

The purpose of this document is to provide a comprehensive guideline on matters relating to internship in medical science and has to be read with the following documents:

- *The National Curriculum: Medical Biological Science – CMS 01 MBS*
- *The National Curriculum: Genetic Counsellors – CMS 01 GC*
- *The National Curriculum: Medical Physics – CMS 01 PH*
  
- *Guideline for Submission and Assessment of Portfolio of Evidence: Medical Biological Science – CMS 02 MBS*
- *Guideline for Submission and Assessment of Portfolio of Evidence: Medical Biological Science (Reproductive Biology) – CMS 02 RB*
- *Guideline for Submission and Assessment of Portfolio of Evidence: Genetic Counselling – CMS 02 GC*
- *Guideline for Submission and Assessment of Portfolio of Evidence: Medical Physics – CMS 02 PH*
  
- *Guideline for the recognition of qualifications not prescribed for registration as Medical Scientists – CMS 05*
  
- *Application for increase in the number of intern medical scientist posts – CMS G*
- *Annual Report to the Committee for Medical Science – CMS C*
- *Guidelines on Assessment and Moderation of Portfolio of Evidence: Intern Medical Scientists – CMS H*

## 1. INTRODUCTION

HPCSA internship training is to provide an environment for candidates to complete their training under supervision and guidance in HPCSA-accredited training facilities. It is a transitional phase from post-graduate student to healthcare professionals with a responsibility to patients, the healthcare team and the community. Internship training should provide opportunities to further develop knowledge, skills, appropriate behavior patterns and professional thinking, as well as to gain insight, understanding and experience in the diagnostic and/or clinical health care platform. The primary goal of internship is to build skill and competency in a diagnostic and/or clinical and/or therapeutic environment, consultation with other health care professionals and to equip oneself to function as a competent and safe health care professional.

Secondly, it provides for sufficient time to successfully complete the overall course objectives of internship which is knowledge, expertise, skills and experience in the integration of academic knowledge, scientific principles and practical laboratory methods and training into the clinical-diagnostic platform.

Medical scientists provide an auxiliary and supporting service to medicine, which leads to or impacts treatment, diagnosis, patient genetic counselling and consultation with other health care practitioners. They are part of a multidisciplinary health care team and may be based in public or private diagnostic laboratories, health care facilities and hospitals.

## 2. SCOPE OF THE PROFESSION OF A MEDICAL SCIENTIST

*Regulation 2 of Regulations relating to the regulations defining the scope of profession of Medical Scientists – Government Notice No. R.579 published in the Government Gazette No. 32244 of 22 May 2009.*

The following acts are hereby specified as acts which, for purposes of section 33 of the Act, shall be deemed to be acts pertaining to the profession of medical science, which acts shall be performed as an auxiliary and supporting service to medicine and in line with the scope of practice for medical scientists as prescribed under the medical and dental professions board Annexure 6 to the Ethical Rules published as Government Notice no.R.717 of 4 August 2007:

The development, the evaluation; and the practice of scientific procedures which involve humans, human biological material, or medical equipment subjects thereto that such acts will lead to or impact on treatment, diagnosis and genetic counselling of humans and, where appropriate, interpretation, quality management, patient genetic counselling and consultation with other registered and appropriately qualified health practitioners.

Persons performing health related research, but do not work within the Scope of the Profession of Medical Science do not need to register with the HPCSA. Booklets 13 and 14 describe the role of health research (<https://www.hpcsa.co.za/Conduct/Ethics>).

### **3. SCOPE OF PRACTICE**

The Scope of Practice of medical science is in the process of development and will be discipline and professional category specific.

### **4. PROFESSIONAL CONDUCT AND ETHICS**

Guidelines on ethical rules are available on the HPCSA website and forms an integral part of internship and the career of a health professional. These guidelines are contained in 15 booklets. Booklets 13 and 14 pertain to health research (<https://www.hpcsa.co.za/Conduct/Ethics>). All rules have application but the following two need highlighting:

#### 4.1 ETHICAL RULE 21 ON PERFORMANCE OF PROFESSIONAL ACTS

A practitioner shall perform, except in an emergency, only a professional act – for which he or she is adequately educated, trained and sufficiently experienced, and under proper conditions and in appropriate surroundings. <https://www.hpcsa.co.za/Conduct/Ethics>

#### 4.2 ETHICAL RULE 27 ON MULTIPLE REGISTRATIONS

Allows for multiple registration of fully qualified health professionals who have completed training and wished to be registered in two or more professional categories. It does not apply to professionals in training. <https://www.hpcsa.co.za/Conduct/Ethics>

#### 5. REGULATIONS RELATING TO THE REGISTRATION OF STUDENTS IN MEDICAL SCIENCE (R.580)

This regulation only pertains to students in genetic counselling.

#### 6. REGISTRATION OF MEDICAL SCIENTISTS

A medical scientist may register in one of the following three disciplines; (a) Medical Biological Science, (b) Genetic Counselling or (c) Medical Physics.

The following professional categories are prescribed within the discipline Medical Biological Science:

- 6.1 Anatomical Pathology
- 6.2 Cell Biology<sup>a</sup>
- 6.3 Clinical Anatomy<sup>a</sup>
- 6.4 Clinical Biochemistry
- 6.5 Haematology
- 6.6 Genetics
- 6.7 Immunology
- 6.8 Molecular Biology
- 6.9 Microbiology
- 6.10 Pharmacology
- 6.11 Radiation Biology<sup>b</sup>
- 6.12 Reproductive Biology
- 6.13 Virology

**Note:** <sup>a</sup> No active program and no register

<sup>b</sup> Register with no active program

## 7. CRITERIA FOR ACCEPTING INTERNS FOR TRAINING

**7.1** Regulation 2 of Regulations relating to the qualifications for registration of Medical Scientists– Government Notice No. R.581 published in the Government Gazette No. 32244 of 22 May 2009 prescribes the entrance level qualification as:

The intern must be in possession of a B.Sc. Hons degree, or an equivalent degree, which includes a research component and principles of scientific methodology, from an accredited education institution.

The minimum academic requirements are:

- a. For Medical Biological Science, four years' formal education (B.Sc. Honours or equivalent) from an accredited educational institution.
- b. For Genetic Counselling, four years' formal education (B.Sc. Honours or equivalent) and successful completion of first year of study of the M.Sc. in Genetic Counselling from an accredited educational institution; or successful completion of M.Sc. in Genetics Counselling degree from accredited educational institution.
- c. For Medical Physics, the intern must be in possession of either of the following:
  - B.Sc. Honours degree (Medical Physics) or
  - B.Sc. Honours degree (Physics) plus the additional Medical Physics modules from an accredited education institution.

## 7.2 EQUIVALENCE OF ENTRANCE ACADEMIC QUALIFICATION

In circumstances where the academic qualification as prescribed differs, as outlined in (a), (b) or (c) above but are believed to be equivalent to the above formal requirements, an applicant shall submit evidence to the Committee for Medical Science for consideration of equivalence of academic qualification.

The minimum academic requirements are:

- a. The minimum entry academic qualification requirement into an internship-training program is NQF 8 as prescribed by SAQA with a minimum of 120 credits.
- b. Presently, qualification descriptors, selection criteria and module content are determined by the training department, based on specific needs of academic knowledge and practical skills.
- c. Sufficient *practical training or competencies over the entire four-year period* of the entrance level academic qualification is recommended for internship training in medical biological science' categories.
- d. Continuous formal academic training and assessment *throughout the entire four-year course* is required for internship training in medical science.
- e. The contents of the entrance level qualification shall support the foundational knowledge in the specified discipline and/or professional category.
- f. In order to determine equivalence of an academic qualification not prescribed for registration a duly completed Compliance Certificate of Equivalence with supportive documents, shall be submitted when applying for registration in internship training.

## 7.2.1 COMPLIANCE CERTIFICATE OF EQUIVALENCE

<p><i>Compliance criteria to determine (i) the equivalence of the entrance level qualification in terms minimum standard and (ii) of appropriateness for the specific discipline and / or professional category.</i></p>		
<input type="checkbox"/> Minimum prescribed criteria		Yes or No
<p>Indicate the discipline and professional category this academic qualification is regarded as equivalent. Medical Biological Science and professional</p>		
<p>a. Is the qualification from an accredited education institution? obtained f</p>		
<p>b. Is the entry qualification at minimum level of at least NQF 8? a</p>		
<p>c. Is the minimum number credits for this qualification equal or more than 120 of credits?</p>		
<p>d. Does the qualification of this applicant include sufficient foundational knowledge for internship training in the relevant discipline?</p>		
e.	<p>Provide a short motivation with reference to the specific modules from the applicant's academic record that support the applicant's foundational knowledge in the specified discipline and / or professional category.</p>	
<p><i>Medical Biological Science only:</i></p>		
f.	<p>Does the curriculum include a research component and principles of scientific methodology?</p>	
g.	<p>Provide the assessment mark of the research module.</p>	%
h.	<p>Does the curriculum contain sufficient practical training?</p>	
<p><i>Genetic Counselling only:</i></p>		
i.	<p>Has the intern candidate successfully completed the first-year study the M.Sc. in Genetic Counselling or completed the entire degree?</p>	

7.2.2 The following certified documentation should be submitted together with the application for internship training:

- a. The study record of the applicant for the entire study period.
- b. A document, preferably from the South African Qualification Authority (SAQA), confirming that the academic qualification is graded by the National Qualifications Framework (NQF) at a minimum level of 8 (NQF 8).
- c. A document from the University from which the academic qualification has been obtained, confirming the total number of credits earned by successfully concluded the academic program. The minimum number of credits required is 120.

## **8. THE INTERNSHIP TRAINING PROGRAM**

### **8.1 THE NATIONAL CURRICULUM**

Section 61 (1)(a)(iv) of the Health Professions Act, 1974 (Act No. 56 of 1974) empowers the Medical and Dental Professions Board to exercise control over the minimum requirements of the curriculum and the standards of education, training and examinations to qualify for registration in terms of this Act, must be maintained at every educational institution or training facility offering education and training in any such profession, in order to secure recognition under this Act of the qualifications in question at such educational institution or training facility.

Government Notices No R.578, No R.579, No R.580 and No. R.581 as published in the *Government Gazette* No. 32244 of 22 May 2009 and as amended relates to the registration of intern medical scientists, the registration of medical scientists, the prescribed qualifications, conditions and duration of internship.

The National Curriculum serves as the core curriculum of the discipline and describes the minimum prescribed requirements for a medical scientist internship training program.

## 8.2. FACILITY-BASED INTERNSHIP TRAINING PROGRAMS

Institutions requiring HPCSA accreditation for intern medical scientist training are required to develop a structured facility-based training program using the prescribed template.

The program shall contain the minimum prescribed elements outlined in the National Curriculum.

It is expected that training programs shall stay relevant to the discipline and / or professional category / technologies / health innovations / testing platforms and shall be updated regularly. The updated or amended program has to be submitted to the HPCSA for approval prior to implementation. For approval of an updated / amended program, please provide two (2) versions of the program. The first copy (previous outdated program) with all the changes highlighted, while the second copy is regarded as the final version for filing.

Intern candidates will be assessed based on the accredited program, but in cases where the minimum requirements as prescribed in the core curriculum are not met; it is expected from the candidate to complete outstanding elements to the satisfaction of the Board.

Internship training programs must be developed by the coordinator or representative of the training program *in situ* at the various sites where the training is to proceed. Training is only permitted at facilities accredited by the HPCSA for this purpose.

The application for internship training must be submitted by the institution together with a written undertaking from the coordinator of the training program who will ensure that appropriate supervision by a suitable and competent team of trainers.

An internship setting must provide suitable and adequate exposure in the relevant discipline and or professional category.

### **8.3 GUIDELINE FOR SUBMISSION AND ASSESSMENT OF PORTFOLIO OF EVIDENCE**

The National Curriculum is supplemented by a structured and prescriptive assessment tool to assist the candidate intern and the assessment panel. As such, a checklist the Guidelines for Submission and Assessment of Portfolio of Evidence was developed by incorporating all components of the National Curriculum and includes an Intern Duty Certificate (as prescribed in regulation 6 of the Government Notice No. R.578 in Government Gazette No. 32244 of 22 May 2009).

The checklist provides a 'user-friendly' tick list and the page allocation of the specific evidence in the Portfolio of Evidence. By using the structured checklist (i) the candidate can evaluate progress, (ii) the examination assessment panel can use this as an easy navigation tool to confirm appropriateness of evidence and (iii) the accreditation panel can easily determine the components of a training program.

A duly completed Guideline for Submission and Assessment of Portfolio of Evidence shall be submitted with the submission of the Portfolio of Evidence.

*In the case of the Checklist not being completed as prescribed or not submitted, the Portfolio of Evidence will be returned to the candidate and assessment will not be performed.*

### **8.4 GUIDELINE FOR THE ASSESSMENT AND MODERATION OF PORTFOLIO OF EVIDENCE**

The guideline for the assessment and moderation of the Portfolio of Evidence describes the duties and responsibilities and the procedure in which way assessors and moderators of Portfolio of Evidence have to conclude their assessment.

## 9. DURATION OF TRAINING AND SUPERVISION

### 9.1 THE TRAINING FACILITY

*The Government Gazette Notice No R.578 (22 May 2009) under the Health Professions Act, 1974 (Act no, 56 of 1974) – Regulations relating to the registration of interns in medical science defines the term “**accredited training facility**” as a hospital, clinic, laboratory, health care center, or any other institution which is accredited by the board for the purpose of internship training”.*

### 9.2 Prerequisite for Registration as Medical Scientist is defined as:

“A graduate shall before he or she can be entitled to registration as a medical scientist in any category of such registration register as an intern and undertake internship training to the satisfaction of the board for a period and in the manner prescribed in regulation 5 unless the board exempts him or her partially or in full this requirement on submission of documentary proof to the satisfaction of the board of internship or equivalent training undergone or experience obtained elsewhere”

### 9.3 THE CONDITIONS OF INTERNSHIP TRAINING

#### 9.3.1 Duration of training

*Regulation 5(a) of the Government Notice No. R.578 published in Government Gazette No. 32244 of 22 May 2009.*

The training to be undertaken by an intern medical scientist shall meet the following conditions:

Internship training must be for a period of twenty-four (24) months and where it is broken or interrupted it must consist of periods which, when added together, are not less than twenty-four (24) months in total, including vacation leave not exceeding one month per annum and sick leave not exceeding two months per annum.

The training undertaken by an intern medical scientist shall meet the following conditions:

- a. Internship training shall be for a period of twenty-four (24) months and where it is broken or interrupted it must consist of period which, when added together, are not less than twenty-four (24) months in total, including vacation leave not exceeding one month per annum and sick leave not exceeding two months per annum;
- b. No such break of interruption must exceed a period of one year, if the period of training prior to such break or interruption is to be recognized as part of completed internship;
- c. The period of twenty-four (24) months of internship training contemplated in paragraph (a) must be completed within a period of four (4) years from the initial date of registration as an intern medical scientist;
  - If an intern does not complete his or her internship training within a period of four (4) years, his or her registration in terms of the Act shall be cancelled, unless-
  - he or she provides the board with satisfactory reasons as to why his or her registration should not be cancelled; and
  - he or she complies with the conditions that the board may determine for completing his or her internship training in order for the board to recognize such training.

Should an intern require vacation leave in excess of one month per annum or sick leave in excess of two months per annum, it is the responsibility of the coordinator of the training program at the training facility to extend the period of intern training in order to comply with the above requirements.

All requirements relating to the internship in medical science be completed within a four (4)-year period.

### **9.3.2 EQUIVALENT TRAINING OR EXPERIENCE UNDERGONE ELSEWHERE**

*Regulation 2 of the Government Notice No. R.578 published in Government Gazette No. 32244 of 22 May 2009 prescribes:*

*“a graduate shall, before he or she be entitled to registration as a medical scientist in any category of such registration, register as an intern and undertake internship training to the satisfaction of the board for a period and in the manner prescribed in regulation 5, unless the board exempts him or her partially or in full from this requirement on submission of documentary proof to the satisfaction of the board of internship or equivalent training or experience undergone elsewhere”.*

This clause on “equivalent training or experience undergone elsewhere” may exempt candidates from performing prescribed components of the internship training program subject to submission and assessment of documentary proof.

### **9.3.2.1 CRITERIA FOR DETERMINATION OF EQUIVALENT TRAINING OR EXPERIENCE UNDERGONE ELSEWHERE AS A GRADUATE WITHOUT INTERNSHIP**

#### **EXEMPTION BASED ON PRIOR LEARNING**

##### ***Research experience***

Evidence of research experience and/or application of scientific literature and critical thinking in the field of Medical Science should be demonstrated. Should the intern have completed a research-based dissertation during further post-graduation studies (appropriate and relevant Masters or Doctorate degree; M.Med.Sc/M.Sc./PhD) evidence should be provided. Any publications such as peer-reviewed articles, abstract submissions for oral or poster presentations at national/international conferences and awards obtained for the research should be noted. Additional publications/conference proceedings should also be noted, and abstracts provided.

Exemption of a component of the training program as prescribed by the National Curriculum may only be granted based on prior learning. A post-graduation qualification *per se* is **not** a prescribed component and is therefore, not deemed suitable as a basis for exemption. In the case of an appropriate post-graduate academic research-based qualification, the component of “Principles of Research” will be the basis of exemption.

The purpose of internship is to be part of the daily functioning of a diagnostic or clinical unit in a clinical environment for the entire period of internship. Prior learning performed outside a diagnostic environment does not expose a candidate to the prescribed environment and conditions of a diagnostic laboratory. Components like quality management and good laboratory practice are in nature very different in a research and diagnostic environment and will therefore not be deemed suitable for exemption.

All prescribed components shall be performed on a continual basis over the entire duration of internship and a specific period cannot be allocated to a component. The exception to the rule may be the component of Principles of Research, which is usually performed within a specified period based on the rotation of intern candidates, availability of equipment and the expiration date of reagents. The required outcomes for this component are very basic and the more specialized output from a master’s or Doctorate dissertation is not directly linked to a possible shortened internship.

Exemption of this component is based on the completion of a prescribed component of equivalence or prior learning and a possible shortening period of internship shall not be more than three (3) months. An internship period of not less than twenty-one (21) months may be considered should exemption of the principles of research component be awarded.

Documents to be submitted should include:

- a. Motivation letter from the candidate, supervisor and head of the training department.

*The candidate may submit either (b) and (c) or only (d) as evidence.*

- b. Certified proof of the academic qualification (Degree Certificate) from an accredited education institute and
- c. Certified copy of the titled page and abstract of the dissertation.
- d. The candidate may also provide proof of a publication as first author in a peer-reviewed accredited journal.
- e. Evidence should be provided in the form of a limited Portfolio of Evidence (as described by the National Curriculum) containing only the evidence pertaining to the component(s) applying for exemption.
  - *For example:* When applying for exemption from component 2.6 on “Principles of Research” from The National Curriculum, only provide evidence pertaining on this component.
- f. Self-assessment should be provided in the form of a limited checklist (Guideline for submission and assessment of Portfolio of Evidence) by completion of only the relevant section(s) based on the Limited Portfolio of Evidence related to the component(s) applying for exemption.
  - *For example:* Only complete section 5.6 on “Principles of Research”.

## **ASSESSMENT TO ESTABLISH EQUIVALENCE OF TRAINING**

- These documents will be assessed for equivalence by the Committee for Medical Science on a case-by-case basis.
- The request should be submitted with the application for internship training.
- The applicant may be exempted from certain component/s of the internship training based on prior learning and may complete internship training in a period as determined by the Board.

### **9.3.2.2 Criteria for determination of equivalent training or experience undergone elsewhere as a registered medical scientist and successful completion of internship.**

- **INTERNSHIP TRAINING PERFORMED ELSEWHERE (NOT WITHIN THE REPUBLIC OF SOUTH AFRICA)**

*Regulations relating to the registration of persons who hold qualifications not prescribed for registration*

– *Government Notice R101 published in the Government Gazette No. 31859 of 6 February 2009.*

The South African internship training program for medical science is internationally benchmarked and is based on equivalent programs in mostly the United Kingdom and independent states within the United States of America. Regulating bodies in these countries, equivalent to the HPCSA, regulate the training and practice of health professionals. Candidates trained and registered in these countries are predominantly on the same or improved standard as the South African program.

This is mostly due to the implementation and functioning of medical science internship programs for more than 3 decades, extended experience in the principles of training, a prescribed multi-disciplinary approach of clinical and pathology professionals, and a build-in clinical component in the programs of these countries. The clinical component is a formal prescribed training program linked to an academic qualification, which consists of formal lectures, patient care and assessment by a formal examination body with other clinical professionals. In this scenario, exemption from specified component(s) and possible shortened internship will be based on equivalent prior learning.

Equivalence of training will be established by using the Guideline for the recognition of qualifications not prescribed for registration as Medical Scientists – CMS 04.

If such an application is turned down, it is not advisable to apply to the Committee for Medical Science again unless entirely new information becomes available and is of such a nature, which is likely to make a substantial difference to the view in which the original application was considered by the Committee for Medical Science.

### ***ASSESSMENT TO ESTABLISH EQUIVALENCE OF TRAINING:***

Equivalence of training will be established by using the Guideline for the recognition of qualifications not prescribed for registration as Medical Scientists – CMS 04.

#### **In summary:**

- In the case where the candidate is/was registered by a regulating body (similar or equivalent to the HPCSA) in another country, the proof of registration has to be provided.
- The training programs will be compared or assessed for equivalence and if determined to be sufficient the candidate will be allowed to follow prescribed processes to register with the HPCSA.
- If the training program lacks prescribed components, the candidate has to complete the components at an HPCSA accredited training facility under supervision of a Board approved supervisor with pre-determined progress reports.
- Duration of internship/supervised practice will depend on the various components lacking.

### **9.3.2.3 CRITERIA FOR DETERMINATION OF REDUCED INTERNSHIP WHEN A REGISTERED MEDICAL SCIENTIST APPLIES FOR REGISTRATION IN A DIFFERENT PROFESSIONAL CATEGORY UNDER MEDICAL BIOLOGICAL SCIENCE**

#### **MIGRATION OF A REGISTERED MEDICAL BIOLOGICAL SCIENTIST FROM ONE PROFESSIONAL CATEGORY TO ANOTHER.**

The HPCSA guidelines on ethical rules under Rule 27 *allows for multiple registration of fully qualified health professionals whom have completed training and wished to be registered in two or more professional categories. This does not apply to professionals in training.* <https://www.hpcsa.co.za/Conduct/Ethics>.

An HPCSA-registered medical scientist in the discipline medical biological science may wish to develop or expand his or her professional career by registering in an additional prescribed professional category. Based on the rule health professionals can now migrate between the disciplines of medical science and even more likely between the professional categories in medical biological science.

The National Curriculum prescribed generic components, which is required in the daily functioning of a diagnostic laboratory. Most of these components are in nature similar or generic and migration may implicate that these generic components has successfully been completed and may be exempted based on equivalent prior learning

Documents to be submitted should include:

- a. Motivation letter from the candidate, supervisor and head of the training department.
- b. Proof of evidence as active registered professional with the HPCSA.
- c. Being in good standing with the HPCSA.
- d. Meet the requirement of CPD.
- e. The Portfolio of Evidence (as described by the National Curriculum).
- f. Completed checklist (guideline on the submission and assessment of Portfolio of Evidence).

## **ASSESSMENT TO ESTABLISH EQUIVALENCE OF TRAINING**

- These documents will be assessed for equivalence by the Committee for Medical Science on a case-by-case basis.
- The request should be submitted with the application for internship training.
- The applicant may be exempted from certain component/s of the internship training program based on prior learning and may complete internship training in a period as determined by the Board.

### **9.4 REGISTRATION AS AN INTERN MEDICAL SCIENTIST**

- a. Facilities accredited for internship training are obligated to provide candidates with the entire legal framework pertaining to medical science and with details concerning registration since intern medical scientists are legally required to register with the HPCSA.
- b. Intern medical scientists should register as interns with the HPCSA *within 2 months of commencing training*. The intern medical scientist, the supervisor and the accredited training facilities are jointly responsible for ensuring that the registration documents are submitted within the stipulated 2 months.
- c. When the registration fee is rendered, the exact date of commencing the internship must be clearly stated. It is the responsibility of the applicant to ensure that the payment for registration is received by the HPCSA. Late registration and non-payment of registration fees may lead to penalties.
- d. On registration, the intern candidate shall receive a registration certificate and a registration number.
- e. The registration number of the intern medical scientist must be reflected in all correspondence.
- f. An intern will be appointed against an HPCSA-approved intern post number.
- g. M.Sc. (Med) Genetic Counselling students should register as Genetic Counselling students with the HPCSA within two (2) months of enrolling for their degree (Regulations relating to the registration of students in medical science).
- h. Individuals, who wish to apply to register with the HPCSA, and practice as a Genetic Counsellor, must be in possession of an M.Sc. (Med) degree in Genetic Counselling and have completed 2 years of internship in an accredited intern training facility as defined in regulation R.578
- i. The Genetic Counsellor intern must be registered for and have at least completed their first year of an M.Sc. (Med) Genetic Counselling degree or have already qualified with this degree.
- j. Intern training at an HPCSA accredited training facility may overlap with the second year of study of the M.Sc. (Med) Genetic Counselling degree. The second year of internship will then be completed post-graduation (after obtaining the academic qualification). Should an

individual not register as an intern in their second year of study, they will be required to complete two years of internship post- degree.

- k. Should the intern move from one training facility to another, the HPCSA should be notified in writing, *in advance*. Intern registration is in accordance with Regulations relating to the registration of Interns in Medical Science - Government Notice No. R.578 in Government Gazette No. 32244 of 22 May 2009, please consult these regulations for further information. Refer to the Annual Report to the Committee for Medical Science.

All applications for internship must be accompanied by the following documents:

- A written undertaking from the coordinator of the accredited training program stating that the relevant training facility is willing to supervise the intern and stating the period of internship involved;
- A written undertaking from the head of the training facility accredited for internship training that the intern will be accommodated for the full duration of the internship arranged, as well as the exact period of the internship;
- In the case of a genetics counsellor, a written undertaking from the Head of the Training program of the supervising facility, stating that the University concerned will act as collaborating University in association with the internship setting, that the facility will ensure that the training is undertaken in accordance with the approved internship program and the dates of internship. In order to act as collaborating University, the University must offer a recognised M.Sc. in Genetic Counselling degree. It is the joint responsibility of the coordinator of the training program and the Head of the Training Department of the University to ensure that progress reports in the intern are submitted at least every (six) 6 months during the internship period and are presented in the Portfolio of Evidence.
- It is recommended that a contract be drawn up between the intern and the training facility to confirm the above undertakings.
- The coordinator of the intern training program has to ensure that the training team includes supervising medical scientists or medical specialists with relevant and recognised academic qualifications in medical science in a relevant discipline and/or recognised specialist qualification in the relevant speciality and registration with the HPCSA plus at least three (3) years of experience; and appropriate training and/or experience in supervision.

#### 9.4.1 SUPERVISION

- a. Supervision of interns requires that the supervising medical scientist or medical specialist is in good standing with the HPCSA and is accessible and available for personal contact on a day-to-day basis.
- b. Supervision of training of **Intern Medical Biological Scientists** must be undertaken by either a registered Medical Specialist or Medical Biological Scientist, in the relevant professional category, who has been registered with the HPCSA for a minimum of three (3) years.
- c. Supervision of training of an **Intern Medical Physicist** must be undertaken by a registered Medical Physicist, who has been registered with the HPCSA for a minimum of three (3) years.
- d. Supervision of training of an **Intern Genetic Counsellor** must be undertaken by a registered Genetic Counsellor, whom has been registered with the HPCSA for a minimum of three (3) years and may include other supervisors including Medical Geneticists.
- e. The ratio of intern candidates to each supervising medical scientist will be determined during the accreditation visit and will depend on the size of the training facility, the staff establishment and number of appropriate supervisors. The ratio could be from 1:1 (intern to supervisor) to a maximum ratio of 4:1 (interns per supervisor).

#### 9.4.2. SUPERVISION AND RESPONSIBILITIES

Note that one person may have multiple roles in the training team.

- a. *Primary stakeholder*
    - Defined as the employer of the intern candidate.
    - Provide environment and resources for internship training.
    - Determine the conditions of employment and/or service.
  - b. *Head of Training Facility*
    - Primarily responsible to complete the Intern Duty Certificate at the end of training.
- e.g. Head the School of Pathology (NHLS) / Executive Director (NIOH and NICD) / Chief Executive Officer (Private pathology and Medical Physics) / Medical Deans (Academic Pathology Laboratories, Genetic Counselling and Reproductive Biology).

c. *Head of Training Program (Head of Department)*

- Ensure that ongoing evaluations per rotation are recorded.
- Sign off on final program-based exit examination of the intern candidate.
- Ensure evaluation as per Guideline for submission and assessment of Portfolio of Evidence is completed and signed by supervisor, intern candidate, and himself / herself.
- Complete the specified section of the Intern Duty Certificate for final approval and sign off by the Head of Training Facility
- Meet regularly with supervisors including at the end of each rotation / domain.
  
- Investigate the failure of the intern candidate to meet the requirements of a rotation / domain.
- Responsible for signing off/approval of Portfolio of Evidence and completing part of Intern Duty Certificate. (in preparation for head of training facility to provide final approval).

d. *Coordinator*

- Usually an administrative role with no authority on training outcome.
- May act as convenor during induction or accreditation assessment.
- In training departments where more than one supervisor is present the coordinator may coordinate the training and rotation of intern candidates

e. *Supervisor*

- Provide starter pack giving details of conditions of internship training.
- Organize orientation program at commencement of the internship training.
- Accessible and available for personal contact on a day-to-day basis.
- Takes medico legal responsibility of interns.
- Impart knowledge, skills and competencies in the specific domain.
- Emphasis in training should be on the core values and skills.
- Ensure training is in adherence with the prescribed guidelines.
- Ensure that the Portfolio of Evidence is updated, and assessments performed as described.
  
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- Ensure that the guideline for submission and assessment of Portfolio of Evidence is duly completed.
- Final sign off on Portfolio of Evidence before the intern candidate can take the facility-based exit assessment

f. *Trainers*

- Responsible for specific domain or area of expertise.
- Impart knowledge and skills to interns.
- Program will determine the relevant trainers
- Experts and personnel not registered with the HPCSA may assist in training

g. *Responsibilities of Intern Candidate*

- Adhere to training organisation code of conduct (professional integrity, ethical behavior)
- Keep the Portfolio of Evidence updated and perform tasks as required in the Portfolio of Evidence.
- Completion of the tasks mentioned in the Portfolio of Evidence is entirely the responsibility of the intern but must be monitored by the supervisor.

## 10. ROTATION AND TRANSFERS

Rotation and transfer of intern candidates shall be pre-approved and have to be indicated on both the respective training units and on the Annual Report.

### 10.1 ROTATION OF INTERN CANDIDATES

Rotation of intern candidates to "other units outside the training facility" is limited to a maximum period of three (3)-months out of the twenty-four (24)-month internship training. These training facilities shall have a Memorandum of Agreement approved by both the heads of the training programs as well as the heads of the training facilities. Both these rotation units shall have independent HPCSA accreditation status for internship training. The maximum number of intern candidates at any of the two training departments, may not, at any given time, exceeds the maximum number of intern candidates as allowed by the HPCSA per training program.

In the case where "satellite" units are permanently part of the training program, but separated by physical distance, rotation is limited to a maximum period of twelve (12)-months out of the 24-month internship training. The "satellite" unit is part of the main training department and has shared or umbrella HPCSA accreditation status for internship status. The number of supervisors and key training staff members per training laboratory will determine the maximum number of intern candidates. The maximum number of interns, may not, at any given time, exceed the maximum allowed number per training laboratory.

Periods longer than prescribed may be considered by the HPCSA based on a motivation. Rotation has to be indicated in the training program with delegated responsibilities, duties and rotation rosters. All rotation facilities should have HPCSA accreditation as internship training facilities.

## **10.2 PERMANENT TRANSFER OF INTERNS**

In cases where internship is completed at more than one training facility, the transfer has to be pre- approved by the HPCSA. On transfer, the following requirements should be met for applications for the transfer of Intern Medical Scientists from one training institution to another:

- a. Letter of transfer from the transferring training institution
- b. Letter of acceptance from the receiving training institution
- c. Portfolio of Evidence and Intern Duty Certificate from the transferring training institution

A schedule or planning roster (over the 24-month period) has to be included in the training program including all the various components of the program (please specify each component) with a specific period.

## **11. CONDITIONS OF EMPLOYMENT**

As prescribed by the employer and/or primary stakeholder

## 12. **UNSATISFACTORY PERFORMANCE OF THE INTERN**

In the event of unsatisfactory performance by the intern candidate the head of the training program and supervisor shall provide the Committee for Medical Science with a written report

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- a) Internship training shall be concluded within forty-eight (48) months from the date of registration as an intern. In the case where internship is extended beyond twenty-four (24) months the head of the training Program shall inform the HPCSA in writing of the extension.
- b) Such an application for an extension of internship to be submitted not later than the 21<sup>th</sup> month of the internship, preferably earlier if possible.
- c) The written report will include remedial action by identification of area(s) of concern, clearly specified objectives on how to overcome the challenges, the method of instruction or mentoring, the frequency of assessment, an appropriate timeframe of conclusion and regular consultations with the intern candidate. Open discussions with the candidate on both professional and personal level may culture a behaviour pattern of critical thinking, reflection and insight.
- d) The head of the training program and supervisor shall provide the HPCSA with quarterly progress reports containing feedback on the matter as describe.
- e) In the case of an intern become mentally or physically incompetent to perform his or her professional duties, the matter should be reported to the Health Committee of the Board.

## 13. **APPLICATION FOR INCREASE IN THE NUMBER OF INTERN MEDICAL SCIENTIST POSTS**

Complete form CMS G and submit to the HPCSA for consideration

## 14. **CONTINUOUS ASSESSMENT**

- Evidence-based continuous assessment must be performed over the 24-month period, with at least annual reports.
- All components of the training program have to be assessed.
- The method and frequency of assessment have to be clearly indicated.
- This is an evidence-based document and will not be accepted without original signatures and dates of each assessment.
- Assessments has to be discussed with and signed off by the intern. Mentoring is part of the responsibility of the training staff. Challenges have to be addressed as soon as it is identified, and possible remedial actions has to be implemented.

- Training facilities are obliged to ensure that intern medical scientists are assessed on a regular basis.
- The intern candidate must be kept informed of his/her progress and copies of the progress reports must be retained for submission in the Portfolio of Evidence.
- The intern must keep a detail Portfolio of Evidence of all aspects of the training for final assessment of competency.
- Annual reports by the training facilities must be submitted on an annual basis containing all relevant information on internship training trainers and intern candidate.
- An intern medical scientist may not perform any professional acts unless it is under appropriate supervision and form part of the formal internship period.
- The candidate has to pass a final exit assessment by the training team and approval by the head of the department must be provided with the Portfolio of Evidence (e.g. written or oral assessment, summation of continuous assessment).

#### 15. **ANNUAL REPORTS**

Annual reports to the Committee (CMS C) shall be completed on an annual base and submitted to the Committee for Medical Science. This document is required to inform the Committee for Medical Science on changes of organizational structure, staff profile and number of supervisors, intern profile and progress of the intern, possible transfer of intern candidates, rotation of intern candidates and changes in the training program and resources.

#### 16. **EXIT-ASSESSMENT BY THE TRAINING DEPARTMENT**

The purpose of this assessment is:

- To assess whether the intern candidate successfully concluded the **prescribed learning outcomes** as prescribed by HPCSA accredited facility-based training program as primary document and the National Curriculum as secondary document. The completion of the Guideline for submission and assessment of the Portfolio of Evidence and approval by the supervisor.
- Note that the exit assessment may only be scheduled after the guideline for submission and assessment of the Portfolio of Evidence has been duly completed, the Portfolio of Evidence is structured based on this document, including the required tables and all original evidence is properly signed and dated by both the candidate, trainers and supervisor.

- c. Form of exit assessment - This is the prerogative of the training team and head of the training Department (HOD).
- d. Number of attempts - *This is to the discretion of the head of the training program. Refer to unsatisfactory performance by the intern.*
- e. Duties and responsibilities of the head of the training department - The successful exit assessment is formally concluded by the HOD completing the Intern Duty Certificate and requesting the head of this training facility to approve the completed Intern Duty Certificate.
- f. Duty and responsibility of the head of the training Facility - final approval of the completed Intern Duty Certificate by signature and official stamp of the head of the training facility.

#### 17. **COMPLETION OF INTERNSHIP**

Upon completion of internship training, an intern must submit an official duly completed Intern Duty Certificate issued by an authorized official of an accredited training facility, certifying to the satisfaction of the board that the intern candidate has satisfactory completed internship training as required by the training department as prescribed by the Board.

The **Intern Duty Certificate** is included in the Guideline for submission and assessment of Portfolio of Evidence (CMS 02).

#### 18. **FINAL ASSESSMENT BY A COMPETENCY-BASED BOARD EXAMINATION**

- a. Section 61(1)(b)(vii) of the Health Professions Act, 1974 (Act No. 56 of 1974) empowers the Medical and Dental Professions Board to exercise control over the appointment and remuneration of moderators and examiners, as well as any other person required to assist in such examinations.
- b. The Portfolio of Evidence is assessed by two independent external assessors and an independent moderator – Refer to the Guideline for the assessment and moderation of the Portfolio of Evidence (CMS H).
- c. The assessment period will be performed in three cycles per annum – February/March, June/July, October/November.

- d. The submission deadlines are 31 January, 31 May or 30 September. Portfolios may be submitted for examination three months prior to the full completion of the prescribed period.
- e. The process takes approximately four (4) weeks following which the HPCSA will inform the supervisor and intern of the outcome.
- f. Where portfolios are not approved i.e. inadequate/insufficient training, absence of evidence, incompleteness of prescribed documents, the supervisor and intern will be notified in writing. Interns will be required to submit the requested documentation or complete the missing elements of their training before registration can be approved.
- g. In the case where minor amendment(s) is required the intern candidate will provide the revised or missing document and reassessment will be performed by the previous moderator.
- h. In the case where major amendments or revised changes are required, the intern candidate will provide the requirements in a form of a revised Portfolio of Evidence and a second independent moderator will be appointed. The report of the previous moderator, containing a list of all the absent or revised requirements, will be provided to the second independent moderator with the revised Portfolio of Evidence. In the case where a revised Portfolio of Evidence is required to be assessed by a second moderator, it will be required from the candidate to pay an additional assessment fee equivalent to the normal prescribed fee.
- i. The second moderator may require further training or an extended training period.
- j. The maximum number of attempts at the Board-approved competency-based examination (Portfolio of Evidence) is three (3) times. If an extended number of attempts is required, it should be motivated by the head of the training program and head of the training facility after consultation with the employer. A written request shall be submitted to the Committee for Medical Science.
- k. The intern candidate or head of the training program may appeal the decision of the Committee for Medical Science and the grievance or appeal, with valid and appropriate reasons, shall be provided to the Committee for Medical Science within a period of no more than three (3) months after the final report.

## **19. THE STRUCTURE OF THE PORTFOLIO OF EVIDENCE**

The Portfolio of Evidence is the product, which will demonstrate the evidence-based outcomes of the course and learning outcomes of the training program.

The guidelines for submission and assessment of the Portfolio of Evidence prescribe the stricter of the Portfolio of Evidence. Please ensure complete adherence.

### **19.1 FORMAT IN WHICH DOCUMENTS HAVE TO BE PRESENTED TO THE HPCSA**

The submission for the Portfolio of Evidence should be compiled on a USB.

Please take note that the documents/evidence provided on the Portfolio of Evidence should not be saved inside folders/files. The table of content for the submission and documents names should be aligned to the headings as contained in the Guidelines for the submission and assessment of portfolio of evidence

The document shall be provided as ONE structured document as prescribed above. The submission of various document will not be accepted.

## **20. REGISTRATION AS A PROFESSIONAL MEDICAL SCIENTIST WITH THE HPCSA**

Registration as a professional medical scientist is possible only after –

- a. The intern demonstrates successful completion of a competency-based examination in the form of a Portfolio of Evidence as determined by the Board.
- b. Registration as Medical Scientist will only be possible if a person holds a valid registration as an intern medical scientist.
- c. The registration number of the intern medical scientist must be reflected in all correspondence.
- d. Foreign qualified applicants applying for registration must official documentary evidence as prescribed. Internship may be required, in its entirety or part thereof in order to familiarise professionals with local environment and circumstances.

## 20.1 REQUIRED FORMS

- 20.1.1 When registering as a MEDICAL BIOLOGICAL SCIENTIST INTERN please complete and submit **FORM 26 MSIN**. Interns MUST submit within 2 months of commencing intern training.

If the academic degree certificate is not available at the time of registration, please complete and submit **Form 23 MSIN**. Interns MUST submit within 2 months of commencing intern training.

**FORM 36 MS (Certificate of intern training)** to be submitted together with portfolio submission.

Following completion of training, please complete and submit **FORM 24 MS** to register as a MEDICAL BIOLOGICAL SCIENTIST. This may be submitted at the same time as portfolio submission in order to speed up the process (provided portfolio assessment is successful).

- 20.1.2 When registering as a MEDICAL PHYSICIST INTERN please complete and submit **FORM 26 PHIN**. Interns MUST submit within 2 months of commencing intern training.

If the academic degree certificate is not available at the time of registration, please complete and submit **Form 23 PHIN**. Interns MUST submit within 2 months of commencing intern training

**FORM 36 PH (Certificate of intern training)** to be submitted together with portfolio submission

Following completion of training, please complete and submit **FORM 24 PH** to register as a MEDICAL PHYSICIST. This may be submitted at the same time as portfolio submission in order to speed up the process (provided portfolio assessment is successful).

- 20.1.3 When registering as a GENETIC COUNSELLING STUDENT please complete and submit FORM 53. Students MUST submit within 2 months of commencing their MSc (Med) degree in Genetic Counselling

When registering as a GENETIC COUNSELLING INTERN please complete and submit

**FORM 26 GCIN.** Interns **MUST** submit within two months of commencing intern training.

If the academic degree certificate is not available at the time of registration, please complete and submit **Form 23 GCIN.** Interns **MUST** submit within 2 months of commencing intern training

**FORM 36 GC (Certificate of intern training)** is to be submitted together with portfolio submission (Intern training certificate).

Following completion of training, please complete and submit **FORM 24 GC** to register as a GENETIC COUNSELLOR. This may be submitted at the same time as portfolio submission in order to speed up the process (provided portfolio assessment is successful)

Evaluation of the intern experience should be completed on FORM CMS F, which is to be submitted with the portfolio.

#### 21. [HPCSA Website](#)

Relevant documentation is available on the HPCSA website (<https://www.hpcsa.co.za>). Go to Professions Boards, Medical and Dental (and Medical Science) and documents.