

NATIONAL POSTGRADUATE MEDICAL COLLEGE OF NIGERIA



PAEDIATRIC ORLHNS SUBSPECIALTY RESIDENCY

TRAINING PROGRAMME

FACULTY OF OTO-RHINO-LARYNGOLOGY (HNS)

APPROVED BY THE SENATE ON 3RD MARCH, 2022

A handwritten signature in blue ink, appearing to read 'F. A. Arogundade', is positioned above the name of the registrar.

DR F. A. AROGUNDADE, MD FMCP
COLLEGE REGISTRAR

**NATIONAL POSTGRADUATE
MEDICAL COLLEGE
OF NIGERIA**

**FACULTY OF OTORHINOLARYGOLOGY-HEAD
& NECK SURGERY**

PAEDIATRIC ORLHNS SPECIALTY
Residency Training Programme

**FACULTY OF OTORHINOLARYNGOLOGY
-HEAD & NECK SURGERY**

**NATIONAL POSTGRADUATE
MEDICAL COLLEGE OF NIGERIA**

MISSION STATEMENT

**TO TRAIN OTOLARYNGOLOGISTS-HEAD AND
NECK SURGEONS WHO WILL EXCEL IN CLINICAL
DUTIES, COMMUNITY HEALTH SERVICE,
EDUCATION AND RESEARCH.**

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Acknowledgement

PREFACE

DESCRIPTION OF RESIDENCY PROGRAMME IN ORLHNS/PAEDIATRIC ORLHNS

The programme is a 6-year course which commences in an accredited institution after passing the Primary Fellowship examination of the Faculty. The training is in two parts, the junior and the senior residency programmes.

The **Junior Residency** training is a 3-year programme, which consists of 18 months rotation in ORLHNS of which one month will be spent in Audiology Immersion, 3 months rotation in Accident and Emergency, 6 months rotation in General Surgery, 2 months rotation in either Plastic Reconstruction Surgery or Maxillofacial Surgery, 2 months rotation in Neurosurgery, 2 months rotation in Cardiothoracic Surgery, 2 months rotation in Ophthalmology and one month rotation in Anaesthesia. On completion of the posting, candidate can apply to sit for the Part 1 Fellowship Examination in ORLHNS, submit the log book and must have **acquired** the **minimum surgical skills** approved by **the Faculty Board** before the candidate will be eligible to sit for this exam.

The **senior residency** training is a 3-year programme to be spent in ORLHNS in an accredited institution. The training commences after passing the Part 1 Fellowship Exam. Residents in this cadre will continue to improve their clinical and surgical skills, teach juniors in areas of surgery and patient care and exercise management skills. The Senior Residency is divided into two segments: first year of Otorhinolaryngology-Head and Neck Surgery and a Final two years for super specialty training. In these last two years candidates can choose to continue with General Otorhinolaryngology-Head and Neck Surgery or branch out into one of the following: Otology,

Rhinology and Allergy, Head and Neck Surgery, or Paediatric Otorhinolaryngology. After completion of the 3 years senior residency training rotation and submission of the dissertation to the College, the candidate can apply to sit for the Part II Fellowship Examinations. Candidate must also submit the log book and must have acquired the minimum surgical skills approved by the Faculty Board before the candidate will be eligible to set for this exam.

Candidates may also choose to undertake the Postgraduate Doctor of Medicine in ORLHNS (Postgraduate MD). Those who choose this route will defend their Postgraduate MD thesis at least 30 months after Passing Part I examination, and before sitting for Part II Final Fellowship examination. Those who have successfully defended their postgraduate MD thesis will only sit the oral examination in their Part II Final Fellowship examination (The requirement of Part II Fellowship dissertation is deemed to have been fulfilled by the Postgraduate MD Thesis).

GUIDELINES FOR USE

1. Upon registration as an Associate Fellow in an ORLHNS Residency Programme, each Resident must obtain a Log Book at the current price. It is his/her responsibility to ensure that it is kept safe and intact throughout his/her period of training.
2. It is the Resident's responsibility to enter each case s/he manages and/or operates on in the appropriate column with date and the Supervising Consultant must sign each entry singly. **No block signing of procedures.**
3. Supervising Consultant in each surgical rotation must assess the operative skill of the resident according to the criteria listed in the log book for surgical procedures/clinical skills **performed** by the Resident.
4. When s/he has completed his/her posting and meets the **minimum criteria set by the Faculty Board on surgical skill acquisition in all the rotation and on level of training**, it is his/her responsibility to present himself/herself to his/her Consultant/Trainer.

5. The Consultant will then assess the Resident and complete the column in respect of his/her own judgment as to the level of knowledge and competence demonstrated by the Resident and sign his/her name in the column provided.
6. It is important that the assessment exercise takes place continuously throughout the posting. Both Resident and Consultant must avoid a situation where this Log Book is completed in a rush in the last days of posting.
7. If there are competency areas identified, taught and assessed in a particular training institution that are not contained in the print out, the programme coordinator should feel free to add on such areas in the blank pro-forma included.

.....
Secretary, Faculty Board of ORLHNS.

.....
Chairman, Faculty Board of ORLHNS.

AIM

The aim of the programme is to train aspiring surgeons in Otorhinolaryngology-Head & Neck Surgery so as to produce specialists who will be well equipped to practice as competent Ear Nose Throat, Head & Neck Surgeons.

LEARNING OBJECTIVE:

The objective of the programme is to train a highly qualified Specialist/ Consultant Otorhinolaryngologist-Head and Neck Surgeon competent to manage all ORLHNS disorders at various levels.

The Trainee by the end of the programme shall:

- Be able to, independently, manage ORLHNS problems to the highest level of competence.
- Be able to set up, organize and manage surgical services in the district/ regional/ tertiary hospitals.
- Provide consultancy services where ever is needed, and therefore will increase access to quality ORLHNS care,
- Teach residents, medical officers, medical students and other health care providers in ORLHNS.
- Engage in research activities.

ADMISSION REQUIREMENT:

Candidates must have a qualification registrable by the Medical & Dental Council of Nigeria.

Candidates must have served the pre-registration year/years in their own country or in any other country accepted by the Medical & Dental Council of Nigeria and must have been fully registered. Candidates must have had at least one year of post-graduation experience, which should be of general clinical duties acceptable to the College.

COURSE DURATION:

A minimum of 6 years made up of:

- 3 years for the Junior Residency (Part I)
- 3 years for the Senior Residency (Part II) is considered adequate

(comprising one year of General ORLHNS and 2 years of super-specialty training).

COURSE STRUCTURE:

The course is structured into:

1. Primary
2. Part I
3. Part II (with or without MD prior to Part II Final Fellowship Examination)

Course Content:

COURSE CONTENT FOR PRIMARY IN ORLHNS

This is essentially a Pre-Residency training. It shall consist of the following Basic Sciences subjects.

ORL 910 Anatomy (6 Credit Units)

2.1.1 Head and Neck

Osteology of the skull, jaws and cervical vertebrae

The Scalp

The Face

Topography of the Neck

The root of neck (Thoracic Inlet)

Anatomy of the vessels and nerves of the Head and Neck

The lymphatic drainage of the Head and Neck

The oral cavity and contents

Anatomy of the Pharynx, Larynx, Trachea and Oesophagus

Infratemporal and pterygopalatine fossae

Temporomandibular joint

The Orbit and its contents

The Nose and paranasal Sinuses

The Auditory apparatus

The major Salivary glands

Thyroid and Para thyroids

2.1.2 **Developmental Anatomy**

Development of the Pharynx, Larynx, Trachea, Oesophagus, Oral Cavity, Nose and Sinuses. Development of the Ear (External, Middle Ear Cleft, Inner ear), Face and major vessels of the Head and Neck in relation to congenital anomalies of the Ear, Nose and Throat.

2.1.3 **Neuro-Anatomy**

The brain- surface anatomy and major divisions, cranial nerves meninges, venous sinuses and cerebral vessels. Brain stem and its centres and connections. Anatomy of circulation of the cerebrospinal fluid. Essentials of development of brain in relation to ENT Autonomic nervous system.

2.1.4 **Thorax:**

Anatomy of:

- Thoracic wall and diaphragm
- The Thoracic cavity - heart and lungs
- The Tracheobronchial tree and oesophagus

2.1.5 **Abdomen**

Anatomy of the abdominal wall

Gross anatomy of abdominal viscera

2.1.6 **Radiologic Anatomy**

Plain and contrast radiography of the head, neck, thorax and upper gastro-intestinal tract. Ultrasound scan Computerized tomography scanning and Magnetic Resonance imaging (MRI), PET Scan and Interventional radiology.

2.1.7 **Histology:**

Microscopic structure of normal tissues

Intercellular Anatomy

Basic principles of Histochemistry

Brief introduction to Electron Microscopy

Nasal and Paranasal Sinuses
External, Middle and Inner Ear
Oral cavity – Pharynx, Larynx, Oesophagus,
Tracheobronchial tree, Salivary glands, Thyroids and
Parathyroids.

ORL911 APPLIED PHYSIOLOGY: (INCLUDING BIOCHEMISTRY, CHEMICAL PATHOLOGY AND PHARMACOLOGY) (6 Credit Units)

2.2.1 General Physiological Principles:

- Structure of Living Matter
Biological interaction
 - The living cell, functions and changes in its mechanism
 - Function of nucleoproteins in the integration of the cell as a unit of living matter
- Energy Changes in the living system:
 - Thermodynamics of the living organism and its potential energy status
 - Oxygen – utilisation of the living cell
 - Heat production and Heat loss. (Basal metabolism, specific dynamic action, regulation of body temperature)
 - Energy transformation
 - Homeostasis
- General Considerations in Water, Electrolytes and Acid-Base Balance:
 - Distribution of water and electrolytes in extra and intracellular spaces of the body.
 - Brief survey of biological transport of water and solutes
 - Water and electrolytes balance.

Causes and effects of dehydration and oedema

Sodium and Potassium Metabolism

- Acid-Base Balance
 - PH Regulation:
pH of the body fluids and buffer systems of the body
Respiratory and metabolic acidosis and alkalosis as encountered in surgical practice.

- Enzymes and Co-Enzymes
 - Effects of enzymes in intermediary metabolism
 - General aspects of metabolism of carbohydrates, lipids and proteins and nucleoproteins.
- General principles of nutrition in surgery including parenteral nutrition, vitamins, folic acid, vitamin deficiencies.
- Mineral Metabolism
 - Iron, Calcium/Phosphate/ Magnesium, Vitamin D and Parathyroid Hormones
- Effects of Physical Agents:
 - Radiation
 - Hypothermia
 - Hyperthermia
 - Hyperbaric Oxygen
- Principles of Electronics

ORL 912 Systematic Physiology (4 Credit Units)

2.3.1 Haemodynamics

- Flow – Basic principles of Cardio-Vascular Physiology
- B.P. – Changes in Hypertension, Hypotension, Shock, Syncope
- Venous circulation and venous pressure
- Haemorrhage – Clotting mechanism

2.3.2 Auditory Apparatus:

- Functions of External, Middle and Inner Ear

2.3.3 Respiratory System

- Physiology of the Nose and Paranasal sinuses
- Physiology of the Larynx
- Pulmonary ventilation and control
- Protective mechanism of the lungs

2.3.4 Mouth, Pharynx and Oesophagus

- Mechanism of deglutition
- Oesophageal function

2.3.5 Special Senses

- Taste and smell

2.3.6 Applied Physiology or Muscles

- Electromyography

2.3.7 Endocrines

- Pituitary, Thyroids and Parathyroids
- Adrenals – Steroids, Corticosteroids and their actions
- Metabolic and Endocrine response to surgery

2.3.8 Nervous System

- Consciousness and higher integrated functions.
- Sensation, Motor System, Pyramidal and Extra pyramidal systems, maintenance of muscle tone.

2.3.9 Physiology of Pain

ORL 913 Pharmacology (4 Credit Units)

2.4.1 General Principles of Pharmacology

- Route of Administration, Absorption, Distribution and Excretion of Drugs
- Mechanisms of Drug Action
- Dose – Effect relationship, biological assay
- Factors Modifying Drug Effects:
 - o Age, Body Weight, Route of Administration, Timing, Distribution, Excretion, Environmental and Genetic Factors, Drugs interaction
- Drugs Toxicity
- Development, Evaluation and Control of Drugs: Clinical Trial

2.4.2 Specific Classes of Drugs

- Anaesthetic agents, Antibiotics, Steroids, Chemotherapeutic agents
- Drugs action on the autonomic nervous system
- Choline and anti-choline drugs: Sympathetic and Adrenergic Drugs.

- Drugs acting on the cardiovascular system
- Antituberculous, Antihelminthic and Antiamoebic Drugs
- Cancer Chemotherapy
- Antiretroviral therapy

ORL 914 General Pathology (3 Credit Units)

This shall be largely concerned with general pathology, General principles underlying disease process:

Inflammation, Trauma, Degeneration, Repair, Hypertrophy, Hyperplasia, Blood coagulation, Thrombosis, Embolism, Infarction – Ischaemia, Neoplasia, Oedema, Principles underlying tissue replacement.

ORL 915 Microbiology (3 Credit Units)

Routine diagnostic methods, identification of Bacteria, Viruses (HIV, HPV and EBV) and other organisms of surgical importance, Common parasitic and fungal diseases in the tropics.

Principles of sterilization and disinfection

Principles of immunology, toxic antibodies, allergy: the immune diseases

Methods of action of antibodies

ORL 916 Chemical Pathology (3 Credit Units)

Basic principles of fluid and electrolyte balance

Blood chemistry

Liver metabolism: hepatic function tests, jaundice, detoxication

Kidney:

Principles of urinalysis

Tests for secretory function

Renal handling of Na⁺ and K⁺

ORL 917 Haematology (3 Credit Units)

Blood Groups

Haemoglobin Genotype

Blood Transfusion

Indications
Complications
Common Haematological diseases
Anaemia
Sickle cell disease
Leukaemia
Disorders of coagulation

PART I COURSE:

This is divided into 2 clusters of 12 months and 6 months duration respectively for the ORLHNS I & ORLHNS II and 18 months of surgical specialty training.

ORL 918 ORLHNS I:

12 months in Otorhinolaryngology-Head and Neck Surgery. Candidates should acquire basic skills in examination of patients as well as perform basic operations in ENT such as:

- Removal of foreign bodies in the Ear Nose and Throat
- Tonsillectomy
- Adenoidectomy
- Drainage of mastoid abscess
- Nasal operations
- Para-nasal sinus operation and other head and neck operations
- Drainage of abscesses in the head and neck

SURGICAL SPECIALTY TRAINING

18 months of rotation in the following related specialties

- ORL 919 2 months in Ophthalmology
- ORL 920 2 months in Neurosurgery
- ORL 921 2 months in Cardiothoracic surgery
- ORL 922 6 months in General Surgery
- ORL 923 3 months in Accident and Emergency medicine
- ORL 924 2 months in Maxillofacial or
Plastic and reconstructive surgery
- ORL 925 1 month in Anaesthesia

ORL 926 ORLHNS II:

This should consist of ORLHNS Training of 6 months at a relatively more advanced nature.

Log book should be obtained at the inception of Part I ORLHNS to document operative surgery and other activities.

PART II: FELLOWSHIP IN ORLHNS with or without super-specialty certification

Duration: 3 Years Post Part I

After passing the Part I examination, the candidate must spend three years acquiring higher surgical/clinical skills in ORLHNS in an accredited institution. Skills must be acquired in the following surgical/Clinical procedures.

Laryngectomy and Voice rehabilitation

Neck dissection

Pharyngectomy

Maxillectomy (partial and total)

Surgery of the Salivary glands

All types Sinus Surgery including Functional Endoscopic

Sinus Surgery (FESS)

Plastic operations in ORLHNS

Mastoid Surgery and Middle & Inner Ear Surgery

Microlaryngeal surgery and Laser Surgery

Panendoscopy and Bronchoscopy

ROUTINE FOR RESIDENTS

- Daily morning ward rounds by the Trainee and evening ward rounds by trainee on call
- Weekly teaching ward rounds with the Consultant
- Attendance at outpatient clinic with the Consultant available for advice and discussion
- Weekly tutorials with the Consultant
- At least twice a week operation session
- Monthly clinic-mortality and clinical audit meetings with the Consultant

- Monthly journal club meeting with the Consultant
- Monthly Clinico-Histopathology Seminars
- Monthly Clinico-Radiology Sessions
- Monthly seminars in specific topics with Consultants
- Weekly head and neck oncology joint clinics
- Trainees will conduct clinical research and publish a paper with the Consultant
- The College will organize regular skills workshop for Trainees.

COURSE CREDIT UNITS FOR JUNIOR RESIDENCY TRAINING IN OTORHINOLARYNGOLOGY - HEAD AND NECK SURGERY

- One (1) hour of Lecture/Tutorial/Seminar every week for 15 weeks (Semester Equivalent) = 15hours =1 credit unit.
- Three (3) hours of Clinical exposure/skills acquisition every week for 15 weeks (Semester Equivalent) =45hours = 1 credit unit.
- Clinical exposure/Skills acquisition:
 - 8 hours regular work day for five working days= 40 hours a week
 - 40 units of call duty per month (40 X 8 hours) = 320 hours (or $320/4 = 80$ hours a week)
 - Total exposure per week = $40 + 80 = 120$ hours
- Residency Program is a continuum except for annual leave; hence 52 Weeks less 4 weeks annual leave = 48 working weeks = 3 semester equivalent

POSTINGS	DURATION IN MONTHS	CONTACT LECTURES HRS/WK	CONTACT CLINICALS HRS/WK	CREDIT UNITS
ORL 918 ORLHNSI	12	5	120	16+128 =144
ORL 919 OPHTHALMOLOGY	2	5	120	3+ 21 =24
ORL 920 NEUROSURGERY	2	5	120	3+21 =24
ORL 921 CARDIOTHORACIC SURGERY	2	5	120	3+21 =24
ORL 922 GENERAL SURGERY	6	5	120	8+64 =72
ORL 923 ACCIDENT AND EMERGENCY	3	5	120	5+32 =37
ORL 924 MAXILLOFACIAL SURGERY OR PLASTIC AND RECONSTRUCTIVE SURGERY	2	5	120	3+21 =24
ORL 925 ANAESTHESIA	1	5	120	1+11 =12
ORL 926 ORLHNSI	6	5	120	8+64 =72
ORL 927 Basic Surgical Skill Course				2
ORL 928 Temporal Bone Dissection Course				2
ORL 929 Endoscopic Sinus Surgery Course.				2
PMC 901 Advanced Trauma Life Support				2
TOTAL	36			441

A minimum of 441 credit units over a period of 36 months in the appropriate postings will make a candidate eligible to sit for the Part I Fellowship Examinations.

COURSE CREDIT UNITS FOR SENIOR RESIDENCY TRAINING IN OTORHINOLARYNGOLOGY-HEAD AND NECK SURGERY.

- One (1) hour of Lecture/Tutorial/Seminar every week for 15 weeks (Semester Equivalent) = 15hours =1 credit unit.
- Three (3) hours of Clinical exposure/skills acquisition every week for 15 weeks (Semester Equivalent) =45hours = 1 credit unit.
- Clinical exposure/Skills acquisition:
 - 8 hours regular work day for five working days= 40 hours a week
 - 40 units of call duty per month (40 X 8 hours) = 320 hours (or 320/4 = 80 hours a week)
 - Total exposure per week = 40 + 80 = 120 hours
- Residency is a continuum except for annual leave; hence, 52 Weeks less 4 weeks annual leave = 48 working weeks = 3 semester equivalent.

POSTINGS	DURATION IN MONTHS	CONTACT LECTURES HRS/WK	CONTACT CLINICALS HRS/WK	CREDIT UNITS
ORL 930OTOLOGY	3	5	120	5+32 =37
ORL 931RHINOLOGY	3	5	120	5+32 =37
ORL 932HEAD AND NECK SURGERY	3	5	120	5+32 =37
ORL933 PAEDIATRICORLHNS I	3	5	120	5+32 =37
ORL 938 PAEDIATRIC ORLHNS	24	5	120	32+256 =288
PMC 951 Research Methodolog				2
PMC 952 Health Resources Management				2
PMC 953 Ethics in Clinical Practice				2
ORL 999 PART II DISSERTATION	24			12
TOTAL				454

A minimum of 454 credit units over a period of 36 months in the appropriate postings will make a candidate eligible to sit for the Part II FINAL Fellowship Examinations.

Where a candidate has difficulties fixing into appropriate accredited centres in Nigeria, postings in accredited centres acceptable to NPMCN outside the country will be countenanced for ORL 938.

GUIDELINES FOR VETTING OF APPLICATION FORM FOR PART I AND PART II IN THE FACULTY OF ORLHNS

Below are the guidelines for preliminary screening in Faculty of Otorhinolaryngology.

1. Candidate must be an associate fellow and in good standing.
2. Must be presented for examination on a platform of an accredited training institution.
3. Must submit along with the examination form his training Log Book.
4. Must submit at the end of January of every year. Annual report on the trainee duly signed by ORLHNS trainers in the department or the unit of ORLHNS.
In addition to the above
5. The submitted application form must be screened for
 - i. Verification of facts

- ii. Mandatory postings,
 - iii. Date of postings.
 - iv. Verification of postings and signatures
 - v. Verification of fellow who signed the form.
6. Logbook verification
- i. Verification of entries of procedures.
 - ii. Verification of cognitive programme and courses.

For part I candidate.

Must show evidence that he/she has attended the mandatory courses before sitting for Part I.

- i. ORL 927 Basic Surgical Skill Course. 2 Credit Units.
- ii. ORL 928 Temporal Bone Dissection Course. 2 Credit Units.
- iii. ORL 929 Endoscopic Sinus Surgery Course. 2 Credit Units.
- iv. PMC 901 Advanced Trauma Life Support (Surgical based Residents) 2 Credit Units.

Where, for logistic reasons, a candidate is able to attend two of the three courses he/she would be allowed to sit the examinations on the proviso that he/she attends the third course before sitting Part II examinations.

For part II candidate

- i. PMC 951 Research Methodology 2 credit Units.
- ii. PMC 952 Health Resources Management 2 credit Units.
- iii. PMC 953 Ethics in Clinical Practice 2 credit units.

TRAINING ASSESSMENT:

1. Primary (entrance examination)

The assessment will be in form of examinations and portfolio for:

1. Part I
2. Part II

PRIMARY: This examination is in multiple choice question formats with questions spread across all aspects in basic medical sciences with emphasis on aspects related to Otorhinolaryngology-Head and Neck Surgery.

Primary Fellowship Examination in Otorhinolaryngology-Head and Neck Surgery (Multiple Choice Questions)

TEST BLUEPRINT 2021
200 questions

SUBJECT	SUBJECT/SUB-SPECIALTY						TOTAL
ANATOMY with emphasis on Head and Neck) 60	Gross anatomy (ear, nose, pharynx, larynx, thyroid gland, neck) 30	Embryology 6	Histology 6	Osteology 6	Neurology 6	Organs/thorax/abdomen 6	60
PHYSIO/pharmacology 40	General 6	Respiratory 6	Special senses 14	Cardiovascular 6	Pharmacology 8		40
BIOCHEM 30	General 6	Carbohydrate 6	LIPIDS 6	Nucleic acid 6	Body fluids 6		30
PATHOLOGY 60	General 24	Morbid anatomy 8	Chem. Path 6	Haematology Blood transfusion 10	Immunology 6	Microbiology 6	60
OTHERS 10	Lab investigations 2	Clinical tests/measurements 4	ENT Clinical procedures 4				10 (GRAND TOTAL 200)

LEVEL OF DIFFICULTY OF TEST ITEMS

The determination of the level of difficulty of test items shall be based on the principles of the Bloom's Taxonomy of Educational objectives. The focus of the questions will be to test the ability of the candidate in application, analysis and synthesis (3, 4, 5 below) which should constitute at least 80-90 percent of the questions. Questions that test knowledge or recall will not be used at this level.

1. Knowledge Recall, or recognition of terms, ideas, procedure, theories, etc.
2. Comprehension Translate, interpret, extrapolate, but not see full implications or transfer to other situations, closer to literal translation.
3. Application Apply abstractions, general principles, or methods to specific concrete situations.
4. Analysis Separation of a complex idea into its constituent parts and an understanding of organization and relationship between the parts. Includes realizing the distinction between hypothesis and fact as well as between relevant and extraneous variables.
5. Synthesis Creative, mental construction of ideas and concepts from multiple sources to form complex ideas into a new, integrated, and meaningful pattern subject to given constraints.
6. Evaluation: candidates make judgements about value of ideas, items and materials.

MODIFIED ANGOFF Standard setting method will be used for determining the Pass mark in each segment of the examination.

PART I:

- Formative assessment by log book.
- Evaluation through annual report on each Resident by the training Department.
- Attendance at prescribed courses.

Examination: This will be in 3 parts:

1. Written

One paper of MCQ, one essay paper in principles of General Surgery and ORLHNS and a third paper in operative surgery and surgical pathology in ORLHNS.

LEVEL OF DIFFICULTY OF TEST ITEMS

The determination of the level of difficulty of test items shall be based on the principles of the Bloom's Taxonomy of Educational objectives. For the theoretical components of the examinations, including the MCQs and Essay questions, the focus of the questions will be on the ability of the candidate in application, analysis and synthesis (3, 4, 5 below) which should constitute at least 80-90 percent of the questions. Questions that test knowledge or recall will not be used at this level.

1. Knowledge Recall, or recognition of terms, ideas, procedure, theories, etc.
2. Comprehension Translate, interpret, extrapolate, but not see full implications or transfer to other situations, closer to literal translation.
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4. Analysis Separation of a complex idea into its constituent parts and an understanding of organization and relationship between the parts. Includes realizing the distinction between hypothesis and fact as well as between relevant and extraneous variables.
5. Synthesis Creative, mental construction of ideas and concepts from multiple sources to form complex ideas into a new, integrated, and meaningful pattern subject to given constraints.
6. Evaluation: candidates make judgements about value of ideas, items and materials.

A Clinical Examination in General Surgery.

A Clinical Examination consisting of long cases in ORLHNS.

Objective Structured Clinical Examination in ORLHNS

An oral Examination in ORLHNS.

There should be external examiner (s) in General Surgery in addition to ORLHNS Examiners.

NPMCN ORLHNS Part 1 Fellowship Examinations in Otorhinolaryngology-Head and Neck Surgery.

Theory Papers

Paper 1: MCQ

TEST BLUEPRINT

Specialty	Total questions	Domain of the Test				Remarks
		General principles	Operative surgery	Surgical pathology	OSCE	
Cardiothoracic	6	4	2			
Ophthalmology	6	2	2		2	
Neurosurgery	6	2	2		2	
Accident/Emer	10	4		2	4	
Plastic/Maxillo	12	4	2	2	4	
General Surgery	20	6	6	4	4	
Subtotal	60	22	14	8	16	
Audiology/Hearing Aid	10	6			4	
Otology	30	14	4	6	6	
Rhinology	30	14	4	6	6	
Laryngology	30	14	4	6	6	
Allergy	10	4		4	2	
Endoscopy	6		2	2	2	
Head/Neck Surgery	20	6	6	4	4	
Speech/Language	4	2		2		
Sub Total	140	60	20	30	30	
Grand Total	200	82	34	38	46	

The determination of the level of difficulty of test items shall be based on the principles of the Bloom's Taxonomy of Educational objectives. For the theoretical components of the examinations, including the MCQs and Essay questions, the focus of the questions will be on the ability of the candidate in application, analysis and synthesis (3, 4, 5 below) which should constitute at least 80-90 percent of the questions. Questions that test knowledge or recall will not be used at this level.

Paper 2: General Principles

- a. General Surgery 2 questions
- b. Otorhinology-Head and Neck Surgery 3 questions
(one each in otology, rhinology, head and neck surgery, or Paediatric ORLHNS)

Paper 3: Operative Surgery and Surgical Pathology 5 questions
(distributed evenly over otology, rhinology, head and neck surgery, or Paediatric ORLHNS).

Clinicals and Orals

General Surgery: Long Case
Otorhinology-Head and Neck Surgery: Long Case
OSCE
Orals

(distributed evenly over otology, rhinology, head and neck surgery, or Paediatric ORLHNS).

A candidate is deemed to have PASSED if he passes in all areas/parts of the examination including a PASS in CLINICALS.

A Candidate is deemed to have FAILED if he FAILS the Clinicals; his passing the other areas/parts of the examination notwithstanding.

The College approved Standard setting method will be used for determining the Pass mark in each segment of the examination:

MCQ: MODIFIED ANGOFF Standard setting method will be used for determining the Pass mark in each segment of the examination.

ESSAY

Borderline regression method shall be used

CLINICAL

OSCE: Manned Station - Borderline group method shall be used.

Unmanned Station - Modified Angoff Method shall be used.

ORALS

Oral examination shall be structured to allow all candidates have the same questions. Standard setting method - Borderline group method shall be used.

PART II

Formative assessment will include:

- The log book.
- Mandatory Faculty and College courses in Research Methodology, Management Course, and Ethics.

Examinations

- a. Dissertation Defence.
- b. Oral examination I (Radiology films and histopathology pots specimen).
- c. Oral examination II (instruments and operative surgery in ORLHNS/PAEDIATRIC ORLHNS).
 - A candidate is deemed to have passed if he passes ALL the 2 component parts (Defence of Dissertation and Viva Voce).
 - Where he/she successfully defends the dissertation but fails the Viva component, he is REFERRED in the component he failed.
 - Where he/she did not successfully defend the dissertation but passes the Viva component, he is REFERRED in the component he failed.
 - He/she is expected to resit that component at the next Fellowship examinations. The date of PASS is the date he/she passed the referred component of the examination.

- Candidates who choose the MD route, and successfully defended their thesis, will be deemed to have satisfied the dissertation component of the Part II Final Fellowship Examination. Hence, they will only sit the Orals component of the examination.
- The College approved Standard setting method will be used for determining the Pass mark in each segment of the examination: Oral examination shall be structured to allow all candidates have the same questions. Standard setting method - Borderline group method shall be used.

LEARNING METHODS: This will be through the following:

- Clinical apprenticeship.
- Hands-on training in clinic, wards and theatre.
- Formal lectures, tutorials, case presentations, seminars.
- Self-directed learning, research and reading.
- Senior residents to teach and supervise junior residents.
- College and faculty courses and workshops (some of which are mandatory).
- Attendance at medical conferences.

ORL 918 & ORL 926 JUNIOR OTORHINOLARYNGOLOGY- HEAD AND NECK SURGERY ROTATION (216 Credit Units)

OBJECTIVES

1. Learn and master Basic Ear /Nose/Throat/Head and Neck examination using otoscope, head mirror, head light, pharyngeal/laryngeal mirrors, nasal and ear specula and rigid/flexible endoscopes.
2. Learn and acquire basic knowledge of audiological/vestibular tests.
3. Learn about the imaging of the Ear, Nose, Throat, Head and Neck and attend joint radiology/ENT seminars.
4. Learn about histopathological specimen and attend joint histopathology/ENT seminars.
5. Teaching of Clinical interns.
- 6 Learn, assist and perform basic E.N.T operations.

SURGICAL SKILLS EXPECTED TO BE ACQUIRED DURING ROTATION.

	MINIMUM REQUIREMENTS	
Removal of foreign bodies in the external ear	A(10)	P (5)
Aural examination and dressing with microscope	A10	P10
Myringotomy under LA in Adults	A5	P5
Myringotomy under GA in children	A5	P5
Myringoplasty	A5	P5
Excision of preauricular sinus	A5	P5
Excision of post auricular cyst	A5	P5
Removal of foreign bodies in nose	A10	P10
Antral Lavage	A10	P10
Intranasal antrostomy	A10	P10
Diathermy to turbinates/SMR	A5	P5
Partial turbinectomy	A5	P5
Nasal polypectomy	A10	P10
Septal surgery	A5	P5
T & A in children	A10	P5
Tonsillectomy in adults	A10	P5
Tracheostomy in adults	O5/5	P5
Tracheostomy in children	A10	P5
Removal of foreign body in larynx	A5	P5
Pharyngoscopy Rigid/Flexible	A10	P5
Direct Laryngoscopy Rigid/Flexible	A10	P5
Oesophagoscopy	A10	P5
Branchial cyst excision	O2/A2	P5
Removal of superficial lesion	A5	P5
<i>Drainage of peritonsillar abscess</i>	A5	P5
Drainage of Retropharyngeal abscess	A5	P5

WHERE

O	=	OBSERVE
A	=	ASSIST
P	=	PERFORM
A/P	=	EITHER ASSIST OR PERFORM

AUDIOLOGY ROTATION (EMBEDDED IN ORLHNS I) OBJECTIVES/SKILLS EXPECTED

Resident should be able to:

1. Understand and appreciate the need for standardization and calibration in auditory testing.
2. Perform and interpret accurate air and bone conduction hearing thresholds.
3. Understand the theory of masking techniques and perform.
4. Understand the theory, perform and interpret impedance audiometry with special reference to measurement of middle ear pressure and identification of stapedial reflexes.
5. Perform and interpret speech audiometry.
6. Understand the theory, interpret and to be able to perform evoked response audiometry
7. Understand the theory, interpret and to be able to perform Otoacoustic emission audiometry.
8. Understand the difficulties and the needs of the hard of hearing.
9. Understand the full range of assistive devices for the hard of hearing, and their application.
10. Understand the indications for prescribing a hearing aid.
11. Understand the full range of electronic hearing aids and the advantages and disadvantages of each type.
12. Understand hearing aid batteries and be able to make ear mould.
13. Understand (have participated in) the hearing aid selection procedure.
14. Understand (have participated in) and appreciate the value of auditory counselling.
15. Understand the risk factors for neonatal hearing loss.
16. Understand neonatal screening programs.
17. Understand the steps to be taken when hearing loss is suspected in a young child.
18. Be aware of the full range of support programs available to the hard of hearing in Nigeria.
19. Understand the theory and construction of cochlear implants, together with patient selection and post implantation auditory assessment and counselling.

20. Be aware of and sensitive to the attitude of the Deaf Community as it relates to intervention by the medical profession. by visiting the Deaf school.
21. Understand the theory, perform and interpret vestibular assessment results.
22. Understand the theory of Speech and Language disorders and the various rehabilitation modalities.

SKILLS EXPECTED TO BE ACQUIRED DURING ROTATION

Pure Tone Audiometry	O5	P10
Speech Audiometry	O5	P10
Tympanometry	O5	P10
Otoacoustic Emission	O5	P10
ABR	O5	P10
Ear Mould Making	O5	P10
ENG	O5	P10

ORL 919 OPHTHALMOLOGY (24 Credit Units)

Objectives

1. To acquire ophthalmology skills in the management of ENT related diseases.
2. Acquiring knowledge/skills in the clinical management and diagnosis of various ophthalmology diseases.

Skills to be acquired	Minimum Requirements	
1. Ophthalmoscopy		P10
2. Removal of FB	A5	
3. Removal of Pterygium	A5	
4. Evisceration	A5	
5. Enucleation	A5	
6. Cataract Extraction	A5	
7. Repair of Laceration of the Eyelid		P5
8. Cannulation of the nasolacrimal duct	A5	P10

ORL 920 NEUROSURGERY (24 Credit Units)

OBJECTIVES

- 1 To acquire neurosurgical skills helpful in the management of ENT related diseases
- 2 Acquiring knowledge/skills in the clinical management and diagnosis of various neurosurgical diseases

Skills expected to be acquired

1.	Exploratory burr holes	A5	P
2.	Use of operating microscope in neurosurgical procedures	A5	P
3.	Lumbar Puncture	A	P5
4.	Craniotomy	A5	P
5.	Laminectomy	A5	P
6.	Shunts	A5	P
7.	Excision of Myelomeningoceles	A5	P

ORL 921 CARDIOTHORACIC SURGERY (24 Credit Units)

OBJECTIVES

1. Assessment of cardiovascular and respiratory systems.
2. Understand the interaction of cardio-pulmonary disease on medical and surgical treatment of otolaryngology head/neck patients.

Skills expected to be acquired

(1)	Bronchoscopy / Oesophagoscopy	A5	P5
(2)	Techniques of arterial/venous access	A10	
(3)	Thoracentesis	A5	P5
(4)	Tube Thoracostomy Physiologic monotony techniques O ₂ saturation, Cardiac output		P5
(5)	Pleural Biopsy	A5	
(6)	Lung Biopsy	A5	
(7)	Mediastinoscopy	A5	
(8)	Thoracotomy	A5	

ORL 922 GENERAL SURGERY (72 Credit Units)

OBJECTIVES

1. Acquire Basic Surgical Skills
2. Acquire skills in Surgical procedures
3. Learn the rudiments of pre-operative and post-operative care
4. Learn to work as a team

Skills expected to be acquired	Minimum Requirements	
1 Incision making/Skin suturing/Knot tying	A5	P10
2 Selection of abdominal incisions	A5	P10
3 Laparotomy incision and closure of abdominal wall	A5	P10
4 Excision of Skin/ Subcutaneous Lesion	A5	P10
5 I & D Subcutaneous abscess	A5	P10
6 Suture of Laceration	A5	P10
7 Excision of benign/ malignant breast lesion	A5	P10
8 Biopsy of enlarged nodes cervical, axillary, inguinal submandibular	A5	P10
9 Endoscopy of Digestive System Proctoscopy/ Sigmoidoscopy Oesophagoscopy Gastroscopy Anoscopy	A5	P10
10 Gastric Surgery Pyloroplasty, Gastroenterostomy Closure of Perforated Ulcers	A5	P10
11 Intestinal Colostomy	A5	P10
Resection and anastomosis of small bowel	A5	P10
AP resection	A5	
Lysis of Adhesions	A5	
Appendectomy	A5	P5
Excision of hemorrhoid	A5	P5
12 Liver Incisional Liver Biopsy, Local Excision of Liver Lesion,	A5	
13 Biliary Tract Cholecystostomy Cholecystectomy Exploration of common bile duct	A5	
14 Pancreas Whipple procedure	A5	
15 Laparotomy for acute abdomen, Splenectomy Abdominal sepsis, Drainage of intra	A5	P5

retention, hematemesis, epistaxis red eye,
FB in nose, ear and throat A/P

A5 P10

ORL 924 PLASTIC/RECONSTRUCTIVE SURGERY OR MAXILLOFACIAL (24 Credit Units)

OBJECTIVES

Comprehension of skin lesions benign and malignant

Wound revision and closure acquire skills in optimal incision

Various method of wound approximation

Wound healing problems e.g. Immunocompromised

Skills expected to be acquired	Minimum Requirements	
1 Anticipation of surgical manouvres, gentle traction on tissues etc	A5	P5
2 Excision of skin tumours	A5	P5
2 Skin topical care and preparation of wound closure	A5	P5
3 Variety of wound closure design of incision Z plasty, Flaps	A5	P5
5 Split thickness skin graft	A5	P5
6 Plating of facial fractures jaw wiring	A5	P5
7 Debridement of wounds	A5	P5
8 Local treatment and dressing of burns, eschar removal Occlusive Treatment and dressing	A5	P10
9 Reconstruction of cleft lip	A5	P5
Reconstruction of cleft palate	A5	P5

ORL 925 ANAESTHESIA (12 Credit Units)

OBJECTIVES

1. To be able to assess, determine suitability and fitness of a patients booked for general anaesthesia.
2. Learn the process and management of general, regional and local anaesthesia. Appreciate the shared airway.
3. Learn General, regional and local Anaesthetic Agents: injectable and gaseous and their complications.

Anaesthetic Complications

Skills expected to be acquired

(1) Preoperative anaesthetic assessment	A5	P5
(2) Induction of Anaesthesia	A10	
(3) Endotracheal Intubation	A5	P5
(4) Monitoring of patients under General Anaesthesia	O5	A5
(5) Reversal of Anaesthesia	A5	
(6) Postoperative monitoring of a patient recovering from Anaesthesia		A5

COMPETENCE BASED GRADING OF PERFORMANCE GRADES OF PERFORMANCE SCORES

PERFORMANCE GRADE	DESCRIPTION
A	Adequate knowledge performs skill without supervision can reproduce skill on request five to six points on Affective domain.
B	Adequate knowledge performs skill with minimal supervision reproduces skill with minimal guidance four to five points on Affective domain.
C	Adequate knowledge performs skill with supervision; barely reproduces skill 3-4 points on Affective domain.
D	Inadequate knowledge performs skill with supervision Unable to reproduce skill 3 points on Affective domain.
E	Gross inadequate knowledge unable to perform task unable to reproduce skill 2 points on Affective domain.

AFFECTIVE DOMAINS FOR ASSESSING CANDIDATES DURING TRAINING:

1. Attendance to work
2. Punctuality
3. Prompt delivery of assignments
4. Group work and interaction
5. Obeying instructions
6. Respect for patient care

GENERAL TRAINING FOR JUNIOR RESIDENTS

OBJECTIVES

Education course

Basic surgical skill course is a compulsory course for all residents before Part I fellowship examination. It is advisable that resident attend the course shortly after starting residency training or before going on general surgical rotation.

Temporal bone dissection course, Audiology course and Endoscopic sinus surgery course are compulsory courses for all residents before sitting for Part 1 fellowship examination respectively.

Research

Residents must key-in into a research work in collaboration with his/her Consultant.

Conferences

Residents are to attend local and International Conferences especially as related to ORLHNS and Surgery.

The Faculty specifically identifies **ORLSON Conference**, and it is a **mandatory** that Residents should attend.

Residents must present at least **one scientific paper** at the conference before sitting for part I fellowship examination.

POSTGRADUATE DOCTOR OF MEDICINE IN ORLHNS

MD by Course work and Thesis

This optional pre-fellowship program is available for Associate Fellows of the National Postgraduate Medical College who are currently at the Senior Resident level. Applicants will be expected to complete the online application available on the College website and in addition submit a 500 word Concept note summarizing their Research proposal and a Compact signed by the prospective supervisor.

MD by Thesis only

This option is available to interested Fellows who passed their part I examination, completed their part II training but dissertation was not a prerequisite for their part II examination. Younger Fellows who do not meet the MD by publication criteria can also apply. Candidates are to complete the online form and submit a 500 word Concept note and a Compact signed with their prospective supervisor. Those who did not complete the NPMCN post part I training will be required to do remedial courses.

MD by Publication

This option is available to senior Fellows of the National Postgraduate Medical College who have been in good financial standing for at least 10 years. Prospective candidates would have contributed maximally to postgraduate medical education primarily in the area of Part 2 Resident Dissertation supervision for any of the listed Colleges or for University Ph.D. programs, evidenced by 5 successfully defended dissertations. In addition, the candidates would be accomplished medical researchers who have authored a minimum of 5 original research articles available in Pubmed in a focused narrow area as lead or corresponding author. Fellows of the West African College of Physicians and the West African College of Surgeons with 15 years Post Fellowship who meet the above can also apply.

FACULTY OF OTORHINOLARYNGOLOGY HEAD AND NECK SURGERY MD PROGRAMME

COURSE CODES

COLLEGE BASED COURSES

PRE-PART 1 COURSES

- PMC 901 Advanced Trauma Life Support (Surgical based Residents) 2 Credit Units
- POST PART 1 COURSES
- PMC 951 Research Methodology 2 Credit Units
- PMC 952 Health Resources Management 2 Credit Units

- PMC 953 Ethics in Clinical Practice 2 Credit Units

MD COURSES

- PMC 994 Medical Education 2 Credit Units
- PMC 995 Advanced Research Methodology 2 Credit Units
- PMC 996 Advanced Health Resourced Management 2 Credit Units
- PMC 997 Assessments and Examination Methods 2 Credit Units

SYNOPSIS OF COLLEGE BASED M.D. COURSES

MEDICAL EDUCATION PMC 994

This course is designed for medical and dental resident doctors. The need for doctors, involved with teaching in the medical school and postgraduate medical training to have training in teaching is widely recognized. The skills in Medical Education course has been designed to meet this need. The course is aimed at resident doctors who are new to teaching and at Fellows with years of experience who would like an update on current best practice and a greater understanding of the basic principles. The course recognizes that, with appropriate help, all teachers, even those with considerable experience, can improve their skills in teaching. The topics to be taught are, standard setting in educational assessment; assessment of clinical skills; threshold concepts in medical statistics and evidence based practice; numeracy issues in learning about research; mapping and revising the learning and teaching of research; e-learning and blended in medical education; problem based learning; programme development; educational; computer communication network; community-institutional relations; reproducibility of result; patient simulation; databases, factual; clinical decision making; selection of medical students.

ADVANCED RESEARCH METHODOLOGY PMC 995

OBJECTIVE

To facilitate acquisition of basic knowledge and necessary skills for research in Medicine and Proposal/Dissertation writing.

COURSE CONTENT

Definition, Spectrum and Types of Health Research Design; defining Research problems; Setting Objectives; Statistics and Research; Methods; writing research Proposals; (Planning, Protocol Development and Report Writing); Good Clinical Practices and Clinical Trials; Role of Computer in Medical Research (EPI Info and SPSS) Literature review; Use of Physical and Virtual Library; Use of Internet; Search Engines; Systematic Reviews and Meta-analysis; Ethical considerations in medical research. Clinical Governance; Writing-up; presentation and Defense of Dissertation Faculty Based Group Discussion on Research Proposal (Practical Group Session); Evidence Based Health Care Statistical Methods (Summary, Inferences and Interpretation); Basic Principles and Method of Writing Papers for Publications Practical Sessions on Processing of Proposal and Presentation to the College.

ADVANCED HEALTH RESOURCES MANAGEMENT PMC 996 OBJECTIVE

To facilitate acquisition of knowledge and necessary skills required for management of health resources in institutions and for programme.

COURSE CONTENT

Principles and application of Management; Strategic Management; Health Care Planning; Health Policy formulation and evaluation; Health Resources mobilization; Health Resources allocation; Human Resources Management; Organization; Monitoring and Evaluation of Health Services; Performance Management; Sustainable Development; Problem Solving and Decision Making Skills; Emotional Intelligence; Leadership; Management of Change; Risk Management, Legal Aspect of Medical Practice; Financial Management; Material Resources Management; Quality assurance in health and equity in healthy; Public/Private Partnership; Case studies/ scenarios.

ASSESSMENT AND EXAMINATION METHODS PMC 997

Multiple Choice Questions and Objective Test; Oral Examinations; Patient Management Problems; The long clinical case; the objective structured long examination record' (OSLER), the short clinical case; objective structured clinical examination (OSCE); objective structured practical examination (OSPE); objective structured picture examination (OSPIEC); workplace-based assessment; mini-CEX (Mini-clinical Evaluation Exercise); direct observation of procedural skill (DOPS) and Multi-source feedback (MFS); Simulated Patients; Observed Clinical Situations; Ensuring safe and effective patient care through training; Establishing and maintaining an environment for learning; Teaching and facilitating learning; Enhancing learning through assessment; Supporting and monitoring educational progress; Guiding personal and professional development; Continuing professional development as an educator; use of standardized patient (SP) encounters; Data gathering technique (history and physical examination); Interpersonal Communication; Clinical management (diagnostic strategy and treatment plan); Professional documentation (post encounter note or PEN); Checklists; Patient Simulators.

FACULTY BASED COURSES;

Candidates may choose any of the following Faculty Based Courses. It is advised as a guide for candidates to choose a course in the specialty where he/she intend to spend the last one year of Senior Residency. The title of candidate's thesis is expected to also fall in line with candidate's choice.

- ORL 941 Advanced Otolaryngology/Head and Neck Surgery 2 Credit Units
- ORL 942 Advanced Otology 2 Credit Units
- ORL 943 Advanced Rhinology 2 Credit Units
- ORL 944 Advanced Laryngology/Head and Neck Surgery 2 Credit Units
- ORL 945 Advanced Paediatric Otorhinolaryngology 2 Credit Units (Seminars and Thesis are compulsory for candidates pursuing MD with Course Work).

- ORL 998 seminar 6 credit units
- ORL 999 Thesis/Dissertation 12 credit units

COURSES SYNOPSES

ORL 941 Advanced Otolaryngology/Head and Neck Surgery 2 credit units

This is a course takes care of general otorhinolaryngology. The course content incorporates knowledge on all basic Ear, Nose and Throat, Head and Neck diseases. The global Otorhinolaryngological disease epidemiology and management (Medical and Surgical) are covered. Histopathology, Radiology and audio logical tests/procedures are covered.

ORL 94 Advanced Otology 2 Credit

This is a subspecialty course with focus on the study the Ear, its related diseases, management and rehabilitation procedures. The study of temporal bones, skull base, Otological and neurotological diseases, relevant audio logical studies (Audiometry, Tympanometry, Otoacoustic Emission, Automated Brain Response Audiometry etc) and rehabilitation are covered. Surgeries of the External, Middle, Inner Ears, Base of the skull and facial nerves are components of the course. The recent advanced in this field should also be thought.

ORL 943 Advanced Rhinology and Allergy 2 Credit

It is a subspecialty course in Nose and paranasal sinuses and its diseases. The Histology including through knowledge of the Osteomeatal complexes, Nasal bones, sinuses. Skull base are important.

The Management of the Rhinological disorders such as Infections, Trauma, Allergies, Benign/Management tumours, Endoscopic Sinus Surgeries and its complications including recent advancements in the field are inherent component of this course.

ORL 944 Advanced Laryngology/Head and Neck Surgery 2 Credit

This is a study of airways, Voice and food passages. The related diseases and its management are inherent component of the course. Rehabilitative concepts and methods for voice and post-surgical measures to improve the quality of life are important. Infections, Trauma (including foreign bodies). Tumors (Benign/Malignant), voice disorders.

ORL 945 Advanced Paediatric Otorhinolaryngology/Head and Neck Surgery 2 Credit Units

This is a course that takes care of general otorhinolaryngology/ Head and Neck Surgery in the paediatric age group. The course content incorporates knowledge on all basic Ear, Nose and Throat, Head and Neck diseases. The global Otorhinolaryngological disease epidemiology and management (Medical and Surgical) are covered. Histopathology, Radiology and audio logical tests/ procedures are covered.

Admission Criteria for NPMCN Resident Doctors

1. Associate Fellows of the College who have been admitted into the residency program.
2. Passed the NPMCN Part 1 fellowship examination in the Faculty of ORLHNS.
3. Any other qualification deemed equivalent to NPMCN Part 1 and acceptable to the Senate of the College.

The program to be undertaken in a nearby approved center and not necessarily the one the resident is employed.

The seminars which carry 3 units each; and will be presented and graded in the local training center.

Faculty courses will be examined centrally by Faculty.

College based courses will be examined by College.

Current Residents who may have had their proposals accepted may seamlessly migrate to the MD program if they so desire but the first defense will be at least 15 months after Senate approval of the program

Admission Criteria for Resident Doctors of other Postgraduate Medical Colleges

These Resident Doctors may be admitted provided that before starting the MD program they would have passed the compulsory College courses applicable before Part 1 [ATLS] and any compulsory Faculty courses at that level

Nature of Thesis

1. A recommendation of 50,000 to 100,000 total word count for MD thesis.
2. Candidate may publish aspects of the work before defense in a manner similar to other PhD programs.
3. Arrangement of the other structures to be similar to College Part II dissertation.
4. Successful Defense to take place at least 6 months before final fellowship exam.
5. Dissertation component of Part II to-be waived for successful MD defenses.
6. Binding colors as determined by College.

DUTIES/ROLE OF SUPERVISORS FOR COLLEGE MD PROGRAMME.

1. To sign application letters for Residents.
The College has developed a research compact with each MD candidate. Please ensure the candidate is working in your field or a field you qualify and are ready to supervise. You will be required to review the candidate's concept paper and work plan and if you are satisfied, you will be expected to sign the research compact with the candidate.
2. To sign Proposals and assist with ethical approval.
To work with the candidates and help transform his / her concept paper to a workable proposal. This proposal will be handled like the Fellowship proposal- sent to assessors and if approved, you will supervise the candidate through data collection, analysis and write up for thesis defense. Please note that candidates with Part II proposals previously accepted by

the College and who may wish to use such for the MD programme will only be requested to attach a letter of acceptance of proposal by the College.

3. To sign Progress reports every semester.
The experience with the residency programme has shown that the residents are a bit slow in presenting their proposals. To guard against this, the supervisors will be expected to present a report each semester to help monitor the progress of residents. This report will be initiated by the MD candidate and sent to the College through the supervisor.
4. Will be required by the College to serve as coordinator for the programme in their centers.
Each department will appoint one of the supervisors as the Departmental Coordinator. The College will appoint one of the Departmental Coordinators as Center Director. The Center Director will relate with all Departmental Coordinators and report on center and departmental activities at the training center to the College.
5. Will be required to liaise with the Centers Director and Departmental Coordinators on seminar presentations and scoring of same along the guidelines provided by the College.
The Departmental Coordinators will report to the Center Director on seminar presentations done in the department.
6. Will be allowed to witness the MD thesis defense as observers only. Supervisors are usually not allowed to attend Fellowship defense but you will be allowed to attend the MD as observers.
7. You are to encourage candidates to go for Faculty and College based courses.

The course work for the MD programme consists of one (1) Faculty based course and four (4) College based courses. Residents not running the MD programme will be at liberty to attend the Faculty courses. These courses will be held every Wednesday with the College courses alternating with the

Faculty courses, each candidate will be required to present a seminar to the others in the Faculty (for the Faculty course) and all the MD candidates (for the College based courses). A pass will be required for both the Faculty courses (in an examination conducted by the Faculty) and seminar presentations to all MD candidates.

8. To encourage the institutions to allow the candidates to attend courses. Supervisors will be expected to encourage all the MD candidates to attend the Annual Scientific Conference and All Fellows Congress (ASCAF) and other professional association conferences and to encourage the Institutions to sponsor such candidates.

Supervisor/Candidate Compact

Purpose of the compact

The compact between MD candidates and their Supervisors enables their relationship to be open and predictable. The work should be jointly designed by the supervisor and the candidate taking their time in relation to other things into consideration, in order for the research to be completed within the stipulated time. Though the success of the MD programme is not guaranteed by this Compact.

The Persons listed below have gone into a Compact to carry out this MD research programme.

(Name of Candidate) Faculty:

Otorhinolaryngology-Head and Neck Surgery

(Name of Supervisor) Faculty:

Otorhinolaryngology-Head and Neck Surgery

Duties and responsibilities of the Supervisor(s)

- (1) The Supervisor should familiarize the candidate with the current rules applying to MD programme at the host training institution.

- (2) The Supervisor should strive to provide the appropriate working conditions for the candidate.
- (3) The Supervisor should commit to regularly and professionally advise the candidate and should also commit to attending meetings regularly about the work in progress of the candidate, taking into consideration the work plan and the work schedule.
- (4) The Supervisor should encourage the candidate to work independently and also support the candidate by allowing access to his patients, medical students and residents. He should also provide access to scientific environments (national and international), by introducing her/him to working groups and scientific networks, by encouraging her/him to take part in seminars, workshops and conferences, by helping her/him to prepare presentations, by providing her/him with information on possibilities to publish articles and by helping her/him in the writing process.
- (5) The Supervisor should support the candidate regarding her/his career plan and should mention possibilities for further disciplinary and interdisciplinary qualification.
- (6) The Supervisor should assess the work submitted by the candidate promptly and in a neutral way.
- (7) If there are any disputes with the candidate, the supervisor should accept arbitration with the Court of Examiners.

Duties and responsibilities of the Candidate

- (1) The candidate should produce a detailed and structured work plan and work schedule and submit to the supervisor for approval. (S)he must inform the supervisor if there are changes made to the work plan or schedule.
- (2) The candidate must get permission from the supervisor to attend specific courses related to the programme.
- (3) The candidate must regularly report on the work in progress to the supervisor(s). The report (approximately 1-page long) should contain a description of the achievements since the last report or since the start of the MD programme, the overall progress on the research, and the participation to lectures,

conferences, guest lectures, and specific workshops. In addition, the candidate must submit part of the results (e.g. chapter of the research work, draft of article) to the supervisor(s) following the work plan and the work schedule.

- (4) The candidate must strive to present her/his scientific results to the scientific community by publishing articles in peer-reviewed journals and by presenting these results at conferences.

The persons signing this Compact agree to comply with the principles of good scientific practice and ethical guidelines.

Signature: Signature:

Name of Candidate:

Name of Supervisor:

Date: Date:

Attachment: -Work plan

Work Schedule

ACADEMIC REGULATIONS FOR POSTGRADUATE DOCTOR OF MEDICINE (MD)

ACADEMIC SESSION: An academic session consists of two semesters. Each semester comprises 15 weeks of teaching and two weeks of examinations.

MODULAR SYSTEM: All postgraduate programmes shall be run on modular system, commonly referred to as Course Unit System. All courses should therefore be sub-divided into more or less self-sufficient and logically consistent Packages that are taught within a semester and examined at the end of that particular semester. Credit weights should be attached to each course.

DEFINITION OF CREDIT UNIT

Credits are weights attached to a course. One credit is equivalent to ONE CREDIT UNIT and consists of:

1 hour / week of lectures or tutorials or Self instruction per semester of 15 weeks = [15 Lecture hours] or

3 hours/week of term paper work per semester of 15 weeks = [45 term-paper hours] or

3 hours/week of practicals/clinicals per semester of 15 weeks.
= [45 Practicals or Clinicals hours]

REQUIREMENTS FOR GRADUATION OF THE DOCTOR OF MEDICINE (POSTGRADUATE MD PROGRAMME)

- A minimum workload of 54 credit units of which:

12 credit units are for the thesis,

30 credit units are for coursework and

6 credit units are for three departmental seminars.

2 credit units for Mandatory College research methodology workshop

2 credit units for Mandatory College Management workshop

2 credit unit for departmental specialty course

SENIOR RESIDENCY TRAINING

OBJECTIVES OF SENIOR ORLHNS/PAEDIATRIC ORLHNS

1. Refinement of skills in clinical examination, consultation, radiological imaging and pathology.
2. Teach junior in examination patient care, and surgery.
3. Management skill.
4. Improve surgical skills and operative experience.

SKILLS EXPECTED TO BE ACQUIRED

EAR

- | | | |
|--|----|----|
| 1. Removal of meatal masses | | P5 |
| 2. Surgery of meatal atresia | A5 | P5 |
| 3. Partial reconstruction of the pinna | | P5 |
| 4. Surgical approaches to the middle ear and mastoid | A5 | P5 |
| 5. Cortical mastoidectomy | A5 | P5 |
| 6. Radial mastoidectomy | A5 | P5 |
| 7. Myringoplasty (P) and Ossiculoplasty | A5 | P5 |
| 8. Stapedectomy | A5 | P5 |

- | | | |
|---|----|--|
| 9. Surgery of Glomus Tumours of the ear | A5 | |
| 10. Surgery of the facial nerve | A5 | |

NOSE

- | | | |
|---|----|-----|
| 1. Turbinectomy | | P5 |
| 2. Lateral rhinotomy | A5 | P5 |
| 3. Surgery of Tumours of the external Nose and Nasal Cavity | A5 | P5 |
| 4. Caldwell-Luc and allied operation | A5 | P5 |
| 5. Surgery of blow-out injuries of the orbit | A5 | P5 |
| 6. Simple and Radical Maxillectomy | A5 | P5 |
| 7. Surgery of the pterygopalatine fossa | A5 | |
| 8. Oro-antral fistula surgery | | P5 |
| 9. Trephination of the frontal sinus | A5 | P5 |
| 10. External operations of frontal ethmoidal and sphenoidal sinuses | A5 | P5 |
| 11. Nasoendoscopy | A5 | P20 |
| 12. Nasoendoscopy/Biopsy | A5 | P10 |
| 13. Endoscopic sinus surgery | | P10 |

NASOPHARYNX

- | | | |
|--|----|----|
| 1. Adenoidectomy | | P5 |
| 2. Transpalatal approach to the post nasal space | A5 | P5 |
| 3. Surgery of angiofibroma of nasopharynx | A5 | P5 |

OROPHARYNX

- | | | |
|---|----|----|
| 1. Tonsillectomy by dissection | | P5 |
| 2. Division of a long styloid process in the tonsillar fossa | | P5 |
| 3. Division of the glossopharyngeal nerve in the Tonsillar fossa | | P5 |
| 4. Surgery of Peritonsillar abscess | | P5 |
| 5. Surgical treatment of parapharyngeal and retropharyngeal abscess | | P5 |
| 6. Tumours of oropharynx | A5 | P5 |

LARYNGO PHARYNX AND OESOPHAGUS

1. Oesophagoscopy		P5
2. Pharyngotomy and partial pharyngectomy	A5	P5
3. Intubation of the Oesophagus		P5
4. Diathermy Treatment of laryngeal pouch	A5	P5
5. Cricopharyngeal sphincterotomy	A5	P5
6. Excision of pharyngeal pouch	A5	P5
7. Pharyngolaryngectomy	A5	
8. Fibreoptic Laryngoscopy		P20

LARYNX AND TRACHEBRONCHIAL TREE

1. Laryngoscopy	A5	P5
2. Bronchoscopy	A5	P5
3. Tracheostomy	A5	P5
4. Surgery of laryngotracheal stenosis	A5	
5. Surgery of laryngocoele	A5	P5
6. Surgery of laryngeal paralysis	A5	P5
7. Radical neck dissection	A5	P5
8. Laryngofissure	A5	P5
9. Laryngectomy	A5	P5

OPERATION OF HEAD AND NECK

1. Ligation of the external carotid artery	A5	P5
2. Surgical treatment of branchial cyst	A5	P5
3. Partial parotidectomy	A5	P5
4. Total parotidectomy	A5	P5
5. Removal of the submandibular salivary gland	A5	P5
6. Removal of calculi of salivary ducts	A5	P5
7. Surgery of cancer of the oral cavity	A5	P5
8. Neck dissections operation	A5	P5
9. Head/neck flap reconstruct procedures	A5	P5

**COMPETENCE BASED GRADING OF PERFORMANCE
GRADES OF PERFORMANCE SCORES**

PERFORMANCE GRADE	DESCRIPTION
A	Adequate knowledge; Performs skill without supervision; can reproduce skill on request; five to six points on Affective domain.
B	Adequate knowledge; performs skill with minimal supervision; reproduces skill with minimal guidance; four to five points on Affective domain.
C	Adequate knowledge; performs skill with supervision; barely reproduces skill 3-4 points on Affective domain.
D	Inadequate knowledge; performs skill with supervision; Unable to reproduce skill; 2 - 3 points on Affective domain.
E	Gross inadequate knowledge; unable to perform task; unable to reproduce skill; 1-2 points on Affective domain.

AFFECTIVE DOMAINS FOR ASSESSING CANDIDATES DURING TRAINING:

1. Attendance to work
2. Punctuality
3. Prompt delivery of assignments
4. Group work and interaction
5. Obeying instructions
6. Respect for patient care

GENERAL TRAINING FOR SENIOR RESIDENCY

OBJECTIVES

Management course

Resident must endeavour to attend Management Course before sitting for Part 2 Fellowship examination.

Education course

Head and neck surgical dissection course is a **recommended** course for all residents **before** Part 2 Fellowship examination.

Research Training/Methodology

National postgraduate Medical College organizes a research methodology course and it is mandatory that Residents must attend before sitting for Part 2 Fellowship examination. Resident must key-in into a research work in collaboration with his/her consultant.

Conferences

Residents are to attend local and International Conferences especially as related to ORL and Surgery.

The faculty specifically identifies **ORLSON Conference**, and it is a **mandatory** that Residents should attend.

Residents must present at least **one scientific paper** at the conference before sitting for Part 2 Fellowship examination.

ORL 938 Paediatric Otorhinolaryngology Head and Neck Surgery (PORLHNS) (288 Credit Units)

Preamble

The National Postgraduate Medical College of Nigeria (NPMCN) had been in the forefront of training Medical specialities for the country's health and tertiary education sectors. The Faculty of OtoRhinoLaryngology Head and Neck Surgery (ORLHNS), being a component entity of the NPMCN had contributed immensely in the task of training and certification of Otorhinolaryngologist Head and Neck Surgeons. These graduates had always been undertaking general duties attending to patients in all age groups. The scope of duties are vast.

The Nigerian population are still young and that reflects in the fact that over 40% of attendees to any ORLHNS clinic will be not less than people equal to or below 18 years of age that is the Paediatric age group. If the practitioner is to focus training, research and service delivery to the Paediatric age group, the efficiency and outcome of the effort will improve.

Contents

- A. Philosophy
- B. Aim of PORLHNS training
- C. Entry requirements Training period, and postings
- D. Research training
- E. Accreditation requirements of Training Centres
- F. Requirements for Trainers in Paediatric ORLHNS
- G. Overview of Content Coverage of the Residency Training in Paediatrics
- H. Course Codes in PORLHNS
- I. Assessment

A. Philosophy

The philosophy is that the trainee should be trained to have the knowledge, skills behaviour and positive attitude to rendering curative, rehabilitative and preventive care services to children with ORLHNS disorders. They should be competent in doing medical

research as well as teaching and managing the resources available.

ORLHNS is the speciality that treats diseases and disorders of the ear (otology), nose and sinuses (Rhinology), throat (Laryngology), head and neck regions. It is the study of the art and science of the medicine and surgery of these anatomic regions. He trained to be both a physician and surgeon at same time. It includes studies in Audiovestibular medicine, speech disorders, sleep medicine and surgery, ORL endoscopic surgery, allergic disorders and head and neck oncology.

Paediatrics is a medical specialty focused on the knowledge and skills required for the prevention, diagnosis and management of all aspects of illness and injury affecting children of all age groups (0-18 years). It also is responsible for child health covering all aspects of growth and development and the prevention of disease and influencing variables of family and environmental factors with a seamless transition of care to other specialties.

The Paediatric Otorhinolaryngology Head and Neck Surgery (PORLHNS) should be trained in both the specialties of ORLHNS, as well as Paediatrics and be able to work in and lead a multidisciplinary team.

This curriculum is the minimum benchmark for training in PORLHNS in Nigeria while at the same time imbibes global best practices.

B. Aim of PORLHNS training

It is important that the NPMCN mounts a training and certification programme to produce higher level specialists with focus in the ORLHNS disorders of the paediatric age group. This curriculum adopts the general mission and vision statements of the trainings in the NPMCN especially the Faculty of ORLHNS

Specific Objectives

Measurable outcomes

It is envisaged that a person who successfully completed the

training will be of such higher level of knowledge, skills and behaviour to be appointed **Consultant** cadre in ORLHNS and PORLHNS in any Health Organisation globally.

Should be able to lead a multidisciplinary team in the preventive, curative and rehabilitation of person from 18 years and below with diseases or defects of ORLHNS.

Should be able to competently carry out surgical operations of complex and advanced nature in ORLHNS.

Manage allergic disorders in these paediatric age group. Have research skills and competence to independently carry out research in the specialties. Have managerial capacity to lead Organisations. Involve in continuing professional development of the specialities of ORLHNS and Paediatrics. Teaching at undergraduate graduate and postgraduate levels in the university. Be capable to advise, supervise, mentor, teach and train people up to advanced higher degrees and Fellowships

C. Entry requirements Training period, and postings

Primary is same as Otorhinolaryngology Head and Neck Surgery. Covers the basic and applied medical sciences of ORLHNS and Paediatrics. It is the entry qualification of medically qualified candidates for admission into the full time Residency Training.

Junior Residency 36 months leading to Part 1 Fellowship of ORLHNS (*details in the Curriculum of the Faculty of ORLHNS*).

Senior Residency: full-time 36 months in supervised training position for holders of the Part 1 Fellowship in ORLHNS. It will be in two phases they may overlap.

First Phase:

12 months in General Otorhinolaryngology Head and Neck Surgery.

Second Phase: 24 months

12 months in Paediatric Otorhinolaryngology Head and Neck Surgery

- 3 months in Paediatric surgery
- 1 month in Audiology, Hearing and Communication Disorders in Children
- 8 months in Paediatrics, made up of
 - 3 months in General Paediatrics
 - 2 months in Emergency Paediatrics
 - 1 month in Respiratory Paediatrics
 - 1 month in Neonatology
 - 1 month in Paediatrics Haematology and Oncology

This senior Residency 36 months full-time would be tailored to be in line with other programmes of the College. It is optional for Senior Residents to embed the MD programme of the College within the study time leading to the Fellowship. Again, any thesis/ dissertation theme must be in **Paediatric ORLHNS**.

NOTE: A Fellow of the Faculty who wants to pursue a qualification in **Paediatric ORLHNS** will need to do, or be granted exemptions from parts of, the **24** months rotations listed above in the second phase of the training.

D. Research training

Same as in the Faculty curriculum; in addition, Dissertation theme must be in **Paediatric ORL**.

E. ACCREDITATION REQUIREMENTS OF TRAINING CENTERS

The training Centre seeking Accreditation to train in PORLHNS must have **full** accreditation to train to Fellowship level in:

1. General Otorhinology Head and Neck Surgery,
2. Paediatrics;
and
3. Have the following:
 - i. Paediatric Otorhinology Head and Neck Surgery Unit,
 - ii. Accredited Paediatric Surgery Service/Unit

- iii. Accredited Neonatology Services/Unit
- iv. Functional Audiology facilities/services Unit
 - a) Each of the Units/services in E3 (i) to (iv) above should have at least one full time appropriately Medically Qualified Consultants.
 - b) The work load in each Training Centre will be taken into consideration when determining their suitability to train Residents in PORLHNS.
 - c) Where a Centre does not have the accreditation in any of these specialty areas, the Resident will do the relevant posting in another Centre that is so accredited.

F. Requirements for Trainers in Paediatric ORLHNS

The training of Trainees should be supervised by at least three registered Fellows, one of which must be a Fellow of not less than 5 years standing in the specialty of ORLHNS and the other in Paediatrics.

G. Overview of Content Coverage of the Residency Training in Paediatrics

Details of the knowledge and skills to be acquired, with their credit units, are outlined in tabular modules below:

Core Professional Competencies in Paediatric posting

COURSES	CREDIT UNITS	SPECIFIC TOPICS / SKILLS	Weighting (%) of Course Coverage
A. Subject / Patient Assessment, Management and Evaluation	20	Understanding and Application of Basic Medical Sciences and Pathophysiology	10
		History taking,	15
		Physical Examination	20
		Laboratory work	5
		Summary making	10
		Sequence of thought	10
		Evidence based Conclusions	10
		Clinical Problem Solving Skills	10
		Holistic Patient Management including appropriate Levels of Prevention	5
		Self Evaluation of conclusions and actions taken	5
B. Communication Skills	4	Basic Communication and Medical language Skills	25
		Patient Education & Counselling	25
		Academic and Interactive Communication	25
		Applications of information technology in Medicine	25
		Learning by doing and teaching 'Principles of Adult/Child Learning to learn'.	25
		Feedback-giving & receiving, Mentoring and Career Planning	25
		Learning Resources, ICT, CAD, Audiovisuals	25
C. Teaching, Research and Continuing Professional Education	4	Research and statistics. Retrieval, Critical Reading and Management of Information.	25
		Teamworking	25
		Multidisciplinary and collaborative Learning/Practice approaches	25
		Role of Consultants	25
		Use of Consultants	25
D. Leadership, Collaboration and Consultation	4	Personal Responsibility and Quality Assurance	25
		Work Habits	25
		Professional Responsibility	25
		Medical Ethics	25
E. Personal and Professional Responsibilities	4		

General Clinical Paediatrics

COURSES	CREDIT UNITS	SPECIFIC TOPICS / SKILLS	Weighting (%) of Course Coverage		
Genetics and Inborn Errors of Metabolism	1	Molecular Genetics	8		
		Genetic Abnormalities	10		
		Chromosomal Abnormalities	20		
		Genetic Counselling	8		
		Dysmorphology	8		
		Carbohydrate Metabolic defects and Mucopolysaccharidosis	20		
		Aminoacidopathies	8		
		Lipid Metabolic defects	8		
		Haem pigments, Purine & Pyrimidine defects	10		
		Fever	10		
		Clinical use of the microbiology laboratory	10		
		Clinical syndromes caused by a variety of infectious agents including malaria	30		
		Sepsis and shock	15		
		Infection in the immunocompromised host	10		
Preventive measures and infectious diseases	15				
Malnutrition -under and -over,	2	Infection control	10		
		Digestive system and absorption processes	15		
		Normal nutrition – Macronutrients & Micronutrients	15		
		Under nutrition – PEM, FTT & Micronutrient deficiencies	30		
		Overnutrition – Overweight & Obesity	20		
		Nutritional Assessment	20		
		Neonatal Resuscitation and Asphyxia. Stabilization and transport of ill Neonates	20		
		Examination and routine care of the newborn. Gestational Age assessment and low birth weight	20		
		Systemic disorders, recognition and management	20		
		Newborn Nutrition and fluid. Metabolic issues	10		
Perinatology/ Neonatology	2	Infections and infection control in the newborn	10		
		Neonatal Mortality Epidemiology	5		
		Procedures in Neonatology Ethical issues in Neonatology	15		
		Health problems of the adolescent	25		
		Psychological issues in adolescents	25		
		Substance abuse	20		
		Menstrual problems, contraception and pregnancy	20		
		Sexually transmitted diseases	10		
		Adolescent Problems, including Adolescent Gynaecology	2	Health problems of the adolescent Psychological issues in adolescents Substance abuse Menstrual problems, contraception and pregnancy Sexually transmitted diseases	25 25 20 20 10

General Clinical Paediatrics

Allergy and Immunology	1	Allergy and the immunological basis of atopic diseases in children	10
		Allergic disorder of children	30
		Anaphylaxis & serum sickness	10
		T, B and NK cells systems	15
		Complement system	15
		The phagocytic system	10
		Tissue transplantation	10
		Aetiopathogenesis, genetics and epidemiology of Solid childhood cancer	10
		Clinical features, diagnosis & staging of solid cancers	40
		Multidisciplinary management and prognosis	10
Oncology	1	Principles of chemotherapy	20
		Management of Oncologic emergencies and supportive care including Palliative care	10
		Principle of Management of Congenital anomalies in Paediatric Surgery	25
		Management of Paediatric Surgical emergencies e.g. intussusceptions, peritonitis typhoid from perforation	15
		Principles of Perioperative Management of Surgical Patients with special on Fluid and electrolytes	25
		Skills:- Venous Cutdown, -I & D of superficial abscesses	25
		Principle of imaging in the paediatric age group	10
		Role and interpretation of plain radiology in paediatric practice	25
		Role and interpretation of ultrasonography in paediatric practice	25
		New imaging technique in paediatric MRI	20
Interventional radiology in paediatric age group	20		
Paediatric Surgery	1	Principle of Management of Congenital anomalies in Paediatric Surgery	25
		Management of Paediatric Surgical emergencies e.g. intussusceptions, peritonitis typhoid from perforation	15
		Principles of Perioperative Management of Surgical Patients with special on Fluid and electrolytes	25
		Skills:- Venous Cutdown, -I & D of superficial abscesses	25
		Principle of imaging in the paediatric age group	10
		Role and interpretation of plain radiology in paediatric practice	25
		Role and interpretation of ultrasonography in paediatric practice	25
		New imaging technique in paediatric MRI	20
		Interventional radiology in paediatric age group	20
		Radiology	1
Management of Paediatric Surgical emergencies e.g. intussusceptions, peritonitis typhoid from perforation	15		
Principles of Perioperative Management of Surgical Patients with special on Fluid and electrolytes	25		
Skills:- Venous Cutdown, -I & D of superficial abscesses	25		
Principle of imaging in the paediatric age group	10		
Role and interpretation of plain radiology in paediatric practice	25		
Role and interpretation of ultrasonography in paediatric practice	25		
New imaging technique in paediatric MRI	20		
Interventional radiology in paediatric age group	20		

A. Clinical Competencies for the Paediatric ORLHNS training

Paediatric Otorhinolaryngology

- Congenital anomalies
- Cleft lips and palate
- Adenoid and Tonsillar disorders
- Speech disorders
- Syndromic and non-syndromic hearing losses

Paediatric Haematology and Oncology

- a. Severe malaria
- b. Sickle cell
- c. Anaemia
- d. Purpura
- e. Disseminated intravascular Coagulopathy
- f. Leukaemia/ lymphoma
- g. Immunocompromised patient

Immunology and Allergy

- a. Allergic conditions and Anaphylaxis

Neonatology

- a. Congenital heart disease
- b. Jaundice
- c. Sepsis
- d. Perinatal asphyxia

Paediatric Neurology

- a. Coma
- b. Meningitis
- c. Cavernous sinus thrombosis
- d. Seizures
- e. Headache
- f. Intra Cranial space occupying lesions

Respiratory Paediatric (*with Ear, Nose and Throat focus*)

- a. Asthma

- b. Acute stridor
- c. Pneumothorax
- d. Bronchiolitis
- e. Pneumonia
- f. Pertussis
- g. Earache and discharge (Otitis media)
- h. Traumatic ear conditions
- I. Epistaxis
- j. Nasal trauma
- k. Acute throat infections
- l. Airway obstruction
- m. Dental problems

Trauma (Management of the injured child)

- a. Anticipates injury patterns in common trauma presentations in each age group.
- b. Demonstrates knowledge of the PED management of:
- c. The child with polytrauma and potential major trauma
- d. Bleeding disorders in trauma, (recognition and management of massive Haemorrhage)
- e. Chest trauma: perform and facilitate key chest procedures e.g. chest drain insertion
- f. Acute drowning and immersion injury
- g. Acute burn injuries (including electrical burns), and subsequent complications
- h. All lacerations and open wounds
- i. Rhabdomyolysis and compartment syndrome
- j. Crush injury
- k. Major burns
- l. Spinal injury

Paediatric ORLHNS Procedures

- a. Control of epistaxis with cautery, anterior packing, posterior packing and balloon placement, arterial ligation
- b. Cerumen removal; Ear syringing, cerumen scoop
- c. Incision and drainage of auricular haematoma

- d. Incision and drainage of abscesses: pre-auricular, septal, retropharyngeal, peritonsillar, etc
- e. Aural wick insertion.
- f. Nasopharyngolaryngoscopy: flexible and rigid
- g. Foreign Body Removal i. Nose ii. Ear iii. Pharynx, oral cavity
- h. Bronchoscopy: rigid and flexible Oesophagoscopy
- i. Endotracheal intubation
- j. Tracheostomy
- k. Management of Congenital lesions of the Ear nose and Throat

Pain relief and sedation

- a. Pain scoring
- b. Non-pharmacologic measures
- c. Pharmacologic approaches
- d. Local anaesthetics
- e. Regional nerve blocks
- f. Procedural sedation techniques

H. Spectrum of Courses in PORLHNS:

- Research Methodology
- Health Resources Management
- Advanced General Principles of ORL
- Advanced Otology
- Advanced Rhinology
- Advanced Laryngology
- Advanced Head and Neck Surgery
- Advanced Endoscopic ORLHNS
- Advanced Allergy
- Paediatric ORLHNS Seminar
- FESS course
- Advanced Temporal Bone dissection course
- Biostatistics
- Bioethics
- Thesis/Dissertation

I. ASSESSMENT

The Trainee should be supervised by the responsible Consultant at every posting/stage of the training. This will be recorded in a portfolio designed by the Faculty by way of a LOGBOOK. Feedback from the supervising Trainer or Consultants will be given and authenticated.

Multiple assessment methods should be deployed at any stage choosing the most appropriate for any tasks performed

- Formative Assessment at all stages of training

- Annual Evaluation Report

- Presentations in Seminars

- End of Course Assessment when done

- Submission of Assignments

- Work Based Performance Evaluations

- Teaching and supervisory skills evaluation

- Research Work

- Final Fellowship Examinations - Clinical

- Defence of Dissertation

REFERENCE

1. J.M. Nedzelki, Derek Birt. Assessment of operative skills - Department of Otolaryngology, University of Toronto, Departmental Handbook. 1995, 144-145
2. Harmonized Curriculum for Otorhinolaryngology-Head and Neck Surgery in the Anglophone West African Sub region.

APPENDIX I

CRITERIA FOR ACCREDITATION OF INSTITUTIONS FOR TRAINING OF ORLHNS RESIDENTS (2020)

1. QUALIFIED AND EXPERIENCED PERSONNEL (15 points)

S/N	Descriptions and minimum number of staff	Score Guideline	Points scored
1.	ORLHNS Consultant: At least 4 consultants of which minimum of one (1) must not be less than 5 years post Fellowship of the College.	Two (2) points per consultant (10 points max), (2 part time consultants are equivalent to 1 full time consultant)	
2.	Audiologist/Audiometrician – 2;	1 point each (2points max)	
3.	Speech pathologist/therapist – 1	1 point	
4.	ENT trained Nurses deployed in outpatient and wards	1 point each (2points max)	

2. APPROPRIATE INFRASTRUCTURE (10 points)

A. Basic: Water, Light, Sewage etc (Maximum 1 point)

B. Core Departments Present - Outpatient Clinic (Maximum of 15 points)

S/N	Description and minimum number	Score Guideline	Points scored
1	Consulting stations minimum of 6 ENT consoles with patient chair and Doctors chair (6) Basic ENT Clinic based instruments a. Jobson horne probes (25), b. Suction nozzles (25), c. Tilley's dressing forceps (25), d. Crocodile forceps(25), e. Cawthorne aural forceps(25), f. Nasal specula(50), g. Aural specula(15), h. Tongue depressors(50), i. Tuning forks(20), j. Laryngeal mirrors(50), k. Otoscopes(10), l. Head-mirrors(10), (suction machines (6) optional if consoles requirements are met)	1/2 point per station 1 point each ½ point per set of instrument (maximum 5 points)	
2	Treatment Room with accessories	1 point	

A. Support Departments Present (Maximum 4 points)

The training Institution must have full accreditation in General Surgery by the Faculty of Surgery of the National Postgraduate Medical College of Nigeria or a Sister College. (1 point)

This will include the hospital having the following surgical units for

the postings of Otorhinolaryngology Head and Neck Surgery (ORLHNS) Residents:

Cardiothoracic (1/2), Plastic and Reconstructive Surgery (or Maxillofacial) (1/2),

Neurosurgery(1/2), Ophthalmology(1/2) (2 points)

Other departments in the hospital with adequate facilities especially with regard to ORL patient care: Anaesthesiology, Radiology, Pathology departments, Blood banking; Pharmacy (**1point**)

Comment: Multiply total score (/20) in section 2 by 0.5 to get score /10.

3. EQUIPMENT (20 points)

Core Equipment (E. N. T. Laboratory and other Facilities) - (Maximum 20 points)

	Description and minimum number	Score guidelines	Points scored
1	Audiology Lab ; Pure tone audiometer (1), Tympanometer(1), OAE machine(1), ABR machine(1) Audio booth or sound proof room(1)	7 points	
2	Vestibular Lab: ENG machine (1) Caloric machine (1)	3 points	
3	Temporal bone dissection laboratory with facilities - drills, burrs, bone holder, icroscope/loupe); Ear instruments accessories	3 points	
4	Endoscopy/Otomicroscopy room for out-patient procedures telescopes and flexible laryngoscope CCU/Camera/Monitor , Microscope	3 points	
5	Speech Lab: Stroboscopy machine and accessories	1 point	
6	Rhinometric Lab: Rhinometer and accessories	1 point	
7	Sleep Lab: Polymosonograph and other accessories	1 point	
8	Seminar room with audio-visual aid, multimedia facilities	1 point	

*OAE---Oto acoustic Emission Machine

* ABR-Auditory Brain Response Audiometer

*ENG – Electronystagmography

* CCU – Camera Circuit Unit

4. WELL STRUCTURED TRAINING PROGRAMME (15 Points)

A. Administration (Maximum of 3 points)

s/n	Description	Score Guideline	Points scored
1.	The Department should be an autonomous ORLHNS department of a hospital and/or College of Medicine, as appropriate. It may be a stand-alone hospital/institution.	1 point	
2.	It shall be headed by a Fellow of the College.	1 point	
3.	There shall be adequate funding of the Departmental activities especially its training programme.	1 point	

B. In-Patient Wards : (Maximum of 9 points)

There shall be Ward dedicated to ORL in patients and has a minimum of 20 bed spaces In-patient register of the past three years to be sighted.

S/N	Description and minimum number	Score Guidelines	Points scored
1	Bed space of 20, Males -7, Females 7 and Children 6	1 point for each 5 beds dedicated ward 3 points non dedicated ward 1point	
2	Ward treatment room	1 point	
3	Call room space for Residents	1 point	

C. Lectures/Tutorials (3 points)

Departments to provide portfolio of Departmental grand Rounds, Seminars, clinical conferences, clinic-pathological conferences, joint meetings with other departments, revision courses in the department, etc.

S/N	Description and minimum number	Score Guidelines	Points scored
1	Departmental Seminars/ Ground Rounds	1 point	
2	Training Programmes of the Department in the past three years	1 point	
3	Clinico-Radiological/ Clinico-Pathological Conferences	1 point	

5. OPPORTUNITIES/EVIDENCE OF SKILL ACQUISITION (15 Points)

Operating Theatre: (Maximum of 15 points)

Operation Register in the past three (3) years shall be provided for inspection. The instruments will be inspected.

S/N	Descriptions and minimum number	Score guidelines	Points scored
1	ORL theatre room space and sessions Minimum of two operating sessions	1 point per op. session per week max 2points	
2	Sets of instruments for the common ORL operations a. Tonsillectomy/ Adenoidectomy set b. Nasal tray, Antrostomy tray and Caldwell luc tray c. Middle ear set and Mastoid set d. Basic surgery (Minor and Major sets) e. Laryngoscope (Adult and Paediatric) f. Oesophagoscope (Adult and Paediatric) g. Bronchoscope (Adult and Paediatric) h. Endoscope forceps and suction nozzles	1 points per set of instruments max 8points	
3	Operating microscope with teaching arm or camera; -	2 points	
4	Endoscopic Surgery instrument sets; telescopes CCU/Camera/Monitor	2 points	
5	Intensive Care Unit, well-equipped	1 point	
	Procedure register, Theatre list and Log book should be inspected		

6. ACCESS TO NEW INFORMATION /KNOWLEDGE (15 Points)

A. Learning Resources of the Department (Maximum of 5 points)

s/n	Description and minimum number	Score Guidelines	Points scored
1	Departmental Library with ENT reference books and current journals	1 point	
2	Institution's Library, if Residents have easy access	1 point	
3	ICT facilities with Internet access	1 point	
4	Museum for pathology pots, etc,	1 point	
5	NPMCN Journal	1 point	

*ICT – Information and Communication Technology

B. Departmental Hands -On Learning Resource (Maximum 10 points)

S/N	Description and minimum number	Score Guidelines	Points scored
1	Departmental Temporal Bone Cadaver Dissection Activities by Residents	5 points	
2	FESS Cadaver Dissection Activities by Residents	5 points	

*FESS – Functional Endoscopic Sinus Surgery

7. REGULAR FEED BACK AND EVALUATION (10 Points)

Patient Work - load - (Maximum of 10 marks)

Patient load should reflect variety in number and types of ORL clinical conditions handled per annum in the training institution vis

a vis the number of Residents in the training Department.

New Out-patient load/ annum

Points Scored

□ 500	-	1/2 point
501	-	1000 1 point
1001	-	2000 2 points
2001	-	above 3 points

In-patient load (Total admissions)

< 50	-	1/2 point
51	-	100 1 point
101	-	150 2 points
151	-	above 3 points

Patients operated upon:

Up to 50 patients/ annum	-	1 point
Equal to and more than 51 patients	-	2 points
Variety of operations --Poor	-	1/2 point
Average	-	1 point
Good	-	2 points

8. Accreditation status to Recommend:

Accreditation status will be determined by the total scores within the following guidelines:

- 8a. The Department shall meet the following minimum spread of the scores from various segments of section.

Section	Minimum Score	Actual score
1. Qualified and Experienced Personnel	7.5	
2. Appropriate Infrastructure	5	
3. Equipment	10	
4. Training Programme	7.5	
5. Skill Acquisition	7.5	
6. Access to new information	7.5	
7. Feed-back and Evaluation	5	
Total	50	

If the criteria set out in 8a are fulfilled, the Department becomes eligible to be considered further for accreditation as stated hereunder:

Recommendation:

8b. FULL ACCREDITATION:

- (i) Score of 75 points plus
- (ii) Minimum of 1 Consultant Fellow in ORLHNS of the College of at least 5 years post qualification.
- (iii) Full accreditation for General Surgery department.
- (iv) Criteria set out in 8a above.

Then full accreditation for 5 years.

PARTIAL ACCREDITATION:

- (i) Score of 50 – 74 points.
- (ii) Minimum of 1 Consultant Fellow of the College in ORLHNS of at least 5 years post qualification.
- (iii) Criteria set out in 8a above.

Then partial accreditation for 2years.

DENIAL OF ACCREDITATION

- (i) Score < 50 points
- (ii) No Fellow of NPMCEN
- (iii) Failure to meet criteria set out in 8a above

Then denial of accreditation.

Trainers/Trainee Ratio

The number of Residents to be approved for the junior and senior stages will be determined by taking into cognisance the number and experience of personnel on ground, quality and variety of infrastructure in the Department, inherent strengths and comparative advantages of the training programme mounted in the department, the track record of the Department and the patient work load.

The ratio of Residents to Consultants should be minimum of 3:1 or Maximum of 4:1. That is, One (1) Senior Registrar and Two (2) Registrars OR Two (2) Senior Registrars and Two (2) Registrars to one Consultant.

Number of Residents Recommended for training:

Junior :

Senior:

.....
Full Names/Signature
Chairman/Team Leader

.....
Full Names/Signature
Team Member

.....
Full Names/ Signature
Panel Member/ Secretary

.....
Full Names/ Signature
Panel Member

CRITERIA FOR ACCREDITATION FOR STAND ALONE TRAINING INSTITUTION OR E.N.T HOSPITAL FOR TRAINING OF OTORHINOLARYNGOLOGY RESIDENTS (2015)

SECTION A: Surgical Units of the Institution: (Maximum of [8] points)

The stand- alone training Institution must have affiliation to a surgical department of another hospital with memorandum of understanding regarding rotations and training of O.R.L residents (a copy of the Legal document must be presented to the accreditors).

The General Surgical department of the hospital must have full accreditation by the Faculty of Surgery of the National Postgraduate Medical College of Nigeria. (4 points)

This will include the hospital having the following surgical units for the postings of Otorhinolaryngology (ORL) Residents: CardioThoracic (1), Plastic and Reconstructive Surgery(1) or Maxillofacial) (1), Neurosurgery(1), Ophthalmology(1), (4 points)

SECTION B: Other Departments

The stand -alone hospital or training Institution must have the following departments within the hospital. These departments in the hospital must have adequate facilities especially with regard to training and ORL patient care: **(Maximum [7] points)**

	Description	Score guidelines	Points scored
1	Anaesthesiology department	(½ point)	
	Appropriate & adequate facilities	(1/2 point)	
2	Radiology department	(1/2 point)	
	Appropriate & adequate facilities (Digital plain X-ray machine, Ultra Sound Scan machine, CT Scan, MRI others.)	(1/2 point)	
3	Radiotherapy department	(1/2 point)	
	Appropriate & adequate facilities (cobalt or linear accelerator machine)	(1/2point)	
4	Pathology departments	(1/2 point)	
	Appropriate & adequate facilities	(1/2 point)	
5	Heamatology and blood banking department	(1/2 point)	
	Appropriate & adequate facilities	(1/2 point)	
6	Pharmacy department	(1/2 point)	
	Facilities for quality control	(1/2 point)	
7.	Others	(1point)	

SECTION C: Otorhinolaryngology: (Departments, Administration/Staff)

1. Departments (Maximum of [20] points)

- a. The stand-alone hospital or training Institution shall be headed by a Fellow of the NPMCN or equivalent College. (1 point)
- b. The stand-alone hospital or training Institution must have at least 3 of the following sub- specialties under Otorhinolaryngology as functioning units namely: 1. Otology 2. Rhinology 3. Laryngology 4. Head Neck Surgery 5. Paediatric O.R.L 6. Audiological medicine 7. Phoniatics (7 points)
- c. There shall be adequate funding of the various departmental activities especially as it concerns training programme. (1 point)

Administration/Staff

S/N	DESCRIPTION AND MINIMUM NUMBER OF STAFF	SCORE GUIDELINE	POINTS SCORED
1.	Each sub specialities must have a minimum of two ORL Consultants: Minimum of 14 consultants in the hospital of which at least 8 of them must be not less than 5 years post Fellowship of the College;	(1/2) point per consultant to up maximum (10 points); (3 part time consultants are equivalent to 1 full time consultant)	
	1. Otology (2 consultants)		
	2. Rhinology (2 consultants)		
	3. Laryngology (2 consultants)		
	4. Head Neck Surgery (2 consultants)		
	5. Paediatric O.R.L (2 consultants)		
	6. Audiological medicine (2 consultants)		
	7. Phoniatics (2 consultants)		
	8. Others(2 consultants)		
2.	Audiologist (BSc, AuD) –minimum of 2; Audiologist Technician minimum of 2	(1/2 point per staff} (3 points max)	
3.	Speech pathologist/therapist – minimum of 2	(1/2 point per staff) (1 point max)	
4.	ENT trained Nurses deployed in outpatient, and wards	(1/2 point per staff) (6 points max)	

SECTION D

1. Non-otorhinology (Departments, Administration/Staff) (Maximum of [8] points)

Departments

The non-otorhinology departments of stand-alone hospital or training Institution must have at least a minimum of two consultants of which one must be a Fellow of the College.

S/N	Description and minimum number of staff	Score Guideline	Points scored
1.		(1/2 point per consultant) (3 part time consultants are equivalent to 1 full time consultant)	
	1. Anaesthesiology department (2 consultants)	(1 point max)	
	2. Radiology department (2 consultants)	(1 point max)	
	Pathology		
	3. (Morbid anatomy and mortuary department (2 consultants)	(1 point max)	
	4. Micro biology department (2 consultants)	(1 point max)	
	5. Biochemistry department (2 consultants)	(1 point max)	
	6. Haematology and blood banking department (2 consultants)	(1 point max)	
	7. Radiotherapy department (2 consultants)	(1 point max)	
	8. Others	(1 point max)	

SECTION E

Medical Consultant Staffs (Visiting/Honorary) **(Maximum of [7] points)**

The stand- alone hospital or training Institution must appoint honorary visiting consultants in the following specialities to assist in collaborative patient care and training with minimum basic facilities to work with. (1/4 point per consultant and 1/2 point for minimum basic facilities)

	Description	Score guidelines	Points scored
1	Cardiothoracic surgery	(1/4 point)	
	Minimum basic facilities	(1/2 point)	
2	General surgery	(1/4 point)	
	Minimum basic facilities	(1/2 point)	
3 1.	Neuro surgery	(1/4 point)	
	Minimum basic facilities	(1/2 point)	
4	Ophthalmology	(1/4 point)	
	Minimum basic facilities	(1/2 point)	
5	Paediatrics	(1/4 point)	
	Minimum basic facilities	(1/2 point)	
6	Internal medicine	(1/4 point)	
	Minimum basic facilities	(1/2 point)	
7.	Others	(1/2 point)	

SECTION F. Outpatient Clinic (Maximum of [10] points)

S/N	Description and minimum number	Score Guideline	Points scored
1	<p>Consulting stations minimum of 20 of which 14 must be ENT based.</p> <p>Minimum of (14) ENT consoles with patient chair and Doctors' chair.</p> <p>Basic ENT Clinic based instruments a. Jobson horns probes (50), b. Suction nozzles (50), c. Tilley's dressing forceps (50), d. Crocodile forceps (50), e. Cawthorne's aural forceps (50), f. Nasal specula (50), g. Aural specula (50), h. Tongue depressors (50), i. Tuning forks (20), j. Laryngeal mirrors (20), k. Otoscopes (15), l. Head-mirrors (20), (suction machines (14) optional if consoles requirements are met)</p> <p>Other basic medical and surgical clinic furniture and accessories for all the rooms.</p>	<p>(1/4 point) per station</p> <p>(1/4 point) each</p> <p>(1/4 point) per set of instrument</p>	
2	Treatment Room with accessories (6 rooms)	(point)	

SECTION G. E. N. T Laboratories and other Facilities

- (Maximum [12] points)

Hospital to provide portfolio of Departmental or hospital grand Rounds, Seminars, clinical conferences, clinico-pathological conferences, joint meetings with other departments, revision courses in the department. etc. (1/4 point each)

	Description and minimum number	Score guidelines	Points scored
1	Audiology Lab; minimum of Pure tone audiometer (2), Tympanometer(2), OAE machine(2), ABRmachine(2) Audio booth or sound proof room(2)	(2 points max)	
2	Vestibular Lab: ENG machine (2) Caloric machine (2) Rotary chair (2) Vemp machine (2)	(1 point max)	
3	Temporal bone dissection laboratory with facilities – drills, burrs, bone holder, microscope/loupe; Ear instruments accessories	(1point max)	
4	Endoscopy room for out-patient procedures telescopes and flexible laryngoscope adult & paediatric (2) CCU/Camera/Monitor	(1 point max)	
5	Otomicroscopy room; Microscope with teaching arm and video camera minimum of (4)	(1point max)	
6	Speech Lab: Stroboscopy machine and accessories	(1point max)	
7	Rhinometric Lab: Rhinometer and accessories	(1point max)	
8	Sleep Lab: Polymosonograph and other accessories	(1point max)	
9	Seminar room with audiovisual aid, multimedia facilities	(1point max)	
10	Training Programmes of the hospital or various O.R.L departments in the past three years	(1 point max)	

SECTION H. Operating Theatre: (Maximum of [8] points)

Operation Register in the past three years shall be provided for inspection. The instruments will be inspected.

S/N	Description and minimum number	Score guidelines	Points scored
1	ORL theatre room space minimum of (4) theatre rooms and daily operating sessions	(1/2 point per op. session per week) (max 1 point)	
2	Sets of instruments for the common ORL operations a. Tonsillectomy/Adenoidectomy set (6sets) b. Nasal tray, Antrostomy tray & Caldwell luc tray (6sets) c. Middle ear set and Mastoid set (6sets) d. Basic surgery (Minor and Major sets, (6sets) e. Laryngoscope (Adult and Peadiatric (6sets) f. Oesophagoscope(Adult and Peadiatric (6sets) g. Bronchoscope (Adult and Peadiatric (6 sets) h. Endoscope forceps and suction nozzles (6 sets)	(1/4 point per set of instruments) (max 2 points)	
3	Operating microscope with teaching arm or camera; (2)	(1/2 point each) (2 points max)	
4	Endoscopic Surgery instrument sets; telescopes CCU/Camera/Monitor (2sets)	(1/2 point per set) (1 point max)	
5	Intensive Care Unit, well-equipped minimum of 5 beds with ventilators	(1 point max)	
6	Others. Basic Major and minor surgical sets.		

SECTION I. In-patient Wards: (Maximum of [6] points)

S/N	Description and minimum number	Score Guidelines	Points scored
1	Bed space of 250, Males -100, Females 100 & and Children 50	(1/2 point for each dedicated ward and ¼ point for non-dedicated ward) (1/2 point for every 50 beds) (4 points max)	
2	Ward treatment room	(1/2 point max)	
3	Call room space for Residents	(1 point max)	
4	Others	(1/2 point max)	

SECTION J. Learning Resources of the Department (Maximum of [4] points)

S/N	Description and minimum number	Score Guidelines	Points scored
1	Departmental Library with ENT reference books and current journals	(2 points max)	
2	Institution's Library, if Residents have easy access	(1 point max)	
3	ICT facilities with Internet access	(1/2 point max)	
4	Museum for pathology pots, etc,	(1/2 point max)	
5	Others		

SECTION K. Patient Work – load - (Maximum of [10] marks)

Patient load should reflect variety in number and types of ORL clinical conditions handled per annum in the training institution vis a vis the number of Residents in the training Department

New Out-patient load/annum

Points Scored

□ 1000	1 point
1001 - 2000	2 points
2001 - 3000	3 points
> 3000	4 points

In-patient load (Total admissions)

< 500	-	1 point
501	- 1000	2 points
1001	- 2000	3 points
2001	- above	4 points

Patients operated upon:

Up to 500 patients/ annum	-	1 point
Equal to and more than 500 patients	-	2 points

SECTION L. Accreditation status to recommend:

Accreditation status will be determined by the total scores within the following guidelines:

8a. The Department should be able to score a minimum of [55] points from various sections.

Section	Minimum Score	Actual score
A: Surgical Units	4	
B. Other Departments	4	
C. ORL Administration/Staffing	10	
D. Non-ORL Administration/Staffing	4	
E. Medical consultant staff	3	
F. Outpatients	5	
G. E N T Laboratory	6	
H. Theatre	4	
I. In-patients	3	
J. Learning resources	2	
K. Patient work load	5	
Total	50	

If the criteria set out in 8a are fulfilled, the Department becomes eligible to be considered further for accreditation as stated hereunder:

Recommendation:

8b. Summary:

70 points plus: full accreditation for 5years ;

50 – 69 points: partial accreditation for 2years ,

<50 points: denial of accreditation

The number of Residents to be approved for the junior and senior stages will be determined by taking into cognisance the number and experience of personnel on ground, quality and variety of infrastructure in the Department, inherent strengths and comparative advantages of the training programme mounted in the department, the track record of the Department and the patient work load.

Number of Residents Recommended for training:

Junior :

Senior:

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