



MINISTRY OF HEALTH  
SINGAPORE

# Stakeholder Consultation on the Healthcare Services (Nuclear Medicine Imaging Service) Regulations

Presented by Health Regulation Group

Ministry of Health

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# Objectives

This presentation will highlight:

1. **Who** the Nuclear Medicine (“NM”) Imaging Service Regulations apply to under the Healthcare Services Act (“HCSA”)
2. **What** the key changes are for the provision of nuclear medicine imaging service under the HCSA, from the existing requirements under the Standards for the Provision of Nuclear Medicine, Imaging, Therapy and Assay Services (“the NM Standards”)<sup>1</sup>

<sup>1</sup> This may be found at: [https://www.moh.gov.sg/docs/librariesprovider5/licensing-terms-and-conditions/standards-for-the-provision-of-nuclear-medicine-services\\_28052019\\_final.pdf](https://www.moh.gov.sg/docs/librariesprovider5/licensing-terms-and-conditions/standards-for-the-provision-of-nuclear-medicine-services_28052019_final.pdf)

# HCS Regulations

- In developing HCSA requirements for NM imaging service, MOH has reviewed and adapted the existing PHMC Regulations and the NM Standards, in consultation with the NM Advisory Committee
- Regulations are structured into **General Regulations, Advertisement Regulations** and **Service-specific Regulations**
  - **General Regulations and Advertisement Regulations:** General requirements broadly applicable to **all licensees**
  - **Service-specific Regulations:** Unique requirements contextualised to each service or stipulate specific requirements articulated in the General Regulations

# HCS Regulations

NM imaging service is a Phase 1 **special licensable healthcare service**, with the required underlying licence being a Radiological service licence.

NM imaging service licensees must comply with:

- General Regulations;
- Advertisement Regulations;
- Radiological Service Regulations; **and**
- NM Imaging Service Regulations

**Radiological  
Service licence**

**NM Imaging  
Service licence**

# HCS Regulations

- The General Regulations, Advertisement Regulations, Radiological Service Regulations and the NM Imaging Service Regulations will be **published in June 2021**.
- Licensees must comply with the abovementioned Regulations from **September 2021**.
- Regulations **will be complemented with:**
  - **LTCs** that set out specific technical requirements to be met
  - **Explanatory guidance document** which will help licensees interpret specific requirements that further elaboration is needed on
- Requirements that are “new” or “enhanced” compared to the existing NM Standards are highlighted as such

# Requirements under the NM Imaging Service Regulations

## A. Licensing matters

- Service modalities provided under licence  
[NEW]
- Notice to add new service modality

## B. General obligations of licensee [NEW]

- Suitability of licensed premises and equipment
- Number and suitability of personnel

## C. Governance and personnel

- Skills and competencies of Clinical Governance Officer
- Duties and responsibilities of Clinical Governance Officer [NEW]
- Staff involved in provision of NM imaging service [ENHANCED]

## D. Facilities and equipment

## E. Systems and Committees

- Quality Management System
- Safety requirements for NM imaging service

## F. Documentation

These requirements apply in addition to the underlying requirements in the Radiological Service Regulations 2021

## Service modalities for NM imaging service

To ensure better regulatory oversight of NM imaging service which consists of different modalities

- Every service modality that is provided as part of the NM imaging service must be **specified in the licence application**
- Should there be intention to provide a new service modality, a **timely notification to MOH (i.e. no later than one month before providing that service modality)** must be made
- “Service modality” means any of the following:
  - positron emission tomography-computed tomography;
  - positron emission tomography-magnetic resonance;
  - single-photon emission computed tomography-computed tomography;
  - planar nuclear medicine imaging and uptake studies;
  - other diagnostic procedures involving radionuclides or radiopharmaceuticals.

### To set out overarching principles or outcomes that licensees should meet

- Licensees must ensure that these general obligations are met at all times in the provision of NM imaging service:
  - The **licensed premises and equipment** installed or available are **suitable** for the provision of the service; and
  - There is an **appropriate number of personnel who are qualified, trained and hold the necessary credentials**to provide the service in a **safe, timely, accurate and effective** manner.
- Details of certain core technical requirements which are necessary to meet the outcomes will be stipulated in accompanying Licensing Terms and Conditions.

To provide clinical and technical oversight of technical and complex services by a qualified person

- **CGO is required for NM imaging service under the HCS (General) Regulation 15**
  - Supervises the provision of NM imaging service
  - No change from the minimum personnel requirements for a physician-in-charge / CGO under paragraph 3.1 of the NM Standards
- **CGO is required to meet the following qualification AND experience requirements:**

Qualification requirement	Experience requirement
a) Medical practitioner registered as a specialist in nuclear medicine by the Singapore Medical Council under section 22 of the Medical Registration Act (Cap. 174); <b><u>OR</u></b>	<b>Not less than 5 years' qualifying experience*</b> in the provision of the service  <i>*Qualifying experience" means 5 years of post-specialist registration clinical working experience in NM imaging service</i>
b) Medical practitioner who holds any other registration or qualification as DMS considers appropriate	

- **CGO must also hold a licence to use any radioactive material granted under section 5(1)(b) of the Radiation Protection Act (Cap. 262)<sup>1</sup> (i.e. a L6 licence)**

<sup>1</sup> This may be found at: <https://sso.agc.gov.sg/Act/RPA2007>

To specify specific duties and responsibilities of the CGO to increase regulatory clarity on how the CGO can ensure proper clinical governance

- **Set and implement appropriate policies** of the licensee for the safe and ethical provision of the service
- **Oversee examinations** conducted or provided by the licensee, and the proper execution of the methods and procedures for those tests/ examinations
- Provide **clinical governance and technical oversight** of the service
- Assist the licensee in **ensuring operational and regulatory compliance** with all applicable requirements
- **Implement and regularly review systems** for clinical governance, risk management and quality management
  - Detect and address in a timely manner any risks affecting the safety, welfare and the continuity of care provided to patients
  - Ensure any weaknesses or inadequacies in the provision of the service are promptly addressed and remedied
- **Implement and oversee a radiation safety programme**

To specify specific duties and responsibilities of the CGO to increase regulatory clarity on how the CGO can ensure proper clinical governance

- **Evaluate new service modalities** to be provided and new processes to be implemented, including processes relating to the preparation, dispensing, radiolabelling, compounding and quality control of radiopharmaceuticals
- **Supervision of staff** and ensuring:
  - Staff compliance to the clinical and technical standards as well as policies and procedures
  - Only competent and trained staff carry out any activity involving the use of any radioactive substance
  - Staff undergo continuing training and education
- Ensure that all **materials, equipment and appliances are properly kept and maintained**

### Expanded requirements on personnel to ensure the licensee's safe provision of service

*Adherence to the recommendations under "Personnel" (paragraphs 3.1 to 3.6) in the NM Standards would generally satisfy these requirements*

- An **adequate number of staff, with the necessary qualifications having regard to the type and nature of the work**, must be employed or engaged to safely provide the service
- Ensure that all staff attended **appropriate training on radiation safety awareness**
- Staff member who has **less than 3 years' relevant experience must be closely supervised** by the CGO or another staff member with not less than 3 years' relevant experience.
  - For an individual who is a professional registered under a professional regulatory Act, the conditional registration period, where applicable, will count towards the relevant experience

**To ensure that service is provided in a safe and suitable environment, using appropriate equipment**

*Adherence to the recommendations under “Facilities and Equipment” (paragraphs 4.1 to 4.4) in the NM Standards that are applicable to the provision of NM imaging service would generally satisfy these requirements*

- Licensed premises and all equipment used must be **safe**, and **suitable and adequate** for the proper and efficient provision of service in an **accurate and timely manner**.
  - Every procedure room complies with the requirements of, and is approved for use in accordance with, any written law regulating the storage, possession and use of radioactive materials and irradiating apparatus
  - **Appropriate radiation shielding** is provided where any laboratory procedures involving the use of radioactive substances are performed
  - **Adequate, controlled and secured space** in relation to the compounding, procurement, receipt, use, preparation, administration, storage and disposal of radioactive materials
  - **Separate waiting areas** with adequate capacity for the segregation of patients before and after administration of radiopharmaceuticals
  - Adequate number of **toilets for the exclusive use of patients** after administration of radiopharmaceuticals

### Ensuring safety and quality of radioactive materials, equipment and the environment/ facility

*Generally retained the recommendations relating to Quality Management Systems in the NM Standards, including “Quality Control for Radiopharmaceuticals”, “Quality Control for Equipment” and “Quality Control for Environment/Facility”*

- **Investigation** of any occurrence or complaint that discloses or may disclose any **weakness or inadequacy affecting the quality** of service
- Identification and implementation of **appropriate and effective actions to prevent a recurrence**
- **Audit** of the provision of the service
- Implementing **quality control measures for all radioactive materials** kept and used, including the safe and proper handling of radioactive materials
- **Accurate and timely reporting** of imaging results
- Maintaining **adequate and accurate documentation** on use of radioactive materials
- Conducting **regular/ periodic analysis** and reviews of information relating to the quality, safety and use of radioactive materials

### Ensuring safety and quality of radioactive materials, equipment and the environment/ facility

*Generally retained the recommendations relating to Quality Management Systems in the NM Standards (“Quality Control for Radiopharmaceuticals”, “Quality Control for Equipment” and “Quality Control for Environment/Facility”)*

- Implement **quality control measures for all equipment** used
- **Testing and monitoring of the licensed premises**

Note: Under the HCS (General) Regulation 17, licensees are required to appoint at **least one Quality Assurance Committee (QAC)**

### To build upon and contextualise radiation safety requirements under the Radiation Protection Act for NM imaging service

- Develop and maintain **accurate documentation for a radiation safety programme** that complies with any written law regulating the compounding, storage, possession and use of radioactive materials and irradiating apparatus
- Ensure that **staff comply with that radiation safety programme**
- Ensure the **availability of suitable and adequate radiation monitoring devices**, including dose calibrator(s) and radiation survey meter(s)
- Ensure **suitable and adequate radiation shields, primary and secondary containers for transportation** (within and outside the premises) of radioactive materials.

### To ensure proper, complete and accurate documentation relating to quality control of the service

*Adherence to the recommendations under “Records (Documentation)” (paragraphs 6.6 to 6.8) in the NM Standards would generally satisfy these requirements.*

- Maintain proper, complete and accurate **quality control records** in respect of the following:
  - equipment used in the provision of the service;
  - radioactive materials used in the provision of the applicable service;
  - the licensed premises.
- Ensure **appropriate and adequate documentation** of policies, processes and programmes

# ***Share your feedback with us by 30 April 2021***

<https://go.gov.sg/hcsa-nm-imaging-feedback>



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# The End

# Thank you

