**NUCLEAR MEDICINE**

**PROGRAMME ACCREDITATION SUBMISSION (PAS) FORM**

This Programme Accreditation Submission (PAS) is used for providing information on the Nuclear Medicine programme‘s pedagogy, curriculum, learning objectives, assessments, and evaluation. It will be used by the Nuclear Medicine Advisory Committee (RAC) and the Joint Committee for Specialist Training (JCST) as part of the necessary tools for the accreditation of Nuclear Medicine programmes.

Please complete the PAS as comprehensively as possible. The Programme Director (PD), the Programme Executives (PE) and the Designated Institutional Official (DIO) will be responsible for the content and timely submission of the PAS.

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**8. Letters of Agreement**

**9. Previous and Outstanding Citations**

1. Name and Address of Sponsoring Institution

|  |
| --- |
|  |

2. Name and Address of Primary Training Site

|  |
| --- |
|  |

3. Accreditation Information

|  |  |
| --- | --- |
| Institutional Accreditation by ACGME-I | |
| Date of Institutional ACGME-I Accreditation | DDMMYY |
|
| Length of Institutional ACGME-I Accreditation | X YEARS |
|
| Date of next Institutional ACGME-I Accreditation | DDMMYY |
|

|  |  |
| --- | --- |
| Programme Accreditation by JCST | |
| Date of Programme JCST Accreditation | DDMMYY |
|
| Length of Programme JCST Accreditation | X YEARS |
|
| Date of next Programme JCST Accreditation | DDMMYY |
|

4. Workload at Primary Site

Please include clinical load or case statistics relevant to your training programme.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Period : DDMMYY to DDMMYY** | | **Number** | | **Remarks** | |
| Average no. of patients with benign Thyroid diseases per month (Separate ‘new’ and ‘repeat’ cases) | | New: |  |  | |
| Repeat: |  |  | |
| Average no. of Thyroid Cancer patients per month | | New: |  |  | |
| Repeat: |  |  | |
| Average no. of non-thyroid radionuclide therapy per month | |  |  |  |  |
| Average no. of radiopharmaceutical doses prepared per month | |  |  |  |  |
| Total no. of myocardial perfusion studies per year | |  |  |  |  |
| Total no. of PET-CT studies per year |  |  |  |  |  |
| Total no. of neurology studies per year |  |  |  |  |  |
| Total no. of skeletal studies per year |  |  |  |  |  |
| Total no. of pulmonary studies per year |  |  |  |  |  |
| Total no. of endocrine studies per year |  |  |  |  |  |
| Total no. of GIT studies per year |  |  |  |  |  |
| Total no. of urology studies per year |  |  |  |  |  |
| Total no. of infection studies per year |  |  |  |  |  |
| Total no. of lymphatic studies per year |  |  |  |  |  |
| Total no. of paediatric nuclear medicine studies per year | |  |  |  |  |

5. Describe the mandated training load or case experience, as required by the RAC and JCST Training Guide (if any). Describe the overall compliance to these required training numbers.

6. Describe any current difficulties or challenges in meeting the required training experience. What strategies have been employed and what are the successes, and/or limitations?

Participating Site **1 <add if necessary>**

1. General Information

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Site 1** |  |  |  |  |  |  |  |  |
| **Department of Diagnostic Radiology, SGH** | | | | | | | | |
|  | | | | | | | | |
| Address: |  | | | | | | | |
|  | | | | | | | | |
| Rotation: |  | | | | | | | |
| 1) Type (specify rotation):   * Core, mandatory * Core, elective * Elective, non-core | | | | |  | 2) Duration: | |  |
|  | | | | |  |  | | |
| Outline of training objectives at the participating site: | | | | | | | | |
|  | | | | | | | | |
|
|
|
| Signed Letter of Agreement between programme and site: | | | | | |  |  |  |
| Yes / No |  |  |  |  |  | Date: |  |  |

1. Workload

Please include clinical load or case statistics relevant to your training programme.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Period : DDMMYY to DDMMYY** | | | **Number** | | **Remarks** | |
| Average number of cross-sectional imaging CT studies per month | | |  | |  | |
| Average number of MRI imaging studies per month | | |  | |  | |
| Average number of cross-sectional imaging cases seen per month per resident | | |  |  |  |  |
|  |  |  |  |  |  |  |

Participating Site **2 <add if necessary>**

A) General Information

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Site 2** |  |  |  |  |  |  |  |  |
| **Department of Oncologic Imaging, NCC** | | | | | | | | |
|  | | | | | | | | |
| Address: |  | | | | | | | |
|  | | | | | | | | |
| Rotation: | | | | | | | | |
| 1) Type (specify rotation): | | | | |  | 2) Duration: | |  |
|  | | | | |  |  | | |
| Outline of training principles at site: | | | | | | | | |
|  | | | | | | | | |
|
|
|
| Signed Letter of Agreement between programme and site: | | | | | |  |  |  |
| Yes / No |  |  |  |  |  | Date: |  |  |

B) Workload

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Period : DDMMYY to DDMMYY** | | | **Number** | | **Remarks** | |
| Average number of cross-sectional imaging CT studies per month | | |  | |  | |
| Average number of MRI imaging studies per month | | |  | |  | |
| Average number of cross-sectional imaging cases seen per month per resident | | |  |  |  |  |
|  |  |  |  |  |  |  |

Participating Site **3 <add if necessary>**

A) General Information

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Site 3** |  |  |  |  |  |  |  |  |
| **Non-invasive Cardiac Imaging, Department of Cardiology, NHC** | | | | | | | | |
|  | | | | | | | | |
| Address: |  | | | | | | | |
|  | | | | | | | | |
| Rotation: | | | | | | | | |
| 1) Type (specify rotation): | | | | |  | 2) Duration: | |  |
|  | | | | |  |  | | |
| Outline of training principles at site: | | | | | | | | |
|  | | | | | | | | |
|
|
|
| Signed Letter of Agreement between programme and site: | | | | | |  |  |  |
| Yes / No |  |  |  |  |  | Date: |  |  |

B) Workload

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Period : DDMMYY to DDMMYY** | **Number** | | **Remarks** | |
| Average number of myocardial perfusion studies per month |  | |  | |
| Average number of MUGA studies per month |  | |  | |
| Average number of cardiac imaging cases seen per month per resident |  |  |  |  |
|  |  |  |  |

The Sponsoring Institution and programme must ensure that all faculty involved in educating the residents has the requisite knowledge and skills for their role. They must 1) create an environment that is conducive for learning; 2) be approachable and encourage active participation in learning and research; and 3) participate in faculty development programmes.

|  |  |
| --- | --- |
| **Ratio of Programme Director/Site Director\* to residents:** |  |
| **Ratio of core faculty to residents:** |  |
| **Ratio of all teaching faculty to residents:** |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Programme Director** | | | | | | | |
| Name: |  | | | | | | |
| Department/ Institution: | |  | | | | | |
| DID: |  | Mobile: |  | | Email: |  | |
| Appointed on: |  | | | | | | |
| Portion of time spent (hours/week)   1. Programme administration: 2. Supervision of residents: 3. Teaching (in lectures / journal club etc.): 4. Research (primary or supporting role): | | | | | | | |
|  |  |  |  |  |  |  |  |
| Medical degree and year obtained: | |  |  | | | | |
| Specialist certification and year obtained: | | |  | | | | |
| MCR number: |  | | | | | | |
| SMC Registration: | Full / Conditional | | | | | | |
| Curriculum Vitae submitted with Accreditation Form: | | | | Yes / No | | | |

1. Does the Programme Director have adequate protected time and resources to fulfill his responsibilities?

\*Site Director is one who agrees to administrative, educational, and supervisory responsibilities for the residents during the rotation at the participating site. This person can also be the core faculty.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Site Director 1 <add if necessary>** | | | | | | | |
| Name: |  | | | | | | |
| Department/ Institution: | |  | | | | | |
| DID: |  | Mobile: |  | | Email: |  | |
| Appointed on: |  | | | | | | |
| Portion of time spent (hours/week)   1. Programme administration: 2. Supervision of residents: 3. Teaching (in lectures / journal club etc.): 4. Research (primary or supporting role): | | | | | |  |  |
|  |  |
|  |  |
|  |  |
| Medical degree and year obtained: | |  |  | | | | |
| Specialist certification and year obtained: | | |  | | | | |
| MCR number: |  | | | | | | |
| SMC Registration: | Full / Conditional | | | | | | |
| Curriculum Vitae submitted with Accreditation Form: | | | | Yes / No | | | |

2. Does the Site Director have adequate protected time and resources to fulfill his responsibilities?

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Core Faculty 1 <add if necessary>** | | | | | | | |
| Name: |  | | | | | | |
| Department/ Institution: | | |  | | | | |
| DID: |  | | Mobile: |  | | Email: |  |
| Date first appointed: | |  | | | | | |
| Primary certification and year obtained: | | | |  | | | |
| Secondary certification and year obtained: | | | |  | | | |
| MCR number: | |  | | | | | |
| SMC Registration: | | Full / Conditional | | | | | |
| Portion of time spent (hours/week)   1. Programme administration: 2. Supervision of residents: 3. Teaching (in lectures / journal club etc.): 4. Research (primary or supporting role): | | | | | | | |
| Curriculum Vitae submitted with Accreditation Form: | | | | | Yes / No | | |
| **Academic appointments** (last ten years) | | | | | | | |
| start date | | end date | | Description | | | |
|  | |  | |  | | | |
|  | |  | |  | | | |
|  | |  | |  | | | |
| Summary of his or her role in programme (please be specific): | | | | | | | |
|  | | | | | | | |
|
| Current professional activities / involvement in committees (limit to 10 | | | | | | | |
|  | | | | | | | |
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|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Teaching Faculty 1 <add if necessary>** | | | | | | | |
| Name: |  | | | | | | |
| Department/ Institution: | | |  | | | | |
| DID: |  | | Mobile: |  | | Email: |  |
| Date first appointed: | |  | | | | | |
| Primary certification and year obtained: | | | |  | | | |
| Secondary certification and year obtained: | | | |  | | | |
| MCR number: | |  | | | | | |
| SMC Registration: | | Full / Conditional | | | | | |
| Portion of time spent (hours/week)  1) Supervision of residents:  2) Teaching (in lectures / journal club etc.):  3) Research (primary or supporting role): | | | | | | | |
| Curriculum Vitae submitted with Accreditation Form: | | | | | Yes / No | | |
| **Academic appointments** (last ten years) | | | | | | | |
| start date | | end date | | Description | | | |
|  | |  | |  | | | |
|  | |  | |  | | | |
|  | |  | |  | | | |
| Summary of his or her role in programme (please be specific): | | | | | | | |
|  | | | | | | | |
|  | | | | | | | |
|

3. Describe the Faculty Development initiatives within and out of the programme and SI. Give an account of the faculty’s participation in these faculty development activities.

1. **Residents**
2. What are the JCST approved training positions in the entire training period? How many active residents are there in the program?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S/N | **Name** | **Postgraduate Medical degree & Year obtained** | **Current Training Year (R3, R4, R5 etc.)** | **Remarks** |
|  |  |  |  |  |
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1. How many residents have successfully completed the training program and progressed onto specialization?

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| --- | --- | --- | --- | --- |
| S/N | **Name** | **Year of Exit** | **Place of Specialist Practice** | **Remarks** |
|  |  |  |  |  |
|  |  |  |  |  |
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1. How many residents have discontinued from the training, and/or have left the programme (either permanently or temporarily)?

|  |  |  |  |
| --- | --- | --- | --- |
| S/N | **Name** | **Terminated, disrupted** | **Reasons** |
|  |  |  |  |
|  |  |  |  |

1. For the residents who have discontinued from the training, please provide detailed accounts?

**B) Non-Residents**

|  |  |  |  |
| --- | --- | --- | --- |
| **Participating Site 1 (Department, Institution):** | |  |  |
|  |  |  |  |
| **Non-Trainees** | | | |
|  | Number | Specialty | Year in training |
| Fellows |  |  | NA |
| Non-trainee MOs |  |  | NA |
| House officers |  |  | NA |
|  |  |  |  |
| **Trainees (Others/Subspecialty Fellows)** | | | |
| Others |  |  |  |

1. Does the presence of these other learners’ impact on the training experience of the residents? Please detail programme monitoring system and management strategies.

**C) Work hours**

Work hours can be defined as all clinical and academic activities related to residency training. Work hours must be limited to 80 hours per week, averaged over a month, including all on-calls. Residents must be allowed 1 day (i.e. 24 continuous hours) in 7 days free from all clinical administrative and academic responsibilities, averaged over a month. On-call hours must not exceed 24 hours. Work hours must be reported in the New Innovation System and tracked by the Programme Director.

1. State the number of hours on duty per week per resident in the last month. Explain how this was derived.

|  |
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1. Describe how work hours will be monitored and enforced.

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1. Describe how residents are educated to recognise signs of fatigue and sleep deprivation.

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|  |

1. Describe the actions which will be taken when residents are identified to be suffering from fatigue or exhaustion.

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1. Describe in detail how a resident in the program will be supervised. Describe the programme supervision policy.

|  |
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1. Describe how the potential lapses in resident supervision are monitored by the programme. What are the management strategies in these circumstances?

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1. **Programme Curriculum**

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| --- |
| Briefly outline your programme curriculum |
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1. **Clinical Rotations**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **<Specialty>** | |  |  |  |  |  |  |  |  |  |  |  |
| Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| SR1 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| SR2 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| SR2.5 |  |  |  |  |  |  |  |  |  |  |  |  |
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**C) Weekly Schedule of Activities**

Provide a schedule of weekly activities for each of the rotations in Section 5B

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Rotation:** | | | | | |
| **Type** | **Core / Elective:** | | | | |
| **Department:** | | |  | **Institution:** |  |
| **Day** | | **Activity (e.g. outpatient clinics, endoscopy, etc.)** | | | **Frequency (e.g. weekly, monthly)** |
| Mon | |  | | |  |
| Tue | |  | | |  |
| Wed | |  | | |  |
| Thur | |  | | |  |
| Fri | |  | | |  |
| Sat/Sun | |  | | |  |

**D) Formal teaching programmes**

List all scheduled teachings (e.g. lecture series, conferences, skills labs, journal club etc.) attended by residents (fill each site separately). Indicate how the residents will be accorded increasing/graded responsibilities as they progress to their senior years in the seven competencies.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Participating Site 1 / Institution :** | | | | | | | | |
| Title (include brief description) | | | Format (e.g. lecture, seminar) | | Core/elective | Frequency | No. of sessions | |
|  |  |  | |
| SR1 | | | | | | | | |
|  | | |  | |  |  |  | |
|  | |  |  |  | |
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| SR2 |  |  |  |  |  |  |  |  |
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| SR2.5 |  |  |  |  |  |  |  |  |
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**<add if necessary>**

**E) Curriculum Checklist**

1. Does each resident go through all the prescribed postings?

Yes / No

1. Does each resident go through the other elective rotations?

Yes / No

1. Are residents supervised during all procedures/cases?

Yes / No

1. Are there provisions made for residents to attend the formal teaching sessions?

Yes / No

Please provide detailed explanations to the "No" answers:

|  |
| --- |
|  |

1. List recommended textbooks/ journals for residents’ reading, indicating which core textbooks are, and whether it needs to be read before the start of the rotation.

|  |
| --- |
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1. Describe how the programme will provide residents with opportunities to participate in scholarly activities.

|  |
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1. Demonstrate the outcomes of the academic scholarship by the residents as supported by the faculty and the programme.

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For each rotation mentioned in Section 5B, outline a) the competency areas and objectives and b) the assessment method used.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Rotation 1:** |  | | | | |
| **Supervisor name:** |  | | | | |
| **Site:** |  | **Level:** |  | **Duration:** |  |
|  | | | | | |
| **Competency\* Areas** | | | | **Method of assessment** | |
|
| Patient Care |  | | |  | |
|
| Medical Knowledge |  | | |  | |
|
| Practice-based learning and Improvement |  | | |  | |
|
| Interpersonal and Communication Skills |  | | |  | |
|
| Professionalism |  | | |  | |
|
| Systems-based Practice |  | | |  | |
|
| Faculty development (residents as future educators) |  | | |  | |
|

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**<add if necessary>**

For formal teaching sessions mentioned in Section 5D, outline a) the competency areas and objectives and b) the assessment method used.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Title 1:** |  | | | | |
| **Supervisor name:** |  | | | | |
| **Site:** |  | **Level:** |  | **Duration:** |  |
|  | | | | | |
| **Competency\* Areas** | | | | **Summary of the Method of Assessment** | |
|
| Patient Care |  | | |  | |
|
| Medical Knowledge |  | | |  | |
|
| Practice-based learning and Improvement |  | | |  | |
|
| Interpersonal and Communication Skills |  | | |  | |
|
| Professionalism |  | | |  | |
|
| Systems-based Practice |  | | |  | |
|
| Faculty development (residents as future educators) |  | | |  | |
|

\*Adapted: ©2012 Accreditation Council for Graduate Medical Education International, LLC (ACGME-I)

**<add if necessary>**

**A) Evaluation of Residents**

1. Describe, in detail, how Patient Care is evaluated at each level from SR1 – SR2.5. How does the programme determine the completion of the competency at the end of each level, in order to allow progressive responsibilities?

|  |
| --- |
|  |

1. Describe, in detail, how Medical Knowledge is evaluated at each level from SR1 – SR2.5. How does the programme determine the completion of the competency at the end of each level, in order to allow progressive responsibilities?

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1. Describe, in detail, how Practice-based Learning and Improvement is evaluated at each level from SR1 – SR2.5.

|  |
| --- |
|  |

1. Describe, in detail, how Interpersonal and Communications Skills is evaluated at each level from SR1 – SR2.5.

|  |
| --- |
|  |

1. Describe, in detail, how Professionalism is evaluated at each level from SR1 – SR2.5.

|  |
| --- |
|  |

1. Describe, in detail, how System-based Practice is evaluated at each level from SR1 – SR2.5.

|  |
| --- |
|  |

1. Describe, in detail, how Faculty Development is evaluated at each level from SR1 – SR2.5.

|  |
| --- |
|  |

1. Describe how the faculty members are trained to evaluate residents.

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1. Describe the evaluation process, including the system and frequency for conducting the evaluation, documentation and release of evaluation results.

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| --- |
|  |

1. Describe how the performance in the various examinations (e.g. In-Training Examinations) is monitored and how the results are used to evaluate resident performance.

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|  |

1. Describe, in detail, the programme‘s policy and strategies in identifying and helping the residents with learning and/or training difficulties.

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**B) Evaluation of Faculty and Programme**

1. Describe how residents provide feedback on their faculty/supervisors and on the programme.

|  |
| --- |
|  |

1. Describe how the feedback on faculty will be kept confidential.

|  |
| --- |
|  |

1. Describe how the evaluations from the residents will be used to improve the programme.

|  |
| --- |
|  |

Please attach all letters of agreement when submitting the Accreditation Form.

1. All letters of agreement have been submitted and enclosed with the Programme Accreditation Submission.

PLAs to be submitted are based on the following:

1. Programmes that the residents are rotate to
2. Other Specialties Residency programs
3. Overseas programmes

Yes / No

**9. Previous and Outstanding Citations**

1. Please list the citations from the (immediate) past Site Visit.

1. Give an account of the strategies used to manage the citations. Have the strategies been successfully implemented?

|  |
| --- |
|  |

1. What are the outstanding citations and the reasons, and/or challenges in resolving thee citations?

|  |
| --- |
|  |

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Certification by Programme Director and Designated Institutional Official**

I certify that the information provided in this PAS is correct and true at the time of submission.

Name of < Programme Director> Signature of <Programme Director> Date

(Including official stamp)

Name of DIO Signature of DIO Date

(Including official stamp)