

This document describes the core national curriculum for Genetics Counselling. It is important to note the following:

- a) *Core curriculum: The minimum prescribed requirements to be successfully completed to pass the Board examination (Portfolio of Evidence).*
- b) *Evidence-based: Evidence of ALL components or elements has to be provided.*
- c) *Facility-based training program: Every training facility should develop a facility-based training program based on the minimum requirements prescribed in this National Curriculum.*
- d) *Assessment of components: All elements or components of the training program MUST be assessed, and documentation of mode and frequency of assessment must be prescribed.*

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NATIONAL CURRICULUM AND ASSESSMENT GUIDELINES IN PREPARATION FOR REGISTRATION AS A GENETIC COUNSELLOR WITH THE HEALTH PROFESSIONS COUNCIL OF SOUTH AFRICA (HPCSA)

The overall outcome of internship is knowledge, expertise, skills and experience in the integration of academic knowledge, scientific principles and practical laboratory methods into the clinical diagnostic platform. A medical scientist is part of a healthcare team which will impact the diagnosis, treatment and counselling of patients. The overall outcomes of internship are defined as:

1. OVERALL COMPETENCIES

At the end of internship training, a genetic counsellor should have gained knowledge, understanding, expertise, skill and experience in the following competency areas:

1.1 Discipline Specific Knowledge (Genetic, Scientific, Medical and Counselling knowledge)

- Can describe and apply theoretical knowledge regarding principles of medical genetics, scientific concepts, genetic counselling theory, epidemiology, aetiology, medical management, risks, and special investigations.
- Can interpret genetic data and test information.
- Can discuss current and developing technologies in all areas of medical genetics.

1.2 Communication Skills

- Can communicate effectively during genetic counselling sessions with patients and families from a variety of educational, socio-economic, ethno-cultural, religious and historical backgrounds, taking into account traditions, health beliefs, lifestyles and values by:
 - o Setting an agenda
 - o Obtaining an appropriate and inclusive family history
 - o Eliciting a social and psychosocial history
 - o Conveying genetic, medical, and technical information
 - o Facilitating the informed-consent and genetic testing process
- Can document and present case information clearly and concisely.
- Can communicate clearly in oral and written format with fellow professionals.

- Can plan, organize, and conduct public and professional awareness and education programmes.
- Can present research findings/academic case reports through written and oral reports, publications, presentations and formal peer-assessments at research meetings / academic days / conferences / departmental seminars

1.3 Critical-Thinking Skills

- Can apply critical thinking during case preparation by:
 - o Identifying relevant resources and applying them appropriately
 - o Conducting a critical and meaningful review of the literature
- In Genetic Counselling sessions, can:
 - o Assess and calculate genetic and teratogenic risks
 - o Evaluate a social and psychosocial history
 - o Analyse and interpret medical, genetic, and family data
 - o Assess patient understanding and response to information and its implications to modify a counselling session as needed
 - o Recognise basic emergency situations and refer appropriately
- In case documentation and follow-up, can:
 - o Identify, synthesize, organize and summarize pertinent medical and genetic information in clinical reports/referrals and manage cases appropriately
 - o Assess patient's understanding and needs for resources/services
- Can demonstrate critical thinking and demonstrate research skills and application of scientific literature applicable to case reports and scientific proceedings

1.4 Interpersonal, Counselling and Psychosocial Assessment Skills

- In Genetic Counselling sessions, can:
 - o Establish rapport and interact with patients and families
 - o Assess patients' and families' emotional needs, identify major concerns and respond to emerging issues
 - o Provide short-term, patient-centered counselling and psychosocial support
 - o Manage patients and their families with empathy and cultural sensitivity/competency
 - o Reflect on how cases are handled and practice self-awareness

- In interpersonal relationships, can:
 - Establish and maintain inter-and intra-disciplinary professional relationships
 - Behave professionally and understand the roles of other professionals

1.5 Professional Ethics and Values

- Practice in accordance with:
 - HPCSA guidelines, ethical rules and practices which cover concepts such as responsibility, accountability, consent, confidentiality and disclosure in terms of professional conduct and patient care including reasonable practice and practicing in good faith
 - The relevant Acts including (but not exclusively) the Occupational Health and Safety Act, Compensation for Occupational Injuries and Diseases Act, National Health Act including the regulations of the HPCSA, Labour Relations Act especially the aspects regarding HIV/AIDS, Human Tissue Act and the Protection of Personal Information Act.
 - Ethics of dealing with patients and patient samples (HPCSA ethical rules and facility) as well as research principles
- Can act in accordance with these and other ethical, legal, and philosophical principles and values of the profession; can recognize and respond to ethical and moral dilemmas arising in practice.
- Can advocate for patients, recognize own limitations in knowledge and capabilities and seek consultation or refer.
- Can demonstrate initiative for continued professional growth.

1.6 Computer Literacy

- Can demonstrate competency in computer literacy and make use of word processing, spreadsheet and database software to retrieve patient, test and procedure data, produce reports and maintain records.
- Can search, collect, organize and interpret information from different databases and sources including genetic databases.
- Can recognize and implement the need for data protection and management

2. DISCIPLINE SPECIFIC KNOWLEDGE

Evidence should be provided regarding specific genetic, scientific, medical and counselling knowledge. This could include a summary of lectures, seminars, courses, conferences, workshops, guest lectures, journal club and patient case discussions attended. Where possible this should include a list of academic topics covered in journal clubs and/or tutorials indicating the date and who presented these including where the candidate was the presenter. Where the candidate was the presenter, more detail could be provided. Involvement with lay patient support groups and public awareness presentations should also be included.

3. RESEARCH EXPERIENCE

Evidence of research experience and/or application of scientific literature and critical thinking in the field of Genetic Counselling should be demonstrated. Should the intern have completed a research report or dissertation in their MSc (Med) Genetic Counselling training, an abstract of the research report and examiners' reports should be included if available. 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 abstract provided.

4. MEASURES TO ACHIEVE COMPETENCIES

The competencies will be achieved through:

- Genetic counselling of patients under supervision and independently (indirect supervision) by accredited supervisors.
- Clinical and counselling supervision by genetic counsellors, medical geneticists (and psychologists if available)
- Debriefing by genetic counsellors (and psychologists if available) to practice reflexivity.
- Attendance and participation in seminars, conferences, workshops, journal club and academic meetings
- Participation in patient case discussions
- Clinical assessments, if appropriate
- Case reports

- Self-study
- Practice using resources for medical genetics and genetic counselling (genetic databases, books, internet, advanced risk calculations)
- Presentations (departmental and national/international conferences if possible)
- Observations in various clinics dealing with genetic conditions and predispositions
- Interaction with patients, health professionals and support/advocacy groups

5. ROTATION ROSTER/EVIDENCE OF CLINICAL EXPOSURE

5.1 A summary of clinics attended/rotations should be provided (including period of exposure)

5.2 A de-identified logbook of cases/conditions seen.

A summary of the candidate's patient logbook, which should include;

- the number of patients seen,
- the reason for referral (diagnosis), and
- the type of counselling session (first time, follow-up session, under supervision, independent, observation, history taking etc.).

The summary should include all cases seen during the internship period, and those seen as a HPCSA registered student, as appropriate.

A minimum of 200 cases over the two-year period in a variety of settings should be seen. Every effort should be made to ensure a reasonable distribution of medical conditions in prenatal, pediatric, and adult genetics. In each of these categories, a minimum of 20 cases should be seen with an effort to have both directly and indirectly supervised cases in addition to observation of cases. A minimum of 24 cases are required to be counselled (in a variety of clinical indications) under direct supervision over the two-year period.

6. CONTINUOUS ASSESSMENT OF TRAINING

- 6.1 Formal evidence-based continuous assessment must be performed over the 24-month period, with at least annual reports.
- 6.2 All components of the training program have to be assessed.
- 6.3 The format of assessment and frequency of assessment have to be clearly indicated.
- 6.4 This is an evidence-based document and will not be accepted without original signatures and dates of each assessment.
- 6.5 Assessments and assignments must include:
- Self-assessments, together with the trainers' and supervisor's appraisals, should be performed at specific intervals and these reports should be included.
 - Remarks regarding observations, suggestions, amendments, progress according to the time-schedule should form part of the performance report.
 - Evidence of involvement by way of practical assessment by an external examiner (a registered genetic counselor external to the training unit) should be included. This may be done via electronic/distance methods
 - Three written case reports (2000-3000 words) highlighting an ethical, medical and psychosocial issue respectively.
 - A reflective piece (2000-3000 words) based on a recording (voice or video) of a genetic counselling session. This should include a reflection written by the counselling supervisor on the submitted written piece and recording and should not be a directly supervised case. It is not necessary for the recording to be submitted with the portfolio, but it should be available on request from the examiners.
 - Summary of additional assignments as part of the intern-training programme should also be included (e.g. problem-based learning, presentations, tests etc.)

6.6 Final exit assessment by training facility

A final exit assessment by the training facility in the form of a signed letter by the head of the training program has to be included. This should include the list of competencies achieved as detailed above. All competencies should be achieved before the intern is able to be signed off by the training facility.

7. OUTCOME ASSESSMENT BY PRESCRIBED HPCSA BOARD EXAMINATION (COMPETENCY ASSESSMENT)

7.1 A formal assessment process will be conducted to ensure the candidate has acquired the necessary skill / knowledge outlined in the syllabus.

7.2 The assessment is in the form of a Portfolio of Evidence – Refer to MSC A.