

## Qualification Pack



# Genetic Counselor

QP Code: HSS/Q8705

Version: 2.0

NSQF Level: 6

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## Qualification Pack

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## Qualification Pack

### HSS/Q8705: Genetic Counselor

#### Brief Job Description

A genetic counselor is an allied healthcare professional who is responsible for obtaining clinical, family and health information, advising individuals/families about their risk of inheriting genetic diseases, informing testing options for diagnosis and providing available options to prevent/ treat genetic conditions. They also focus on empowering their patients by helping them understand and adjust to the genetic conditions.

#### Personal Attributes

The job requires individuals to be proficient in communication skills. They must possess sensitivity towards the emotional wellbeing of patients.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [HSS/N8713: Collect detailed patient and family history to draw a pedigree](#)
2. [HSS/N8714: Assess risk for genetic disorders or syndromes](#)
3. [HSS/N8715: Provide counselling on various genetic tests and coordinate for their execution](#)
4. [HSS/N8716: Interpret the inferences of the genetic tests and carry out post- test counselling](#)
5. [HSS/N8717: Provide need- based genetic counselling to the patient and their family members](#)
6. [HSS/N8718: Promote genetics related awareness](#)
7. [HSS/N9615: Maintain interpersonal relationship with client, colleagues, and others](#)
8. [HSS/N9616: Maintain professional & medico-legal conduct](#)
9. [HSS/N9618: Follow infection control policies & procedures including biomedical waste disposal protocols](#)
10. [DGT/VSQ/N0103: Employability Skills \(90 Hours\)](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health

### Qualification Pack

<b>Occupation</b>	Counselling
<b>Country</b>	India
<b>NSQF Level</b>	6
<b>Credits</b>	50
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO/2015/2635
<b>Minimum Educational Qualification &amp; Experience</b>	<p>Pursuing first year of 2-year PG program after completing 3 year UG degree (Human genetics/ Genetics/ Bio technology) after completing 3 year UG degree in the relevant field) with NA of experience</p> <p>OR</p> <p>Pursuing 4th year UG (in case of 4-year UG with honours/ honours with research) (Pursuing 4th year UG (in case of 4-year UG with honours/ honours with research) in the relevant field (Medical Graduate (MBBS/ BHMS/ BAMS/ BUMS)/Graduate (Nursing/ Allied Health Professionals)/BDS/life sciences/clinical psychology/ biotechnology/ pharmacy/ B. Tech Biotechnology or genetics) with continuing education) with NA of experience</p> <p>OR</p> <p>Graduate (life sciences/ MBBS/ B.Sc. nursing/clinical psychology/ biotechnology/ pharmacy/ BDS/ B. Tech Biotechnology or genetics)) with NA of experience</p> <p>OR</p> <p>Post Graduate (Masters in Public Health) with NA of experience</p> <p>OR</p> <p>Previous relevant Qualification of NSQF Level (5.5) with 1-2 Years of experience 1.5 years of relevant experience</p> <p>OR</p> <p>Previous relevant Qualification of NSQF Level (5) with 3 Years of experience relevant experience</p>
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	21 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	28/07/2028
<b>NSQC Approval Date</b>	28/07/2023

## Qualification Pack

<b>Version</b>	2.0
<b>Reference code on NQR</b>	QG-05-HE-00667-2023-V1.1-HSSC
<b>NQR Version</b>	2.0

## Qualification Pack

### HSS/N8713: Collect detailed patient and family history to draw a pedigree

#### Description

This unit covers the knowledge and skills required to obtain a family history and draw pedigree charts

#### Scope

The scope covers the following :

- Obtain and record a comprehensive clinical and family history of the patient
- Prepare a pedigree chart to assess inheritance patterns

#### Elements and Performance Criteria

##### *Obtain and record a comprehensive clinical and family history of the patient*

To be competent, the user/individual on the job must be able to:

- PC1.** obtain written consent from the patient
- PC2.** extract the detailed history of a patient, including family history or any other genetic disorders in the family to assess the chance of disease occurrence or recurrence
- PC3.** communicate in a culture, religious and gender sensitive manner while obtaining a family history
- PC4.** record the clinical findings using appropriate terminology
- PC5.** record the relevant details from medical documents of the patient
- PC6.** document the physical examination findings of the patients/relatives including detailed anthropometry
- PC7.** elicit developmental history in detail
- PC8.** elicit and document the reproductive and perinatal history
- PC9.** maintain the confidentiality of medical information of the patients and families

##### *Prepare a pedigree chart to assess inheritance patterns*

To be competent, the user/individual on the job must be able to:

- PC10.** ask questions about the medical and clinical history of the patient and family members such as siblings, parents, aunts, uncles, cousins, nieces, nephews and grandparents, etc.
- PC11.** draw a basic outline of the family tree using pedigree symbols, standard notation, and nomenclature with proficiency and accuracy
- PC12.** record the gathered information on the pedigree chart drawn to complete the pedigree analysis
- PC13.** assess the probability of conditions with a genetic component or carrier status using relevant knowledge and data based on pedigree analysis
- PC14.** apprise the patient/ family members sensitively of the cause, inheritance, risk of a genetic anomaly and its likelihood of affecting other family members.

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1.** relevant legislation, standards, policies, and procedures in the field of genetics followed in the healthcare organization/country.
- KU2.** SOPs of maintaining patient's genetics file
- KU3.** current professional hierarchy of genetic counselors, at the institutional, state, regional and national levels.
- KU4.** service request procedures, tools, and techniques
- KU5.** role and responsibilities of a genetic counselor and other members of the multi-disciplinary team
- KU6.** importance of attributes such as empathy, patience, tolerance, integrity, ethics etc
- KU7.** importance of respecting religious and cultural diversity
- KU8.** foundations of genetics, embryology, dysmorphology, principles of genetics, medical genetics
- KU9.** foundations of pedigree chart/tree symbols
- KU10.** family history and pedigree analysis
- KU11.** anatomy and physiology of human beings
- KU12.** basic Mendelian genetics and deviations
- KU13.** fundamentals of cell biology, molecules, embryology, cells, genomics and chromosome studies
- KU14.** basics and the importance of inheritance patterns of genetic disorders and penetrance estimates
- KU15.** basics of taking patient history, making observations and the process of their interpretation to arrive at differential diagnosis and further testing to confirm a diagnosis
- KU16.** the nature of the diagnosis, common clinical presentation, information about the previous investigation, anticipated course of the disease, complications, risk estimation and management of common genetic diseases
- KU17.** standard questions to obtain family and clinical history
- KU18.** importance of displaying empathy towards PwD.
- KU19.** different type of disabilities, genetic syndromes and disorders such as congenital anomalies, anatomic deformities etc
- KU20.** principles of medical and public health genetics and genomics
- KU21.** genetic principles and how they contribute to etiology, clinical features, and disease expression, natural history, differential diagnosis, genetic testing and test report interpretation, pathophysiology, recurrence risk, management and prevention, and population screening
- KU22.** difference between patterns of inheritance
- KU23.** importance of maintaining privacy
- KU24.** the verbal and non-verbal cues of the patient and relatives

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** document call logs, reports, task lists, and schedules
- GS2.** write history, clinical findings, status and progress reports without making language errors

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- GS3.** plan for secure record keeping
- GS4.** write memos and e-mail to patient and the family, co-workers, and vendors
- GS5.** record the proceedings of counselling session to share with patients, family members, and other healthcare professionals
- GS6.** be updated on the recent advances in the field of genetics in India and other countries by reading relevant published literature, brochures, pamphlets, product information sheets and through participation in professional conferences and seminars
- GS7.** network with clinical, diagnostic and research specialists
- GS8.** communicate relevant and latest genetic and genomic information to help patients and families understand and adapt to conditions or the risk of conditions
- GS9.** communicate in a way that reflects cultural, religious, gender and PwD sensitivity
- GS10.** use a range of tools to enhance the learning encounter such as handouts, visual aids, and other educational technologies
- GS11.** give clear instructions to the patients/relatives and keep them informed about progress
- GS12.** speak and write in a clear manner and avoid using jargon, slang or acronyms when communicating with a patient, unless it is required
- GS13.** build a therapeutic rapport and manage relationships with patient and the family who may be stressed, frustrated, confused, grieving in denial or angry
- GS14.** build interpersonal relationships that foster inter- and intra-departmental unity and coordination
- GS15.** apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action



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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Obtain and record a comprehensive clinical and family history of the patient</i>	<b>18</b>	<b>10</b>	<b>10</b>	<b>20</b>
<b>PC1.</b> obtain written consent from the patient	-	-	-	-
<b>PC2.</b> extract the detailed history of a patient, including family history or any other genetic disorders in the family to assess the chance of disease occurrence or recurrence	-	-	-	-
<b>PC3.</b> communicate in a culture, religious and gender sensitive manner while obtaining a family history	-	-	-	-
<b>PC4.</b> record the clinical findings using appropriate terminology	-	-	-	-
<b>PC5.</b> record the relevant details from medical documents of the patient	-	-	-	-
<b>PC6.</b> document the physical examination findings of the patients/relatives including detailed anthropometry	-	-	-	-
<b>PC7.</b> elicit developmental history in detail	-	-	-	-
<b>PC8.</b> elicit and document the reproductive and perinatal history	-	-	-	-
<b>PC9.</b> maintain the confidentiality of medical information of the patients and families	-	-	-	-
<i>Prepare a pedigree chart to assess inheritance patterns</i>	<b>18</b>	<b>10</b>	<b>10</b>	<b>20</b>
<b>PC10.</b> ask questions about the medical and clinical history of the patient and family members such as siblings, parents, aunts, uncles, cousins, nieces, nephews and grandparents, etc.	-	-	-	-
<b>PC11.</b> draw a basic outline of the family tree using pedigree symbols, standard notation, and nomenclature with proficiency and accuracy	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> record the gathered information on the pedigree chart drawn to complete the pedigree analysis	-	-	-	-
<b>PC13.</b> assess the probability of conditions with a genetic component or carrier status using relevant knowledge and data based on pedigree analysis	-	-	-	-
<b>PC14.</b> apprise the patient/ family members sensitively of the cause, inheritance, risk of a genetic anomaly and its likelihood of affecting other family members.	-	-	-	-
<b>NOS Total</b>	<b>36</b>	<b>20</b>	<b>20</b>	<b>40</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N8713
<b>NOS Name</b>	Collect detailed patient and family history to draw a pedigree
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health
<b>Occupation</b>	Counselling
<b>NSQF Level</b>	6
<b>Credits</b>	7
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2023
<b>Next Review Date</b>	28/07/2028
<b>NSQC Clearance Date</b>	28/07/2023

## Qualification Pack

### HSS/N8714: Assess risk for genetic disorders or syndromes

#### Description

This unit covers how to assess probability/ risks for specific genetic disorders or syndromes based on initial findings and counsel the patient/ family members on related parameters such as nature, type and prognosis of the genetic disease.

#### Scope

The scope covers the following :

- Assess the probability/ risk of a genetic condition or carrier status
- Identify suitable genetic/predictive tests
- Carry out pre-test counselling by interpreting preliminary test results

#### Elements and Performance Criteria

##### *Assess the probability/ risk of a genetic condition or carrier status*

To be competent, the user/individual on the job must be able to:

- PC1.** carry out a risk assessment using previously captured information, data based on pedigree analysis, inheritance patterns, genetic epidemiology, genetics principles, quantitative/ mathematical calculations
- PC2.** educate the patient and family members on etiopathogenesis, common clinical presentations, anticipated course of disease, complications, and management of genetic disorders
- PC3.** identify broad disease groups where the diagnosis is not apparent
- PC4.** assess psychological problems or needs of the patients of families like fear, stress, stigma, marital conflicts, etc.
- PC5.** provide information about the prognosis based on preliminary findings

##### *Identify suitable genetic/genomic tests*

To be competent, the user/individual on the job must be able to:

- PC6.** identify various genetic testing options such as screening, diagnostic and genomic genetic tests
- PC7.** prepare a list of screening, diagnostic and predictive genetic tests required to be performed for a patient/family based on history, clinical findings and course of the disease
- PC8.** evaluate various genetic testing options such as screening, diagnostic and genomic genetic tests as per patient's feasibility

##### *Carry out pre-test counselling while interpreting preliminary test results*

To be competent, the user/individual on the job must be able to:

- PC9.** maintain the confidentiality of medical information regarding patients and families
- PC10.** prepare a plan of action based on preliminary findings
- PC11.** educate the patient about various genetic testing options such as screening, diagnostic and genomic genetic tests

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- PC12.** apprise the patients and their family members of important aspects of all types of screening and diagnostic genetic testing options such as the availability, analytic and clinical validity etc.
- PC13.** interpret the clinical implications of preliminary genetic test reports
- PC14.** conduct an empirical risk assessment by applying the results of the preliminary tests
- PC15.** apprise the patient of the importance and procedure to carry out predictive genetic testing
- PC16.** interpret the results of pre-symptomatic genetic testing/ carrier testing
- PC17.** guide the patient/ family about various aspects of the test results such as the nature, type, and prognosis of genetic diseases
- PC18.** advise the patient about the differential diagnosis of common presentations in genetic disorders
- PC19.** convey to patient and family, the possibility of likely genetic disorder and plan of required investigations for reaching a diagnosis
- PC20.** address the concerns of the family/patient, allay the doubts based on the available factual information
- PC21.** inform about various procedures performed for prenatal sample collection e.g. amniocentesis, chorionic villus biopsy, umbilical cord blood sampling
- PC22.** inform the patient and the family members about the success rates and failure of each procedure
- PC23.** advise the patient/ family members to share the results of genetic tests with at- risk family members

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant legislation, standards, policies, and procedures in the field of genetics followed in the healthcare organization/ country.
- KU2.** read relevant information about the genetic disease or the mutations
- KU3.** internal and external specialists to be contacted for support to resolve incidents and service requests
- KU4.** service request procedures, tools, and techniques
- KU5.** foundations of genetic counseling and medical genetics
- KU6.** significance of empathy and compassion
- KU7.** difference between chromosomal versus genetic (Mendelian) disorders and relevant diagnostic tests
- KU8.** concept and prevalence of consanguinity, endogamy, founder mutations
- KU9.** uncertainties in the tests due to various causes like undetected/unidentified causative mutation
- KU10.** the availability, analytic validity, clinical validity, and clinical utility of all types of genetic testing
- KU11.** the verbal and non-verbal cues of the patient and relatives

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- KU12.** the difference between the screening and diagnostic procedures such as ultrasound, NIPT maternal blood sampling, biochemical test vs Chorionic Villus Sampling (CVS) and amniocentesis.
- KU13.** basics of making observations and the process of their interpretation to arrive at differential diagnosis and further testing to confirm a diagnosis
- KU14.** specific considerations relevant to genetic versus genomic and clinical versus research testing
- KU15.** differential diagnosis of common presentations in genetic disorders
- KU16.** aspects of screening and diagnostic genetic testing options such as the availability, analytic and clinical validity, clinical utility, potential benefits, risks, limitations, and costs etc
- KU17.** the importance of carrying out pre- symptomatic genetic testing
- KU18.** process and importance of conveying important information to other team members involved in the care of patients
- KU19.** the SOPs of carrying out pre- implantation studies
- KU20.** the SOPs of carrying out newborn screening
- KU21.** accuracy and reliability of various diagnostic tests
- KU22.** the importance of non-directive, non-paternalistic and non-judgmental approach when counseling the patients and relatives
- KU23.** the concept of non-maleficence
- KU24.** types of genetic disorders Chromosomal disorders, Monogenic (Mendelian ) inheritance, Polygenic or multifactorial, and Mitochondrial disorders
- KU25.** principles of prenatal diagnosis, different modalities available for prenatal diagnosis
- KU26.** basic principles and methodologies of common genetic test procedures
- KU27.** available diagnostic tests for prenatal and postnatal diagnosis
- KU28.** demarcation of teratogenic versus genetic causes of disease conditions

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** document call logs, reports, task lists, and schedules
- GS2.** write history, clinical findings, status and progress reports
- GS3.** plan for secure record keeping
- GS4.** be updated on the recent advances in the field of genetics in India and other countries by reading relevant published literature, brochures, pamphlets, product information sheets and through participation in professional conferences and seminars
- GS5.** read comments, suggestions, and responses to Frequently Asked Questions (FAQs) posted on the helpdesk portal
- GS6.** deliberate task lists, schedules, and work-loads with co-workers
- GS7.** communicate in a way that reflects cultural, religious and gender sensitivity
- GS8.** give clear instructions to the patients/relatives and keep them informed about progress
- GS9.** speak and write in a clear manner and avoid using jargon, slang or acronyms when communicating with a patient, unless it is required

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- GS10.** make decisions about the concerned area of work
- GS11.** interact adequately with personnel in other departments to coordinate for the investigations and care plan
- GS12.** plan and organize sessions of counseling
- GS13.** maintain ethical behaviour while dealing with the patients and families
- GS14.** network between advocacy groups/support groups and clinicians, researchers
- GS15.** build a therapeutic rapport and manage relationships with patient and the family who may be stressed, frustrated, confused, grieving in denial or angry
- GS16.** maintain cordial relationships with all other team members
- GS17.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
- GS18.** apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assess the probability/ risk of a genetic condition or carrier status</i>	<b>32</b>	<b>30</b>	<b>10</b>	<b>15</b>
<b>PC1.</b> carry out a risk assessment using previously captured information, data based on pedigree analysis, inheritance patterns, genetic epidemiology, genetics principles, quantitative/ mathematical calculations	-	-	-	-
<b>PC2.</b> educate the patient and family members on etiopathogenesis, common clinical presentations, anticipated course of disease, complications, and management of genetic disorders	-	-	-	-
<b>PC3.</b> identify broad disease groups where the diagnosis is not apparent	-	-	-	-
<b>PC4.</b> assess psychological problems or needs of the patients of families like fear, stress, stigma, marital conflicts, etc.	-	-	-	-
<b>PC5.</b> provide information about the prognosis based on preliminary findings	-	-	-	-
<i>Identify suitable genetic/genomic tests</i>	<b>30</b>	<b>30</b>	<b>10</b>	<b>15</b>
<b>PC6.</b> identify various genetic testing options such as screening, diagnostic and genomic genetic tests	-	-	-	-
<b>PC7.</b> prepare a list of screening, diagnostic and predictive genetic tests required to be performed for a patient/family based on history, clinical findings and course of the disease	-	-	-	-
<b>PC8.</b> evaluate various genetic testing options such as screening, diagnostic and genomic genetic tests as per patient's feasibility	-	-	-	-
<i>Carry out pre-test counselling while interpreting preliminary test results</i>	<b>20</b>	<b>30</b>	<b>10</b>	<b>15</b>
<b>PC9.</b> maintain the confidentiality of medical information regarding patients and families	-	-	-	-
<b>PC10.</b> prepare a plan of action based on preliminary findings	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> educate the patient about various genetic testing options such as screening, diagnostic and genomic genetic tests	-	-	-	-
<b>PC12.</b> apprise the patients and their family members of important aspects of all types of screening and diagnostic genetic testing options such as the availability, analytic and clinical validity etc.	-	-	-	-
<b>PC13.</b> interpret the clinical implications of preliminary genetic test reports	-	-	-	-
<b>PC14.</b> conduct an empirical risk assessment by applying the results of the preliminary tests	-	-	-	-
<b>PC15.</b> apprise the patient of the importance and procedure to carry out predictive genetic testing	-	-	-	-
<b>PC16.</b> interpret the results of pre-symptomatic genetic testing/ carrier testing	-	-	-	-
<b>PC17.</b> guide the patient/ family about various aspects of the test results such as the nature, type, and prognosis of genetic diseases	-	-	-	-
<b>PC18.</b> advise the patient about the differential diagnosis of common presentations in genetic disorders	-	-	-	-
<b>PC19.</b> convey to patient and family, the possibility of likely genetic disorder and plan of required investigations for reaching a diagnosis	-	-	-	-
<b>PC20.</b> address the concerns of the family/patient, allay the doubts based on the available factual information	-	-	-	-
<b>PC21.</b> inform about various procedures performed for prenatal sample collection e.g. amniocentesis, chorionic villus biopsy, umbilical cord blood sampling	-	-	-	-
<b>PC22.</b> inform the patient and the family members about the success rates and failure of each procedure	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. advise the patient/ family members to share the results of genetic tests with at- risk family members	-	-	-	-
<b>NOS Total</b>	<b>82</b>	<b>90</b>	<b>30</b>	<b>45</b>

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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N8714
<b>NOS Name</b>	Assess risk for genetic disorders or syndromes
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health
<b>Occupation</b>	Counselling
<b>NSQF Level</b>	6
<b>Credits</b>	4
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2023
<b>Next Review Date</b>	28/07/2028
<b>NSQF Clearance Date</b>	28/07/2023

## Qualification Pack

# HSS/N8715: Provide counselling on various genetic tests and coordinate for their execution

## Description

This unit covers in detail about counseling patients and their family on various diagnostic/ screening test, the facility to conduct them, methods and Turn Around Time (TAT), etc. and coordinating with the physician/ medical geneticist to perform the diagnostic test

## Scope

The scope covers the following :

- Provide detailed information on various aspects of pre-natal and post-natal screening/diagnostic genetic diseases
- Coordinate with the appropriate specialist/ medical geneticist to carry out identified confirmatory diagnostic genetic test

## Elements and Performance Criteria

*Provide detailed information on various aspects of pre-natal and post-natal screening/diagnostic genetic diseases*

To be competent, the user/individual on the job must be able to:

- PC1.** prepare contract of agreement to give the results
- PC2.** provide information about all available options of screening/ diagnostic genetic diseases without bias
- PC3.** counsel on the advantages and disadvantages of each option within the context of individual values and beliefs
- PC4.** ensure that patients and family members are given sufficient time and freedom to deliberate and seek further relevant input as necessary
- PC5.** guide the patient about the actionability of the genetic/ genomic test such as likelihood of all possible results such as positive, negative as well as uncertain or unexpected result
- PC6.** notify about the associated financial cost to the patient or family members in an appropriate manner
- PC7.** guide the patient/ family about the screening tests for prenatal screening, newborn screening or any other kind of population screening in detail and comprehensible manner
- PC8.** inform regarding various diagnostic tests for prenatal diagnosis including various sophisticated options like pre-implantation genetic diagnosis
- PC9.** provide appropriate pretest information such as the nature of the sample required, appropriateness, limitations of the test and the scope of the outcome
- PC10.** assist in informed decision making

*Coordinate with the appropriate specialist/ medical geneticist to carry out identified confirmatory diagnostic genetic test*

To be competent, the user/individual on the job must be able to:

- PC11.** obtain the pre-test consent

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- PC12.** coordinate with appropriate clinicians and healthcare professionals for consultation time
- PC13.** inform the attending physician/ medical geneticist about the findings of the preliminary examination, pedigree analysis etc.
- PC14.** handover the originals/ copies of the reports of the preliminary findings as and when appropriate to the clinician
- PC15.** address any queries raised by the physician/ geneticist about the patient or collected information
- PC16.** guide the patient/ family members about the next step such as pre- test preparations
- PC17.** co-ordinate with labs/organizations to obtain timely reports

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant legislation, standards, policies, and procedures in the field of genetics followed in the Healthcare Organization (HCO)/country
- KU2.** service request procedures, tools, and techniques
- KU3.** common apprehensions of the patient and the family and the process to address them
- KU4.** the cultural sensitivity of the patient
- KU5.** the concept and importance of empathy and compassion in treating suffering patients and relatives
- KU6.** the basics of gene mutation
- KU7.** various screening and diagnostic tests and procedures
- KU8.** the verbal and non-verbal cues of the patient and relatives
- KU9.** concept of Variant of Uncertain Significance (VUS)
- KU10.** various genetic diseases or the mutations obtained through Next Generation Sequencing (NGS), or any such genetic test
- KU11.** PNDT Act
- KU12.** ACMG guidelines
- KU13.** newborn screening, diagnostic testing, carrier testing, prenatal testing, preimplantation testing, predictive and presymptomatic testing, forensic testing
- KU14.** types of available genetic tests- diagnostic tests, genetic carrier test, screening tests, predictive tests, pre-symptomatic tests, research tests etc.
- KU15.** importance of single cell multiplex-polymerase chain reactions for monogenic diseases and fluorescent in situ hybridization for chromosomal aberrations
- KU16.** the importance of decision-making in selecting tests or follow-up regarding results
- KU17.** general information about the conditions being tested for, including variability and common features
- KU18.** nature of the testing (screening, carrier screening, diagnostic)
- KU19.** available alternative testing options and the risks, benefits and limitations of each possible results of testing (positive, negative, unclear and unexpected)
- KU20.** Implications and follow-up options if the results are positive
- KU21.** cost of testing and expectations regarding insurance coverage

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- KU22.** various possibility of the test results such as such as a mutation in a different gene
- KU23.** importance and procedure to carry out predictive genetic testing
- KU24.** the options, and limitations of the tests with couples, patients or families with genetic disease
- KU25.** the types of tests that are available like carrier, screening, diagnostic, predictive, pre-symptomatic, and collection of samples for research purposes
- KU26.** process and importance of conveying important information to other team members involved in the care of patients
- KU27.** common genetic test procedures e.g. different types of PCR, DNA extraction, MLPA, real-time PCR, gel electrophoresis, CGH array and sequencing etc
- KU28.** the conditions under which Pre-Natal Diagnosis (PND) is appropriate, and the reasons justifying the same

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** document call logs, reports, task lists, and schedules
- GS2.** write history, clinical findings, status and progress reports
- GS3.** plan for secure record keeping
- GS4.** prepare status and progress reports
- GS5.** write memos and e-mail to patient and the family, co-workers, and vendors to provide them with work updates and to request appropriate information
- GS6.** be updated on the recent advances in the field of genetics in India and other countries by reading relevant published literature, brochures, pamphlets, product information sheets and through participation in professional conferences and seminars
- GS7.** read comments, suggestions, and responses to Frequently Asked Questions (FAQs) posted on the helpdesk portal
- GS8.** analyze the patient's reaction to each option and consequence
- GS9.** plan to manage task lists, schedules, and work-loads with co-workers
- GS10.** communicate in a way that reflects cultural, religious and gender sensitivity
- GS11.** speak and write in a clear manner and avoid using jargon, slang or acronyms when communicating with a patient, unless it is required
- GS12.** make decisions about the concerned area of work
- GS13.** network adequately with personnel in other departments to coordinate the multi-disciplinary investigations and care of patients with genetic diseases
- GS14.** plan and organize sessions of counseling
- GS15.** maintain ethical behaviour while dealing with the patients and families
- GS16.** network between advocacy groups/support groups and clinicians, researchers
- GS17.** build a therapeutic rapport and manage relationships with patient and the family who may be stressed, frustrated, confused, grieving in denial or angry
- GS18.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)



## Qualification Pack

**GS19.** apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Provide detailed information on various aspects of pre-natal and post-natal screening/diagnostic genetic diseases</i>	<b>17</b>	<b>20</b>	<b>10</b>	<b>15</b>
<b>PC1.</b> prepare contract of agreement to give the results	-	-	-	-
<b>PC2.</b> provide information about all available options of screening/ diagnostic genetic diseases without bias	-	-	-	-
<b>PC3.</b> counsel on the advantages and disadvantages of each option within the context of individual values and beliefs	-	-	-	-
<b>PC4.</b> ensure that patients and family members are given sufficient time and freedom to deliberate and seek further relevant input as necessary	-	-	-	-
<b>PC5.</b> guide the patient about the actionability of the genetic/ genomic test such as likelihood of all possible results such as positive, negative as well as uncertain or unexpected result	-	-	-	-
<b>PC6.</b> notify about the associated financial cost to the patient or family members in an appropriate manner	-	-	-	-
<b>PC7.</b> guide the patient/ family about the screening tests for prenatal screening, newborn screening or any other kind of population screening in detail and comprehensible manner	-	-	-	-
<b>PC8.</b> inform regarding various diagnostic tests for prenatal diagnosis including various sophisticated options like pre-implantation genetic diagnosis	-	-	-	-
<b>PC9.</b> provide appropriate pretest information such as the nature of the sample required, appropriateness, limitations of the test and the scope of the outcome	-	-	-	-
<b>PC10.</b> assist in informed decision making	-	-	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Coordinate with the appropriate specialist/ medical geneticist to carry out identified confirmatory diagnostic genetic test</i>	<b>25</b>	<b>50</b>	<b>22</b>	<b>15</b>
<b>PC11.</b> obtain the pre-test consent	-	-	-	-
<b>PC12.</b> coordinate with appropriate clinicians and healthcare professionals for consultation time	-	-	-	-
<b>PC13.</b> inform the attending physician/ medical geneticist about the findings of the preliminary examination, pedigree analysis etc.	-	-	-	-
<b>PC14.</b> handover the originals/ copies of the reports of the preliminary findings as and when appropriate to the clinician	-	-	-	-
<b>PC15.</b> address any queries raised by the physician/ geneticist about the patient or collected information	-	-	-	-
<b>PC16.</b> guide the patient/ family members about the next step such as pre- test preparations	-	-	-	-
<b>PC17.</b> co-ordinate with labs/organizations to obtain timely reports	-	-	-	-
<b>NOS Total</b>	<b>42</b>	<b>70</b>	<b>32</b>	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N8715
<b>NOS Name</b>	Provide counselling on various genetic tests and coordinate for their execution
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health
<b>Occupation</b>	Counselling
<b>NSQF Level</b>	6
<b>Credits</b>	3
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2023
<b>Next Review Date</b>	28/07/2028
<b>NSQC Clearance Date</b>	28/07/2023

## Qualification Pack

# HSS/N8716: Interpret the inferences of the genetic tests and carry out post- test counselling

## Description

This unit covers the interpretation, documentation and providing information about the result of the genetic tests carried out to the patient and the family members. This unit also include details post- test counselling

## Scope

The scope covers the following :

- Interpretation and documentation of results of the genetic tests
- Carry out post-test counseling

## Elements and Performance Criteria

### *Interpretation and documentation of results of the genetic tests*

To be competent, the user/individual on the job must be able to:

- PC1.** prepare a plan of action based on the diagnostic findings
- PC2.** make a psychosocial assessment
- PC3.** interpret genetic test reports and their implications on the patient
- PC4.** obtain a second opinion in case of uncertainty
- PC5.** interpret results of various genomic testing as appropriate like chromosomal microarray, whole- exome sequencing, Next Generation Sequencing (NGS) based panel testing, cytogenetic reports (karyotypes, FISH, spectral karyotypes), newborn screening results
- PC6.** file copies of consent forms for assessing medical records, DNA testing or sample storage and copies of correspondence to patient/first and extended families and health professionals
- PC7.** document results of investigations including the records that the reports have been seen by the appropriate health professional
- PC8.** maintain a record of the copies of complete birth records, birth defect register form if applicable and arrangement for follow up
- PC9.** maintain appropriate health record, preferably electronic, in a complete and comprehensive file for each family
- PC10.** access central clinical genetics unit for the records of patients observed in outreach areas
- PC11.** maintain the confidentiality of records
- PC12.** store the files of patients with genetics consultation securely in a separate place at the concerned hospitals/ health records
- PC13.** encourage paperless documentation and record keeping as per the SOPs

### *Carry out post-test counseling*

To be competent, the user/individual on the job must be able to:

- PC14.** educate the patient and family members about the results of investigations through an agreed process

## Qualification Pack

- PC15.** communicate the genetic test results timely while maintaining utmost confidentiality
- PC16.** apprise the patient of multidisciplinary clinical examination, electrophysiological/ radiological/ genetic or any other tests required for further diagnosis
- PC17.** schedule communication about further counseling sessions according to the urgency of the timeline in which further testing may be needed
- PC18.** provide psychosocial support
- PC19.** give details about the implications of the genetic tests to the patients and their family members
- PC20.** refer the patient immediately to a medical geneticist to discuss the implications of the findings in detail
- PC21.** assess the emotional status of the patient and family members after disclosure of the test results
- PC22.** provide the written summary of the test result and discussions done during the post counselling session to the patient and family members
- PC23.** provide comprehensive post-test counselling report with definitive health recommendations to the patient and family members
- PC24.** advise the patient and the family members about the follow-up plan
- PC25.** obtain a consent signature on the final post- test report after completion of the case study
- PC26.** document proceedings of a genetic counselling according to the SOPs

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant legislation, standards, policies, and procedures in the field of genetics followed in the Healthcare Organization (HCO)/country.
- KU2.** the process of ascertaining and complying with current professional credentialing requirements, at the institutional, state, regional and national levels
- KU3.** various notes, records, paperwork required in genetic counselling process
- KU4.** concepts related to interpretation of results like normal finding(s), physiological finding, normal variation, non-specific finding(s) without clinical relevance, incidental finding(s) with possible clinical relevance, finding(s) of uncertain significance, pathognomonic (disease-specific, pathological) finding(s)
- KU5.** importance of informed consent, empathy and confidentiality
- KU6.** the importance of non-directive, non-paternalistic and non-judgmental approach when counseling the patients and relatives
- KU7.** psychosocial impact of the diagnosis
- KU8.** segregation analysis
- KU9.** guidelines, importance and process of documentation and record keeping
- KU10.** the process of forming a network of clinical, diagnostic and research specialists for support to diagnose and manage cases
- KU11.** service request procedures, tools, and techniques
- KU12.** importance of religious and cultural diversity

## Qualification Pack

- KU13.** process and importance of conveying important information to other team members involved in the care of patients
- KU14.** the method of interpretation of estimate theoretical risks and empirical risks for the disorders
- KU15.** the process of determining the pathogenicity of VUSs using linkage analysis, in silico and functional assays
- KU16.** the complete concept Next Generation Sequencing (NGS) based test
- KU17.** process of distinguishing which Next Generation Sequencing (NGS) obtained data is important and should be considered in the analysis, and which data is not significant
- KU18.** the use of genetic databases in determining variant classification depending on the mutations obtained.

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** document call logs, reports, task lists, and schedules
- GS2.** write history, clinical findings, status and progress reports
- GS3.** plan for secure record keeping
- GS4.** write memos and e-mail to patient and the family, co-workers, and stakeholders to provide them with work updates and to request appropriate information
- GS5.** store clinical genetics and the patient database according to the organizational policies
- GS6.** read and correctly interpret internal communications
- GS7.** be updated on the recent advances in the field of genetics in India and other countries by reading relevant published literature, brochures, pamphlets, product information sheets and through participation in professional conferences and seminars
- GS8.**
  - read comments, suggestions, and responses to Frequently Asked Questions (FAQs) posted on the helpdesk portal
  - speak and make presentations in English and/or a regional/local language
- GS9.** give clear instructions to the patients/relatives and keep them informed about progress
- GS10.** communicate in a way that reflects cultural, religious, gender and PwD sensitivity
- GS11.** speak and write in a clear manner and avoid using jargon, slang or acronyms when communicating with a patient, unless it is required
- GS12.** make decisions about the concerned area of work
- GS13.** interact adequately with personnel in other departments to coordinate the multidisciplinary investigations and care of patients with genetic diseases
- GS14.** use electronic documentation methods and adopt a paperless approach wherever possible
- GS15.** think through the problem, evaluate the possible solution(s) and suggest all available alternatives for patient families to arrive at the best possible solution(s)
- GS16.** prepare and maintain files of clinical genetics units separate from records of the health unit
- GS17.** make decision to ensure security in terms of password access, systems for back-up and virus protection (with regular upgrade)
- GS18.** make plan to use the existing data to arrive at a specific diagnosis
- GS19.** access relevant databases to analyses, interpret and convey the results

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- GS20.** plan and organize sessions of counseling
- GS21.** maintain ethical behaviour while dealing with the patients and families
- GS22.** build a therapeutic rapport and manage relationships with patient and the family who may be stressed, frustrated, confused, grieving in denial or angry
- GS23.** maintain cordial relationships with all other team members
- GS24.** be empathetic with the patient
- GS25.** use the existing data to arrive at specific consequences
- GS26.** apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interpretation and documentation of results of the genetic tests</i>	<b>30</b>	<b>30</b>	<b>10</b>	<b>15</b>
<b>PC1.</b> prepare a plan of action based on the diagnostic findings	-	-	-	-
<b>PC2.</b> make a psychosocial assessment	-	-	-	-
<b>PC3.</b> interpret genetic test reports and their implications on the patient	-	-	-	-
<b>PC4.</b> obtain a second opinion in case of uncertainty	-	-	-	-
<b>PC5.</b> interpret results of various genomic testing as appropriate like chromosomal microarray, whole-exome sequencing, Next Generation Sequencing (NGS) based panel testing, cytogenetic reports (karyotypes, FISH, spectral karyotypes), newborn screening results	-	-	-	-
<b>PC6.</b> file copies of consent forms for assessing medical records, DNA testing or sample storage and copies of correspondence to patient/first and extended families and health professionals	-	-	-	-
<b>PC7.</b> document results of investigations including the records that the reports have been seen by the appropriate health professional	-	-	-	-
<b>PC8.</b> maintain a record of the copies of complete birth records, birth defect register form if applicable and arrangement for follow up	-	-	-	-
<b>PC9.</b> maintain appropriate health record, preferably electronic, in a complete and comprehensive file for each family	-	-	-	-
<b>PC10.</b> access central clinical genetics unit for the records of patients observed in outreach areas	-	-	-	-
<b>PC11.</b> maintain the confidentiality of records	-	-	-	-
<b>PC12.</b> store the files of patients with genetics consultation securely in a separate place at the concerned hospitals/ health records	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> encourage paperless documentation and record keeping as per the SOPs	-	-	-	-
<i>Carry out post-test counseling</i>	<b>10</b>	<b>20</b>	<b>10</b>	<b>15</b>
<b>PC14.</b> educate the patient and family members about the results of investigations through an agreed process	-	-	-	-
<b>PC15.</b> communicate the genetic test results timely while maintaining utmost confidentiality	-	-	-	-
<b>PC16.</b> apprise the patient of multidisciplinary clinical examination, electrophysiological/ radiological/ genetic or any other tests required for further diagnosis	-	-	-	-
<b>PC17.</b> schedule communication about further counseling sessions according to the urgency of the timeline in which further testing may be needed	-	-	-	-
<b>PC18.</b> provide psychosocial support	-	-	-	-
<b>PC19.</b> give details about the implications of the genetic tests to the patients and their family members	-	-	-	-
<b>PC20.</b> refer the patient immediately to a medical geneticist to discuss the implications of the findings in detail	-	-	-	-
<b>PC21.</b> assess the emotional status of the patient and family members after disclosure of the test results	-	-	-	-
<b>PC22.</b> provide the written summary of the test result and discussions done during the post counselling session to the patient and family members	-	-	-	-
<b>PC23.</b> provide comprehensive post-test counselling report with definitive health recommendations to the patient and family members	-	-	-	-
<b>PC24.</b> advise the patient and the family members about the follow-up plan	-	-	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC25. obtain a consent signature on the final post-test report after completion of the case study	-	-	-	-
PC26. document proceedings of a genetic counselling according to the SOPs	-	-	-	-
<b>NOS Total</b>	<b>40</b>	<b>50</b>	<b>20</b>	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N8716
<b>NOS Name</b>	Interpret the inferences of the genetic tests and carry out post- test counselling
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health
<b>Occupation</b>	Counselling
<b>NSQF Level</b>	6
<b>Credits</b>	6
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2023
<b>Next Review Date</b>	28/07/2028
<b>NSQC Clearance Date</b>	28/07/2023

## Qualification Pack

# HSS/N8717: Provide need- based genetic counselling to the patient and their family members

## Description

This unit covers knowledge and skills required to plan and carry out the genetic counselling session after preparing the patients and their first and extended family members for the same.

## Scope

The scope covers the following :

- Prepare the patient and the paperwork required for counseling
- Provide appropriate genetic counseling to patients and their family members

## Elements and Performance Criteria

### *Prepare the patient and the paperwork required for counseling*

To be competent, the user/individual on the job must be able to:

- PC1.** ensure that the patient appointments are organized
- PC2.** review the purpose of the consultation
- PC3.** guide the patient about the consultation process and possibility of a physical examination
- PC4.** address the concerns that the patient may have regarding the nature and conduct of the consultation
- PC5.** file the plan of the session including cross- references and tests required
- PC6.** ascertain the needs and expectations of the patient/family, identifying any special requirements e.g. wheelchair access or interpreter services and clarify unrealistic expectations of the consultation
- PC7.** provide emotional support to reduce any pre- clinical anxiety
- PC8.** check that all information needed for the consultation has been obtained
- PC9.** review relevant health unit record and/or clinical genetics unit records
- PC10.** prepare information that will be given to the patient, including appropriate support group information and fact sheets as applicable
- PC11.** set the agenda for the counselling session of the patient
- PC12.** ensure that the confidentiality of the patient information is maintained
- PC13.** consult with the clinical geneticist after a definite diagnosis is drawn to plan prospective counselling sessions

### *Provide appropriate genetic counseling to patients and their family members*

To be competent, the user/individual on the job must be able to:

- PC14.** prepare detailed pre-test and post-test counselling reports for different genetic conditions having varied inheritance patterns that include monogenic, polygenic, multifactor etiology
- PC15.** provide adequate information about the condition including its prognosis to help patients/families take a decision

## Qualification Pack

- PC16.** provide full disclosure to individuals and families of all information relevant to their health the nature, usual course, anticipated problems or complications, investigations, management and follow up plan
- PC17.** provide information about the condition, which may include its cause, pattern of inheritance, natural history, complications, and treatment options
- PC18.** provide information about the risk of a condition and their implications affecting the patient, their children and/or other relatives
- PC19.** address the medical, emotional and social implications for the individual and family
- PC20.** adopt a non-directive approach, except when treatment is available and the affected individuals and families need guidance
- PC21.** communicate in a way that reflects cultural, religious, PwD and gender sensitivity and modify the communication pattern as and when necessary
- PC22.** advise about options, including genetic testing and reproductive options and assisting with informed decision making in a non-judgmental / non-coercive manner
- PC23.** arrange genetic tests after obtaining informed consent, which may include carrier testing, predictive testing, screening, research testing
- PC24.** carry out pre-marital counselling
- PC25.** carry out pre-conception counselling
- PC26.** undertake prenatal counselling
- PC27.** provide genetic counseling in specified areas of clinical genetics such as obstetrics, pediatrics, oncology, and neurology
- PC28.** apprise about invasive procedures wherever necessary for future offspring by providing information, education, or reassurance
- PC29.** assess patients' psychological or emotional needs such as those relating to stress, fear of test results, financial issues, and marital conflicts to make referral recommendations or assist patients in managing test outcomes
- PC30.** advise patient and family member to contact close, at risk relatives, for cascade testing
- PC31.** carry out appropriate individualized counselling sessions and refer to a psychologist or other appropriate specialists
- PC32.** document proceedings of a genetic counselling session and hand them over to patient/family for their medical records

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant legislation, standards, policies, and procedures in the field of genetics followed in the Healthcare Organization (HCO)/country
- KU2.** SOPs of maintaining patient's genetics file
- KU3.** the process of ascertaining and complying with current professional credentialing requirements, at the institutional, state, regional and national levels.
- KU4.**
  - process of networking with clinical, diagnostic and research specialists for support to diagnose and manage cases
  - service request procedures, tools, and techniques
- KU5.** the religious/ cultural beliefs of the patient

## Qualification Pack

- KU6.** genetic diseases and disorders
- KU7.** process of genetic counselling session
- KU8.** psychosocial aspects of counseling
- KU9.** genetic evaluation for common diseases of adulthood
- KU10.** genomic perspective of genetic counseling
- KU11.** ethics of genetic counseling- basic concepts and relevance to various communities
- KU12.** process of interpretation of test results
- KU13.** components of genetic counseling and case preparation
- KU14.** genotype- phenotype correlation
- KU15.** importance of anticipation
- KU16.** types of counseling to be offered for pre-marital genetics, reproductive genetics, pre-pregnancy genetics, pediatric genetics, oncology genetics, prenatal genetics
- KU17.** penetrance and inheritance of cancer- predisposing gene mutations
- KU18.** risk- reducing and treatment options available for mutation carriers
- KU19.** consanguinity and birth defects
- KU20.** history of pre-marital and pre-conception cases to enquire whether any testing was done for autosomal recessive diseases
- KU21.** the significance of informing the spouses/ partners about the carrier state and possible harmful effects on the marriage from disclosure
- KU22.** risk factors such as aneuploidies of pregnancy at an advanced age
- KU23.** concept, importance and process of amniocentesis
- KU24.** chromosomal microarray analysis
- KU25.** importance of informing blood relatives about the potential genetic risk

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** document call logs, reports, task lists, and schedules
- GS2.** write history, clinical findings, status and progress reports
- GS3.** plan for secure record keeping
- GS4.** write proceedings of a genetic counselling session in an appropriate manner
- GS5.** be updated on the recent advances in the field of genetics in India and other countries by reading relevant published literature, brochures, pamphlets, product information sheets and through participation in professional conferences and seminars
- GS6.**
  - read comments, suggestions, and responses to Frequently Asked Questions (FAQs) posted on the helpdesk portal
  - communicate in a way that reflects cultural, religious, gender and PwD sensitivity
- GS7.** communicate in a way that reflects cultural, religious, gender and PwD sensitivity
- GS8.** plan to identify social and/or cultural issues which may impinge on the consultation
- GS9.** speak and write in a clear manner and avoid using jargon, slang or acronyms when communicating with a patient, unless it is required
- GS10.** make decisions of the concerned area of work

## Qualification Pack

- GS11.** work in close contact with clinical geneticist and scientist to provide efficient genetic counseling services
- GS12.**
  - respect the rights of persons and families to full disclosure of their conditions after the diagnosis
  - preserve family integrity
- GS13.** preserve family integrity
- GS14.** plan to involve children and adolescents in the decisions affecting them
- GS15.** make decisions to protect the privacy of individuals and families from unjustified intrusion by authorities, employers, and insurers
- GS16.** interact adequately with personnel in other departments to coordinate the multidisciplinary investigations and care of patients with genetic diseases
- GS17.** plan and organize sessions of counseling
- GS18.** maintain ethical behaviour while dealing with the patients and families
- GS19.**
  - be cautious of using outdated, offensive terms while communicating with the patient/ family members
  - network between advocacy groups/support groups and clinicians, researchers
- GS20.** network between advocacy groups/support groups and clinicians, researchers
- GS21.** make use of assistive technology when necessary while during counselling session with PwD
- GS22.** manage relationships with clients who may be stressed, frustrated, confused, or angry by using patient-centric approach
- GS23.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
- GS24.** apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare the patient and the paperwork required for counseling</i>	20	20	10	-
<b>PC1.</b> ensure that the patient appointments are organized	-	-	-	-
<b>PC2.</b> review the purpose of the consultation	-	-	-	-
<b>PC3.</b> guide the patient about the consultation process and possibility of a physical examination	-	-	-	-
<b>PC4.</b> address the concerns that the patient may have regarding the nature and conduct of the consultation	-	-	-	-
<b>PC5.</b> file the plan of the session including cross-references and tests required	-	-	-	-
<b>PC6.</b> ascertain the needs and expectations of the patient/family, identifying any special requirements e.g. wheelchair access or interpreter services and clarify unrealistic expectations of the consultation	-	-	-	-
<b>PC7.</b> provide emotional support to reduce any pre-clinical anxiety	-	-	-	-
<b>PC8.</b> check that all information needed for the consultation has been obtained	-	-	-	-
<b>PC9.</b> review relevant health unit record and/or clinical genetics unit records	-	-	-	-
<b>PC10.</b> prepare information that will be given to the patient, including appropriate support group information and fact sheets as applicable	-	-	-	-
<b>PC11.</b> set the agenda for the counselling session of the patient	-	-	-	-
<b>PC12.</b> ensure that the confidentiality of the patient information is maintained	-	-	-	-
<b>PC13.</b> consult with the clinical geneticist after a definite diagnosis is drawn to plan prospective counselling sessions	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Provide appropriate genetic counseling to patients and their family members</i>	17	20	15	-
<b>PC14.</b> prepare detailed pre-test and post-test counselling reports for different genetic conditions having varied inheritance patterns that include monogenic, polygenic, multifactor etiology	-	-	-	-
<b>PC15.</b> provide adequate information about the condition including its prognosis to help patients/families take a decision	-	-	-	-
<b>PC16.</b> provide full disclosure to individuals and families of all information relevant to their health the nature, usual course, anticipated problems or complications, investigations, management and follow up plan	-	-	-	-
<b>PC17.</b> provide information about the condition, which may include its cause, pattern of inheritance, natural history, complications, and treatment options	-	-	-	-
<b>PC18.</b> provide information about the risk of a condition and their implications affecting the patient, their children and/or other relatives	-	-	-	-
<b>PC19.</b> address the medical, emotional and social implications for the individual and family	-	-	-	-
<b>PC20.</b> adopt a non-directive approach, except when treatment is available and the affected individuals and families need guidance	-	-	-	-
<b>PC21.</b> communicate in a way that reflects cultural, religious, PwD and gender sensitivity and modify the communication pattern as and when necessary	-	-	-	-
<b>PC22.</b> advise about options, including genetic testing and reproductive options and assisting with informed decision making in a non-judgmental / non-coercive manner	-	-	-	-
<b>PC23.</b> arrange genetic tests after obtaining informed consent, which may include carrier testing, predictive testing, screening, research testing	-	-	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC24.</b> carry out pre-marital counselling	-	-	-	-
<b>PC25.</b> carry out pre-conception counselling	-	-	-	-
<b>PC26.</b> undertake prenatal counselling	-	-	-	-
<b>PC27.</b> provide genetic counseling in specified areas of clinical genetics such as obstetrics, pediatrics, oncology, and neurology	-	-	-	-
<b>PC28.</b> apprise about invasive procedures wherever necessary for future offspring by providing information, education, or reassurance	-	-	-	-
<b>PC29.</b> assess patients' psychological or emotional needs such as those relating to stress, fear of test results, financial issues, and marital conflicts to make referral recommendations or assist patients in managing test outcomes	-	-	-	-
<b>PC30.</b> advise patient and family member to contact close, at risk relatives, for cascade testing	-	-	-	-
<b>PC31.</b> carry out appropriate individualized counselling sessions and refer to a psychologist or other appropriate specialists	-	-	-	-
<b>PC32.</b> document proceedings of a genetic counselling session and hand them over to patient/family for their medical records	-	-	-	-
<b>NOS Total</b>	<b>37</b>	<b>40</b>	<b>25</b>	<b>-</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N8717
<b>NOS Name</b>	Provide need- based genetic counselling to the patient and their family members
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health
<b>Occupation</b>	Counselling
<b>NSQF Level</b>	6
<b>Credits</b>	17
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2023
<b>Next Review Date</b>	28/07/2028
<b>NSQC Clearance Date</b>	28/07/2023

## Qualification Pack

### HSS/N8718: Promote genetics related awareness

#### Description

This unit covers details about creating awareness related to genetic counseling. It discusses in detail about how to promote activities related to genetic counseling amongst the fellow non-genetics healthcare providers and promote the advocacy the objective of the genetic counselling profession.

#### Scope

The scope covers the following :

- Educate the fellow healthcare providers about the merits of genetic counseling
- Identify and educate the at-risk population regarding the need for genetic counseling

#### Elements and Performance Criteria

##### *Educate the fellow healthcare providers about the merits of genetic counseling*

To be competent, the user/individual on the job must be able to:

- PC1.** update and maintain literature related to genetics for its usage in continuous learning programs and conferences
- PC2.** design genetics training programs for physicians, graduate students and other health professionals by doing a gaps analysis
- PC3.** conduct sensitization and refresher genetics training programs for physicians, graduate students and other health professionals.
- PC4.** support healthcare team in research activities related to the field in the healthcare facility
- PC5.** evaluate or make recommendations for drafting standards in genetics as appropriate
- PC6.** liaison between genetics-trained and non-genetics-trained health care providers for educating and supporting them in the genetics domain
- PC7.** prepare and provide genetics-related educational materials to patients or medical personnel
- PC8.** ensure IEC material used are paperless by substituting handouts/ pamphlets/ leaflets with electronic presentation
- PC9.** ensure compliance and adherence with the ethical/ legal issues surrounding the access and use of information, media, information technology

##### *Identify and educate the at-risk population regarding the need for genetic counseling*

To be competent, the user/individual on the job must be able to:

- PC10.** identify community resources/NGOs involved in education, support services, physiotherapy, speech therapy or offering any other aids to individuals with special needs
- PC11.** connect with major genetics and local administration to utilize them advocates for genetic counselling education sessions in the community
- PC12.** prepare appropriate Information, Education and Communication (IEC) material and encourage re-use of material
- PC13.** address patient's attitudes, perceptions and concern areas such as, privacy concerns, values, social norms, lack of perceived benefit and fatalism, etc.

## Qualification Pack

- PC14.** educate the community on subjects like preventative counseling, associated myths and screening etc
- PC15.** plan and organize community programs on genetic counselling including group counselling sessions
- PC16.** provide genetics services such as prenatal screening to minority and underserved communities while maintaining the confidentiality of medical information
- PC17.** educate the families about the community resources/ societies/ voluntary organization for specific genetic disorders for patient registration or support

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the importance of being a part of a multi-disciplinary team
- KU2.** the importance of working in close contact with clinical geneticist and scientists to provide efficient genetic counselling services
- KU3.** relevant legislation, standards, policies, and procedures in the field of genetics followed in the Healthcare Organization (HCO)/country
- KU4.** process of engaging with both internal and external specialists for support to resolve incidents and service requests
- KU5.** the concept of population genetics
- KU6.** importance of social media in awareness activities
- KU7.** effective use of charts/leaflets and other IEC material for counseling preferably electronic presentation
- KU8.**
  - strategy of connecting organizations/advocacy groups working in their region/country for providing community, social, legal and economic support to individuals and families suffering from genetic disorders
  - existing socio-cultural contexts
- KU9.** existing socio-cultural contexts
- KU10.** the method of preparation of charts/leaflets/presentations for advocacy of genetic counseling profession to healthcare providers
- KU11.** the benefits of association or registration with organization catering to genetic disorders
- KU12.** protocols for conducting surveys
- KU13.** the process of delivering information using visual aids, slides, electronic presentation, hand-outs , and engage with media
- KU14.** importance of outreach programs to spread awareness about basics of genetics and dispel myths, among the community
- KU15.** various religious/ cultural perspectives in the field of genetics
- KU16.** appropriate IEC material to educate community with various language backgrounds
- KU17.** the effective methodology of conserving and re-using IEC material
- KU18.** the importance of optimizing material utilization used for awareness related activities
- KU19.** various materials which can be replaced by environment friendly substitutes
- KU20.** importance and process of organizing Continuing Medical Education (CMEs) and Continuing Nursing Education (CNEs) for hospital staff

## Qualification Pack

**KU21.** the process of tackling any negative publicity pertaining to organ donation that might arise

### Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** document call logs, reports, task lists, and schedules
- GS2.** write history, clinical findings, status, and progress reports
- GS3.** plan for secure record keeping
- GS4.** write a to-the-point and crisp message for counseling in the community
- GS5.** write memos and e-mail to patient and the family, co-workers, and vendors to provide them with work updates and to request appropriate information
- GS6.** write grant proposals for eligible programs or services as and when necessary
- GS7.** be updated on the recent advances in the field of genetics in India and other countries by reading brochures, pamphlets, product information sheets and through participation in professional conferences and seminars
- GS8.** respect the cultural, religious, gender diversity of the patient
- GS9.** treat suffering patients and relatives with empathy and compassion
- GS10.** read and correctly interpret internal communications
- GS11.** address comments, suggestions, and responses to Frequently Asked Questions (FAQs) posted on the helpdesk portal
- GS12.** speak and make presentations in English and a regional/local language
- GS13.** network with co-workers to discuss task lists, schedules, and work-loads
- GS14.** be encouraged to extend and expand counselling for common disorders
- GS15.** work as a team with clinical geneticist and scientist to provide efficient genetic counseling services in the community
- GS16.** communicate in a way that reflects cultural, religious, gender and PwD sensitivity
- GS17.** speak and write in a clear manner and avoid using jargon, slang or acronyms when communicating with a patient, unless it is required
- GS18.** make decisions about the concerned area of work
- GS19.** network adequately with personnel in other departments to coordinate the multi-disciplinary investigations and care of patients with genetic diseases
- GS20.** network between advocacy groups/support groups and clinicians, researchers
- GS21.** plan and organize sessions of counseling
- GS22.** maintain ethical behaviour while dealing with the patients and families
- GS23.** build a therapeutic rapport and manage relationships with patient and the family who may be stressed, frustrated, confused, grieving in denial or angry
- GS24.** maintain cordial relationships with all other team members
- GS25.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
- GS26.** apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Educate the fellow healthcare providers about the merits of genetic counseling</i>	25	-	-	15
<b>PC1.</b> update and maintain literature related to genetics for its usage in continuous learning programs and conferences	-	-	-	-
<b>PC2.</b> design genetics training programs for physicians, graduate students and other health professionals by doing a gaps analysis	-	-	-	-
<b>PC3.</b> conduct sensitization and refresher genetics training programs for physicians, graduate students and other health professionals.	-	-	-	-
<b>PC4.</b> support healthcare team in research activities related to the field in the healthcare facility	-	-	-	-
<b>PC5.</b> evaluate or make recommendations for drafting standards in genetics as appropriate	-	-	-	-
<b>PC6.</b> liaison between genetics-trained and non-genetics-trained health care providers for educating and supporting them in the genetics domain	-	-	-	-
<b>PC7.</b> prepare and provide genetics-related educational materials to patients or medical personnel	-	-	-	-
<b>PC8.</b> ensure IEC material used are paperless by substituting handouts/ pamphlets/ leaflets with electronic presentation	-	-	-	-
<b>PC9.</b> ensure compliance and adherence with the ethical/ legal issues surrounding the access and use of information, media, information technology	-	-	-	-
<i>Identify and educate the at-risk population regarding the need for genetic counseling</i>	15	-	10	10
<b>PC10.</b> identify community resources/NGOs involved in education, support services, physiotherapy, speech therapy or offering any other aids to individuals with special needs	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> connect with major genetics and local administration to utilize them advocates for genetic counselling education sessions in the community	-	-	-	-
<b>PC12.</b> prepare appropriate Information, Education and Communication (IEC) material and encourage re-use of material	-	-	-	-
<b>PC13.</b> address patient’s attitudes, perceptions and concern areas such as, privacy concerns, values, social norms, lack of perceived benefit and fatalism, etc.	-	-	-	-
<b>PC14.</b> educate the community on subjects like preventative counseling, associated myths and screening etc	-	-	-	-
<b>PC15.</b> plan and organize community programs on genetic counselling including group counselling sessions	-	-	-	-
<b>PC16.</b> provide genetics services such as prenatal screening to minority and underserved communities while maintaining the confidentiality of medical information	-	-	-	-
<b>PC17.</b> educate the families about the community resources/ societies/ voluntary organization for specific genetic disorders for patient registration or support	-	-	-	-
<b>NOS Total</b>	<b>40</b>	<b>-</b>	<b>10</b>	<b>25</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N8718
<b>NOS Name</b>	Promote genetics related awareness
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health
<b>Occupation</b>	Counselling
<b>NSQF Level</b>	6
<b>Credits</b>	6
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2023
<b>Next Review Date</b>	28/07/2028
<b>NSQ Clearance Date</b>	28/07/2023



## Qualification Pack

# HSS/N9615: Maintain interpersonal relationship with client, colleagues, and others

## Description

This OS unit is about effective communication and exhibiting professional behavior with co-workers, patients & their family members in response to queries or as part of health advice and counseling. It also describes the skills required for meeting work requirements by allied health professionals working in a team or collaborative environment.

## Scope

The scope covers the following :

- Communicating and maintaining professional behavior with co-workers and patients & their families
- Working with other people to meet requirements
- Establishing and managing requirements, planning and organizing work, ensuring accomplishment of the requirements

## Elements and Performance Criteria

### *Communicating & maintaining professional behavior with co-workers and patients & their families*

To be competent, the user/individual on the job must be able to:

- PC1.** communicate effectively with all individuals regardless of age, caste, gender, community or other characteristics without using terminology unfamiliar to them
- PC2.** utilize all training and information at ones disposal to provide relevant information to the individual
- PC3.** confirm that the needs of the individual have been met
- PC4.** respond to queries and information needs of all individuals
- PC5.** adhere to guidelines provided by ones organization or regulatory body relating to confidentiality
- PC6.** respect the individuals need for privacy
- PC7.** maintain any records required at the end of the interaction

### *Working with other people to meet requirements*

To be competent, the user/individual on the job must be able to:

- PC8.** integrate ones work with other peoples work effectively
- PC9.** utilize time effectively and pass on essential information to other people on timely basis
- PC10.** work in a way that shows respect for other people
- PC11.** carry out any commitments made to other people
- PC12.** reason out the failure to fulfill commitment
- PC13.** identify any problems with team members and other people and take the initiative to solve these problems

### *Establishing and managing requirements*

To be competent, the user/individual on the job must be able to:

## Qualification Pack

- PC14.** clearly establish, agree, and record the work requirements
- PC15.** ensure his/her work meets the agreed requirements
- PC16.** treat confidential information correctly
- PC17.** work in line with the organizations procedures and policies and within the limits of his/her job role

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** guidelines on communicating with patients and other individuals
- KU2.** guidelines on maintaining confidentiality and respecting need for privacy
- KU3.** the business, mission, and objectives of the organization
- KU4.** the scope of work of the role
- KU5.** the responsibilities and strengths of the team and their importance to the organization
- KU6.** the information that is considered confidential to the organization
- KU7.** effective working relationships with the people external to the team, with which the individual works on a regular basis
- KU8.** procedures in the organization to deal with conflict and poor working relationships
- KU9.** the relevant policies and procedures of the organization
- KU10.** how to communicate effectively (face-to-face, by telephone and in writing)
- KU11.** how to handle stressful or risky situations when communicating with patients and/or other individuals
- KU12.** when to ask for assistance when situations are beyond ones competence and authority
- KU13.** how to maintain confidentiality and to respect an individuals need for privacy
- KU14.** how to ensure that all information provided to individuals is from reliable sources
- KU15.** disclosure of any information to unauthorized persons would subject to disciplinary action and possible termination
- KU16.** the essential information that needs to be shared with other people
- KU17.** the importance of effective working relationships and how these can contribute towards effective working relationships on a day-to-day basis
- KU18.** the importance of integrating ones work effectively with others
- KU19.** the types of working relationships that help people to work well together and the types of relationships that need to be avoided
- KU20.** the types of opportunities an individual may seek out to improve relationships with others
- KU21.** how to deal with difficult working relationships with other people to sort out
- KU22.** the importance of asking the appropriate individual for help when required
- KU23.** the importance of planning, prioritizing and organizing, timely work
- KU24.** the importance of clearly establishing work requirement
- KU25.** the importance of being flexible in changing priorities when the importance and urgency comes into play

## Qualification Pack

- KU26.** how to make efficient use of time, and to avoid things that may prevent work deliverables from being expedited
- KU27.** the importance of keeping the work area clean and tidy

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write effective communications to share information with the team members and other people outside the team
- GS2.** write at least one local/ official language used in the local community
- GS3.** report progress and results
- GS4.** record problems and resolutions
- GS5.** read and understand work related documents and information shared by different sources
- GS6.** read organizational policies and procedures
- GS7.** communicate essential information to colleagues face-to-face or through telecommunication
- GS8.** speak at least one local language
- GS9.** question others appropriately in order to understand the nature of the requestor compliant
- GS10.** report progress and results
- GS11.** interact with other individuals
- GS12.** negotiate requirements and revised agreements for delivering them
- GS13.** make decisions on information to be communicated based on needs of the individual and various regulations and guidelines
- GS14.** plan and organize files and documents
- GS15.** be responsive to problems of the individuals
- GS16.** be available to guide, counsel and help individuals when required
- GS17.** be patient and non-judgmental at all times
- GS18.** communicate effectively with patients and their family, physicians, and other members of the health care team
- GS19.** be capable of being responsive, listen empathetically to establish rapport in a way that promotes openness on issues of concern
- GS20.** be sensitive to potential cultural differences
- GS21.** maintain patient confidentiality
- GS22.** respect the rights of the patient(s)
- GS23.** understand problems and suggest an optimum solution after evaluating possible solutions

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Communicating &amp; maintaining professional behavior with co-workers and patients &amp; their families</i>	5	-	-	-
<b>PC1.</b> communicate effectively with all individuals regardless of age, caste, gender, community or other characteristics without using terminology unfamiliar to them	-	-	-	-
<b>PC2.</b> utilize all training and information at ones disposal to provide relevant information to the individual	-	-	-	-
<b>PC3.</b> confirm that the needs of the individual have been met	-	-	-	-
<b>PC4.</b> respond to queries and information needs of all individuals	-	-	-	-
<b>PC5.</b> adhere to guidelines provided by ones organization or regulatory body relating to confidentiality	-	-	-	-
<b>PC6.</b> respect the individuals need for privacy	-	-	-	-
<b>PC7.</b> maintain any records required at the end of the interaction	-	-	-	-
<i>Working with other people to meet requirements</i>	5	-	-	-
<b>PC8.</b> integrate ones work with other peoples work effectively	-	-	-	-
<b>PC9.</b> utilize time effectively and pass on essential information to other people on timely basis	-	-	-	-
<b>PC10.</b> work in a way that shows respect for other people	-	-	-	-
<b>PC11.</b> carry out any commitments made to other people	-	-	-	-
<b>PC12.</b> reason out the failure to fulfill commitment	-	-	-	-
<b>PC13.</b> identify any problems with team members and other people and take the initiative to solve these problems	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Establishing and managing requirements</i>	3	-	-	-
<b>PC14.</b> clearly establish, agree, and record the work requirements	-	-	-	-
<b>PC15.</b> ensure his/her work meets the agreed requirements	-	-	-	-
<b>PC16.</b> treat confidential information correctly	-	-	-	-
<b>PC17.</b> work in line with the organizations procedures and policies and within the limits of his/her job role	-	-	-	-
<b>NOS Total</b>	<b>13</b>	-	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N9615
<b>NOS Name</b>	Maintain interpersonal relationship with client, colleagues, and others
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health, Healthcare Management, Allied Health & Paramedics
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	0.5
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2022
<b>Next Review Date</b>	28/07/2027
<b>NSQC Clearance Date</b>	28/07/2022

## Qualification Pack

### HSS/N9616: Maintain professional & medico-legal conduct

#### Description

This OS unit is about recognizing the boundaries of the role and responsibilities, practice code of conduct and working within the level of competence in accordance with legislation, protocols and guidelines set up by the healthcare provider.

#### Scope

The scope covers the following :

- Maintain professional behavior
- Acting within the limit of ones competence and authority
- Following the code of conduct and demonstrating best practices in the field

#### Elements and Performance Criteria

##### *Maintain professional behavior*

To be competent, the user/individual on the job must be able to:

- PC1.** adhere to legislation, protocols and guidelines relevant to ones role and field of practice
- PC2.** work within organizational systems and requirements as appropriate to ones role
- PC3.** recognize the boundary of ones role and responsibility and seek supervision when situations are beyond ones competence and authority
- PC4.** maintain competence within ones role and field of practice
- PC5.** maintain personal hygiene and contribute actively to the healthcare ecosystem

##### *Acting within the limit of ones competence and authority*

To be competent, the user/individual on the job must be able to:

- PC6.** use relevant research based protocols and guidelines as evidence to inform ones practice
- PC7.** promote and demonstrate good practice as an individual and as a team member at all times
- PC8.** identify and manage potential and actual risks to the quality and safety of practice
- PC9.** evaluate and reflect on the quality of ones work and make continuing improvements
- PC10.** use relevant research-based protocols and guidelines as evidence to inform ones practice

##### *Following the code of conduct and demonstrating best practices in the field*

To be competent, the user/individual on the job must be able to:

- PC11.** recognize the boundary of ones role and responsibility and seek supervision when situations are beyond ones competence and authority
- PC12.** promote and demonstrate good practice as an individual and as a team member at all times
- PC13.** identify and manage potential and actual risks to the quality and safety of practice
- PC14.** maintain personal hygiene and contribute actively to the healthcare ecosystem
- PC15.** maintain a practice environment that is conducive to the provision of medico-legal healthcare

#### Knowledge and Understanding (KU)

## Qualification Pack

The individual on the job needs to know and understand:

- KU1.** relevant legislation, standards, policies & procedures followed in the organization
- KU2.** the medical procedures and functioning of required medical equipment
- KU3.** role and importance of assisting other healthcare providers in delivering care
- KU4.** how to engage and interact with other providers in order to deliver quality and maintain continued care
- KU5.** personal hygiene measures and handling techniques
- KU6.** the limitations and scope of the role and responsibilities of self and others
- KU7.** the importance of working within the limits of ones competence and authority
- KU8.** the importance of personally promoting and demonstrating good practice
- KU9.** The detrimental effects of non-compliance
- KU10.** the importance of intercommunication skills
- KU11.** the legislation, protocols and guidelines affecting ones work
- KU12.** the organizational systems and requirements relevant to ones role
- KU13.** the sources of information and literature to maintain a constant access to upcoming research and changes in the field
- KU14.** the difference between direct and indirect supervision and autonomous practice, and which combination is most applicable in different circumstances
- KU15.** the importance of individual or team compliance with legislation, protocols, and guidelines and organizational systems and requirements
- KU16.** how to report and minimize risks
- KU17.** the principle of meeting the organizations needs, and how this should enable one to recognize ones own limitations and when one should seek support from others
- KU18.** the processes by which improvements to protocols/guidelines and organizational systems/requirements should be reported
- KU19.** the procedure for accessing training, learning and development needs for oneself and/or others within ones organization
- KU20.** the actions that can be taken to ensure a current, clear and accurate understanding of roles and responsibilities is maintained, and how this affects the way one work as an individual or part of a team
- KU21.** the risks to quality and safety arising from:
  - o Working outside the boundaries of competence and authority
  - o Not keeping up to date with best practice
  - o Poor communication
  - o Insufficient support
  - o Lack of resources
- KU22.** the importance of personal hygiene

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** document reports, task lists, and schedules
- GS2.** prepare status and progress reports
- GS3.** record daily activities
- GS4.** update other co-workers



## Qualification Pack

- GS5.** read about changes in legislations and organizational policies
- GS6.** keep updated with the latest knowledge
- GS7.** discuss task lists, schedules, and work-loads with co-workers
- GS8.** give clear instructions to patients and co-workers
- GS9.** keep patient informed about progress
- GS10.** avoid using jargon, slang or acronyms when communicating with a patient
- GS11.** make decisions pertaining to the concerned area of work in relation to job role
- GS12.** act decisively by balancing protocols and work at hand
- GS13.** communicate effectively with patients and their family, physicians, and other members of the health care team
- GS14.** be responsive and listen empathetically to establish rapport in a way that promotes openness on issues of concern
- GS15.** be sensitive to potential cultural differences
- GS16.** maintain patient confidentiality
- GS17.** respect the rights of the patient(s)

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain professional behavior</i>	5	-	-	-
<b>PC1.</b> adhere to legislation, protocols and guidelines relevant to ones role and field of practice	-	-	-	-
<b>PC2.</b> work within organizational systems and requirements as appropriate to ones role	-	-	-	-
<b>PC3.</b> recognize the boundary of ones role and responsibility and seek supervision when situations are beyond ones competence and authority	-	-	-	-
<b>PC4.</b> maintain competence within ones role and field of practice	-	-	-	-
<b>PC5.</b> maintain personal hygiene and contribute actively to the healthcare ecosystem	-	-	-	-
<i>Acting within the limit of ones competence and authority</i>	7	-	-	-
<b>PC6.</b> use relevant research based protocols and guidelines as evidence to inform ones practice	-	-	-	-
<b>PC7.</b> promote and demonstrate good practice as an individual and as a team member at all times	-	-	-	-
<b>PC8.</b> identify and manage potential and actual risks to the quality and safety of practice	-	-	-	-
<b>PC9.</b> evaluate and reflect on the quality of ones work and make continuing improvements	-	-	-	-
<b>PC10.</b> use relevant research-based protocols and guidelines as evidence to inform ones practice	-	-	-	-
<i>Following the code of conduct and demonstrating best practices in the field</i>	7	-	-	-
<b>PC11.</b> recognize the boundary of ones role and responsibility and seek supervision when situations are beyond ones competence and authority	-	-	-	-
<b>PC12.</b> promote and demonstrate good practice as an individual and as a team member at all times	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> identify and manage potential and actual risks to the quality and safety of practice	-	-	-	-
<b>PC14.</b> maintain personal hygiene and contribute actively to the healthcare ecosystem	-	-	-	-
<b>PC15.</b> maintain a practice environment that is conducive to the provision of medico-legal healthcare	-	-	-	-
<b>NOS Total</b>	<b>19</b>	-	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N9616
<b>NOS Name</b>	Maintain professional & medico-legal conduct
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Allied Health & Paramedics, Social Work & Community Health, Healthcare Management
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	0.5
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2022
<b>Next Review Date</b>	28/07/2027
<b>NSQC Clearance Date</b>	28/07/2022

## Qualification Pack

# HSS/N9618: Follow infection control policies & procedures including biomedical waste disposal protocols

## Description

This OS unit is about the safe handling and management of health care waste and following infection control policies

## Scope

The scope covers the following :

- Classification of the Waste Generated, Segregation of Biomedical Waste, Proper collection and storage of Waste

## Elements and Performance Criteria

### *Classification of the Waste Generated, Segregation of Biomedical Waste, Proper collection and storage of Waste*

To be competent, the user/individual on the job must be able to:

- PC1.** handle, package, label, store, transport and dispose of waste appropriately to minimize potential for contact with the waste and to reduce the risk to the environment from accidental release
- PC2.** store clinical or related waste in an area that is accessible only to authorized persons
- PC3.** minimize contamination of materials, equipment and instruments by aerosols and splatter

### *Complying with an effective infection control protocols*

To be competent, the user/individual on the job must be able to:

- PC4.** apply appropriate health and safety measures following appropriate personal clothing & protective equipment for infection prevention and control
- PC5.** identify infection risks and implement an appropriate response within own role and responsibility in accordance with the policies and procedures of the organization
- PC6.** follow procedures for risk control and risk containment for specific risks. Use signs when and where appropriate
- PC7.** follow protocols for care following exposure to blood or other body fluids as required
- PC8.** remove spills in accordance with the policies and procedures of the organization
- PC9.** clean and dry all work surfaces with a neutral detergent and warm water solution before and after each session or when visibly soiled
- PC10.** demarcate and maintain clean and contaminated zones in all aspects of health care work
- PC11.** confine records, materials and medicaments to a well designated clean zone
- PC12.** confine contaminated instruments and equipment to a well designated contaminated zone
- PC13.** decontaminate equipment requiring special processing in accordance with quality management systems to ensure full compliance with cleaning, disinfection and sterilization protocols
- PC14.** replace surface covers where applicable

## Qualification Pack

**PC15.** maintain and store cleaning equipment

**PC16.** report and deal with spillages and contamination in accordance with current legislation and procedures

*Maintaining personal protection and preventing the transmission of infections from person to person*

To be competent, the user/individual on the job must be able to:

**PC17.** maintain hand hygiene following hand washing procedures before and after patient contact /or after any activity likely to cause contamination

**PC18.** cover cuts and abrasions with waterproof dressings and change as necessary

**PC19.** change protective clothing and gowns/aprons daily, more frequently if soiled and where appropriate, after each patient contact

**PC20.** perform additional precautions when standard precautions alone may not be sufficient to prevent transmission of infection

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** relevant up-to-date information on health, safety, and security that applies to the organization

**KU2.** organizations emergency procedures and responsibilities for handling hazardous situations

**KU3.** person(s) responsible for health, safety, and security in the organization

**KU4.** good personal hygiene practice including hand care

**KU5.** importance of and how to handle, package, label, store, transport and dispose of waste appropriately to minimize potential for contact with the waste and to reduce the risk to the environment from accidental release

**KU6.** the importance to adhere to the organizational and national waste management principles and procedures

**KU7.** the hazards and risks associated with the disposal and the importance of risk assessments and how to provide these

**KU8.** the required actions and reporting procedures for any accidents, spillages and contamination involving waste

**KU9.** the requirements of the relevant external agencies involved in the transport and receipt of your waste

**KU10.** the importance of organizing, monitoring and obtaining an assessment of the impact the waste may have on the environment

**KU11.** The current national legislation, guidelines, local policies and protocols which affect work practice

**KU12.** the policies and guidance that clarify scope of practice, accountabilities and the working relationship between yourself and others

**KU13.** identification and management of infectious risks in the workplace

**KU14.** aspects of infectious diseases including opportunistic organisms & pathogens

**KU15.** basic microbiology including bacteria and bacterial spores, fungi, viruses

**KU16.** the path of disease transmission including direct contact and penetrating injuries, risk of acquisition

## Qualification Pack

- KU17.** how to clean and sterile techniques
- KU18.** susceptible hosts including persons who are immune suppressed, have chronic diseases such as diabetes and the very young or very old
- KU19.** routine surface cleaning procedures at the start and end of the day, managing a blood or body fluid spill
- KU20.** sharps handling and disposal techniques
- KU21.** effective hand hygiene including hand wash, surgical hand wash, when hands must be washed
- KU22.** good personal hygiene practice including hand care
- KU23.** how to use personal protective equipment such as: The personal clothing and protective equipment required to manage the different types of waste generated by different work activities

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** report and record incidents
- GS2.** read and understand company policies and procedures to managing biomedical waste and infection control and prevention
- GS3.** listen patiently
- GS4.** report hazards and incidents clearly with the appropriate level of urgency
- GS5.** take in to account opportunities to address waste minimization, environmental responsibility and sustainable practice issues
- GS6.** apply additional precautions when standard precautions are not sufficient
- GS7.** consistently ensure instruments used for invasive procedures are sterile at time of use (where appropriate)
- GS8.** consistently follow the procedure for washing and drying hands
- GS9.** consistently maintain clean surfaces and limit contamination
- GS10.** how to make exceptional effort to keep the environment and work place clean
- GS11.** identify hazards and suggest effective solutions to identified problems pertaining to hospital waste and related infections
- GS12.** analyze the seriousness of hazards pertaining to hospital waste and related infections
- GS13.** apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to act
- GS14.** take into account opportunities to address waste minimization, prevent infection, environmental responsibility and sustainable practice issues

### Qualification Pack

#### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Classification of the Waste Generated, Segregation of Biomedical Waste, Proper collection and storage of Waste</i>	5	-	3	10
<b>PC1.</b> handle, package, label, store, transport and dispose of waste appropriately to minimize potential for contact with the waste and to reduce the risk to the environment from accidental release	-	-	-	-
<b>PC2.</b> store clinical or related waste in an area that is accessible only to authorized persons	-	-	-	-
<b>PC3.</b> minimize contamination of materials, equipment and instruments by aerosols and splatter	-	-	-	-
<i>Complying with an effective infection control protocols</i>	8	-	5	10
<b>PC4.</b> apply appropriate health and safety measures following appropriate personal clothing & protective equipment for infection prevention and control	-	-	-	-
<b>PC5.</b> identify infection risks and implement an appropriate response within own role and responsibility in accordance with the policies and procedures of the organization	-	-	-	-
<b>PC6.</b> follow procedures for risk control and risk containment for specific risks. Use signs when and where appropriate	-	-	-	-
<b>PC7.</b> follow protocols for care following exposure to blood or other body fluids as required	-	-	-	-
<b>PC8.</b> remove spills in accordance with the policies and procedures of the organization	-	-	-	-
<b>PC9.</b> clean and dry all work surfaces with a neutral detergent and warm water solution before and after each session or when visibly soiled	-	-	-	-
<b>PC10.</b> demarcate and maintain clean and contaminated zones in all aspects of health care work	-	-	-	-
<b>PC11.</b> confine records, materials and medicaments to a well designated clean zone	-	-	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> confine contaminated instruments and equipment to a well designated contaminated zone	-	-	-	-
<b>PC13.</b> decontaminate equipment requiring special processing in accordance with quality management systems to ensure full compliance with cleaning, disinfection and sterilization protocols	-	-	-	-
<b>PC14.</b> replace surface covers where applicable	-	-	-	-
<b>PC15.</b> maintain and store cleaning equipment	-	-	-	-
<b>PC16.</b> report and deal with spillages and contamination in accordance with current legislation and procedures	-	-	-	-
<i>Maintaining personal protection and preventing the transmission of infections from person to person</i>	<b>8</b>	-	<b>5</b>	<b>10</b>
<b>PC17.</b> maintain hand hygiene following hand washing procedures before and after patient contact /or after any activity likely to cause contamination	-	-	-	-
<b>PC18.</b> cover cuts and abrasions with waterproof dressings and change as necessary	-	-	-	-
<b>PC19.</b> change protective clothing and gowns/aprons daily, more frequently if soiled and where appropriate, after each patient contact	-	-	-	-
<b>PC20.</b> perform additional precautions when standard precautions alone may not be sufficient to prevent transmission of infection	-	-	-	-
<b>NOS Total</b>	<b>21</b>	-	<b>13</b>	<b>30</b>

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	HSS/N9618
<b>NOS Name</b>	Follow infection control policies & procedures including biomedical waste disposal protocols
<b>Sector</b>	Healthcare
<b>Sub-Sector</b>	Social Work & Community Health, Healthcare Management, Allied Health & Paramedics
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	0.5
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	28/07/2022
<b>Next Review Date</b>	28/07/2027
<b>NSQC Clearance Date</b>	28/07/2022

## Qualification Pack

### DGT/VSQ/N0103: Employability Skills (90 Hours)

#### Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

#### Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

#### Elements and Performance Criteria

##### *Introduction to Employability Skills*

To be competent, the user/individual on the job must be able to:

- PC1.** understand the significance of employability skills in meeting the current job market requirement and future of work
- PC2.** identify and explore learning and employability relevant portals
- PC3.** research about the different industries, job market trends, latest skills required and the available opportunities

##### *Constitutional values - Citizenship*

To be competent, the user/individual on the job must be able to:

- PC4.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC5.** follow environmentally sustainable practices

##### *Becoming a Professional in the 21st Century*

To be competent, the user/individual on the job must be able to:

- PC6.** recognize the significance of 21st Century Skills for employment

## Qualification Pack

- PC7.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life
- PC8.** adopt a continuous learning mindset for personal and professional development

### *Basic English Skills*

To be competent, the user/individual on the job must be able to:

- PC9.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC10.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC11.** write short messages, notes, letters, e-mails etc. in English

### *Career Development & Goal Setting*

To be competent, the user/individual on the job must be able to:

- PC12.** identify career goals based on the skills, interests, knowledge, and personal attributes
- PC13.** prepare a career development plan with short- and long-term goals

### *Communication Skills*

To be competent, the user/individual on the job must be able to:

- PC14.** follow verbal and non-verbal communication etiquette while communicating in professional and public settings
- PC15.** use active listening techniques for effective communication
- PC16.** communicate in writing using appropriate style and format based on formal or informal requirements
- PC17.** work collaboratively with others in a team

### *Diversity & Inclusion*

To be competent, the user/individual on the job must be able to:

- PC18.** communicate and behave appropriately with all genders and PwD
- PC19.** escalate any issues related to sexual harassment at workplace according to POSH Act

### *Financial and Legal Literacy*

To be competent, the user/individual on the job must be able to:

- PC20.** identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.
- PC21.** carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook
- PC22.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC23.** identify relevant rights and laws and use legal aids to fight against legal exploitation

### *Essential Digital Skills*

To be competent, the user/individual on the job must be able to:

- PC24.** operate digital devices and use their features and applications securely and safely
- PC25.** carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.
- PC26.** display responsible online behaviour while using various social media platforms

## Qualification Pack

- PC27.** create a personal email account, send and process received messages as per requirement
- PC28.** carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications
- PC29.** utilize virtual collaboration tools to work effectively

### *Entrepreneurship*

To be competent, the user/individual on the job must be able to:

- PC30.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC31.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC32.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

### *Customer Service*

To be competent, the user/individual on the job must be able to:

- PC33.** identify different types of customers and ways to communicate with them
- PC34.** identify and respond to customer requests and needs in a professional manner
- PC35.** use appropriate tools to collect customer feedback
- PC36.** follow appropriate hygiene and grooming standards

### *Getting ready for apprenticeship & Jobs*

To be competent, the user/individual on the job must be able to:

- PC37.** create a professional Curriculum vitae (Résumé)
- PC38.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC39.** apply to identified job openings using offline /online methods as per requirement
- PC40.** answer questions politely, with clarity and confidence, during recruitment and selection
- PC41.** identify apprenticeship opportunities and register for it as per guidelines and requirements

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** need for employability skills and different learning and employability related portals
- KU2.** various constitutional and personal values
- KU3.** different environmentally sustainable practices and their importance
- KU4.** Twenty first (21st) century skills and their importance
- KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- KU6.** importance of career development and setting long- and short-term goals
- KU7.** about effective communication
- KU8.** POSH Act
- KU9.** Gender sensitivity and inclusivity
- KU10.** different types of financial institutes, products, and services

## Qualification Pack

- KU11.** components of salary and how to compute income and expenditure
- KU12.** importance of maintaining safety and security in offline and online financial transactions
- KU13.** different legal rights and laws
- KU14.** different types of digital devices and the procedure to operate them safely and securely
- KU15.** how to create and operate an e- mail account
- KU16.** use applications such as word processors, spreadsheets etc.
- KU17.** how to identify business opportunities
- KU18.** types and needs of customers
- KU19.** how to apply for a job and prepare for an interview
- KU20.** apprenticeship scheme and the process of registering on apprenticeship portal

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** read and write different types of documents/instructions/correspondence in English and other languages
- GS2.** communicate effectively using appropriate language in formal and informal settings
- GS3.** behave politely and appropriately with all to maintain effective work relationship
- GS4.** how to work in a virtual mode, using various technological platforms
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the current job market requirement and future of work	-	-	-	-
<b>PC2.</b> identify and explore learning and employability relevant portals	-	-	-	-
<b>PC3.</b> research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC4.</b> recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
<b>PC5.</b> follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>1</b>	<b>3</b>	-	-
<b>PC6.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC7.</b> practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<b>PC8.</b> adopt a continuous learning mindset for personal and professional development	-	-	-	-
<i>Basic English Skills</i>	<b>3</b>	<b>4</b>	-	-
<b>PC9.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC11.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	<b>1</b>	<b>2</b>	-	-
<b>PC12.</b> identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	-
<b>PC13.</b> prepare a career development plan with short- and long-term goals	-	-	-	-
<i>Communication Skills</i>	<b>2</b>	<b>2</b>	-	-
<b>PC14.</b> follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-	-
<b>PC15.</b> use active listening techniques for effective communication	-	-	-	-
<b>PC16.</b> communicate in writing using appropriate style and format based on formal or informal requirements	-	-	-	-
<b>PC17.</b> work collaboratively with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>1</b>	-	-
<b>PC18.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC19.</b> escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>2</b>	<b>3</b>	-	-
<b>PC20.</b> identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-	-
<b>PC21.</b> carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook	-	-	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC22.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
<b>PC23.</b> identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	<b>3</b>	<b>5</b>	-	-
<b>PC24.</b> operate digital devices and use their features and applications securely and safely	-	-	-	-
<b>PC25.</b> carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.	-	-	-	-
<b>PC26.</b> display responsible online behaviour while using various social media platforms	-	-	-	-
<b>PC27.</b> create a personal email account, send and process received messages as per requirement	-	-	-	-
<b>PC28.</b> carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-	-
<b>PC29.</b> utilize virtual collaboration tools to work effectively	-	-	-	-
<i>Entrepreneurship</i>	<b>2</b>	<b>3</b>	-	-
<b>PC30.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC31.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC32.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	<b>1</b>	<b>2</b>	-	-
<b>PC33.</b> identify different types of customers and ways to communicate with them	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC34.</b> identify and respond to customer requests and needs in a professional manner	-	-	-	-
<b>PC35.</b> use appropriate tools to collect customer feedback	-	-	-	-
<b>PC36.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>2</b>	<b>3</b>	-	-
<b>PC37.</b> create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC38.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC39.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC40.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC41.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0103
<b>NOS Name</b>	Employability Skills (90 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	5
<b>Credits</b>	3
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/04/2024
<b>Next Review Date</b>	30/04/2027
<b>NSQC Clearance Date</b>	30/04/2024

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score a minimum of 70% of % aggregate marks to successfully clear the assessment.

## Qualification Pack

7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

### Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

### Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
HSS/N8713. Collect detailed patient and family history to draw a pedigree	36	20	20	40	116	10
HSS/N8714. Assess risk for genetic disorders or syndromes	82	90	30	45	247	20
HSS/N8715. Provide counselling on various genetic tests and coordinate for their execution	42	70	32	30	174	10
HSS/N8716. Interpret the inferences of the genetic tests and carry out post- test counselling	40	50	20	30	140	10
HSS/N8717. Provide need- based genetic counselling to the patient and their family members	37	40	25	-	102	10
HSS/N8718. Promote genetics related awareness	40	-	10	25	75	10
HSS/N9615. Maintain interpersonal relationship with client, colleagues, and others	13	-	-	-	13	5
HSS/N9616. Maintain professional & medico-legal conduct	19	-	-	-	19	5

### Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
HSS/N9618.Follow infection control policies & procedures including biomedical waste disposal protocols	21	-	13	30	64	10
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	10
<b>Total</b>	<b>350</b>	<b>300</b>	<b>150</b>	<b>200</b>	<b>1000</b>	<b>100</b>

## Qualification Pack

### Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training

## Qualification Pack

### Glossary

<b>Sector</b>	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
<b>Scope</b>	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

## Qualification Pack

<b>Knowledge and Understanding (KU)</b>	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
<b>Organisational Context</b>	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
<b>Electives</b>	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
<b>Options</b>	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.