

NATIONAL POSTGRADUATE MEDICAL COLLEGE OF NIGERIA



CURRICULUM FOR SUBSPECIALTY OF PUBLIC AND  
COMMUNITY EYE HEALTH

FACULTY OF OPHTHALMOLOGY

APPROVED BY THE SENATE ON 1<sup>ST</sup> DECEMBER, 2022

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**NATIONAL POSTGRADUATE  
COLLEGE OF NIGERIA**

**FACULTY OF OPHTHALMOLOGY**

**TRAINING CURRICULUM**

**FOR**

**PUBLIC AND COMMUNITY EYE HEALTH**

**2022**

## TABLE OF CONTENTS

CHAPTER 1	Preamble .....	3
CHAPTER 2	The MD degree program.....	6
<i>CHAPTER 3</i>	The Senior Residency Postings .....	7
CHAPTER 4	Certifying Examinations .....	11
CHAPTER 5	Accreditation of Training Institutions guidelines .....	14

# CHAPTER 1

## PREAMBLE

### 1.1 Introduction

The burden of eye diseases, blindness and visual impairment is a major cause of disability, poverty and non-inclusion globally. In 2020 an estimated 596 million people had distance visual impairment, of whom 43 million were blind. An additional 510 million had uncorrected near vision impairment because of lack of reading spectacles. The burden is disparately higher in developing countries including Nigeria. The lack of inadequate trained manpower per population especially of ophthalmologists is one of major factors contributing to the burden.

### 1.2 Philosophy

This 36-month subspecialist fellowship is intended to prepare candidates for a career as a public and community eye health ophthalmologist with knowledge and skills in the management and control of eye health diseases of public and community eye health significance. There will be a general emphasis on cataract, glaucoma, refractive errors/low vision, paediatric eye diseases, health care management, ethics/professionalism, and research methods. In the course of the training the trainee is expected to also have more advanced knowledge and skills in the management of external eye/lid diseases, medical retinal conditions, uveitis/ocular inflammation, ocular tumours, and trauma. The envision career is that of a full-time general and public and community eye health ophthalmologist in an academic, community or private care setting.

This Fellowship is designed to promote subspecialty competence, confidence, and efficiency in managing the full range of common medical and surgical cases in ophthalmology, resources management, training ophthalmic and allied manpower and planning and conducting research for the improvement of population health in local and global context.

During the Subspecialty Fellowship Training, an optional MD Degree with Thesis defence will intercalate for 6 semesters. This will be concluded before the Final Part II Fellowship examinations

### 1.3 Details of curricula

#### 1.3.1 General education objectives

- i. To develop manpower for eye health at the specialist level for the management of resources for the advocacy, control and treatment of eye diseases
- ii. To develop specialists skilled and knowledgeable in the practice of ophthalmology with particular focus on research and training in eye health system and health services.

### **1.3.2 Admission Requirements**

- i. Bachelor of Medicine, Bachelor of Surgery (MB; BS) or its equivalent from a recognized university
- ii. Full registration with the Medical & Dental Council of Nigeria
- iii. Evidence of completion of the National Youth Service Corps programme or its exemption
- iv. Completion of a minimum of 24 months rotations in general ophthalmology at the Part I level of the National Postgraduate Medical College of Nigeria (NPMCN) or its equivalents
- v. A pass at the Part I examinations of the NPMCN in ophthalmology or its equivalent

### **1.3.3 Core competencies to be acquired**

At the end of the subspecialist training in public and community eye health ophthalmology, the trainee is expected to:

- i. To build on the knowledge, skills, and competencies of the junior residency years and develop into an all-round competent Ophthalmologist with generic core competencies common, including administrative, and medical education skills
- ii. Be skilled in taking history and performing physical examination geared towards making appropriate diagnoses
- iii. Effectively and efficiently utilise diagnostic tools/services to make diagnoses, develop management plans, and manage common ophthalmic conditions and refer to other subspecialists as necessary
- iv. Effectively function as a communicator, collaborator, partner ,advocate and manager in the discharge of his/her duties and obligations, including community eye health obligations and responsibilities
- v. Exhibit confidence as a trainer and health care manager and confidently be able to establish and develop tertiary level health care and training programmes for all eye health care cadres
- vi. Effectively teach and train resident doctors, optometrists, medical students and other allied eye health workers, as well as have the capacity and ability to provide the required mentoring and leadership in an eye care team setting
- vii. Competently and responsibly initiate and conduct basic, clinical, epidemiological and translational research either independently or as a research team member. The trainee is expected to develop an appreciation for pursuit of knowledge and advancement of ophthalmology through scientific enquiry, including clinical research, project design and completion, along with publications and presentations at learned society activities
- viii. Consistently exhibit and demonstrate the highest levels of ethics and professionalism in their relationships with patients and their families, colleagues ,allied eye health workers, other stakeholders in the health sector, and the society . The trainee will be expected to have imbibed the skills for maximizing personal growth and career/ life aspirations, and also incorporating volunteerism/altruism into their life plans.

### **1.3.4 Duration of training**

The duration of the training is three (3) years and starts after passing the Part I level examinations of the National Postgraduate Medical College of Nigeria (NPMCN) or its equivalents. There will be General Ophthalmology rotations in the first year followed by 2 years rotation in the public and community eye health subspecialty. The details are shown in table 1. All Senior Residents in Public and Community eye health are to rotate 3-monthly postings through OPH 926, 927, 930 and 932 courses making up 48 credit units. The subspecialty core posting of 24 months account for additional 100 credit units. There are mandatory courses that are categorised as College-based and Faculty-based. The mandatory College courses account for 26 credit units and Faculty ones account for additional 5 units as shown in the tables above. So, the total credit units for this senior Residency is **48 + 100 + 26 + 5 = 179 credit units**. The details for College-based and Faculty-based course are shown in Tables 2 and 3 respectively.

## CHAPTER 2

### DOCTOR OF MEDICINE (MD) DEGREE IN OPHTHALMOLOGY (OPTIONAL)

Admission into this MD degree programme is only for medical doctors with MBBS or MBChB degree and are already admitted into residency training programme in Ophthalmology and registered as an associate fellow of the National Postgraduate Medical College of Nigeria and is strictly by:

- i. Having passed Primary FMCOph Fellowship Examination or Exemption from Primary Examination of NPMCN
- ii. Having passed Part I FMCOph Fellowship Examination of NPMCN
- iii. Candidate must be registered as an Associate Fellow of NPMCN
- iv. The duration of the MD is minimum of 6 semesters post Part I in an accredited training Institution.
- v. Defense for MD thesis will be conducted by examiners in the Faculty of Ophthalmology as appointed by the National Postgraduate Medical College of Nigeria (NPMCN)

#### **Philosophy**

Candidates will focus on the creation of new and innovative knowledge. The MD degree is primarily for individuals with goals in ophthalmology **Research or Teaching**.

The NPMCN Senate oversees the MD degree programmes and its requirements, which entail coursework and independent research. Generally, the programme is for resident doctors undergoing residency training in the Faculty of Ophthalmology, NPMCN and other sister Colleges as approved by the Senate of NPMCN. It consists of course work during residency training in accredited residency training institutions during junior residency training period and first 2 years of senior residency training period in ophthalmology and independent research during the senior residency training period in ophthalmology.

The NPMCN MD degree programme ensures that Residents have a breadth and depth of knowledge in a particular discipline or area and candidate's ability to conduct research is assessed by the preparation of a written thesis.

### CHAPTER 3

THE SENIOR RESIDENCY POSTINGS IN PUBLIC and COMMUNITY EYE HEALTH:

**Table 1 Disposition and duration of postings in public and community eye health ophthalmology**

S/N	Course code	Course title	Duration (months)	Contact academic time (hrs/wk = Total hrs)	Contact Clinical/ Surgical time (hrs/wk = Total hrs)	Credit units
1	OPH 926	Cornea and Anterior segment senior posting	3	4(48)	35(420)	12.5
2	OPH 927	Glaucoma senior posting	3	4(48)	35(420)	12.5
3	OPH 930	Paediatric Ophthalmology and Strabismus senior posting	3	4(48)	35(420)	12.5
4	OPH 932	Vitreo-retina senior posting(mainly medical retina)	3	4(48)	35(420)	12.5
5		Public and Community eye health core posting	24			100
		TOTAL				50+ 100 =150



**Table 2 College-based courses and the credit units**

S/N	Course codes	Courses	Duration (months)	Contact academic time (hrs/wk = Total hrs)	Credit units
PMC 951	Research Methodology in Medicine Course	1 week	30	-	2
PMC 952	Health Resources management Course	1 week	30	-	2
PMC 953	Ethics in Clinical Practice	1 week	30		2
PMC 901	Advanced Trauma Life Support (ATLS)	1 week	30		2
	<b>TOTAL</b>				<b>8</b>

**Table 3 Faculty-based courses and the credit units**

Course codes	Courses	Duration (months)	Contact academic time (hrs/wk = Total hrs)	Contact Clinical/ Surgical time (hrs/wk = Total hrs)	Credit units
OPH 933	Clinical ophthalmology Revision course	1 week +3 days hands-on	30(45)	18 hours	2
OPH 934	Community ophthalmology course	1 week +4 days hands-on	30(45)	24 hours	3
Total					5

**Table 4 Public and community eye health core courses and credit units**

S/N	Course code	Courses	Duration (months)	Contact academic time (hrs/wk = Total hrs)	Contact Clinical/ Surgical time (hrs/wk = Total hrs)	Credit units
	OPH 978	Environmental health	1.5	4(24 )	35(315)	6
	OPH 979	Epidemiology and biostatistics	3	4(48)	35(420)	12.5
	OPH 980	Family health	1.5	4(24 )	35(315)	6
	OPH 981	Health policy, planning and management	4	4(64)	35(840)	16
	OPH 982	Health promotion and health education	3	4(48)	35(420)	12.5
	OPH 983	Occupational health	1.5	4(24 )	35(315)	6
	OPH 984	Posting with implementation partners and International eye health	2.5	4(40)	35(525)	10
	OPH 985	Rehabilitative and social medicine	3	4(48)	35(420)	12.5
	OPH 986	Rural health posting	3	4(48)	35(420)	12.5
	OPH 987	Urban health posting	2	4(32)	35(280)	8.3
	TOTAL		24	40(400)	350(4,270)	100

ADDITIONAL COURSES:

**PMC 998 Seminars 6 credit units**

**PMC 999 Thesis/ Dissertation 12 credit units**

All Senior Residents in Public and Community eye health are to rotate 3-monthly through OPH 926, 927, 930 and 932 making 50 credit units. The subspecialty core posting of 24 months account for additional 100 credit units. The mandatory College courses account for 8 credit units and Faculty

ones account for additional 5 units as shown in the table above. The additional courses account for 18 credit units. **So, the total credit units for this senior Residency is 50 + 100 + 8+5 +18 = 181 credit units.**

### **3.1 Methods and opportunities for training/ Mode of delivery**

- i. Ward rounds; ward consultation and outpatient clinics
- ii. Bedside teachings
- iii. Didactic Lectures
- iv. Essay writing
- v. Procedure sessions including surgical exposures: Recorded in log book
- vi. Seminars and tutorials in relevant topics in the Subspecialty at least 3? seminars
- vii. Grand rounds and teaching practices
- viii. Unit-led research, dissertation writing
- ix. Workshops and Conferences focusing on the subspecialty
- x. Community outreaches including relevant declared world days.

### **3.2 Training in public and community eye health ophthalmology**

The training in public and community eye health ophthalmology shall take place in accredited training centres of the College in Nigeria and any other institutions/MDAs/Organizations so designated.

### **3.3 Mode of entry into the training programme**

A written application to the Faculty of Ophthalmology of NPMCN for admission into the public and community eye health ophthalmology subspecialty training programme by a candidate gainfully employed in an accredited centre.

## CHAPTER 4

### CERTIFYING EXAMINATIONS AND FORMATIVE ASSESSMENT FORMAT

#### 4.1 Mode of formative assessment:

Continuous assessment activities recorded and scored in the purposive specialty log books.

One essay on a relevant public and community eye health topic every 3 months (minimum of 6)

#### 4.2 Eligibility for final examination

- i. Training for the stipulated minimum duration
- ii. A logbook indicating that the needed training has taken place
- iii. Submission of a dissertation in basic, epidemiologic or clinical ophthalmology of public and community eye health significance. The proposal must have been approved at least 12 months before the Fellowship examinations date. One of the supervisors must meet the requirement for accreditation of a training centre
- iv. An attestation from a trainer in public and community eye health that the trainee has met all the training requirements approved by the Faculty

#### 4.3 Components of the Part II Fellowship Examinations

The Part II Fellowship Examinations shall consist of:

- a) A comprehensive oral examination on the candidate's dissertation. The "Dissertation orals" shall focus on the candidate's accomplishment of those objectives of the dissertation earlier stated in this handbook.
- b) An oral examination (VIVA VOCE) consisting of two sections:
  - i) General Ophthalmology where the candidate is expected to meet a set of at least two examiners to answer THREE questions in general ophthalmology over a 30-minute period
  - ii) Public and Community eye health orals: where the candidate is expected to meet a set of at least two sub-specialists to answer SIX questions in the sub specialty over a 60-minute period

The ORALS (VIVA VOCE) will cover the following components:

Principles of Ophthalmology- 10

Medical, Tropical and Surgical Ophthalmology including pathology in candidates

Subspecialty area (cornea and anterior segment) -70

Community Ophthalmology -10

Management and other soft Skills- 10

- c) Orals on the General Principles and Practice of Ophthalmology which shall focus respectively on:

- i. Principles of Ophthalmology- 10
- ii. Medical, Tropical and Surgical Ophthalmology including pathology in candidates Subspecialty area (Public and Community eye health) -70
- iii. Community Ophthalmology -10
- iv. Management and other soft Skills- 10

### **Oral (Viva Voce)**

The purpose of Viva Voce is to cover as wide a field as possible with the candidate. Each candidate is subjected to 90 minutes oral examinations dealing with principles of surgery, pre-and post-operative management, surgical pathology, diagnostic modalities and operative surgery mostly directed at the subspecialty of interest.

**The Standard setting method for Orals** - Borderline group method should be used to obtain the pass score.

In the case of a provisional pass the candidate should make all the required corrections and submit to the college within the stipulated period of three months.

The assessors' copies of all corrected dissertations must be uploaded on the College portal within 48 hours following completion of Part II examinations, together with the comments. These are then directed through the portal to the chosen assessor to whom the dissertation is disposed for the final assessment.

Where a candidate is to be re-examined on the same dissertation, the copy of the corrected dissertation and the copy of the previous dissertation along with the previous assessors' comments should be sent to the assessor for ease of cross-checking and to avoid raising new issues.

### **4.4 Examination Results**

To pass the examination, a candidate must:

- a) Have his/her dissertation accepted at *P* or *P+* level
- b) Conditions for Provisional Pass, Referral in Orals, Referral in Dissertation and Fail

- i) A candidate whose dissertation needs some significant corrections, i.e. *P-* level pass, but who had passed the Orals shall have a Provisional Pass.

The corrections of the dissertation shall be made within three months and must be satisfactorily vetted by one of the examiners before it can be accepted. Once accepted, the provisional pass is converted to a full pass by the College

- i) A candidate who has his/her dissertation accepted as *P* or *P+* level but fails in the ORALS shall be referred in ORALS only.
- ii) A candidate who scores a *P*-level pass in the Dissertation and fails the ORALS shall be deemed referred in ORALS with Provisional Pass in Dissertation.

- iii) The candidate would be required to make the corrections in the book within 3 months after the exams and if satisfactory to the examiners, will be expected to repeat only the ORALS. However, if the dissertation remains unacceptable to the examiners, the candidate would be required to sit both the dissertation and the ORALS.
- iv) A candidate, having passed the ORALS but whose dissertation needs major restructuring, i.e. *P-I* level, shall be referred in the Dissertation only.
- v) A candidate whose dissertation needs major restructuring, i.e. *P-I* level and also failed the ORALS is deemed to have failed the entire exam.

#### **4.5 Publication of the Results**

The results of the Fellowship examinations in Ophthalmology are published by the College Registrar on approval by the Senate

#### **4.6 Correspondence**

The National Postgraduate Medical College of Nigeria or the Faculty of Ophthalmology does not normally enter into correspondence or discussion in respect of the details of a candidate's performance in the examination.

#### **4.7 Designation of Fellowship in public and community eye health ophthalmology**

The designation of a fellowship in public and community eye health of the College shall be FMCOph (Public and Community eye health).

## CHAPTER 5

### ACCREDITATION OF TRAINING INSTITUTIONS GUIDELINES

#### 5.1 Training Institution eligibility criteria

Shall meet the requirements of the Faculty of Ophthalmology of NPMCN training requirements in Comprehensive ophthalmology

Facility and equipment: inclusive of in-hospital radiology, community medicine, basic biochemistry, haematology, microbiology and ophthalmic histology services with the requisite manpower

Already accredited in comprehensive ophthalmology services

Manpower: at least one Public and Community eye health specialist with a minimum of 5 years post fellowship OR minimum 10 years running the specialty service.

Case load:

Minimum number of procedures

Clinic load of a minimum number of cases per week/month per trainee

#### 5.2 UNIFORM CRITERIA/GUIDE FOR ACCREDITATION

The Senate of National Postgraduate Medical College of Nigeria at its meeting of 3<sup>rd</sup> December 2015 approved Uniform Criteria /Guidelines for Accreditation of Training Institutions as follows:

##### **BASIS**

The College recognizes that the training of specialist requires

1. Qualified and experienced personnel
2. Appropriate infrastructure
3. A well-structured training programme that recognizes modern trends of training and assessments
4. Opportunities and evidence of acquisition of skills
5. Access to up-to-date information
6. Regular feedback and evaluation from trainers and trainees

**PHILOSOPHY:** The process must be:-

➤ Fair

Done when the institution is ready

➤ Transparent

What is being assessed and persons assessing is known to all

➤ Objective

Minimal bias in the choice of the accreditors – usually not from the institution of affiliates

➤ Instructive

Feedback given to heads of Institutions

➤ Monitored

Reaccreditation done after a clearly defined period – 5 years (Full), 2 years (Partial)

## **DEFINITIONS AND WEIGHTING**

### **MANDATORY REQUIREMENT.**

#### **1. Qualified personnel**

The College approved that the basic qualification for training is the Fellowship of College (by examination or election but not honorary). The individual must have had at least 5 years' experience working in a training institution in the Public and Community eye health and must be financially up-to-date. It is also expedient that departments in Institutions should have a good mix of the College training in the country so that trainees will have the maximum benefits of current rules and regulations governing their training. Weighting should be 15% of total accreditation score.

#### **2. Appropriate Infrastructure**

This is a major pillar without which training cannot take place. What is appropriate will be defined by faculties. But facilities must be well constructed and maintained with the basic amenities

- a. light
- b. water
- c. waste disposal

Available and with adequate backup. These includes

- a. wards
- b. out patients clinic
- c. laboratories
- d. theaters
- e. radiological suites, etc

The weighting shall be a minimum of 10% of total accreditation scores. This can be subdivided into core infrastructure (5%) and support infrastructure (5%)

#### **3 Equipment**

The College noted that equipment is an essential component in the acquisition of skills and competence. The minimum equipment needs will be determined by faculties and the procedure/log book will be necessary in assessing this component. The weighting shall be a minimum of 20% of total accreditation score.



4. **Structured training programme:**

The College has approved curricula and required competencies that trainees are expected to acquire. It is expected that institutions have a well-publicized (every trainee should have it in writing) structured programme which faithfully implemented and evaluated by a departmental residency committee. This programme must be seen by the accreditation team. Weighting should be 15% of total accreditation score.

5. **Opportunities/ Evidence of skill acquisition**

In recognition that our profession is an apprenticeship, all trainees must be provided with the opportunities of acquiring the necessary skills to be competent as a specialist. Records of such must be seen. This includes a procedure registrar, theater list and log book. Weighting should be 15% of total accreditation score.

**DESIRABLE REQUIREMENT**

6. **Access to new information**

This is a crucial element in making our trainees lifelong learners. It is therefore expected that there should be institutional support for trainees to attend updates, revisions, conference and seminars. It is also expedient that trainees acquire the skills at making presentation at departmental meetings and other scientific or professional. The library and the internet are veritable sources of information and it is expected that training institutions have such facilities accessible to the trainees. Evidence of all these must be seen. Weighting should be 15% of total accreditation score

7. **Regular feedback and evaluation:**

Evaluation is an important aspect of training. It is recognized that assessment can be formative /continuous or summative. The College traditionally have carried out summative examinations at the end of each part. However, training requires regular feedback from trainers to trainees and vice versa. Mentorship builds on the concept of regular evaluation, feedback, appropriate guidance and counseling of trainees. A good training programme must have these inbuilt and faithfully carried out. Weighting should be 10% of total accreditation score.

Total score is 100% or 100 points

**TABLE 5: ACCREDITATION TABLE OF REQUIREMENTS AND GRADING**

No	Requirement	Inadequate 0	Partially Adequate 7.5	Full Adequate 15
1.	Qualified and experienced personnel a. Prescribed number (full time/Part time b. prescribed trainers: trainees ratio c. support personnel <b>(15 Points)</b>			
2.	Appropriate infrastructure a. basic: water, light, sewage etc b. core departments presents c. support departments presents <b>(10 Points)</b>			
3	Equipment a. core equipment b. support equipment <b>(20 Points)</b>			
4	Well-structured training programme a. seen by all b. content (lectures, tutorial , bedside sessions ) <b>(15 Points)</b>			
5	Opportunities/ Evidence of skill acquisition a. Procedure Register b. Theater List c. Log Book <b>(15 Points)</b>			
6	Access to new information(15 point) a. library b. Internet <b>(15 Points)</b>			
7	Regular feedback and evaluation <b>( 10 Point)</b>			
8	<b>TOTAL</b>			

**< 0=49 (Scores less than 50%)**

**- Accreditation Denied**

**≥50-74 (Scores equals to 50% and Less than 75%) - Partial Accreditation for 2 years**

**>75-100 (Scores equals or greater than 75% and above) - Full Accreditation for 5 years**

**2. Effectiveness/function/role of visiting Consultants**

- i. A visiting Consultant should have a minimum of 5 years post Fellowship experience.
- ii. No training should take place in any institution without permanent consultants on ground.
- iii. There must be documented evidence of activities of a visiting Consultant that residents are being supervised by him/her.

- iv. For the purpose of accreditation the full time equivalent should be as follows:  
2 visiting Consultants to 1 Full time Consultant.

**3. Period of Accreditation**

- i. Partial accreditation should last for 2 years. Within the period of the Partial accreditation, one monitoring visit should be made to the institution.
- ii. Full accreditation should last for 5 years. Within the period of the Full accreditation, two monitoring visits should be made to the institution.

**4. Effective Date of Accreditation**

The effective date for existing accreditation should be with effect from the date of visitation, irrespective of the time the Senate approves the report.

The effective date for new accreditation should be from the date of Senate approval.

**5. Trainers/trainee ratio**

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

- 6. The number of Consultants is not the sole determinant for accreditation status, either as partial or full.

Every other criteria are taken into account to arrive at the verdict of either Partial or Full accreditation.

- 1. For any re-accreditation visit, the report of the previous accreditation visit should be made available to the current nominated panel member, to enable them to compare notes and ensure that progress is being made.

**5.3 SUMMARY OF ACCREDITATION VISIT:**

**Should accompany the accreditation report and in formats approved by the College and the Faculty and contained in the main Faculty Curriculum**