### HONG KONG COLLEGE OF RADIOLOGISTS

# **Higher Training (Nuclear Medicine)**

## **Subspecialty Training in Nuclear Cardiology**

[This document should be read in conjunction with the **General Guidelines on Higher Training** (Nuclear Medicine)]

#### 1. Introduction

- 1.1 Nuclear cardiology provides important diagnostic and prognostic information that is an essential part of the knowledge bases required for optimal management of the patients with cardiovascular disease.
- 1.2 This subspecialty training provides the trainee with special expertise to practice nuclear cardiology.

## 2. Objectives

The aim of the subspecialty training in nuclear cardiology is to ensure a trainee at the end of training period to have:

- 2.1 Detailed understanding and competence in:
  - indications for the specific nuclear cardiology tests
  - the safe use of medications, radioactive tracers and performance of tests
  - basics of instrumentation and image processing
  - methods of quality control
  - image interpretation
  - interpretation of findings correlated with the test, such as ECG changes
  - integration of risk factors, clinical symptoms and investigation findings
  - effective and safe supervision of the whole examination
  - management of unexpected cardiac events including cardiac arrest
- 2.2 Hand-on supervised experience with an appropriate number of the standard procedures such as myocardial perfusion imaging and radionuclide angiocardiography. Exposure to new nuclear cardiology studies e.g. cardiac PET is encouraged.
- 2.3 Ability to manage clinical consultation related to the subspecialty. Trainees should be able to advise clinicians on the appropriate use of various imaging techniques for the investigation of cardiovascular diseases and be able to communicate the findings in an effective way.
- 2.4 Competence in clinical rounds and meetings.

### 3. Training Requirements

#### 3.1 TRAINING CENTRE REQUIREMENTS

- 3.1.1 Gamma camera with the capability in performing planar dynamic and static studies, SPECT acquisition and ECG gating.
- 3.1.2 Access to stress testing facilities.
- 3.1.3 Well established cardiology department in the hospital.
- 3.1.4 Exposure to echocardiogram, coronary angiogram, cardiac CT, cardiac MR and cardiac PET using different PET tracers are recommended

#### 3.2 TRAINER REQUIREMENTS

As specified in the General Guidelines on Higher Training (Nuclear Medicine).

#### 3.3 DURATION OF TRAINING

Six months of training are desirable (minimum 3 months). The duration can be continuous or separate into two three-month training periods.

### 3.4 <u>DUTY SESSIONS</u>

- 3.4.1 No less than four sessions per week specific for the subspecialty.
- 3.4.2 Attachment to another centre on sessional basis is advisable if exposure to specific examination categories is inadequate or unavailable.

#### 3.5 MINIMUM NUMBER OF EXAMINATIONS REQUIRED

The minimum workload of a trainee for 6 month of higher subspecialty training in nuclear cardiology is 400 (200 for 3-month training). A suggested minimum number for each examination category in 6 months is as follows (pro-rata for 3-month training):

Examination Category	RIS Coding	Requirement
Radionuclide angiocardiography	9110-9111, 9180-9181	100
Exercise myocardial perfusion imaging	9130-9136, 9151	150
Pharmacological myocardial perfusion imaging	(9130-9136).01, 9151.01	150
Myocardial viability imaging	9143	Exposure recommended
PET cardiology, infarcted myocardium imaging, I-123-MIBG scan for heart diseases		Exposure recommended

### 3.6 <u>CLINICAL MEETINGS, PRESENTATIONS AND PUBLICATIONS</u>

As specified in the General Guidelines on Higher Training (Nuclear Medicine).

# 3.7 ADDITIONAL NOTES

This is not a standalone nuclear cardiology training program. Trainees have to fulfil the requirements of nuclear cardiology training in the Basic and General Higher Training before they are entitled to have undergone Nuclear Cardiology Subspecialty training.

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