US	CT + Plain films	Fluro + Plain films	MRI + plain films	Pediatric Neuro CT/MRI	Elective	Vacation	Total weeks
F1	11	11	7	11	4	4	4	52
F2	19	7	7	7	4	4	4	52
Total weeks	30	18	14	18	8	8	8	104

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

- ULTRASOUND
  - Describe the indications for ordering a US examination.
  - Conduct and report the standard sonographic procedures for the Pediatric Body, Musculoskeletal (MSK), Neck, central nervous system (CNS), and small parts.
  - Scan patients, particularly when the technologist observes significant or ambiguous findings
  - Conduct and report Doppler techniques.
  - Conduct and report specialized pediatric US procedures, such as TCDI, chest and diaphragm US, and neonatal bowel perfusion.
- CT SCAN + PLAIN FILMS
  - Prescribe, supervise, interpret, and report all Routine Pediatric Body & MSK CT examinations.
  - Recognize various CT protocols tailored to the pediatric population with special emphasis on minimizing radiation.
  - Describe specialized examinations, including CT angiography
  - Manipulate the imaging data to dedicated 3D workstations for interpretation and illustration.
  - Review all plain films.
  - MR IMAGING + PATIENT PLAIN FILMS
  - Recognize the indications of using MRI.
  - Describe the essential sequences in the MRI protocol.
  - Describe the essential practical physical principles relating to the pediatric Body & MSK, including MR angiography.
  - Supervise the examinations by working with a technologist to make necessary adjustments to the parameters and protocols as the studies are being conducted.
  - Identify the indications and precautions for using various MR contrast agents, and indications for sedation in pediatric patients.

- Recognize the proper post-processing of imaging data.
- Review all plain films.

- FLUOROSCOPY + PLAIN FILMS
    - Conduct various pediatric fluoroscopic procedures, including less traditional examinations, such as loopograms and genitograms.
    - Identify the appropriateness of various fluoroscopic contrasts for certain age groups.
    - Identify various intussusception reduction techniques and appropriate logistics associated with the procedure.
    - Review all plain films.
- PEDIATRIC NEURORADIOLOGY CT/MR
    - The fellow should prescribe, supervise, interpret, and report all Routine Pediatric CNS CT & MRI examinations.
    - Identify CT & MRI protocols tailored to the pediatric population with special emphasis on minimizing radiation.
    - Conduct specialized examinations, including CT/MR angiography, CT/MR venography, and MR spectroscopy.
    - Identify the clinical appropriateness of CT/MRI examinations and the indications and precautions for CT contrast, MR contrast, and sedation.
- All cases should be reviewed by the attending consultant before reporting.

VIII. CONTINUUM OF LEARNING

This includes the learning that should occur at each key stage of progression within the specialty. The fellows were reminded of lifelong Continuous Professional Development (CPD). Fellows should keep in mind the necessity of CPD for every healthcare provider to meet the demands of their vital professions. The following table shows how this role is expected to progressively develop throughout junior and senior levels of practice.

Program Overview	F1 (Junior Level) Objectives	F2 (Senior Level) Objectives
Clinical Rounds	To participate in at least 10 Tumor Board Meetings, General Pediatric Teaching Sessions, Urology Rounds, Pulmonology Rounds, or Hematology Rounds	
Oncall Duties	To cover a maximum of 10 on-call duties per month	
Research Specific Objectives According to the Level of Training	Finalize research abstract by the end of the first year	Finalize manuscript for publication by the end of the second year
Annual Modality Specific Minimum Requirements	US: 1200 CT: 120 MR: 72 Fluoroscopy: 120	US: 1600 CT: 80 MR: 48 Fluoroscopy: 120

TEACHING METHODS

The teaching process in postgraduate training programs mainly relies on the principles of adult learning theory. Trainees feel the importance of learning and actively participating in the content and process of their own learning. The training programs implement the adult learning concept on each feature of the activities, where the residents are responsible for their own learning requirements. Formal training time includes three formal teaching activities:

- Program-Specific Learning Activities
- General Learning Opportunities

A- Specific learning activities:

This table details the arrangement of half the academic activities and offers a guide for research throughout the fellowship program:

	Details
Half-day academic activity	• Each fellow is entitled to one half-day of academic activities weekly, at least 2-4 h • A formal teaching time is an activity that is planned in advance with assigned tutor(s), time slots, and venue. • The academic half-day covers the core specialty topics, which are determined and approved by the specialty's scientific council, aligned with the specialty-defined competencies and teaching methods, and ensure that important clinical problems of the specialty are well-taught. • The learning objectives of each core topic will be clearly defined. • The recommended number of half-day sessions is 40 annually. • Each session will discuss topics approved by the subspecialty's scientific council that are aligned with subspecialty-defined competencies and teaching methods
Research	F1: By the end of F1, the fellow should have conducted and submitted the following: - Choose a research topic - Write the proposal for IRB approval - Collect the data - Analyze the data
	F2: Should submit the finalized manuscript by the end of training, which is ready for publication, or submit a paper that has been published

C- General learning opportunity:

The following table details the specific courses and workshops recommended to expand knowledge and experience in this particular subspecialty.

Organization	Course
Society of Pediatric Radiology	Thoracic Imaging Course
	Basic Course on Pediatric Cardiovascular MRI
	Pediatric Ultrasound Course
	Neonatal Imaging Course
	Pediatric Body MRI Imaging Course
	Fetal Imaging Course
American College of Radiology	Pediatric Radiology Course
European Society of Pediatric Radiology	Imaging Child Abuse
	European Course in Pediatric Neuroradiology
Radiological Society of Saudi Arabia	Pediatric Ultrasound Course
Radiological Society of North America	Contrast-Enhanced US in Pediatric Patients

IX. ASSESSMENT AND EVALUATION

In the Pediatric Radiology Fellowship Training Programme, multiple validated mechanisms are adopted to evaluate and assess trainees. This process is thorough, meticulous, and standardized.

1. Purpose of Assessment

- To enhance learning by providing formative assessments, enabling trainees to receive immediate feedback, measure their own performance, and identify areas for development.
- To drive learning and enhance the training process by clarifying what is required of trainees and motivating them to ensure they receive suitable training and experience.
- To provide robust summative evidence that trainees meet curriculum standards during the training program.
- To ensure that trainees are acquiring competencies within the domains of good medical practice.
- To assess trainees' actual performance in the workplace.
- To ensure that trainees possess the essential knowledge, skills, and attitudes required for their specialty.
- To identify trainees who should be advised to consider a career change.

Formative Assessment

General Principles

This was a continuous assessment and evaluation throughout the academic year and was completed at the end of each monthly rotation.

The evaluations are based on the trainee's performance skills, knowledge, and attitude rather than on an individual basis and ought to be conducted by more than one faculty

member, if possible. Program directors must inform fellows about the evaluation and assessment results and discuss their strengths and weaknesses.

Mid-rotation assessments and meetings must be arranged with trainees if concerns are noted regarding their performance. Assessment and evaluation adhered solely to the rules and regulations of SCFHS training, including knowledge, skills, and manners.

Assessment methods

Unless otherwise stated, the following assessment and evaluation mechanisms apply to all trainees in the program, including junior (F1) and senior fellows (F2). The distribution of marks and the percentage of each tool follow specific roles and are according to SCFHS regulations.

A. Continuous Formative Assessment:

Gen./Sub.	Level	Knowledge					Skills							Attitude
		SOE	EYPT-n't	Academic Activities	CBD	EYPT-Local	OSCE/OSPE	Research	DOPS	Logbook	Volunteering	Other	Mini-CEX	ITERS
Pediatric Radiology	F1	✓		✓				✓	✓					✓
	F2			✓				✓	✓					✓

SOE: Structured Oral Exam skills ; **CBD**: Case-based Discussion; **DOPS**: Direct observation of procedure ;**Mini-CEX**: Mini-Clinical Evaluation Exercise ; **EYPT-Local:** Progress test; **EYPT-n't:** International Exams ;**OSCE**: Objective Structured Clinical Examination .

Description Table of Formative Assessment Tools

Learning Domains	Assessment Tool	Requirements
Knowledge	SOE	**At the end of the first year (F1), the fellow is required to complete the SOE.** The results will be used **for formative feedback and performance improvement purposes.** (Refer to **Appendix 1** and **Appendix 2** for details.)
	Academic Activities	**Fellows are required to actively participate in clinical rounds, teaching rounds, morbidity and mortality rounds, and multidisciplinary rounds, as well as deliver one annual lecture.**

Learning Domains	Assessment Tool	Requirements
		Attendance at all scheduled academic activities is **mandatory**. Any absence must be **pre-approved by the Program Director** and supported with a valid justification.
Skills	Research	**F1: By the end of F1, the fellow should have conducted and submitted the following:** • **Choose a research topic** • **Write the proposal for IRB approval** • **Collect the data** • **Analyze the data** **F2: Should submit the finalized manuscript by the end of training that is ready for publication, or submit a paper that has been published**
	DOPs	**A total of 30 pediatric fluoroscopy procedures is required per academic year.** **Fellows must complete a minimum of 30 pediatric fluoroscopy procedures annually. These procedures will be evaluated quarterly, and the results documented on assessment forms will be used for formative feedback and ongoing performance improvement.**
Attitude	ITER	All In-Training Evaluation Reports (ITERs) must be completed. ITERs serve as end-of-rotation evaluations in accordance with SCFHS policies and criteria. In addition, supervisors must submit at least one quarterly report on each fellow's performance throughout the academic year (see Appendix 3).

The mentioned abbreviations in the above Table were defined below:

SOE: Structured Oral Exam skills

DOPS: Direct observation of procedural

All formative and work-based assessments (WBA) should be conducted following the SCHFS definitions and methodologies

Not complying with these will subject trainees to disciplinary actions according to SCFHS bylaws

B- Summative assessment

1.1 Objectives

- To determine the ability of the candidate to safely practice independently and provide consultations in the general domain of their specialty to other healthcare professionals or bodies that may seek assistance and advice.
- To ensure that the candidate has the necessary clinical competencies relevant to their specialty, including procedural skills, communication skills, diagnosis, management, investigation, and data interpretation.
- A fellowship-eligible fellow will need to pass the final written and final clinical exam, including written Short Answer Questions (SAQ) and a Structured Oral Exam (SOE).

1.2 Exam eligibility

- Successful completion of the fellowship training period
- Obtaining a training completion certificate (or equivalent) issued by the local supervisory committee based on a satisfactory Final In-Training Evaluation Report (FITER) and any other related requirements assigned by any mentioned scientific board (research or publication). An example of FITER is outlined in the Appendix of the exam rules and regulations document on the SCFHS website.
- Any candidate who has missed a maximum of 3 months of training in the whole fellowship program is allowed to sit for the exam (written and clinical); however, their results will be suspended until the missing period is completed.
- Register for the examination at least one month before the exam date.

1.3 General rules

- The Saudi Fellowship Final Examination will be held after the end of the second academic year on a date published on the SCFHS website.
- The final clinical exam is restricted to second-year fellows. Successful candidates are awarded a Saudi Pediatric Radiology Fellowship.
- The examination dates are provided by the Specialty Examination Committee (SEC) according to the fixed annual schedule submitted by the examination department.
- There shall be no reset examination.
- A candidate remains eligible for the Saudi Fellowship Final Written Examination for a period not longer than 3 years if they can prove they have been clinically active.
- If the candidate does not pass within three years, an exceptional attempt may be granted upon approval of the scientific council, provided evidence that continuing clinical practice is presented.
- A candidate who failed to pass the Saudi Fellowship Final Written Examination, including the exception attempt, must repeat the final year of training, after which they can sit for the final written examination twice after the approval of the scientific council.
- After exhausting all the above attempts (maximum six), the candidate will not be permitted to sit the Saudi Fellowship Final Written Examination.

1.4 End-of-year Final written examination SAQ (Short answer questions) for F2 after completion of training.

The final written exam will be held after the end of the academic year.

- The exam is held once a year.
- The exam is used for the F2 level after completion of training.

1.5 Final Saudi Board Clinical Examination.

The final clinical exam will be held after the final written exam.

- The exam is held once a year.
- After passing the final written exam, the candidate can set up for the final clinical exam.

1.6 Exam format:

FINAL WRITTEN EXAM:

Short Answer questions (SAQ): The exam consists of 12 stations of short answer questions that must be passed following the SCHS rules for exams.

The stations had the following pathologies (Appendix 2):

1- HEAD/ Spine ultrasound
2- Neck ultrasound
3- Chest I
4- Chest II
5- Gastroenterology I
6- Gastroenterology II
7- Genitourinary I
8- Genitourinary II
9- Musculoskeletal system I
10- Musculoskeletal system II
11- Emergency
12- Multisystem involvement, including Tubes and lines

FINAL CLINICAL EXAM:

Structured Oral Exam: After passing the final written exam, the candidate can set for the final SOE, consisting of four stations with eight different systems, including (head/spine, neck, chest, gastroenterology, genitourinary, Musculoskeletal system, emergency, and/or tubes, and lines). The total examination time was 40 min. (Appendix 1)

1.7 Passing score

The passing score is 70%. However, if the percentage of candidates passing the examination before final approval is less than 70%, the passing score must be lowered by one mark at a time to achieve a 70% passing rate or a 65% passing score, whichever comes first. Under no circumstances can the passing score be reduced below 65%.

CERTIFICATION

A certificate of training completion will be issued only upon the fellow's successful completion of all program requirements. Candidates who pass the final written and clinical examinations will be awarded the Saudi Pediatric Radiology Fellowship Certificate.

X. POLICIES AND PROCEDURES

This curriculum represents the means and materials, and outlines the learning objectives with which trainees and trainers will interact to achieve the identified educational outcomes. The SCFHS has a full set of “General Bylaws of Training in Postgraduate Programs” and “Executive Policies” (published on the official SCFHS website) that regulate all training-related processes. The general bylaws of training, assessment, and accreditation, as well as executive policies on admission, registration, formative assessment and promotion, examination, trainees’ representation and support, duty hours, and leaves are examples of regulations that need to be implemented. Under this curriculum, trainees, trainers, and supervisors must comply with the most updated bylaws and policies, which can be accessed online (via the official SCFHS website).

APPENDIX 1

Please refer to the SCFHS official website

www.scfhs.org.sa

APPENDIX 2

PEDIATRIC RADIOLOGY FELLOWSHIP TRAINING PROGRAM

Final Fellowship Written Examination

Examination Format:

The Final Pediatric Radiology Fellowship written examination consisted of 12 stations, each of which contained one to six selected images/images with three to four short-answer questions (SAQ). The duration of the exam will be 96 min (8 min for each station).

Passing Score:

The passing score is 70%. However, if the percentage of candidates passing the examination before final approval is less than 70%, the passing score must be lowered by one mark at a time to achieve a 70% passing rate or a 65% passing score, whichever comes first. Under no circumstances was the passing score reduced below 65%.

Blueprint Outlines:

No.	Sections	Percentage (%)
1	Neonatal head Ultrasound/ Neonatal spine Ultrasound	9
2	Neck Ultrasound	9
3	Chest 1	8
4	Chest 2	8
5	Gastrointestinal Tract 1	8
6	Gastrointestinal Tract 2	8
7	Genitourinary System 1	8
8	Genitourinary System 2	8
9	Musculoskeletal 1	8
10	Musculoskeletal 2	8
11	Emergency	9
12	Lines and Tubes Position/Malposition/Complication	9
At least one neoplastic case in any section		
Total		**100%**

Note:

Blueprint distributions of the examination may differ up to +/-3% in each category

APPENDIX 3

Saudi Commission for Health Specialties
M.F.RadioP-NG.KAMC-Riyadh

Evaluated By: evaluator's name
Evaluating: person (role) or moment's name (if applicable) Dates: start date to end date

* Indicates mandatory response.

ITER - IN-TRAINING EVALUATION REPORT (M.F.RadioP) - New 2019

	n/a	Clear Fail	Borderline	Clear Pass	Exceed Expectations
*A GENERAL - Radiological Knowledge					
*-Radiological Skills					
*B ROTATION SPECIFIC - Radiological Knowledge					
*-Radiological Skills					
*C COMMUNICATION					
*D COLLABORATION					
*E HEALTH ADVOCACY AND SAFETY					
*F REPORTING SKILLS					
*G SERVICE MANAGEMENT					
*H PROFESSIONALISM AND ETHICS					
*I SCHOLARLY ACTIVITIES					

J. WORKPLACEBASED ASSESSMENTS (MINIIPX AND DOPS)

MINIIPX (IF NOT REQUIRED BY THE ROTATION PLEASE CLICK N/A) TO BE FILLED FOR ALL ROTATIONS EXCEPT INTERVENTIONAL RADIOLOGY

	n/a	Clear Fail	Borderline	ClearPass	ExceedExpectations
*Evaluates Exam Appropriateness/Safety					
*Looks for Relevant Lab / Prior Imaging					
*Understands Exam Technique					
*Critiques Image Quality					
*Detects Findings					
*Describes Findings Appropriately					
*Mentions Pertinent Negatives					
*Diagnosis / Differential Diagnosis					
*Recommendations					
*Appropriate Handling Of Result Urgency					

DOPS (IF NOT REQUIRED BY THE ROTATION PLEASE CLICK N/A)

TO BE FILLED IN ADDITION TO MINI IPX AS

FOLLOWING:

JUNIOR: FL/ER, PEDIATRIC IMAGING

SENIOR: INTERVENTIONAL RADIOLOGY (WITHOUT MINIIPX), FL/ER, PEDIATRIC IMAGING, MSK IMAGING, BREAST IMAGING

	n/a	Clear Fail	Border line	Clear Pass	Exceed Expectations
*Evaluates Indications/Risks					
*Procedure Preparation					
*Explains Procedure To Patient / Informed Consent					
*Technical Procedures Skills					
*Prevents / Manages Complications					
*Post-Procedure Management / Instructions					

*Comments (areas of strengths/areas for improvement)

The following will be displayed on forms where feedback is enabled... (for the evaluator to answer...)

*Did you have the opportunity to meet this trainee to discuss their performance?

- Yes
- No (for the evaluee to answer...)

*Did you have the opportunity to discuss your performance with your preceptor or supervisor?

- Yes
- No

References:

1- Beal, M. D., Kinnear, J., Anderson, C. R., Martin, T. D., Wamboldt, R., & Hooper, L. (2017). The effectiveness of medical simulation in teaching medical students critical care medicine: a systematic review and meta-analysis. *Simulation in Healthcare*, *12*(2), 104-116.

2- Cook, D. A., Erwin, P. J., & Triola, M. M. (2010). Computerized virtual patients in health professions education: a systematic review and meta-analysis. *Academic Medicine*, *85*(10), 1589-1602.

3- Cook, D. A., Hatala, R., Brydges, R., Zendejas, B., Szostek, J. H., Wang, A. T., ... & Hamstra, S. J. (2011). Technology-enhanced simulation for health professions education: a systematic review and meta-analysis. *Jama*, *306*(9), 978-988.

4- Lynagh, M., Burton, R., & Sanson-Fisher, R. (2007). A systematic review of medical skills laboratory training: where to from here?. *Medical education*, *41*(9), 879-887.

5- So, H. Y., Chen, P. P., Wong, G. K. C., & Chan, T. T. N. (2019). Simulation in medical education. *Journal of the Royal College of Physicians of Edinburgh*, *49*(1), 52-57.

6- 2014 The Royal College of Physicians and Surgeons of Canada, Objectives of Training in the Specialty of Diagnostic Radiology