

SRI BALAJI VIDYAPEETH (DEEMED TO BE UNIVERSITY) U/S 3 OF UGC ACT 1956 Puducherry–607402 Accredited by NAAC with 'A' Grade

### M.S. *OTORHINOLARYNGOLOGY* POST GRADUATE CURRICULUM

### For course conducted in

MAHATMA GANDHI MEDICAL COLLEGE AND RESEARCH INSTITUTE

and

SHRI SATHYA SAI MEDICAL COLLEGE AND RESEARCH INSTITUTE



### Preface 1

The promulgation of the much-awaited Competency Based Medical Education (CBME) for post graduate programs by the National Medical Council is a welcome move. Sri BalajiVidyapeeth (SBV), Puducherry, deemed to be University, declared u/s 3 of the UGC Act. and accredited by the NAAC with A grade, takes immense privilege in preparing such a unique document in a comprehensive manner and most importantly the onus is on the Indian setting for the first time, with regard to the competency based medical education for post graduate programs that are being offered in the broad specialty departments. SBV is committed to making cardinal contributions that would be realised by exploring newer vistas. Thus, post graduate medical education in the country could be made to scale greater heights and SBV is poised to show the way in this direction.

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### Preface 2

The National Medical Council has laid down the PG curricula in their website <u>https://www.nmc.org.in/information-desk/for-colleges/pg-curricula-2</u> that is listing the syllabus course wise, listing competency to some extent, teaching learning methods and the assessment methods as well. The document describes competencies in three domains (knowledge, skill, and attitude). However, the most significant problem in competency-based training is the development of appropriate assessment tools.

The salient feature of this document is defining the program educational objectives (PEO) for its postgraduate program as a whole, defining program outcomes (PO) based on the competencies to be practiced by the specialist, course outcomes (CO) and program specific sub-competencies and their progression in the form of milestones. The compilation of the milestone description leads to the formation of the required syllabus. This allows the mentors to monitor the progress in sub-competency milestone levels. It also defines milestone in five Although NMC has described three domains of levels, for each sub-competency. competencies, the domain 'Attitude' is elaborated into 4 more competencies for ease of assessment. The six-competency model (ACGME) for residency education: Medical Knowledge, Patient Care, Practice Based Learning and Improvement, Systems Based Practice, Professionalism, Inter personal and Communication Skills gives better clarity and in-depth explanation and is used in this document. The sub-competency and their milestone levels are mapped into the entrustable professional activities (EPA) that are specific to the individual postgraduate program. While doing all this, the syllabus prescribed by NMC is fully incorporated into the curriculum. To make the program more relevant, PEO, PO, CO and EPAs are mapped with each other. EPAs which are activity based are used for formative assessment and graded. EPA assessment is based on workplace-based assessment (WPBA), multisource feedback (MSF) and eportfolio. A great emphasis is given on monitoring the progress in acquisition of knowledge, skill and attitude through various appraisal forms including e-portfolios during three years of residency period.

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### Forward

The competency based medical education is gaining momentum across the globe. The need for the shift in curriculum to competency based curriculum is being increasingly realized. Understanding the changing health needs of the country, the medical curriculum for the postgraduate residents needs a pad grim shift to competency based curriculum. Competency Based Medical Education is more skill based providing hands on experience. The teacher's role is to facilitate students' progress, to provide opportunity for self-directed learning and to make them incorporate feedback.

Medical curricula must ensure that all graduates are competent in all essential domains. The new competency based curriculum focus not only on cognitive and psychomotor domain but also on the other neglected facet of medical education i.e. attitude, ethics and communication. All competencies and sub competencies are identified. Each sub competencies are graded with 5 levels of milestone. The sub-competencies and the milestones are mapped with Entrustable professional activities Competencies are well aligned with teaching learning and assessment methods which is ensured in curricular mapping. The new curriculum also ensures to train the residents in competencies that will help them in working efficiently in Pandemic.

Competency based curriculum is the ideal solution for providing competent medicos meeting the varied needs of general population in future.

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### 1 List of Abbreviations and Acronyms

PEO	Programme Educational Objective
РО	Programme Outcome
СО	Course outcome
EPA	Entrustable Professional Activity
МК	Medical Knowledge
PC	Patient Care
SBP	System Based Practice
PBLI	Practice Based Learning and Improvement
IPCS	Interpersonal Communication Skills
Р	Professionalism
ENT	Ear, Nose, Throat
CBME	Competency Based Medical Education
OPD	Out Patient Department

### Sri BalajiVidyapeeth

### Post - Graduate Programme, MS OTORHINOLARYNGOLOGY

### 2 **Preamble**

The competency-based curriculum should take into account the needs of the society, both local and global. It needs to outline the demand for the present day as well as future. The curriculum needs to be reviewed at least every five years to address the trending needs, as new knowledge is evolving and communication of the same is seamless. Accordingly, the competencies need to meet the societal needs detailing the cognitive, psychomotor and affective domain development for attaining these competencies.

The curriculum indicates to the candidate the knowledge, basic skills and attitudes required to become an *Otorhinolaryngologist*. It disciplines the thinking habits for problem solving and discovery of new knowledge in the field of *Otorhinolaryngology*. It defines the Teaching - Learning methods adopted for the resident to achieve the goals of and the methods of assessment performed throughout the training period and at the completion of training. The purpose of this document is to provide teachers and learners illustrative guidelines to achieve defined outcomes through learning and assessment.

### **3 Programme Educational Objective (PEO)**

Programme Educational Objectives are broad statements that describe what graduates are expected to attain within few years of completing their programme. These are based on the needs of the society as analysed and outlined by the regulatory body. So as defined by Medical Council of India (MCI), the PEO for MS *Otorhinolaryngology* are as follows:

- **PEO1.** Specialist who can provide comprehensive care related to Otorhinolaryngology and Head & Neck Surgery over and above the physician of first contact.
- **PEO2.** Leader and team member who understand health care system and act to provide safe patient care with accountability and responsibility.
- **PEO3.** Communicator possessing adequate communication skill to convey required information in an appropriate manner in various health care setting.
- **PEO4.** Lifelong learner keen on updating oneself regarding the advancement in the health care field and able to perform the role of researcher and teacher.
- **PEO5.** Professional who understands and follows the principle of bio-ethics / ethics related to health care system.

### 4 **Programme Outcome (PO)**

PO's represent broad statements that incorporate many areas of inter - related knowledge and skills developed over the duration of the programme through a wide range of courses and experiences. They represent the big picture and describe broad aspects of knowledge, skill and attitude development. They encompass multiple learning experiences.

After a period of 3 years, the resident should be able to attain the following PO's:

PO1: Practice his or her specialty efficiently and ethically, keeping in mind the

requirement of the patient and maintain a good rapport with the patients.

PO2: He/she should gain adequate skills to individually manage

Otorhinolaryngological diseases both medically and surgically.

PO3: Manage all kinds of emergencies in Otorhinolaryngology and Head and Neck

PO4: Develop good learning and teaching skills along with communication skills with stake holders of the health care system

PO5: Take part in National Health program and take an active role in prevention and rehabilitation of Otolaryngology related diseases.

PO6:Know the basic concept of research methodology, plan a research project, plan and write a dissertation/ thesis with a fair knowledge of statistics

PO7: Acquire in depth knowledge of the subject, latest diagnostic and therapies available and recent advances.

PO8: They should be able to perform common Audio – vestibular tests like, Pure tone audiometry, BERA, etc.

PO9: Identify patient safety and system approach to medical errors.

PO 10: Demonstrate the ability to perform lifesaving aerosol generating procedures and to manage suspected cases during high impact respiratory pathogen pandemic situations, ensuring safety of health care workers.

### **5 Course and Course Outcomes (CO)**

COs describe the learning that will take place across the curriculum through concise statements, made in specific and measurable terms, of what students will know and /or be able to do after successful completion of each course.

There are four courses for MS OTORHINOLARYNGOLOGY:

- 1. Course 1 (C1) Applied Basic science related to Otorhinolaryngology
- 2. Course 2 (C2) Principles and practices of oto-rhinology.
- 3. Course 3 (C3) Recent advances in otorhinolaryngology and head and neck.
- 4. Course 4 (C4) General surgical principles in laryngology and head and neck.

### 5.1 Course 1 (C1) (Applied Basic science related to Otorhinolaryngology)

Objectives: At the end of three years post graduate student should be able to

- **C1.1.** Apply the knowledge of anatomy, physiology, biochemistry, microbiology, pathology, pharmacology related to ENT and to integrate such knowledge in his/her clinical practice.
- **C1.2.**Develop basic knowledge of various anaesthetic techniques related to Otorhinolaryngology, radiology and allied surgical specialities related to ENT.
- **C1.3**.Perform and interpret the results of invasive procedures such as FNAC, Biopsy, Throat swabs, Ear swabs, various culture media etc.
- **C1.4.** Perform research activities in the Post graduate course in the form of dissertation, paper and poster presentation and publications.
- **C1.5.** Describe and discuss the implementation of various precautions to be taken to prevent spread of infections via aerosols during a high impact respiratory pathogen pandemic situation.

### 5.2 Course 2 (C2) (Principles and practices of oto-rhinology)

### Objectives: At the end of three years post graduate student should be able to

**C2.1.**Perform examination of the ear and allied diseases, complications of diseases of the ear and its management.

- **C2.2.**Perform diagnosis and rehabilitation of the hearing handicapped including, dispensing of hearing aid and other vibrotactile aids along with the idea of spreading awareness regarding neonatal hearing difficulties, early diagnosis and management
- **C2.3.**Perform and interpret audiograms, nystagmograms, tympanograms and evaluation of the audio-vestibulo-neurological system in connection with ENT diseases and disorders.
- **C2.4.** Perform basic otological surgeries like myringotomy, myringoplasty, tympanoplasty and mastoid surgeries and assisting in advanced otological surgeries.
- **C2.5.** Basics of General surgery topics involved in the field otorhinolaryngology. Examination of the nose and paranasal sinuses, identification of related diseases and their management
- **C2.6**.Use endoscopes in various surgeries like maxillectomy, orbital decompression, DCR and other minimally invasive surgeries and its extended use for skull base surgeries and to demonstrate the various precautions to be taken and protocols to be followed during nasal endoscopic procedures in a high impact respiratory pathogen pandemic situation

### 5.3 Course 3 (C3) (Recent Advances in Otorhinolaryngology and Head and Neck)

### Objectives:

At the end of three years post graduate student should be able to

**C3.1** Understand the recent advances in the field of otorhinolaryngology, advancement in investigation modalities, development of new surgical modalities and better outcome for the patient in terms of reduced morbidity, cost effectiveness and better rehabilitation, thus ensuring a better future.

### 5.4 Course 4 (C4): General surgical principles in laryngology and

### head and neck

Objectives: At the end of three years post graduate student should be able to

- **C4.1.** Perform examination of the larynx and complications of diseases of the larynx and its management while spreading awareness regarding language pathologies and their prevention.
- **C4.2.** Use and perform laryngoscopy, esophagoscopy and bronchoscopy in visualizing and diagnosing various diseases involving larynx, oesophagus and trachea and to demonstrate the various precautions to be taken and protocols to be followed while performing these aerosol generating procedures during a high impact respiratory pathogen pandemic situation.
- **C4.3**. Identify and manage difficult airways and be able to perform procedures like Tracheostomy, mini tracheostomy, cricothyroidotomy to secure the airway and to demonstrate the various precautions to be taken and protocols to be followed while performing these aerosol generating procedures during a high impact respiratory pathogen pandemic situation.
- **C4.4.** Foster diagnostic skills for Head & Neck malignancies, to be adaptable decision makers about the management of such cases and to be trained for risk assessment, explaining the latest treatment modalities available to provide the best patient outcome.
- **C4.5**. Acquire the knowledge about the basics of General surgery topics involved in the field of otorhinolaryngology.

### 5.5 Mapping of PEO, PO and CO

Programme mapping facilitates the alignment of course - level outcomes with programme outcomes. It allows faculty to create a visual map of a programme. It is also used to explore how students are meeting program - level outcomes at the course level. Outcome's mapping focuses on student learning also.

]	PEO 1		PE	02	P	PEO3	P	EO4	PI	E <b>O5</b>
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	Y	Y	Y	Y		Y			Y	Y
CO2	Y	Y	Y	Y	Y	Y		Y	Y	Y
CO3	Y	Y	Y	Y		Y	Y		Y	Y
CO4	Y	Y	Y	Y		Y			Y	Y

Table1. Mapping of PEO, PO and CO

All courses run concurrently for 3 years, with a summative assessment at the end. The program is competency based and the competencies, sub-competencies and milestones are detailed. These are mapped to the Entrustable professional activities (EPA) identified as essential for a specialist. Formative assessment is carried out every three months using appropriate tools, for identifying eligibility for transfer of trust.

### 6 Competencies, Sub - competencies and milestones

The post graduate programme is competency based, consisting of six domains of competency. Sub - competencies under these domains, specific to the speciality, have been mentioned in general terms. The progression through the curriculum is detailed in sub - competency milestone levels that direct the prescribed syllabus. These sub - competency milestones are mapped to the Entrustable Professional Activities (EPAs), identified as essential for a specialist. Formative assessment includes EPA assessment, and is carried out every quarter using appropriate tools, for identifying eligibility for transfer of trust, to the resident.

### 6.1 **Domain of Competencies**

- 1. **Medical Knowledge (MK)**–Acquiring Knowledge of established and evolving biomedical, clinical, epidemiological, and social–behaviouralsciences and the application of this knowledge to patient care.
- 2. **Patient Care/Procedural Skill(PC/PS)**–Demonstrate ability to provide patient centred care/demonstrate skills required for teaching and conducting research.
- 3. System Based Practise (SBP) Demonstrate the ability to follow the standard operating procedures relevant to practices of the organisations for patient care, inculcating quality and economical practices.
- 4. **Practice Based Learning and improvement (PBLI)** Demonstrate the commitment to learn by literature search, feedback, practice and improve upon their ability.
- 5. **Interpersonal Communication skills (IPCS)** Demonstrate behaviour and skills that result in the effective communication, exchange of information and cooperation with patients, their families, and health professionals
- 6. **Professionalism (P)** Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

### 6.2 Sub - competencies

### 6.2.1 Medical Knowledge (MK)

- MK 1: Knowledge about anatomy, physiology & other basic sciences of ear, nose, throat and head & neck.
- MK 2: Knowledge about symptoms and signs highlighting abnormality associated with ear, nose, throat, head& neck with help of proper knowledge about the subject.
- **MK 3:** Early appropriate diagnosis and relevant management to be decided based on knowledge about the subject.
- **MK 4:** Knowledge of social-behavioural sciences and communication skills to explain the patient about the disease process.
- **MK 5:** Learning about epidemiological sciences to identify health problems, risk factors, disease prevention/health promotion efforts for patients and populations along with knowledge of translation, creation, dissemination of such new health care knowledge and practices.
- MK 6. Knowledge required for presenting seminar and journal club.

### 6.2.2 Patient Care/ Procedural skill (PC/PS)

- **PC 1/PS1:** Ability to acquire adequate, accurate and concise information about patients and their condition through proper history-taking and physical examination.
- **PC 2/PS2A:** Efficiency in performing all diagnostic, and surgical procedures considered essential for the field of Otorhinolaryngology.
- **PC 2/PS2B:** Proficiency in following protocols and precautions while performing high risk aerosol generating procedures in ENT in a situation of a respiratory pathogen pandemic.
- **PC 3/PS3:** Proficiency in interpreting laboratory data, imaging studies, and other tests required for the field of Otorhinolaryngology.
- PC 4/PS4: Rationally and ethically developing and carrying out patient management plans.
- **PC 5/PS5:** To provide health care services with the aim of preventing health problems or maintaining health and to provide appropriate referral of patients whenever warranted.
- PC 6/PS6: Skill required for Teaching and Training.
- PC 7/PS7: Skill required for Research.

### 6.2.3 System Based Practice

**SBP1:** Work in tandem amongst various health care delivery systems related to Otorhinolaryngology

SBP2: Managing efficient patient care within these health care systems.

**SBP3:** To play an active role in identifying errors within these health care systems and implementing potential solutions.

SBP4: Contemplate cost versus risk-benefit while providing patient care.

**SBP5:** Perform administrative and practice management responsibilities according to one's role, abilities, and qualifications and to portray appropriate.

### 6.2.4 Practice based learning and improvement

**PBLI 1:** Identify strengths, weakness, and limits of one's knowledge and skill and set learning and improvement goals.

**PBLI 2:** Identify and perform learning activities that address one's gaps in knowledge, skills, or attitudes

**PBLI 3 A**: Systematically analyse practice using quality-improvement methods and implement changes with the goal of practice improvement along with incorporating feedback into practice

**PBLI 3 B**: Find, evaluate and imbibe evidence from scientific studies into practice related to patients' health problems

**PBLI 4:** Use information technology to optimize learning and to utilize information from all domains to improve care

**PBLI 5:** Participate in the education of patients, families, students, trainees, peers, and other health professionals

### 6.2.5 Interpersonal communication skills

**ICS 1:** Capable to communicate effectively with patients, families, and the public, as appropriate.

**ICS 2:** To develop effective communication with colleagues within specialty, other health professionals, and health-related agencies.

**ICS 3: Properly** counsel and educate patients and their families to enable shared decision making and empower them to participate in their care.

**ICS 4:** Demonstrate compassion in difficult conversations (e.g., about issues such as death, adverse events, disclosure of errors, end-of-life issues).

**ICS 5:**To exhibit leadership qualities and team work as a member or leader of a health care team or other professional group and to execute supervisory responsibilities commensurate with one's roles, abilities and qualifications, while displaying traits of a role model.

### 6.2.6 Professionalism

**P** 1: Demonstrate punctuality, compassion, integrity, and respect for others.

P2: Demonstrate responsiveness to patient needs that supersedes.

**P 3:** Demonstrate respect for patient privacy and autonomy.

**P 4:** Demonstrate accountability to patients, society, and the profession while demonstrating a commitment to ethical principles.

**P 5:** Demonstrate sensitivity and responsiveness to a diverse patient population.

**P 6:** Receive constructive feedback from faculty members and offer feedback to peers.

6.3 Milestone Levels for Sub–competencies –

### 6.3.1 Medical Knowledge

MK1.

Knowledge about anatomy, physiology & other basic sciences of ear, nose, throat and head & neck

MK1: Knowledge about	MK1: Knowledge about anatomy, physiology & other b ${\mathfrak s}$	vasic sciences of ear, nose, throat and head $\&$ neck	at and head & neck	
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Basic knowledge about anatomy, physiology & other basic sciences related to Ear nose and throat.	In addition to Milestone Level 1, knowledge of any anomalies related to anatomy, embryology, physiology etc in Ear nose and throat.	In addition to Milestone Level 2, able to clinically identity these anomalies because of adequate knowledge of the same.	In addition to Milestone Level 3, Able to provide accurate treatment options for such anomalies based on the knowledge.	In addition to Milestone Level 4, Able to educate others about the basic sciences related to ENT & Head and neck.

MK2: Knowledge about symptoms and signs highlighting abnormality associated with ear, nose, throat, head& neck with help of proper knowledge about the subject.

MK2: Knowledge about sym knowledge about the subject.	out symptoms and signs highlig subject.	MK2: Knowledge about symptoms and signs highlighting abnormality associated with ear, nose, throat, head& neck with help of proper knowledge about the subject.	vith ear, nose, throat, head&	neck with help of proper
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Basic knowledge about symptomatology and signs of diseases in ENT& Head and neck.	In addition to Milestone Level 1, able to identify symptoms and signs of common diseases related to ENT & Head and neck.	In addition to Milestone Level 2, able to arrive at a diagnosis after going through the symptoms and signs of the presenting disease.	In addition to Milestone Level 3, able to explain the causation of such symptoms to the patient based on the previously acquired knowledge.	In addition to Milestone Level 4, able to educate the symptomatology of the disease.

MK3: Early appropriate diagnosis and relevant management to be decided based on knowledge about the subject.

MK3: Early appropri	iate diagnosis and relevant man	MK3: Early appropriate diagnosis and relevant management to be decided based on knowledge about the subject.	n knowledge about the subje	ct.
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Knowledge about principles of basic diagnostic tools used in the field of ENT.	In addition to Milestone Level 1, knowledge about performing basic diagnostic procedures in ENT.	In addition to Milestone Level 2, knowledge of accurate and early treatment modalities justifying the diagnostic procedures.	In addition to Milestone Level 3, teaching others about different spectrum of diagnostic modalities available and related treatment options.	In addition to Milestone Level 4, exhibiting new and innovative ideas about various diagnostic tools based on previously acquired knowledge.

MK4: Knowledge of social-behavioural sciences and communication skills to explain the patient about the disease process.

MK4: Knowledge of	MK4: Knowledge of social-behavioural sciences and communication skills to explain the patient about the disease process.	communication skills to expla	in the patient about the disea	se process.
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Basic knowledge about social-behavioural sciences.	In addition to Milestone Level 1, exhibiting such skills in daily patient care.	In addition to Milestone Level 2, explaining the importance of social behavioural sciences amongst the healthcare fraternity	In addition to Milestone Level 3, teaching others about practical usage of social behavioural sciences.	In addition to Milestone Level 4, providing new and innovative ideas or techniques to inculcate appropriate socio- behavioural changes among patients.

Basic knowledge about the method of obtaining consent for various surgical procedure explaining its risks, benefit and alternative treatment options available. Basic knowledge about motivating hearing impaired patients for hearing rehabilitation and knowledge of various rehabilitation methods available. Basic knowledge about pre-operative and post- operative patient care	In addition to Milestone Level 1, exhibiting such skills while obtaining consent for various surgical procedures in daily patient care. In addition to Milestone Level 1, exhibiting such skills while motivating patients for hearing rehabilitation in daily patient care. In addition to Milestone Level 1, exhibiting such skills in daily patient care.	In addition to Milestone Level 2, explaining the importance of obtaining consent for various surgical procedure explaining its risks, benefit and alternative treatment options available amongst the healthcare fraternity. In addition to Milestone Level 2, explaining the importance and benefit of hearing rehabilitation amongst the healthcare fraternity. In addition to Milestone Level 2, explaining the importance and benefit of level 2, explaining the importance and benefit of	In addition to Milestone Level 3, teaching others about practical usage of obtaining consent for various surgical procedures. In addition to Milestone Level 3, teaching others about practical usage of rehabilitation of hearing- impaired patients. In addition to Milestone Level 3, teaching others about practical usage of pre-	In addition to Milestone Level 4, providing new and innovative ideas or techniques to improve the method of obtaining consent for various surgical procedures. In addition to Milestone Level 4, providing new and innovative ideas or techniques to improve the process of motivating hearing rehabilitation among hearing impaired patients. In addition to Milestone Level 4, providing new and innovative ideas or
counselling for various surgical procedures.		pre-operative and post- operative patient care counselling amongst the healthcare fraternity.	operative and post-operative patient care counselling.	techniques to improve the process of pre-operative and post-operative patient care counselling.

MK 5: Learning about epidemiological sciences to identify health problems, risk factors, disease prevention/health promotion efforts for patients and populations along with knowledge of translation, creation, dissemination of such new health care knowledge and practices. MK5: Learning about epidemiological sciences to identify health problems, risk factors, disease prevention/health promotion efforts for patients and populations along with knowledge of translation, creation, dissemination of such new health care knowledge and practices.

Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Basic knowledge about epidemiological sciences.	In addition to Milestone Level 1, implying the	In addition to Milestone Level 2, implying the	In addition to Milestone Level 3, able to get an	In addition to Milestone Level 4, teaching the
health promotion		knowledge in prevention,	effective feedback about the	healthcare personnel and
projects and practices.		appropriate treatment of	provided and to improve on	importance of
	common ENT problems	common ENT problems	the current practices.	epidemiological sciences
	encountered on a day-to-day	amongst the local		and its accurate usage in
	basis	population.		preventing and treating
				common ENT Problems

# MK 6: Knowledge required for presenting seminar and journal club.

MK6: Knowledge req	MK6: Knowledge required for presenting seminar and journal club.	nd journal club.		
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Understands the basic	In addition to Milestone	In addition to Milestone	In addition to Milestone	In addition to Milestone
topic being presented.	analysing Journals (Indexing,	critically analyse and	direction of growth of the	knowledge in recent
	impact factor, TOC), articles,	compare articles relevant to	speciality	advances of the speciality
Understands the relevance of journal articles.	methodology and statistics	topic/practise		
	Knowledge of gathering	Able to form concepts on		
	relevant information from	the subject.		
	various sources and sites the			
	references.			

**6.3.2 Patient Care/Procedural Skill – PC/PS** 

PC/PS.1. Ability to acquire adequate, accurate and concise information about patients and their condition through proper history-taking and physical examination.

PC/PS1: Ability to acq	PC/PS1: Ability to acquire adequate, accurate and concise information about patients and their condition through proper history-	oncise information about pa	tients and their condition th	nrough proper histo ry-
taking and physical examination	amination			
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Have basic knowledge about basic history taking and ENT examination.	In addition to Milestone Level 1, exhibiting the required history taking and examination skills in the field of Otorhinolaryngology	In addition to Milestone Level 2, able to arrive at a provisional clinical diagnosis at the end of basic history taking and examination.	In addition to Milestone Level 3, able to provide possible differential diagnosis justifying the history and the findings during ENT examination.	In addition to Milestone Level 4, teaching others the accurate methods of eliciting history and ENT examination.

PC/PS2A: Efficiency in performing all diagnostic and surgical procedures considered essential for the field of Otorhinolaryngology.

PC/PS2A: Efficiency in pe	PC/PS2A: Efficiency in performing all diagnostic and surgical procedures considered essential for the field of Otorhinolaryngology.	irgical procedures consider	ed essential for the field of C	)torhinolaryngology.
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Able to recall basics about medical, diagnostic and surgical proceduresIn addition to Milestone Level 1, performing the medical, diagnostic, basi surgical procedures in th field of Otorhinolaryngo under strict supervision.	In addition to Milestone Level 1, performing the medical, diagnostic, basic surgical procedures in the field of Otorhinolaryngology under strict supervision.	In addition to Milestone Level 2, performing the medical, diagnostic and basic surgical procedures in the field of Otorhinolaryngology under loose supervision	In addition to Milestone Level 3, performing the medical, diagnostic, basic surgical procedures in the field of Otorhinolaryngology independently and observing advance surgical procedures.	In addition to Milestone Level 4, teaching others about the medical, diagnostic, basic surgical procedures in the field of Otorhinolaryngology and assisting advanced surgical procedures.

PC/PS2B: Proficiency in following protocols and precautions while performing high risk aerosol generating procedures in ENT in a situation of a respiratory pathogen pandemic. PC/PS2B: Proficiency in following protocols and precautions while performing high risk aerosol generating procedures in ENT in a

situation of a respiratory pathogen pandemic.

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Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Able to recall basic	In addition to Milestone	In addition to Milestone	In addition to Milestone	In addition to Milestone
protocols and precautions	Level 1, following basic	Level 2, following basic	Level 3, following basic	Level 4, teaching others
to be followed while	protocols and precautions to	protocols and precautions	protocols and precautions	the basic protocols and
performing high risk	be followed while	to be followed while	to be followed while	precautions to be followed
aerosol generating	performing high risk aerosol	performing high risk	performing high risk	while performing high risk
procedures in ENT in a	generating procedures in	aerosol generating	aerosol generating	aerosol generating
situation of a respiratory	ENT in a situation of a	procedures in ENT in a	procedures in ENT in a	procedures in ENT in a
pathogen pandemic.	respiratory pathogen	situation of a respiratory	situation of a respiratory	situation of a respiratory
	pandemic under strict	pathogen pandemic under	pathogen pandemic	pathogen pandemic.
	supervision.	loose supervision.	independently.	

PC/PS 3: Proficiency in interpreting laboratory data, imaging studies, and other tests required for the field of Otorhinolary ngology.

eld of Otorhinolaryngology.	1 4 Milestone Level 5	toneIn addition to Milestoneow upLevel 4, able to teachow upother about theinterpretation ofinterpretation ofolaboratory data, imagingss ofstudies, and other testsity.required for the field ofOtorhinolaryngology.
ts required for the fit	Milestone Level 4	In addition to Milestone Level 3, able to follow up with the investigative data and findings post treatment, in order to evaluate effectiveness of the treatment modality.
aging studies, and other tes	Milestone Level 3	In addition to Milestone Level 2, able to correlate the investigative findings with the clinical findings to arrive at an accurate diagnosis
PC/PS3: Proficiency in interpreting laboratory data, imaging studies, and other tests required for the field of Otorhinolaryngology.	Milestone Level 2	In addition to Milestone Level 1, able to interpret accurately laboratory data, imaging studies, and other tests commonly used in the field of Otorhinolaryngology.
PC/PS3: Proficiency in int	Milestone Level 1	Have basic knowledge about interpreting laboratory data, imaging studies, and other tests.

ruirs4: kauonally and e	PC/PS4: Kauonany and etnicany developing and carrying out patient management plans.	ng out patient management	plans.	
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Exhibits basic awareness about the moral values associated with management of patients.	In addition to Milestone Level 1, provide patient with necessary management ethically and rationally.	In addition to Milestone Level 2, establishing patient trust and belief towards current healthcare systems by circulating the message of rational and ethical modalities of management.	In addition to Milestone Level 3,able to identify lapses and errors in the ethical aspect while providing necessary management.	In addition to Milestone Level 4, teach others about the importance of such moral values in order to gain the trust of masses towards ethical healthcare.

PC/PS 5: To provide health care services with the aim of preventing health problems or maintaining health and to provide appr opriate referral of patients whenever warranted.

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PC/PS5: To	
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referral of patients whenever warranted.	ver warranted.			
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Having knowledge about	In addition to Milestone	In addition to Milestone	In addition to Milestone	In addition to Milestone
prevention of diseases,	Level 1, able to counsel	Level 2, able to counsel	Level 3, able to provide	Level 4, teaching the
maintenance of good	patients about the role of	population already	best possible solutions in	importance of preventive
health via healthy lifestyle	regular follow up and	exposed to risk factors	the interest of patient care	measures and healthy
choices	routine check-ups for	about maintaining health	to already diagnosed	lifestyle choices in view of
	promoting healthy and	via proper education about	cases, in the current	maintaining a good health.
	disease-free life.	prevention and lifestyle	healthcare scenario.	
		modification.		

PC 6/PS6: Skill required for Teaching and Training.

Willestone Level 2   Millestone Level 3
In addition to Milestone
Level 2, prepares and
presents lectures/bedside
teaching for junior
colleagues.
In addition to Milestone
Level 2, prepares and
presents in Case
Discussion.

## PC/PS6: Skill required for Teaching and Training.

### PC /PS7: Skill required for Research

### PC/PS7: Skill required for Research

I C/I 3/: SMIII TEQUIE OF INI NESCALUI				
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Review of Literature - Collecting information and compiling.	In addition to Milestone Level 1, prepares study protocol for dissertation submission. Confidently presents study protocol to scientific committee.	In addition to Milestone Level 2, proactively participates in data collection and data compilation. Discusses study findings with the guide and co guides regularly and seeks help when warranted.	In addition to Milestone Level 3,able to present their study at scientific meetings. Compiles data collected and statistics, and formatting for dissertation.	In addition to Milestone Level 4, develop hypo dissertation, designs and conducts research studies. Helps and guides juniors with research protocols.

SBP1:Work in tander SBP1: Work in tand	m amongst various health c lem amongst various health	SBP1:Work in tandem amongst various health care delivery systems related to Otorhinolaryngology SBP1: Work in tandem amongst various health care delivery systems related to Otorhinolaryngology	to Otorhinolaryngology ed to Otorhinolaryngology	
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Have the basic awareness about various	In addition to Milestone Level 1. able to work in	In addition to Milestone Level 2. able to work in	In addition to Milestone Level 3. able to provide	In addition to Milestone Level 4. able to nortrav
healthcare delivery	tandem along with 1st	tandem along with senior	inputs in a super speciality	leadership qualities
	camps, Rural healthcare centres etc.	while attending OPDs.	set up, such as neauache clinic, allergy clinic.	when given independent role.
SBP2: Managing efficient patient care within th	nt patient care within these	nese health care systems.		
SBP2: Managing efficie	SBP2: Managing efficient patient care within these health care systems.	e health care systems.		
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
To know the abilities &	In addition to Milestone	In addition to Milestone	In addition to Milestone	In addition to Milestone
limitations of	Level 1, to work towards	Level 2, to execute at base	Level 3, to monitor the	Level 4, is able to
management modalities within these healthcare systems.	betterment of facilities and bridge any gaps found in the healthcare	level the for the betterment of management modalities.	progress in the betterment of the system.	transfer these management skills to others.
	chain.			
SBP3: To play an active	role in identifying errors w	SBP3: To play an active role in identifying errors within these health care systems and implementing potential solutions.	ns and implementing potenti	al solutions.
SBP3: To play an active	e role in identifying errors	SBP3: To play an active role in identifying errors within these health care systems and implementing potential solutions.	ems and implementing poten	tial solutions.
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Able to recognize errors in the healthcare	In addition to Milestone Level 1, able to	In addition to Milestone Level 2, able to rectify the	In addition to Milestone Level 3, able to implement	In addition to Milestone Level 4, able to portray

System based practice

6.3.3

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system.	recognize the causes behind the errors.	error with appropriate solutions.	and execute the solutions at various levels of health care system.	such problem-solving skills to subordinates and teach others.
SBP4: Contemplate cost	SBP4: Contemplate cost versus risk-benefit while providing patient care.	roviding patient care.		
SBP4: Contemplate cost	SBP4: Contemplate cost versus risk-benefit while providing patient care.	providing patient care.		
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Is able to recognize the absolute essential cost required for the management.	In addition to Milestone Level 1, is able to compare the cost vs risk for each patient individually.	In addition to Milestone Level 2, is able to provide the correct path, balancing the cost vs risk ratio.	In addition to Milestone Level 3, is able to Justify the outcome based on the decision making.	In addition to Milestone Level 4, is able to impart knowledge to others regarding managing a patient while keeping a perfect balance.
SBP5: Perform administrative and practice man portray appropriate.	rative and practice manage	lagement responsibilities according to one's role, abilities, and qualifications and to	ng to one's role, abilities, an	d qualifications and to
SBP5: Perform administ nortrav annronriate.	trative and practice manag	SBP5: Perform administrative and practice management responsibilities according to one's role, abilities, and qualifications and to nortrav annonriate.	ling to one's role, abilities, a	nd qualifications and to
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Is able to recognize one's role and abilities according to one's qualification	In addition to Milestone Level 1, is able to recognize one's administrative and executive responsibilities.	In addition to Milestone Level 2, is able to perform administrative and executive responsibilities.	In addition to Milestone Level 3, is able to perform his/her functions and roles at multiple health care levels.	In addition to Milestone Level 4, is having an adequate leadership skill to guide others about their roles and functions.

Practice based learning and improvement

PBLI 1: Identify strengths, weakness, and limits of one's knowledge and skill and set learning and improvement goals.

PBLI 1: Identify stre	engths, weakness, and lim	PBLI 1: Identify strengths, weakness, and limits of one's knowledge and skill and set learning and improvement goals.	skill and set learning an	d improvement goals.
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Has a basic idea about one's own strength, weakness and limits	In addition to Milestone Level 1, is working towards identifying the lacunae causing such limitations.	In addition to Milestone Level 2, has identified the limitations in the skill set & knowledge and is working towards its improvement.	In addition to Milestone Level 3, has achieved a level of improvement in the skill set and knowledge.	In addition to Milestone Level 4, is able to guide others with personal experience of identifying weakness and limitations and correcting them.

PBLI 2: Identify and perform learning activities that address one's gaps in knowledge, skills, or attitudes

PBLI 2: Ider	tify and perform learning	PBLI 2: Identify and perform learning activities that address one's gaps in knowledge, skills, or attitudes	s gaps in knowledge, skil	ls, or attitudes
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Is able to identify learning activities that can enhance gaps in knowledge skills or attitude	In addition to Milestone Level 1, is performing the learning activities to fill the lacunae at a basic level.	In addition to Milestone Level 2, is performing the learning activities to fill the lacunae at adequate levels.	In addition to Milestone Level 3, has improved in the field of knowledge, skills or attitude.	In addition to Milestone Level 4, is able to teach others about various learning activities.

PBLI 3A: Systematically analyse practice using quality-improvement methods and implement changes with the goal of practice

improvement along with incorporating feedback into practice.

PBLI 3A: Systematically analyse practice using quality-improvement methods and implement changes with the goal of practice improvement along with incorporating feedback into practice.

Milestone Level 1 Is able to analyse the lack in quality of	Milestone Level 2 In addition to Milestone Level 1, is able to find	Milestone Level 3 In addition to Milestone Level 2, is implementing	Milestone Level 4 In addition to Milestone Level 3, has achieved	Milestone Level 5 In addition to Milestone Level 4, incorporates
	possible improvement methods to improve the quality.	changes in order to better the practice skills	practice improvement after implementing adequate changes.	feedback in the improvement methods.
nd, evaluate Find, eval	and imbibe evidence from a	PBLI 3B: Find, evaluate and imbibe evidence from scientific studies into practice related to patients' health problems PBLI 3B: Find, evaluate and imbibe evidence from scientific studies into practice related to patients' health problems.	e related to patients' health j	problems nts' health problems.
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Is able to search for scientific data related to current patient care practices.	In addition to Milestone Level 1, evaluates scientific data related to patient care.	In addition to Milestone Level 2, is able to incorporate new methods of care derived from scientific studies.	In addition to Milestone Level 3, is able to derive benefits from the newer methods benefitting patient care.	In addition to Milestone Level 4, is able to convince others about the implementation of such scientific studies into practice.
information	i technology to optimize lear	PBLI 4: Use information technology to optimize learning and to utilize information from all domains to improve care.	on from all domains to impi	rove care.
J 4: Use infe	ormation technology to opti	PBLI 4: Use information technology to optimize learning and to utilize information from all domains to improve care.	formation from all domains	s to improve care.
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Has basic idea about usage of information technology in terms of patient care	In addition to Milestone Level 1, is able to implement IT to optimize learning and improve patient care.	In addition to Milestone Level 2, is able to utilize the inputs from IT in betterment of patient care.	In addition to Milestone Level 3, is able to monitor the correct usage of IT in the field of patient care.	In addition to Milestone Level 4, is able to describe the correct usage of IT in betterment of patient care

PBLI 5: Participate in the education of patients, families, students, trainees, peers, and other health professionals.

PBLI 5: F	articipate in the education of	PBLI 5: Participate in the education of patients, families, students, trainees, peers, and other health professionals.	lees, peers, and other health p	rofessionals.
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Is aware of role of the	In addition to Milestone	In addition to Milestone	In addition to Milestone	In addition to Milestone
teaching role imparted	Level 1, is able to	Level 2, is able to	Level 3, is able to	Level 4, is able to
to him.	participate in educational	participate in educational	participate in educational	educate others about the
	role given to him/her	role given to him/her under	role given to him/her	educational role.
	under strict supervision.	loose supervision.	under no supervision.	

# **6.3.4 Interpersonal communication skills**

# IPCS1: Capable to communicate effectively with patients, families, and the public, as appropriate.

IPCS1: Capable to com	IPCS1: Capable to communicate effectively with patients, families, and the public, as appropriate.	nts, families, and the public	c, as appropriate.	
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Having the necessary expertise to communicate effectively.	In addition to Milestone Level 1, able to effectively communicate about the disease and the related treatment modalities to the patient and the family.	In addition to Milestone Level 2, able to effectively communicate about the post treatment scenario for the patient and necessarily follow up	In addition to Milestone Level 3, to collect feedback in view of shortcomings while communicating with the patient and family.	In addition to Milestone Level 4, to Spread awareness about the importance of effective communication in the field of healthcare.
		in an accurate yet compassionate manner		

IPCS2: To develop effective communication with colleagues within specialty, other health professionals, and health-related agencies.

IPCS2: To develop effe	IPCS2: To develop effective communication with colleagues within specialty, other health professionals, and health -related agencies	agues within specialty, othe	er health professionals, and l	health -related agencies
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Knows the importance of inter-personnel communication in the field of healthcare.	In addition to Milestone Level 1, effectively communicating within the health care system to provide	In addition to Milestone Level 2, to look for the errors found within the communication, causing	In addition to Milestone Level 3, develops a better understanding about the various tiers of healthcare	In addition to Milestone Level 4, to stress on importance of inter personnel
	best management possible to	loss to the patient and	system as well as gain	communication and
		34		

about communication within	health care systems and	to educate others about	the same.	
some knowledge about	other subjects.			
hence rectify them.				
the patient.				

IPCS3: Properly counsel and educate patients and their families to enable shared decision making and empower them to participate in

their care.

<b>IPCS3: Properly couns</b>	IPCS3: Properly counsel and educate patients and their families to enable shared decision making and empower them to participate	ir families to enable shared	l decision making and empo	wer them to participate
in their care.				
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Have the necessary	In addition to Milestone	0	In addition to Milestone	In addition to Milestone
skills to counsel and	Level 1, able to emphasize	Level 2, able to get the	Level 3, to counsel the	Level 4, to teach other

Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Have the necessary skills to counsel and educate patients and the family.	In addition to Milestone Level 1, able to emphasize the role of shared decision making and encourage them to participate in patient care for better care of the patient.	In addition to MilestoneIn addition to MilestonLevel 2, able to get the consent of the patient and the family about the planned mode ofLevel 3, to counsel the patient and the family about possibilities of modality not being effective and hence tal effective and hence.	In addition to Milestone In addition to Milestone Level 3, to counsel the Level 4, to teach patient and the family about the importa about possibilities of consent taking an modality not being effective and hence take an decision making.	In addition to Milestone Level 4, to teach other about the importance of consent taking and necessity of joined decision making.
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IPCS4: Demonstrate compassion in difficult conversations (e.g., about issues such as death, adverse events, disclosure of errors, end-of-

life issues)

<b>IPCS4:</b> Demonstrate co	PCS4: Demonstrate compassion in difficult conversations (e.g., about issues such as death, adverse events, disclosure of errors, end-	ions (e.g., about issues suc	h as death, adverse events, d	lisclosure of errors, end-
of-life issues)				
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Have the awareness	In addition to Milestone	In addition to Milestone	In addition to Milestone	In addition to Milestone
about being	Level 1, act in a sensitive and Level 2, to diffuse a	Level 2, to diffuse a	Level 3, to sensitize the	Level 4, to teach
compassionate in	compassionate manner while tensed situation in a	tensed situation in a	health care professionals	importance of

sensitive situations.	dealing with difficult conversations.	professional yet compassionate way to avoid anger amongst patient relatives.	about dealing with difficult tense situations in a compassionate manner	compassion and sensitiveness while dealing with difficult situations
IPCS5: To exhibit leade execute supervisory resj	IPCS5: To exhibit leadership qualities and team wor execute supervisory responsibilities commensurate v	IPCS5: To exhibit leadership qualities and team work as a member or leader of a health care team or other professional group and to execute supervisory responsibilities commensurate with one's roles, abilities and qualifications, while displaying traits of a role model	a health care team or other J I qualifications, while display	professional group and to ving traits of a role model
IPCS5: To exhibit leade	IPCS5: To exhibit leadership qualities and team wo	work as a member or leader of a health care team or other professional group and	a health care team or other J	professional group and
to execute supervisory r model	esponsibilities commensurat	to execute supervisory responsibilities commensurate with one's roles, abilities and qualifications, while displaying traits of a role model	ınd qualifications, while disp	laying traits of a role
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
To know basics of team dynamics and importance of roles in a team during management of a patient.	In addition to Milestone Level 1, able to show leadership qualities and supervisory role along with maintaining healthy relationship within the team.	In addition to Milestone Level 2, able to accept shortcomings and take valuable feedback from the errors committed while exhibiting team leader roles.	In addition to Milestone Level 3, to supervise roles of other personnel and explain them about their shortcomings.	In addition to Milestone Level 4, to impart leadership qualities and skills to younger subordinates and colleagues.
6.3.5 Professionalism	alism			
P 1: Demonstrate punct	P 1: Demonstrate punctuality, compassion, integrity, and respect for others	7, and respect for others		
	P 1: Demonstrate p	P 1: Demonstrate punctuality, compassion, integrity, and respect for others	itegrity, and respect for	others
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
To learn the values	In addition to Milestone	In addition to Milestone	In addition to Milestone Ir	In addition to Milestone

compassion, integrity and respect.	Level 1, To discuss values of compassion, integrity	Level 2, To discuss values of compassion, integrity	Level 3, To demonstrate such values under	Level 4, to demonstrate such values without
hands in assignments within stipulated times.	colleagues and subordinates.	from outside department.	faculty.	faculty.
Wears appropriate attire and maintains personal hygiene.				
Is truthful in all forms of communication.				

# P 2: Demonstrate responsiveness to patient needs that supersedes.

	P 2:Demonst	P 2:Demonstrate responsiveness to patient needs that supersedes	tient needs that supersede	SS
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Is able to identify the	In addition to Milestone	In addition to Milestone	In addition to Milestone	In addition to Milestone
patient needs in view of	patient needs in view of   Level 1, is responsive to	Level 2, is responsive to	Level 3, is able to exhibit	Level 4, is able to teach
patient care.	patient needs in view of	patient needs even if it	such behaviour at	others about such
	patient care.	supersedes personal	multiple instances.	behaviour and its need in
		interest.		patient care.
				-

## P 3: Demonstrate respect for patient privacy and autonomy.

	P 3:Demons	P 3:Demonstrate respect for patient privacy and autonomy	privacy and autonomy	
Milestone Level 1	Milestone Level 2	Milestone Level 3	Milestone Level 4	Milestone Level 5
Knows about the	In addition to Milestone	In addition to Milestone	In addition to Milestone   In addition to Milestone	In addition to Milestone
importance of patient	Level 1, knows one's	Level 2, is able to keep	Level 3, is able to protect	Level 3, is able to protect   Level 4, is able to educate
privacy and autonomy.	boundaries when	patient privacy and	privacy and autonomy of   others about the values of	others about the values of
	considering patient	autonomy intact at most of patients against factors	patients against factors	patient privacy and
	privacy.	the times.	violating it.	autonomy.

Milestone Level 2			
	Milestone Level 3	Milestone Level 4	Milestone Level 5
Is aware about one's In addition to Milestone In addition accountability to Level 1, is able to Level 2, is a patients, society, and demonstrate one's demonstrate the profession. society, and the profession society, and under strict supervision. Under loose	In addition to Milestone I Level 2, is able to 1 demonstrate one's 6 accountability to patients, 8 society, and the profession 9 under loose supervision. 1 b	In addition to Milestone Level 3, is able to demonstrate one's accountability to patients, society, and the profession under no supervision.	In addition to Milestone Level 4, is able to Demonstrate others about this accountability.

P 4: Demonstrate accountability to patients, society, and the profession while demonstrating a commitment to ethical principles.

P 5: Demonstrate sensitivity and responsiveness to a diverse patient population.

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lation.	Milestone Level 5	In addition to Milestone Level 4, is receptive to any feedback attained regarding these values.
ss to a diverse patient popu	Milestone Level 4	In addition to Milestone Level 3, is able to teach others about the role of these values in patient care
P 5: Demonstrate sensitivity and responsiveness to a diverse patient population.	Milestone Level 3	In addition to Milestone Level 2, is able to implement these values for better patient care and service.
P 5: Demonstrate s	Milestone Level 2	In addition to Milestone Level 1, is able to exhibit such moral values of sensitivity and responsiveness in day-to- day service.
	Milestone Level 1	Is aware about the values such as sensitivity and responsiveness to a diverse population.

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S
In addition to Milestone       In addition to Milestone         Level 2, correlates       Level 3, provides         feedback with self -       constructive feedback to         reflection and incorporates       juniors in a tactful and
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P 6: Receiving and Giving Feedback

### 7 Syllabus

### 7.1 Course 1 (C1) Applied Basic science related to Otorhinolaryngology

### **KNOWLEDGE:**

### 7.1.1: Anatomy:

- 1. Anatomyof Ear, Nose and Throat, Tracheo-bronchial tree and oesophagus.
- 2. Radiographic anatomy of the ear, nose, throat and imaging.
- 3. Anatomy of Deep Neck Spaces and Thyroid Glands.
- 4. Anatomy of Salivary glands.
- 5. Osteology: skull base, mandible, facial bones, cervical and thoracic vertebral sternum

### 7.1.2: Physiology:

- 1. Physiology of Ear, Nose and Throat, Trachea and oesophagus.
- 2. The generation and reception of speech.
- 3. Physiology of circulation, regulation of blood pressure, reactions of body to haemorrhage, patho-physiology of shock.
- 4. Physiology of production and circulation of CSF

### 7.1.3. Biochemistry:

- 1. Electrolyte, fluid balance/shock conditions and in emergencies
- 2. Routine blood, urine testing required in diagnosis and pre-operative workups.
- 3. Composition of inner ear fluids and CSF.

### 7.1.4. Microbiology:

- 1. Bacteriology in relation to Otorhinolaryngology
- 2. Mycology in relation to Otorhinolaryngology
- 3. Virology in relation to Otorhinolaryngology
- 4. Hypersensitivity reactions
- 5. Sterilization
- 6. Universal precautions

### 7.1.5. Pathology:

- 1. Pathology of common diseases in practice of Otorhinolaryngology.
- 2. Haematology in relation to Otolaryngology.
- 3. Blood components, transfusion and transfusion reactions
- 4. Wound healing
- 5. Pathogenesis of head and neck cancer

### 7.1.6. Pharmacology:

- 1. Antihistaminic commonly used in the field of otorhinolaryngology.
- 2. Nasal vasoconstrictors- variants, dosages, indications, contraindications, side effects.
- 3. Local anaesthetics uses, dosages, indications, contraindications, side effects
- 4. Corticosteroids uses, topical /systemics, dosages, indications, contraindications, side effects
- 5. Cyto-toxic agents uses, dosages, indications, contraindications, side effects
- 6. Antibiotics various classes, sensitivity to organisms, dosages, side effects, resistance, contraindications
- 7. Radioactive isotopes uses in radiology and imaging, uses in medical management of diseases of head and neck
- 8. Antifungal agents various classes, sensitivity to organisms, dosages, side effects, resistance, contraindications
- 9. Vassopressive and other agents used in shock like states.
- 10. Topical preparations commonly used in Otorhinolaryngology.

### 7.1.7. Anaesthesia:

- 1. Hypotensive anaesthesia in ENT.
- 2. Regional blocks in ENT

### 7.1.8. Introduction to Research methodologyandbasics of biostatistics.

### 7.1.9. Ethics & medico legal aspects of Otorhinolaryngology.

### 7.1.10. Miscellaneous:

- 1. HIV infection/AIDS and ENT manifestation.
- 2.Suture material in surgery,
- 3. burns,
- 4. Initial management of polytrauma cases.

### **SKILLS:**

- 1. Use of teaching aids.
- 2. Precautions to be taken or protocols to be followed in clinical and surgical otorhinolaryngology practice on outbreak of high impact respiratory pathogen Pandemic situation.
- 3. Preparation of slides, extraction of various histopathological samples.

### **ATTITUDES AND BEHAVIOUR:**

1. To be aware of medico legal aspects of otorhinolaryngology cases and communicate with patients and relatives of patients effectively.

### 7.2 Course 2 (C2) Principles and practices of Oto-Rhinology:

### 7.2.1 Otology:

### **KNOWLEDGE**

- 1. The physical and functional examination of the ear
- 2. The functional and physical examination of the vestibular system.
- 3. Tinnitus- Etiopathogenesis, classification, symptomatology, audiometric assessment, modes of management
- 4. Diseases of external ear
- 5. Repair of deformities of the external ear.
- 6. Congenital conditions of the middle ear cleft
- 7. Traumatic conductive deafness
- 8. Acute inflammation of the middle ear cleft
- 9. Non-suppurative otitis media
- 10. Chronic suppurative otitis media
- 11. Management of chronic suppurative otitis media
- 12. Complications of infections of middle ear.
- 13. Tumours of the middle ear cleft and temporal bone
- 14. Diseases of the otic capsule-otosclerosis
- 15. Diseases of the otic capsule-other diseases
- 16. The deaf child- assessment and management
- 17. Acoustic neuroma early diagnosis and appropriate intervention
- 18. Ototoxicity culprit drugs, reversal and rehabilitation
- 19. Presbycusis evaluation, assessment, hearing aids and rehabilitation.
- 20. Diagnosis and management of sudden and fluctuant sensorineural hearing loss
- 21. Meniere's disease etiopathogenesis, symptomatology, investigations and treatment aspects
- 22. Neurologic aspects of vertigo identification, classification and its management
- 23. Facial paralysis Lower vs Upper Motor Neuron Classification, Identification, etiology, Medical vs Surgical Management, Rehabilitation and Follow up
- 24. Rehabilitation of adults with acquired Hearing loss -Hearing aids
- 25. The cochlear Implants- ideal candidates, indications,
- 26. Nystagmus Classification, etiology& management
- 27. Audiological investigations like pure tone Audiometry, Impedance Audiometry, Free field Audiometry, Evoked response audiometry, Specialized tests of hearing, ASSR, VEMP.
- 28. Facial nerve stimulation test.

29. Vestibular tests like caloric testing (Water and Air) stopping test, Fukuda's test.

### SKILL:

- 1. The physical and functional examination of the ear
- 2. The functional and physical examination of the vestibular system.
- 3. Performing examination of ear under microscope.
- 4. Performing oto-endoscopy.
- 5. Removal of ear foreign bodies.
- 6. Temporal Bone Dissections. basic procedures; advanced procedures.
- 7. Performing basic ear surgeries and assisting advanced ear surgeries.

### Attitude and Behaviour:

- 1. Counsel preoperative and post-operative patients effectively.
- 2. Links with other staff showing ability to co ordinate a team.
- 3. To communicate a balanced view of the advantages, disadvantages, risks and benefits of various otological surgeries.
- 4. To communicate effectively with patients and relatives.
- 5. To obtain consent appropriately
- 6. To keep good records.
- 7. To identify priorities in case of emergency.
- 8. To counsel and motivate hearing impaired patients for hearing rehabilitation.
- 9. To allocate resources and call for assistance appropriately
- 10. To be aware of local audits and self-audit
- 11. Demonstrate compassion in difficult conversations such as issues of death, adverse events, and disclosure of errors

### 7.2.2 RHINOLOGY:

### **KNOWLEDGE:**

- 1. Examination of the nose
- 2. Conditions of the external nose
- 3. Injuries of the facial skeleton
- 4. Congenital diseases of the nose
- 5. The nasal septum anatomy, blood supply, surgical landmarks, fractures, deviated nasal septum, surgical management and related complications.

- 6. Foreign bodies in the nose, rhinolith
- 7. Epistaxis causes, site of bleeding, various modes of management.
- 8. Acute chronic inflammations of the nasal cavities
- 9. Vasomotor rhinitis -allergic and non-allergic.
- 10. Nasal polyposis- etiopathogenesis, clinical features, investigations, medical and surgical management
- 11. Abnormalities of smell evaluation and assessment with management.
- 12. Acute sinusitis- etiopathogenesis, symptomatology, investigations, management.
- 13. Chronic sinusitis- etiopathogenesis, symptomatology, investigations, medical and surgical management
- Nasal Allergy/Fungal allergic sinusitis symptomatology, investigations, medical and surgical management
- 15. Complications of acute and chronic sinusitis.
- 16. Tumours of nose and sinuses- etiopathogenesis, symptomatology, investigations, medical and surgical management, chemo-radiotherapy.
- 17. Facial pains causes, site, management.
- 18. Trans-ethmoidal hypophysectomy.
- 19. Functional endoscopic sinus surgery (FESS) and extended FESS.
- 20. Skull base surgeries.

### SKILL:

- 1. Examination of the nose.
- 2. Performing diagnostic endoscopy.
- 3. Assisting and performing Functional endoscopic sinus surgery (FESS).
- 4. Assisting endoscopic skull base surgery and other advanced rhinological surgical procedures.
- 5. Performing fracture reduction for nasal bones and preparing splints.

### **Attitude and Behaviour:**

- 1. Counsel preoperative and post-operative patients effectively.
- 2. Links with other staff showing ability to co ordinate a team.
- 3. To communicate a balanced view of the advantages, disadvantages, risks and benefits of various rhinological surgeries.
- 4. To communicate effectively with patients and relatives.

- 5. To help deal with disappointment.
- 6. To obtain consent appropriately
- 7. To keep good records.
- 8. To identify priorities in case of emergency.
- 9. To allocate resources and call for assistance appropriately
- 10. To be aware of local audits and self-audit.
- 11. Demonstrate compassion in difficult conversations such as issues of death, adverse events, and disclosure of errors.
- 12. Develop an understanding of the needs of the anaesthetist when operating on a shared airway not compromising patient safety.

### 7.3 Course 3 (C3) RECENT ADVANCES

### **INOTORHINOLARYNGOLOGY AND HEAD AND NECK**

### **KNOWLEDGE**

- 1. Implantable hearing aids.
- 2. Advances and application of oto-endoscopy,
- 3. Lasers in ENT,
- 4. Cochlear implant and brainstem implant,
- 5. Imaging modalities of Temporal bone,
- 6. Radio surgeries in otology
- 7. Recent advances in surgical management of giddiness
- 8. Image guided sinus surgery,
- 9. Application of embolization techniques in ENT,
- 10. Imaging in rhinology,
- 11. Rhinoplasty in nasal trauma.
- 12. Phono surgery
- 13. Contact endoscopies
- 14. Radiotherapy and radiosensitisers in Head and neck,
- 15. Chemotherapy in head and neck,
- 16. USG in head and neck
- 17. PET,
- 18. Biomaterials used in ENT,
- 19. Stem cells in ENT
- 20. Cryosurgery, Robotic surgeries

### SKILL:

- 1. Basic surgical techniques.
- 2. To assist advanced oto-rhinological procedures.

### Attitude and Behaviour:

- 1. To assess the proper candidacy for cochlear implantation.
- 2. To practice preoperative and post-operative counselling for the care givers of cochlear implant patients to achieve appropriate outcomes.
- 3. To counsel patients of implantable hearing aids for speech therapy.
- 4. To assess the ideal candidacy for rhinoplasty.

- 5. To counsel preoperatively for rhinoplasty surgery explaining the procedure and obtain appropriate consent.
- 6. To follow up cases post rhinoplasty.

### 7.4 (C4) GENERAL SURGICAL PRINCIPLES OF LARYNGOLOGY, HEAD AND NECK.

### 7.4.1 Laryngology:

### **KNOWLEDGE:**

- 1. Methods of examination of the oral cavity and pharynx.
- 2. Diseases of the oral cavity
- 3. Diseases of the salivary glands including tumours of salivary gland
- 4.Oral lesions and Pharyngeal lesions associated with general diseases
- 5. Diseases of the tonsils and adenoids (excluding neoplasms)
- 6. Tumours of the pharynx etiopathogenesis, symptomatology, investigations and management
- 7. Tumours of the larynx etiopathogenesis, symptomatology, investigations and management
- 7. Hypopharyngeal diverticulum (Pharyngeal Pouch)
- 8. Methods of examining and larynx and tracheobronchial tree
- 9. Congenital diseases of the larynx
- 10. Laryngeal disorders in singers and other voice users
- 11. Neurological affections of larynx and pharynx
- 12. Method of Intubation of the larynx, laryngotomy and tracheostomy
- 13. Neck dissection
- 14. Micro laryngeal surgery/thyroplasty

### SKILL:

- 1. Examination of the oral cavity and pharynx.
- 2. Examining and larynx and tracheobronchial tree.
- 3. Performing diagnostic video laryngoscopy.
- 4. Removal of foreign bodies from upper aerodigestive tract.
- 5. Intubation of the larynx, laryngotomy and tracheostomy
- 6. Performing tonsillectomy, adenoidectomy

- 7. Performing frenulectomy
- 8. Performing Direct laryngoscopy, oesophagoscopy and bronchoscopy.
- 9. Performing or assisting Micro laryngeal surgery/thyroplasty

### 7.4.2Head and Neck:

### **KNOWLEDGE:**

- 1. Cranial nerves presentations in field of ENT, identification and management
- 2. Raised intracranial tension-causes, diagnosis, management with particular
- 3. reference to otitis hydrocephalus
- 4. Head injuries and I.C. Haemorrhage.
- 5. Facial trauma and management.
- 6. Pituitary gland, anatomy, physiology hypo and hyper pituitarism, new growths.
- 7. Intracranial venous sinuses and their affections  $v_{\rm V}$
- 8. 7.Deep neck space Abscesses
- 9. Anatomy and physiology of thyroid gland, goitre, diseases of the thyroid and
- 10. carcinoma of thyroid
- 11. Large blood vessels in neck, thoracic duck development of major cervical and
- 12. thoracic blood vessels.
- 13. Skin grafts in Otolaryngology and reconstructive methods including regional and
- 14. distant flaps for repair of defects after excision of tumours or trauma.
- 15. Head and neck reconstructive surgery.
- 16. OSAS.

### SKILL:

- 1. Performing thorough clinical examination of neck.
- 2. Cranial nerve examinations.
- 3. Harvesting skin grafts or assisting in head and neck reconstructive surgeries.
- 4. Assisting major head and neck surgeries

### Attitude and Behaviour:

1. Counsel preoperative and post- operative patients effectively.

2. Links with other staff showing ability to co - ordinate a team.

3. To communicate a balanced view of the advantages, disadvantages, risks and benefits of various laryngeal and head and neck surgeries.

4. To communicate effectively with patient and relatives.

- 5. To help deal with disappointment in case of untoward outcomes.
- 6. To obtain consent appropriately
- 7. To keep good records.
- 8. To identify priorities in case of emergency.
- 9. To counsel and stimulate patients of post radical surgeries for head and neck malignancies for appropriate rehabilitation.
- 10. to counsel patients for appropriate vocal hygiene and need for speech therapy.
- 10. To allocate resources and call for assistance appropriately.
- 11. To be aware of local audits and self-audit.
- 12. Develop an understanding of the needs of the anaesthetist when operating on a shared airway not compromising patient safety.

### 8 Teaching and Learning Method

The trainee will undergo a graded training over a period of three years.

### • Orientation:

At the beginning of the course each resident should be given an orientation to the department and subject. The candidate shall be assigned dissertation guides so as to help them prepare protocols

### 8.1 Theory(Knowledge/ Cognitive Domain)

The teaching learning methods does not totally depend on didactic lectures. Only the introductory lectures by faculty are in this format.

### 8.1.1 Introductory lectures:

These will be conducted at the beginning of the course by a faculty and are aimed to familiarize the resident with the:

a) Knowledge about common symptomatology of ear, nose, throat and head and neck.

b) Knowledge about basic audiological evaluation and interpretation.

c) Knowledge about basics of neuro ontological examination and evaluation.

d) Theoretical introduction to temporal bone dissection.

e) Knowledge regarding patient evaluation, interpretation of laboratory investigation as applied to the care of' the patients.

f) Candidacy of various surgical procedures, pre-operative counselling, and postoperative care.

e) The resident should be familiarized about the principle of the sterilization and universal precautions.

f) Residents will be taught to search literature and write a dissertation protocol.

### 8.1.2 Teaching programme

This will include theory topics and will ensure participation of the resident in the form of:

- 1. **Seminars, group discussions and symposia**. These should be regularly organized in the department.
- 2. **Problem case discussion**, before and after the conduct of the case should form part of training.
- 3. Journal club presentation and discussion
- 4. Interdepartmental programmes with clinical departments like pathology, anaesthesia, respiratory medicine, general surgery and radiology.
- 5. Skill based training

- a) Learning and practicing basic skills in OPD procedures.
- b) Learning and practicing basic skills in OT procedures.

### 6. Workplace based training

Problem solving and decision-making skills

Interpersonal and communications skills

Ability to work as a team

Deliberate practice with feedback

Exposure to uncommon events

Assessment of learners

### MAPPING FOR SEMINAR AND JOURNAL CLUB:

### **MAPPING OF SEMINAR EVALUATION**

S. No.	QUESTIONS	SUBCOMPETENCIES	LEVEL
1	Introduction of subject and its importance /	MK1,	2
	Objectives	MK6	1
2	Completeness of presentation	PC6	3
3	Cogency of presentation	MK6	2
4	Consulted all relevant literature	PC/PS7	1
		MK6	2
5	Use of audio-visual aids	PC/PS6	3
6	Understanding of subject	MK1	2
		MK2	1
		MK6	3
7	Summary and take-home message	PBLI3B	2
8	Cites appropriate references / suggests further reading	MK6	2
9	Time management	P1	1
10	Overall performance – relevant answers to questions, attitude during presentation and	P1	1
	confidence	P6	2
		1CS2	1

### MAPPING FOR JOURNAL CLUB EVALUATION

S. No.	QUESTIONS	SUBCOMPETENCIES	LEVEL
1	Relevance of article chosen	MK1 MK6	2
2	Identifies the problem addressed in the paper	PBLI 3B	2
3	Completeness of presentation	PC6	2
4	Analyses and gives comments on methodology	MK6	2
	and statistics	PBLI 3B	2
5	Brief summary of results	MK6	3
6	Comparison of work with other published work	MK 6	3
		PBLI4	1
7	Merits and demerits of the paper	МК6,	3
		PC6	2
8	Summary and take-home message	PC6,	3
		PBLI 3B	2
9	Time management	P1,	1
10	Overall performance – relevant answers to	P1	1
	questions, attitude during presentation and	P6	2
	confidence	1CS2	1

### 8.1.3 Structured Graded Training-Year wise Knowledge / cognitive domain

First Year Objectives:

- 1. Theory as mentioned in syllabus of Course 1
  - 2. Theoretical knowledge of common diseases of external and middle year.
  - 3. Congenital anomalies of middle ear cleft.
  - 4. Etiopathogenesis and types of facial nerve palsy.
  - 5. Congenital anomalies of nose
  - 6. The nasal septum.
  - 7. Foreign bodies of nose.
  - 8. Epistaxis.
  - 9. Acute and chronic inflammatory conditions of nose and paranasal sinuses.
  - 10.Diseases of oral cavity and salivary glands.
  - 11. Diseases of tonsils and adenoid.
  - 12. Congenital diseases of larynx.
  - 13. Cranial nerves and presentation in field of ENT.
  - 14. Dural venous sinuses

### Second Year Objectives

- 1. Diseases of otic capsule.
- 2. Deaf child assessment and management.
- 3. Ototoxicity, reversal and rehabilitation.
- 4. Evaluation, assessment and rehabilitation of presbycusis.
- 5. Sudden and fluctuating sensorineural hearing loss.
- 6. Meniere's disease.
- 7. Facial palsy evaluation including electrodiagnostic and topodiagnostic tests.
- 8. Cochlear implant: candidacy profile, indications, contraindications, and pre-operative evaluation.
- 9. Surgical management of middle ear diseases.
- 10. Nystagmus.
- 11. Basic audiological evaluation such as PTA, Impedance, OAE.
- 12. Facial injuries.
- 13. Managements of epistaxis.
- 14. Nasal polyposis.
- 15. Fungal rhino-sinusitis.

- 16. Complications of acute and chronic rhino-sinusitis.
- 17. Facial pain.
- 18. FESS.
- 19. Etiopathogenesis and symptomatology of tumours of larynx, pharynx and salivary glands.
- 20. Voice disorders.
- 21. Deep neck space abscess.
- 22. Diseases of thyroid including malignancy.

### Third Year Objectives:

- 1. Repair of deformities of external ear.
- 2. Tumours of middle ear cleft and temporal bone.
- 3. Acoustic neuroma.
- 4. Neurological aspects of vertigo.
- 5. Surgical management, rehabilitation and follow up of facial palsy.
- 6. Surgical procedure, follow up and rehabilitation following cochlear implant.
- 7. Advanced audiological evaluation such as BERA, ASSR, VEMP.
- 8. Tumours of nose and paranasal sinuses.
- 9. Extended FESS.
- 10. Skull base surgeries.
- 11. Management and rehabilitation of tumours of larynx, pharynx and salivary glands.
- 12. Management of voice disorders.
- 13. Neurological diseases of larynx and pharynx.
- 14. Neck dissection.
- 15. Management of diseases of thyroid including malignancy.
- 16. Head and neck reconstructive surgeries.
- 17. Implantable hearing aids and brainstem implants.
- 18. LASERS in ENT.
- 19. Image guided sinus surgery.
- 20. Embolization in ENT
- 21. Contact endoscopy.
- 22. Rhinoplasty.
- 23. Radio and chemotherapy in head and neck.
- 24. PET and PET CT.
- 25. Biomaterials in ENT.
- 26. Stemcells in ENT

27. Robotics in ENT.

28. OSAS.

### 8.2 Practical skills training (psychomotor domain)

### 8.2.1 Resident Rotations

Details of 3 years posting in the PG programme (6 terms of 6 months each)

### FIRST YEAR

Total Duration:12 months

E. N. T	10 Months
General Surgery	15 Days
Radiology	15 Days
Plastic Surgery	15 Days
Anesthesia	15 Days

### SECOND YEAR

Total Duration: 12 months

Audiology and Neurotology (Internal)	3 Months
Pediatric Otolaryngology	1 Month
Advanced training in MERF, Chennai	1 Month
Head and Neck Oncology and	1 Month
Radiotherapy (Adayar Cancer Institute)	
ENT	6 Months

### THIRD YEAR

Total Duration :12 months

Total D diation (12 months	
ENT	12 Months

### \*Allied posts should be done during the course – for

Details of training in the subject during resident posting

The student should attend to the duties (Routine and emergency) and will be attending Outpatient

department and special clinics, Inpatients, Operation Theatre,

Also, will be writing clinical notes regularly and maintains records.

### 8.2.2 Structured Graded Training –Year - wise Practical training objectives

### First Year Objectives:

- 1.Use of teaching aids.
- 2. Precautions to be taken or protocols to be followed in clinical and surgical otorhinolaryngology
- practice on outbreak of high impact respiratory pathogen pandemic situation.
- 3. Preparation of slides, extraction of various histopathological samples.
- 4. The physical and functional examination of the ear
- 5. The functional and physical examination of the vestibular system.
- 6. removal of ear foreign body.
- 7. Temporal Bone Dissections. basic procedures;
- 8. Assisting basic ear surgeries
- 8. Examination of the nose.
- 9. Performing diagnostic nasal endoscopy.
- 10. Performing diagnostic video laryngoscopy.
- 11. Performing tonsillectomy, adenoidectomy
- 12. Performing frenulectomy
- 13. Performing thorough clinical examination of neck.
- 14. Cranial nerve examinations.

### Second Year Objectives

1.Performing examination of ear under microscope.

- 2. Performing oto-endoscopy.
- 3. removal of ear foreign bodies under endoscopic and microscopic guidance.
- 4. removal of throat foreign bodies under endoscopic guidance.
- 5. Temporal Bone Dissections. Basic procedures and advanced procedures.
- 6. Performing nasal bone fracture reduction and preparing splints
- 6. Assisting and performing basic ear surgeries.
- 7. Assisting and performing Functional endoscopic sinus surgery (FESS).
- 8. Removal of foreign bodies from upper aerodigestive tract.
- 9. Intubation of the larynx, laryngotomy and tracheostomy
- 10. Performing Direct laryngoscopy.

### Third Year Objectives:

- 1. Temporal Bone Dissections. advanced procedures;
- 2. Assisting advanced ear surgeries.
- 3. Assisting endoscopic skull base surgery and other advanced rhinological surgical procedures.
- 4. Performing oesophagoscopy and bronchoscopy
- 5. Assisting head and neck surgeries
- 6. Performing or assisting Micro laryngeal surgery/thyroplasty.
- 7. Assisting advanced oto-rhinological procedures.

### E - portfolio

It is an electronic portfolio to be maintained by the resident to record their day to day academic and patient care activities under the following sections:

Entrustable Professional Activity assessment

Daily log

Patient care

Procedure

Dissertation

Academic activities (Seminar, symposium, case presentation, journal club)

Co - curricular activities (Conference, CME, Workshop),

Teaching Assignments,

Awards and achievements

Outreach activities.

**E**–**portfolio** will be monitored and endorsed periodically by the faculty supervisors. This will enable faculty to monitor residents progress, attainment of milestones and impart the training accordingly.

• E –portfolio shall be checked and assessed periodically by the faculty members. This will enable to monitor progress of the resident, his level of attainment of milestone and impart the training accordingly

Writing dissertation following appropriate research methodology, ethical clearance and good clinical practice guidelines.

The postgraduate students shall be required to participate in the teaching and training programme of undergraduate students and interns.

A postgraduate student of a postgraduate degree course in broad specialities/super specialities would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.

Department should encourage e-learning activities.

### **Practical and Clinical Training**

Emphasis should be on self-directed learning, group discussions and case presentations.

Student should be trained about proper History taking, Clinical examination, advising / ordering relevant investigations, their interpretation and instituting medical / surgical management by posting students in OPD, specialty clinics, wards, operation theatres, and other departments like anaesthesiology, radiology. Students should be able to perform and interpret X RAYS, CT SCANS AND MRIs related to field of Otorhinolaryngology.

### 9 Assessment

Assessment will have 2 components Formative and Summative

### 9.1 Formative assessment

### 9.1.1 Cognitive Assessment

- Assessment in Cognitive Domain
- Schedule of theory tests
  - $\circ$  1<sup>st</sup> year 2 papers consisting of syllabus from Course 1
  - $\circ$  2<sup>nd</sup> year 2 papers consisting of syllabus from Course 2 and 4
  - $\circ$  3<sup>rd</sup> year one paper consisting of syllabus from Course 3
  - 3<sup>rd</sup> year Mock exams one month prior to University examination, consisting of 4 papers, including syllabus from all the four courses.

### 9.1.2 EPA Assessment

Assessment of Entrustable Professional Activities (EPA) will be done during day-to-day patient care in OPD, wards, operation theatres and during PG teaching activities and temporal bone dissections. EPA assessment will be done both by the faculty and the residents every 3rd monthly for monitoring the resident progress.

Sl. No.	EPAs	
1.	Gathering a history and performing a physical examination	
2.	Prioritizing a differential diagnosis following a Clinical encounter	
3.	Recommending and interpreting common diagnostic and screening tests	
4.	Entering and discussing orders and prescription and giving the necessary instructions to the patients	
5.	Documenting a clinical encounter in patient records while providing an oral presentation of this encounter	
6.	Form clinical questions and retrieve evidence to advance patient care	
7.	Give or receive a patient hand-over to provide smooth transition care & thus collaborating as a member of an inter professional team	
8.	Obtain informed consent for tests and/or procedures	
9.	Identify system failures and contribute to a culture of safety and improvement	
10.	Recognise a patient requiring urgent or emergency care and initiate evaluation and management like management of dizzy patient, management of epistaxis, stridor, foreign body removal in aerodigestive tract, and foreign body of ear& nose, nasal fracture reduction.	

### List of EPA's

11.	Post-operative care, evaluation and counselling
12.	Performing basic office procedures like diagnostic nasal endoscopy, video laryngoscopy, post nasal examination, throat swabs, ear swabs, nasopharyngeal swabs, FNACs
13.	Performing basic surgeries of throat such as adenoidectomy and tonsillectomy, Adenotonsillectomy, Tracheostomy.
14.	Assisting advanced Head & Neck Surgeries, Laryngectomies
15.	Performing rigid scopies such as direct laryngoscopy guided biopsy, rigidEsophagoscopy, Bronchoscopy.
16.	Performing basic surgeries of nose such as septoplasty, submucosal resection of nasal septum, endoscopic middle meatal antrostomy.
17.	Assisting advanced nasal surgeries such as Functional Endoscopic Sinus Surgery, frontal sinusotomy, sphenoidotomy, orbital decompression, trans sphenoidal excision of pituitary macro adenoma, optic nerve decompression.
18.	Performing basic ear surgeries such as myringoplasty, tympanoplasty, corticalmastoidectomy.
19.	Assisting in advanced surgeries such as modified radical mastoidectomy, stapedotomy, cochlear implant surgery, facial nerve decompression, labyrinthectomy.
20.	Day care procedures like lobuloplasty, keloid excision, etc
21.	Reading and interpreting X-rays, e.g., X ray PNS, Mastoids, Nasopharynx, soft tissue neck etc.
22.	Reading and interpreting CT PNS, HRCT Temporal Bone, CT & CECT Neck, CT CP angle, MRI, Barium Studies etc
23.	Reading, Doing and Interpreting Audiological investigation like PTA, Impedence, BERA, OAE, SiSi, Tone decay etc
24.	Research methodology and writing of paper, Poster presentation and publications
25.	Performing cadaveric dissection to learn basic temporal bone dissection.
26.	Performing advanced cadaveric dissection to learn advanced temporal bone dissection such as labyrinthectomy, petrous apex approach, cochleostomy.
27.	Following protocols and precautions to be followed while performing high risk aerosol generating procedures in ENT in a situation of a high impact respiratory pathogen pandemic.
28.	Conversant in pedagogic and andragogic methods of teaching and learning.

### 9.1.3 EPA Descriptions (Enter all the EPA and their descriptions)

Gathering a history and performing physical examination EPA1.

EPA1. Gathering a history and performing physical examination			
Description for the activity	Residents should be able to perform an accurate complete or focused history and physical exam in a prioritized, organized manner without supervision and with respect for the patient. The history and physical examination should be tailored to the clinical situation and specific patient encounter. This data gathering and patient interaction activity serves as the basis for clinical work and as the building block for patient evaluation and management.		
	Relevant domains of	Subcompetencies within	Milestone level (L) in
	competency	each domain	subcompetency
		MK1	3
Resident will be		MK2	3
entrustable when these	MK	MK3 MK4	3 2
subcompetency		MK4 MK5	2
Milestone Levels are attained	PC/PS	PC/PS 1	4
	IPCS	IPCS1	1
	Р	P1	1
	P	P3	3
Method of Assessment	<ol> <li>Periodic written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> <li>d. Peers</li> </ul> </li> </ol>		

EPA2. Prioritizing a differential diagnosis following a clinical encounter

EPA2. Prioritizing a differential diagnosis following a clinical encounter				
Description for the activity	Residents should be able to integrate patient data to formulate an assessment, developing a list of potential diagnoses that can be prioritized and lead to selection of a working diagnosis			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
Resident will be entrustable when these subcompetency Milestone Levels are attained	МК	MK1 MK2 MK 3 MK5	3 3 3 2	
	PC/PS	PC1	4	
	PBLI	PBLI 3B PBLI 4	3 3	

	IPCS	IPCS 1	1
	Р	P 1	1
	<ol> <li>Written exam (Every</li> <li>Clinical examinations</li> <li>Workplace assessment</li> </ol>	s (every 6 months)	
Method of Assessment	4. E-portfolio		
a. Patient b. Nurses c. Health care workers d. Peers			

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EDA2	Dogowww.onding.ang	intownwating again	mon diamontia and	annoning toata
LFAJ.	Recommending and		ποπ αιαγποδιίς απα	

<i>EPA3</i> . Recommending and interpreting common diagnostic and screening tests				
Description for the activity	Residents should be able to select and interpret common diagnostic and screening tests using evidence-based and cost-effective principles as one approach a patient in any setting.			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK1 MK2 MK3	3 3 3	
Resident will be entrustable when these subcompetency	PC/PS	PC/PS3 PC/PS4	3 3	
Milestone Levels are	PBLI	PBLI 3A	3	
attained	IPCS	ICS1 ICS2 ICS3	2 2 3	
	Р	P1 P2 P3	3 2 3	
Method of Assessment	<ol> <li>Periodic written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>E-portfolio</li> <li>Multisource feedback         <ul> <li>Patient</li> <li>Nurses</li> <li>Health care workers</li> <li>Peers</li> </ul> </li> </ol>			

EPA4. Entering and discussing orders and prescriptions and giving the necessary instructions to the patients

*EPA4*. Entering and discussing orders and prescriptions and giving the necessary instructions to the patients

Description for the activity	Residents should be able to prescribe therapies or interventions beneficial to patients. Entering residents will have a comprehensive understanding of some but not necessarily all of the patient's clinical problems for which they must provide orders. They must also recognize their limitations and seek review for any orders and prescriptions they are expected to provide but for which they do not understand the rationale. The expectation is that learners will be able to enter safe orders and prescriptions in a variety of settings (e.g., inpatient, ambulatory, urgent, or emergent care).		
	Relevant domains of	Subcompetencies within	Milestone level (L) in
	competency	each domain	subcompetency
		MK3	3
	MK	MK4	2
D 1 / 111		MK5	2
Resident will be	PC/PS	PC/PS4	3
entrustable when these		PC/PS5	2
subcompetency Milestone Levels are	PBLI	PBLI 3A	3
attained	SBP	SBP 4	3
attanica		ICS1	3
	IPCS	ICS2	3
		ICS3	3
	Р	P1	3
	Р	P 4	3
Method of Assessment	<ol> <li>Workplace assessment by Faculty</li> <li>E-portfolio</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> <li>d. Peers</li> </ul> </li> </ol>		

### EPA5. Documenting a clinical encounter in patient records while providing an oral presentation of a clinical encounter

EPA5: Documenting a clinical encounter in patient records while providing an oral presentation of a clinical encounter			
Description for the activity	Residents should be able to provide accurate, focused, and context-specific documentation of a clinical encounter in either written or electronic formats. Performance of this EPA is predicated on the ability to obtain information through history, using both primary and secondary sources, and physical exam in a variety of settings (e.g., office visit, admission, discharge summary, telephone call, email). Residents should be able to concisely present a summary of a clinical encounter to one or more members of the health care team (including patients and families) in order to achieve a shared understanding of the patient's current condition. A prerequisite for the ability to provide an oral presentation is synthesis of the information, gathered into an accurate assessment of the patient's current condition.		
Resident will be	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency
entrustable when these subcompetency		MK2	4
Milestone Levels are	MK	MK3	3 2
attained	PC/PS	MK5 PC/PS1	4

	PBLI	PBLI 1 PBLI 4	3 3
		PBLI 5	3
	SBP	SBP 4	3
	IPCS	IPCS1	3
		P1	3
	Р	P 3	3
Method of Assessment	<ol> <li>Workplace assessment</li> <li>E-portfoio</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care worker</li> <li>d. Peers</li> </ul> </li> </ol>		

## EPA6. Form clinical questions and retrieve evidence to advance patiente:ar

EPA 6: Form clinical questions and retrieve evidence to advance patient care			
Description for the activity	Residents should be able to identify key clinical questions in caring for patients, identify information resources, and retrieve information and evidence that will be used to address those questions. Residents should have basic skill in critiquing the quality of the evidence and assessing applicability to their patients and the clinical context. Underlying the skill set of practicing evidence-based medicine is the foundational knowledge an individual has and the self-awareness to identify gaps and fill them.		
	Relevant domains of	Subcompetencies within each domain	Milestone level (L) in subcompetency
	MK	MK1 MK2 MK3 MK4	3 4 3 2
Resident will be entrustable when these	PC/PS	PC/PS1 PC/PS4	1 3
subcompetency Milestone Levels are attained	PBLI	PBLI 3A PBLI3B	2 3
	SBP	SBP 2 SBP4	3 3
	IPCS	IPCS1	3
	Р	P1 P2 P5	3 2 3

Method of Assessment	<ol> <li>Workplace assessment by Faculty</li> <li>E-portfolio</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> <li>d. Peers</li> </ul> </li> </ol>
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EPA7. Give or receive a patient handover to transition care responsibility as well as collaborates as a member of an interprofessional team

EPA 7: Give or receive a patient handover to transition care responsibility as well as collaborates as a member of an interprofessional team				
Description for the activity	Effective and efficient handover communication is critical for patient care. Handover communication ensures that patients continue to receive high-quality and safe care through transitions of responsibility from one health care team or practitioner to another. Handovers are also foundational to the success of many other types of interprofessional communication, including discharge from one provider to another and from one setting to another. Handovers may occur between settings (e.g., hospitalist to PCP; discharges to lower-acuity settings) or within settings (e.g., shift changes). Effective teamwork is necessary to achieve the Institute of Medicine competencies for care that is safe, timely, effective, efficient, and equitable. Introduction to the roles, responsibilities, and contributions of individual team members early in professional development is critical to fully embracing the value that teamwork adds to patient care outcomes.			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK4	2	
	PC/PS	PC/PS5	4	
	PBLI	PBLI 3A	3	
Resident will be		SBP 1	3	
entrustable when these	SBP	SBP 2	3	
sub competency		SBP3	3	
Milestone Levels are		IPCS1	3	
attained	IPCS	IPCS2	2	
		IPCS3	4	
		P1	2	
		P2	3 2	
	Р	P4	3	
		Р5	3	
Method of Assessment	<ol> <li>Workplace assessment by Faculty</li> <li>E-portfolio</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> <li>d. Peers</li> </ul> </li> </ol>			

EPA 8: Obtain informed consent for tests and/or procedures				
Description for the activity	Residents should be able to perform patient care interventions that require informed consent for interventions, tests, or procedures they order or perform (e.g., diagnostic nasal endoscopies, indirect laryngoscopy, audiometry,oto - endoscopy, ear under microscopy, swabs for culture etc) but should not be expected to obtain informed consent for procedures or tests for which they do not know the indications, contraindications, alternatives, risks, and benefits.			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK4	2	
Resident will be entrustable when these	PC/PS	PC4	3	
subcompetency Milestone Levels are	SBP	SBP4	4	
attained	IPCS	IPCS1 IPCS3 IPCS4	3 4 3	
	Р	P1 P2 P3 P5	1 2 3 3	
Method of Assessment	<ol> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>Patient</li> <li>Nurses</li> <li>Health care workers</li> <li>Peers</li> </ul> </li> </ol>			

## EPA9. *Identify system failures and contribute to a culture of safety and improvement.*

EPA 9: Identify system failures and contribute to a culture of safety and improvement				
Description for the activity	Post-graduates should be well equipped in recognizing any fallacies in the healthcare system. He/she should have the basic knowledge about how healthcare functions at multiple levels and should be able to recognize any failures I the working system. Whilst identifying the errors and shortcomings, he/she should also be able to find the most appropriate solution to resolve the issue in hand. Thus, should contribute towards the betterment of the healthcare system while developing a culture of safety.			
Resident will be entrustable when these subcompetency Milestone Levels are	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
attained	PBLI	PBLI 3A	3 3	

	SBP	PBLI 5 SBP 2 SBP3 SBP5 IPCS2 IPCS3	3 3 3 3 4
		IPCS5	3
	Р	P1 P4 P6	3 3 3
Method of Assessment	<ol> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>Patient</li> <li>Nurses</li> <li>Health care workers</li> <li>Peers</li> </ul> </li> </ol>		

EPA10. Recognise a patient requiring urgent or emergency care and initiate

evaluation and management like management of dizzy patient,

management of epistaxis, stridor, foreign body removal in

aerodigestive Tract, and foreign body of ear& nose, nasal fracture

reduction.

EPA 10: Recognise a patient requiring urgent or emergency care and initiate evaluation and management like management of dizzy patient, management of epistaxis, stridor, foreign body removal in aerodigestive tract, and foreign body of ear& nose, nasal fracture reduction. Residents should be able to promptly recognize a patient who requires urgent or emergent care, initiate evaluation and management, and seek help is essential. New residents in particular are often among the first responders in an acute care setting, or the first to receive notification of an abnormal lab or deterioration in a patient's status. Early recognition and intervention provide the greatest chance Description for the for optimal outcomes in patient care. This EPA often calls for simultaneously activity recognizing need and initiating a call for assistance. Includes management of some of the emergency conditions dealt in the field of otorhinolaryngology and the role of the post graduate in the process. These include giddy patient, epistaxis, stridor, foreign body removal in aerodigestive tract, and foreign body of ear& nose, nasal fracture reduction Subcompetencies within Milestone level (L) in Relevant domains of competency each domain subcompetency Resident will be MK1 4 entrustable when these MK2 3 subcompetency MK 3 MK3 Milestone Levels are 2 MK4 attained PC/PS1 4 PC/PS PC/PS2A 4 3 PC/PS2B

		PC/PS3	3
		PC/PS4	3
		PC/PS5	3
		PBLI 1	3
	PBLI	PBLI 2	3
		PBLI 3A	3
		IPCS1	3
	IPCS	IPCS2	3
		IPCS 3	4
		IPCS4	3
		P1	4
		P2	2
	Р	P3	3
		P5	3
		P6	3
	1. Workplace assess	ment by Faculty	
	2. E-portfolio		
	3. Multisource feedback		
Method of Assessment	a. Patient		
	b. Nurses		
	c. Health care workers		
	4. d. Peers		

### EPA11. Post-operative care, evaluation and counselling.

EPA 11: Post-operative care, evaluation and counselling			
Description for the activity	Post graduates must have adequate knowledge about the post-operative period, the events that follow, the care that is required and / or expected. Post graduate should provide adequate patient care in the post-operative duration of stay in the hospital. He/she should also be well versed in counselling the patient about the post procedural outcomes, what to expect, recovery and any rehabilitation.		
Resident will be	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency
	МК	MK1 MK2 MK3 MK4 MK5	4 4 3 3 2
entrustable when these subcompetency	PC/PS	PC/PS1 PC/PS4	4 3
Milestone Levels are attained	PBLI	PBLI3A PBLI5	3 4
	SBP	SBP4	4
	IPCS	IPCS1 IPCS3 IPCS 4	4 3 3
	Р	P1 P2 P3	1 2 3 1

	P4 3 P5 3 P6
Method of Assessment	<ol> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>Patient</li> <li>Nurses</li> <li>Health care workers</li> <li>Peers</li> </ul> </li> </ol>

EPA12. Post-Performing basic office procedures like diagnostic nasal

endoscopy, video laryngoscopy, post nasal examination, throat swabs, ear

swabs, nasopharyngeal swabs, FNACs

EPA 12: Performing basic office procedures like diagnostic nasal endoscopy, video laryngoscopy, post nasal examination, throat swabs, ear swabs, nasopharyngeal swabs, FNACs				
Description for the activity	Post graduates must have the basic knowledge behind the principles of common diagnostic modalities used in the field of ENT. They should be well versed in performing some common outpatient based diagnostic procedures such as diagnostic nasal endoscopy, video laryngoscopy, post nasal examination, throat swabs, ear swabs, nasopharyngeal swabs, FNACs etc. They should also be considerate about pre procedural counselling and consent taking.			
Resident will be entrustable when these subcompetency Milestone Levels are attained	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK1 MK2 MK3	4 3 3	
	PC/PS	PC/PS2A PC/PS2B PC/PS4	4 3 3	
	PBLI	PBLI 1 PBLI 2 PBLI 3A	3 3 3	
	SBP	SBP4	4	
	IPCS	IPCS1 IPCS2 IPCS3	3 3 4	
	Р	P1 P2 P3 P5 P6	4 2 3 3 3	

Method of Assessment	
	1. Written exam (Every 6 months)
	2. Workplace assessment by Faculty
	3. Multisource feedback
	a. Patient
	b. Nurses
	c. Health care workers
	4. d. Peers

*EPA13. Performing basic surgeries of throat such as adenoidectomy, tonsillectomy, Adenotonsillectomy, tracheostomy.* 

EPA 13: Performing basic surgeries of throat such as adenoidectomy, tonsillectomy, Adenotonsillectomy, tracheostomy.				
Description for the activity	Post graduates should have the basic knowledge about basic surgical anatomy of throat and neck and related surgical steps regarding some commonly performed surgeries in ENT. Post graduate should have the general idea of managing a particular patient with the best suitable treatment modality. Also Post graduate should be well versed in both, pre-operative workup and post-operative management.			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK1 MK2 MK3	4 4 3	
Resident will be	PC/PS	PC/PS2A PC/PS2B PC/PS4	5 4 3	
entrustable when these subcompetency Milestone Levels are	PBLI	PBLI 1 PBLI 2 PBLI 3A	3 3 3	
attained	SBP	SBP4	4	
	IPCS	IPCS1 IPCS2 IPCS 3	3 3 4	
	Р	P1 P2 P3 P5 P6	4 2 3 3 3	
Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> </ul> </li> <li>d. Peers</li> </ol>			

# EPA14. Assisting in advanced Head & Neck Surgeries, Laryngectomies

EPA 14: Assisting in advanced Head & Neck Surgeries, Laryngectomies				
Description for the activity	Post graduates should assist in few above mentioned advanced surgeries in the field of otorhinolaryngology. They should be well versed with basic surgical anatomy of head and neck and the procedural steps. They should be sensitized about the intra and post-operative events that might be encountered upon while assisting. They should also know about the care to be provided after the procedure.			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK1 MK2 MK3	4 4 3	
Resident will be	PC/PS	PC/PS2A PC/PS2B PC/PS4	5 4 3	
entrustable when these subcompetency Milestone Levels are	PBLI	PBLI 1 PBLI 2 PBLI 3A	3 3 3	
attained	SBP	SBP4	4	
	IPCS	IPCS1 IPCS2 IPCS 3	3 3 4	
	Р	P1 P2 P3 P5 P6	4 2 3 3 3	
Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> <li>d. Peers</li> </ul> </li> </ol>			

EPA15. Performing rigid scopies such as direct laryngoscopy guided biopsy, rigid esophagoscopy and bronchoscopy.

EPA 15: Performing rigid scopies such as direct laryngoscopy guided biopsy, rigid esophagoscopy and bronchoscopy.

Description for the activity	Post graduates should assist in few above mentioned advanced surgeries in the field of otorhinolaryngology. They should be well versed with basic surgical anatomy and the procedural steps of various rigid scopies. They should be sensitized about the intra and post-operative events that might be encountered.		
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency
	МК	MK1 MK2 MK3	4 4 3
Resident will be	PC/PS	PC/PS2A PC/PS2B PC/PS4	4 4 3
entrustable when these subcompetency Milestone Levels are attained	PBLI	PBLI 1 PBLI 2 PBLI 3A	3 3 3
atumea	SBP	SBP4	4
	IPCS	IPCS1 IPCS2 IPCS 3	3 3 4
	Р	P1 P2 P3 P5 P6	4 2 3 3 3
Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>Patient</li> <li>Nurses</li> <li>Health care workers</li> </ul> </li> <li>d. Peers</li> </ol>		

# EPA16. Performing basic surgeries of nose such as septoplasty, submucosal

resection of nasal septum and endoscopic middle meatal antrostomy.

EPA 16: Performing basic surgeries of nose such as septoplasty, submucosal resection of nasal septum and endoscopic middle meatal antrostomy.				
Description for the activity	Post graduates should have the basic knowledge about basic surgical anatomy of nose and paranasal sinuses and related surgical steps regarding some commonly performed surgeries in nose. Post graduate should have the general idea of managing a particular patient with the best suitable treatment modality. Also Post graduate should be well versed in both, pre-operative workup and post- operative management.			
Resident will be entrustable when these subcompetency	Relevant domains of competencySubcompetencies within each domainMilestone level ( subcompetence)			
Milestone Levels are	MK	MK1	4	

attained		MK2	4
attanicu			3
		MK3	
		PC/PS2A	4
	PC/PS	PC/PS2B	4
		PC/PS4	3
		PBLI 1	3
	PBLI	PBLI 2	3
	I DLI	PBLI 3A	
			3
	SBP	SBP4	4
		IPCS1	3
	IPCS	IPCS2	3
		IPCS 3	4
		P1	4
		P2	
	Р	P3	2 3 3 3
		P5	3
		P6	3
	1. Written exam (Ev	very 6 months)	
	2. Workplace assess		
	3. Multisource feedback		
Method of Assessment	a. Patient		
	b. Nurses		
	c. Health car	a workers	
		C WOIKEIS	
	d. Peers		

EPA17. Assisting advance nasal Surgeries such as Functional Endoscopic

Sinus Surgery, Frontal sinusotomy, sphenoidotomy, orbital

decompression, trans sphenoidal excision of pituitary

macroadenoma, optic nerve decompression.

EPA 17:Assisting advance nasal Surgeries such as Functional Endoscopic Sinus Surgery, Frontal sinusotomy, sphenoidotomy, orbital decompression, trans sphenoidal excision of pituitary macroadenoma, optic nerve decompression.			
Description for the activity	Post graduates should assist in few above mentioned advanced surgeries in the field of rhinology. They should be well versed with basic surgical anatomy of nose, paranasal sinuses, orbit, skull base and the procedural steps. They should be sensitized about the intra and post-operative events that might be encountered upon while assisting. They should also know about the care to be provided after the procedure.		
Resident will be entrustable when these	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency
subcompetency Milestone Levels are attained	МК	MK1 MK2 MK3	4 4 3
	PC/PS	PC/PS2A PC/PS2B	5 4

		1	1
		PC/PS4	3
		PBLI 1	3
	PBLI	PBLI 2	3
		PBLI 3A	3
	SBP	SBP4	4
		IPCS1	3
	IPCS	IPCS2	3
		IPCS 3	4
		P1	4
		P2	2
	Р	P3	3
		P5	3
		P6	3
	1. Written exam (Ev	very 6 months)	
	2. Workplace assess		
	3. Multisource feedb		
Method of Assessment	a. Patient		
	b. Nurses		
	c. Health car	e workers	
	d. Peers		

EPA18. Performing basic surgeries of ear such as

# myringoplasty, tympanoplasty and cortical mastoidectomy.

EPA 18: Performing basic surgeries of ear such as myringoplasty,tympanoplasty and cortical mastoidectomy.				
Description for the activity	Post graduates should have the basic knowledge about basic surgical anatomy and related surgical steps regarding some commonly performed surgeries in ear. Post graduate should have the general idea of managing a particular patient with the best suitable treatment modality. Also Post graduate should be well versed in both, pre-operative workup and post-operative management.			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK1 MK2 MK3	4 4 3	
D 11 / 111	PC/PS	PC/PS2A PC/PS4	4 3	
Resident will be entrustable when these subcompetency Milestone Levels are	PBLI	PBLI 1 PBLI 2 PBLI 3A	3 3 3	
attained	SBP	SBP4	4	
	IPCS	IPCS1 IPCS2 IPCS 3	3 3 4	
	Р	P1 P2	4 2	

	P3         3           P5         3           P6         3
Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>Patient</li> <li>Nurses</li> <li>Health care workers</li> </ul> </li> <li>d. Peers</li> </ol>

EPA19. Assisting advanced ear Surgeries such as Modified radical

mastoidectomy, stapedotomy, cochlear implant surgery, facial nerve

decompression, labyrinthectomy.

EPA 19: Assisting advanced ear Surgeries such as Modified radical mastoidectomy, stapedotomy, cochlear implant surgery, facial nerve decompression, labyrinthectomy.			
Description for the activity	Post graduates should assist in few above mentioned advanced surgeries in the field of otology. They should be well versed with basic surgical anatomy of ear and the procedural steps. They should be sensitized about the intra and post-operative events that might be encountered upon while assisting. They should also know about the care to be provided after the procedure.		
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency
	МК	MK1 MK2 MK3	4 4 3
	PC/PS	PC/PS2A PC/PS4	5 3
Resident will be entrustable when these subcompetency	PBLI	PBLI 1 PBLI 2 PBLI 3A	3 3 3
Milestone Levels are	SBP	SBP4	4
attained	IPCS	IPCS1 IPCS2 IPCS 3	3 3 4
	Р	P1 P2 P3 P5 P6	4 2 3 3 3

Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> <li>d. Peers</li> </ul> </li> </ol>
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*EPA20. Performing day care procedures like lobuloplasty, keloid excision etc.* 

EPA 20:Performing day care procedures like lobuloplasty, keloid excision etc.				
Description for the activity	Post graduates should have the basic knowledge about basic surgical anatomy and related surgical steps regarding some commonly performed day care surgeries in ENT. Post graduate should have the general idea of managing a particular patient with the best suitable treatment modality. Also Post graduate should be well versed in both, pre-operative workup and post-operative management.			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK1 MK2 MK3	4 4 3	
	PC/PS	PC/PS2A PC/PS4	4 3	
Resident will be entrustable when these	PBLI	PBLI 1 PBLI 2 PBLI 3A	3 3 3	
subcompetency Milestone Levels are attained	SBP	SBP1 SBP2 SBP3 SBP4	1 3 2 4	
	IPCS	IPCS1 IPCS2 IPCS 3	3 3 4	
	Р	P1 P2 P3 P5 P6	4 2 3 3 3 3	
Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> </ul> </li> <li>4. d. Peers</li> </ol>			

# EPA21. Reading and interpreting X-rays, e.g.: X ray PNS, Mastoids,

Nasopharynx, soft tissue neck etc

EPA 21:Reading and interpreting X-rays, e.g.: X ray PNS, Mastoids, Nasopharynx, soft tissue neck etc				
Description for the activity	Post graduates must have the basic knowledge about X ray mechanism. They should be able to interpret and diagnose common ENT related x ray films such as X ray PNS, Mastoids, Nasopharynx, soft tissue neck etc. They should be well trained in pointing out abnormalities and hence arrive at a conclusive diagnosis.			
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency	
	МК	MK1 MK3	3 3	
Resident will be	PC/PS	PC/PS3	3	
entrustable when these subcompetency Milestone Levels are attained	PBLI	PBLI 1 PBLI 2 PBLI 3B PBLI 4	3 4 2 3	
	SBP	SBP2	2	
	IPCS	IPCS1 IPCS2 IPCS 3	3 3 3	
	Р	P6	2	
Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> <li>d. Peers</li> </ul> </li> </ol>			

EPA22. Reading and interpreting CT PNS, HRCT Temporal Bone, CT & CECT Neck, CT CP angle, MRI, Barium Studies etc

EPA 22:Reading and interpreting CT PNS, HRCT Temporal Bone, CT & CECT Neck, CT CP angle, MRI, Barium Studies etc								
Description for the activity	Post graduates must have the basic knowledge about mechanism behind some imaging modalities such as CT scan, MRI, contrast imaging studies. They should be able to interpret and diagnose common ENT related imaging studies. They should be well trained in pointing out abnormalities and hence arrive at a conclusive diagnosis.							
Resident will be entrustable when these subcompetency	Relevant domains of competencySubcompetencies within each domainMilestone level (L) subcompetency							
Milestone Levels are attained	МК	MK MK1 3 MK3 3						

	PC/PS	PC/PS3	3
	PBLI	PBLI 1 PBLI 2	3 4
		PBLI 3B PBLI 4	2 3
	SBP	SBP2	2
		IPCS1	3
	IPCS	IPCS2	3
		IPCS 3	3
	Р	P6	2
Method of Assessment	<ol> <li>Written exam (Ev.</li> <li>Workplace assess</li> <li>Multisource feedba. Patient</li> <li>Nurses</li> <li>Health card. Peers</li> </ol>	ment by Faculty back	

EPA23. Reading, Doing and Interpreting Audiological investigation like PTA, Impedance, BERA, OAE, SiSi, Tone decay etc

EPA 23:Reading, Doing and Interpreting Audiological investigation like PTA, Impedance, BERA, OAE, SiSi, Tone decay etc							
Description for the activity	Post graduates must have the basic knowledge about various types of audiometry and other hearing assessment tests. They should know about the indications as well as the applications of these diagnostic tests in the field of otology. Interpretation and arriving at the diagnosis should be learnt during the course.						
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency				
	МК	MK1 MK3	3 3				
Resident will be entrustable when these	PC/PS	PC/PS2 PC/PS3	4 3				
subcompetency Milestone Levels are attained	PBLI	PBLI 1 PBLI 2 PBLI 3B PBLI 4	3 4 2 3				
	SBP	SBP4	2				
	Р	P2 P6	1 2				

Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>E-portfolio</li> <li>Multisource feedback         <ul> <li>a. Faculties</li> <li>b. Peers</li> </ul> </li> </ol>
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# *EPA24. Research methodology and writing of Paper, Poster presentation and publications*

EPA 24:Research m	ethodology and writing o	of paper, Poster present:	ation and publications			
Description for the activity	Residents should be sensitized towards the field of research contributing to publications in otorhinolaryngology, they should know the basics of research methodology, how to write a paper, poster or contribute into any publication. At the end of 3 years, resident must have one paper, poster and presentation each being published into renowned journals.					
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency			
Resident will be	МК	MK2 MK3 MK5 MK6	4 3 1 3			
entrustable when these subcompetency	PC/PS	PC/PS5	3			
Milestone Levels are attained	PBLI	PBLI 1 PBLI 3B PBLI 4 PBLI 5	3 3 3 3			
	SBP	SBP5	3			
	IPCS	IPCS2	3			
	P P1 3 P6 2					
Method of Assessment	<ol> <li>Multisource feed A. Faculties</li> <li>B. Peers</li> <li>E-portfolio</li> </ol>	back				

EPA25. Performing cadaveric dissection to learn temporal bone dissection

EPA 25: Performing cadaveric dissection to learn temporal bone dissection

Description for the activity	Post graduates should have the basic knowledge about basic surgical anatomy and related surgical steps temporal bone dissection. Cadaveric dissection of temporal bone will provide real like simulation to further advanced ear surgeries.					
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency			
Resident will be entrustable when these	МК	MK1	2			
subcompetency	PC/PS	PC/PS2	4			
Milestone Levels are	PBLI	PBLI 1	3			
attained		PBLI 2	3			
		PBLI 3A	3			
	Р	P1	1			
	1	P6	2			
Method of Assessment	<ol> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>a. Faculties</li> <li>b. Peers</li> </ul> </li> </ol>					

*EPA26.* Performing advanced cadaveric dissection to learn temporal bone dissection such as labyrinthectomy, petrous apex approach, cochleostomy.

EPA 26: Performing advanced cadaveric dissection to learn temporal bone dissection such as labyrinthectomy, petrous apex approach, cochleostomy.						
Description for the activity	Post graduates should have the advanced knowledge about surgical anatomy and related surgical steps temporal bone dissection. Cadaveric dissection of temporal bone will provide real like simulation to further advanced ear surgeries.					
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency			
Resident will be entrustable when these	МК	MK1	2			
subcompetency	PC/PS	PC/PS2A	5			
Milestone Levels are		PBLI 1	4			
attained	PBLI	PBLI 2	4			
		PBLI 3A	3			
	р	P1	1			
	ľ	P6	2			

Method of Assessment	<ol> <li>Workplace assessment by Faculty</li> <li>Multisource feedback</li> <li>a. Faculties</li> <li>b. peers.</li> </ol>
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EPA27. Following protocols and precautions to be followed while

performing high risk aerosol generating procedures in ENT in a

situation of a high impact respiratory pathogen pandemic.

EPA 27: Following protocols and precautions to be followed while performing high risk aerosol generating procedures in ENT in a situation of a high impact respiratory pathogen pandemic.						
Description for the activity	Residents should be able to follow protocols and precautions to be followed while performing high risk aerosol generating procedures in ENT in a situation of a high impact respiratory pathogen pandemic.					
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency			
	МК	MK3 MK5	3 2			
D 11 . 111	PC/PS	PC/PS2B	4			
Resident will be entrustable when these subcompetency Milestone Levels are attained	PBLI	PBLI 3A PBLI 3B	2 3			
	SBP	SBP1 SBP2 SBP3 SBP4	3 2 2 3			
	Р	P1 P2 P4	2 2 4			
Method of Assessment	<ol> <li>Written exam (Every 6 months)</li> <li>Workplace assessment by Faculty</li> <li>Multisource feedback         <ul> <li>a. Patient</li> <li>b. Nurses</li> <li>c. Health care workers</li> <li>d. Peers</li> </ul> </li> </ol>					

# *EPA28. Conversant in pedagogic and andragogic methods of teaching and learning.*

EPA 28: Conversant in pedagogic and andragogic methods of teaching and learning

Description for the activity	Collect and comprehend learning resources, adapt different teaching methods, effectively communicate with medical and paramedical students.					
	Relevant domains of competency	Subcompetencies within each domain	Milestone level (L) in subcompetency			
Resident will be entrustable when these subcompetency	МК	MK1 MK6	2 3			
Milestone Levels are attained	PC/PS	PC/PS6 PC/PS 7	3 3			
	IPCS	IPCS2	1			
	Р	P1 P6	1 2			
Method of Assessment	<ol> <li>PC/PS assessed by the faculty</li> <li>Communication skills &amp; Professionalism will be assessed by Multisource feedback.</li> </ol>					

# 9.1.4 Mapping of EPA to Programme Outcomes (PO)

Table 4 showing mapping of the EPA's to the Programme outcomes

	PO1.	PO2.	PO3.	PO4.	PO5.	PO6.	PO7.	PO8.	PO9.	PO10.
EPA1.	Y	Y		Y						
EPA2.	Y	Y		Y			Y			
EPA3.	Y	Y		Y			Y	Y		
EPA4.	Y	Y		Y					Y	
EPA5.	Y	Y		Y						
EPA6.	Y	Y		Y			Y	Y	Y	
EPA7.	Y	Y							Y	
EPA8.	Y	Y		Y					Y	
EPA9.									Y	
EPA10.	Y	Y	Y							Y
EPA11.	Y	Y							Y	
EPA12.	Y	Y		Y						
EPA13.	Y	Y		Y						Y
EPA14.	Y	Y		Y			Y			
EPA15.	Y	Y		Y			Y			Y
EPA16.	Y	Y		Y			Y			
EPA17.	Y	Y		Y			Y			
EPA18.	Y	Y		Y			Y			
EPA19.	Y	Y		Y			Y			
EPA20.	Y	Y		Y						
EPA21.	Y	Y		Y						
EPA22.	Y	Y		Y						
EPA23.	Y	Y						Y		
EPA24.	Y				Y	Y	Y			
EPA25.	Y	Y		Y						
EPA26.	Y	Y		Y						
EPA27.	Y	Y	Y				Y		Y	Y
EPA28.				Y		Y	Y			

### 9.2 Summative assessment

#### 9.2.1 Dissertation

#### Objectives

- 1. The student should be able to demonstrate capability in research by planning and conducting systematic scientific inquiry & data analysis and deriving conclusion.
- 2. Communicate scientific information for health planning.

#### Guide for dissertation

- 1. Chief guide will be allocated from the Department of Otorhinolaryngology.
- 2. Co guides can be selected from within the department or from other disciplines related to the dissertation topic.

#### Submission of dissertation protocol

It should be submitted at the end of six months after admission in the course, in the format prescribed by the institute:

- 1. Protocol in essence should consist of:
  - a) Introduction and objectives of the research project.
  - b) Brief review of literature
  - c) Suggested materials and methods, and (scheme of work)
  - d) Statistician should be consulted at the time of selection of groups, number of cases and method of study. He should also be consulted during the study.
  - e) Bibliography
- 2. The protocol must be presented in the Department of Otorhinolaryngology before being forwarded to the Institutional Research Committee (IRC) for review.
- Protocol must be approved by the research committee, which is appointed by the Dean / Principal to scrutinize the dissertation protocol in references to its feasibility, statistical validity, ethical aspects, etc.
- 4. Once approved by the IRC, the protocol will be forwarded to the Institutional Human Ethics Committee (IHEC) for review.
- 5. After presentation and approval of the protocol by the IHECthe data collection may be initiated.

#### Submission of dissertation

1. The dissertation shall relate to the candidates own work on a specific research problem or a series of clinical case studies in accordance with the approved plan.

- 2. The dissertation shall be written in English, printed or typed double line spacing, on white bond paper 22x28 cm with a margin of 3.5 cm, bearing the matter on one side of paper only and neatly bound with the title, the name of the College and University printed on the front cover.
- 3. The dissertation shall contain: Introduction, review of literature, material and methods, observations, discussion, conclusion and summary and reference as per index medicus.
- 4. Each candidate shall submit to the Dean four copies of dissertation, through their respective Heads of the Department not later than six months prior to the date of commencement of theory examination in the subject.

#### Evaluation of Dissertation:

- The dissertation shall be referred by the University for Evaluation, to External Examiners appointed by the University. The examiners will evaluate and report independently to the Controller of Examinations using Proforma for Dissertation Evaluation Form and recommend whether the dissertation
  - a. Accepted as submitted
  - b. Accepted pending modification as suggested
  - c. Not Accepted for reasons specified
- 2. The dissertation shall be deemed to be accepted when it has been approved by at least two external examiners, who will allocate marks from which an average will be taken.
- 3. If the dissertation is rejected by one of the external examiners it shall be referred to another external examiner (other than the one appointed for initial evaluation) whose judgment shall be final for purposes of acceptance or otherwise of the dissertation.
- 4. Where improvements have been suggested by the external examiners, the candidate shall be required to re submit the dissertation, after making the required improvements for evaluation.
- 5. When a dissertation is rejected by the examiners, it shall be returned to the candidate who shall have to rewrite it. The second version of the dissertation, as and when submitted shall be treated as a fresh dissertation and processed.
- 6. Acceptance of dissertation submitted by the candidate is a pre condition for his / her admission to the written, oral and practical / clinical part of the examination.
  - a. Provided that under special circumstances if the report from one or more examiners is not received by the time the Post Graduate examination is due, the candidate may be permitted provisionally to sit for the examination but the result be withheld till the receipt of the report, subject to the condition that if the dissertation is rejected then the candidate in addition to writing a fresh dissertation, shall have to reappear for the examination.

7. A candidate whose dissertation stands approved by the examiners but fails in the examination, shall not be required to submit a fresh one if he/she appears in the examination in the same branch on a subsequent occasion.

### 9.2.2 Eligibility Criteria

- Candidates will be eligible to appear for the university examinations after completion of 3 years and when following criteria are fulfilled:
  - 1. Attendance of 80%
  - 2. Submission of dissertation and acceptance by external examiner
  - 3. One research Publication based on the Dissertation
  - 4. One poster and one Podium presentation at National or Regional conferences, recognised by Theory (Subject contents already outlined in syllabus)

#### 9.2.3 Theory

- Final Theory Papers: 4 papers
- All papers should have 10 short answer questions.
- Question papers are prepared based on the prescribed blueprint described later (see blueprint section)
- Model question paper is attached for ready reference.

#### 9.2.4 Practical

• The practical examination is structured and consists of 2 sessions- morning and afternoon.

Morning Session					
Clinical Cases No Duration Marks					
Long case	1	45	80		
Short cases	3	30	40		

• Structured Assessment (For clinical Cases)

	Marks distribution	Duration
Segment	Long Case/Short	
	Case/Short Case	
Oral skills / Presentation	20/10	
Accuracy of clinical findings	20/10	1 hr
Formulating differential diagnosis based on clinical findings	20/10	1 111
Management: principles and details	20/10	

	Afternoon Session			
Segn	nent	Marks		
1.	Instruments	20		

2.	Pathology specimens and operative surgery	20
3.	Radiology	20
4.	Audiology	20
5.	General Viva	20

#### • Total Marks allotted:

Segment		Total Marks
Theory (Papers 1 - 4)		400
Practical		200
Viva Voce		100
Grand Total	SBV	700

- $\circ$  Recommendations for passing:
- 1. The candidate will be required to secure minimum 50% marks in theory and 50% marks in clinicals and viva voce separately, which is mandatory for passing the whole examination.
- 2. There will be enough gap between theory and practical examination as recommended by MCI rules.
- 3. There university practical examination will be conducted by 2 external and 2 internal examiners.

# **10 Blueprint of Theory exam paper**

Sl No.	Discipline	Topics	Weight age	Marks Allotted	No. of Questio n
1	Anatomy	Anatomy & Embryology of Ear Anatomy & Embryology of Nose and Paranal sinuses & orbit Anatomy & Embryology of throat, trachea, and deep neck spaces Anatomy & Embryology of Salivary glands, Thyroid and Parathyroid Anatomy of skull base and cranial fossa's, cerebellum and brainstem Anatomy and embryology of pleura, pleural cavity and bronchopulmonary segments.	30%	30	3
2	Biochemistry	Fluid and electrolyte balance, biochemistry of perilymph and endolymph, CSF, saliva, nasal secretion, etc	10%	10	1
3	Physiology	Physiology of Perception of sound &equilibrium Perception of sound at the auditory cortex Physiology of nose and paranasal sinuses& smell; Physiology of salivary glands; Physiology of speech; Physiology of Respiration; Physiology of deglutition	10%	10	1
4	Pharmacology	Pharmacokinetics, Pharmacodynamics and adverse effects of antihistamines, decongestants, steroids (especially topical), Antimicrobial agents, cancer chemotherapeutic agents, antifungals, anti- vertiginous drugs, NSAIDS, electrolyte and fluids and drugs related to anaesthesia	10%	10	1
5	Microbiology	Bacteriology, Virology and Mycology in Otolaryngology Sterilisation techniques in OT	10%	10	1
6	Anaesthesia	Various anaesthetic techniques used in ENT such as Jet ventilation, Airway management, Pain management, Local anaesthesia related to ENT Pharmacology related to anaesthesia	10%	10	1
7	Pathology and Miscellaneous	Ear, Nose & Throat Pathology Various pathological techniques such as Preparation of slides in relation to biopsy & FNAC	20%	20	2

Paper I: Applied Basic science related to otorhinolaryngology

## Paper II: Principles and practices of oto-rhinology

S1.N 0	Section	Topics	Weight age	Marks Allotted	No.of Question
1	External Ear	Infections of external ear, Repair of deformities of external ear, Tumours of external ear,	10%	10	1
2	Middle Ear	Congenital conditions of middle ear cleft, Traumatic conductive deafness Acute inflammations of the middle ear cleft, Non suppurative otitis media Chronic suppurative otitis media and its management Complications of infections of middle ear, Tumours of middle ear cleft and temporal bone, Disease of otic capsule -otosclerosis and other diseases Facial nerve palsies and its management Granulomatous diseases of middle ear	20%	20	2
3	Inner Ear	Ototoxicity Presbycusis Sudden sensorineural hearing loss diagnosis and its management Noise induced hearing loss Meniere's disease Tinnitus and hyperacusis Superior semi-circular syndrome Autosomal dominant no syndromic SNHL Cochlear implants Brainstem implants	10%	10	1
4	Neuro- otology	Evaluation of vertigo Neurological aspects of vertigo Vestibular rehabilitation BPPV Peripheral cause of vertigo Nystagmus Vestibular rehabilitation Vestibular migraine Clinical tests like positional tests, Gaze test, Romberg test, Stepping test, Craniocoprography, Electronystagmography,	10%	10	1

		Posturography.			
5	Audiology	Evaluation of Deaf child Pure tone audiometry Masking Impedance audiometry Recruitment Tone decay test SISI, ABLB, Tests for functional deafness, Speech audiometry, Auditory evoked response audiometry, BERA Bekesy audiometry, Oto-acoustic emissions, Electrocochleography, etc,	20%	20	2
6	Rhinology	Examination of the nose Conditions of the nose Injuries of the facial skeleton Congenital diseases of the nose The nasal septum, nasal valve Foreign bodies in the nose, rhinolith Epistaxis, Disorders of orbit Acute chronic inflammation of the nasal cavities Vasomotor rhinitis -allergic and non – allergic Nasal polyposis Abnormalities of smell Acute and chronic sinusitis and its complications Nasal allergy/fungal allergic sinusitis CSF leak, Relation b/w upper and lower respiratory tract. Granulomatous conditions of nose, Tumours of nose and sinuses Facial pains, FESS Trans-ethmoidal hypophysectomy	30%		3

S1.N0	Section	Topics	Weightage	Marks Allotted	No.of Question
1	Otology	Implantable hearing aids cochlear implants, Advances and application of oto- endoscopy, Lasers associated in otology, Cochlear implant and brainstem implant, Imaging modalities of Temporal bone, Radio surgeries in otology, Recent advances in surgical management of giddiness.	30%	30	3
2	Rhinology	Image guided sinus surgery, Application of embolization techniques in ENT, Imaging in rhinology, Rhinoplasty in nasal trauma.	20%	20	2
3	Laryngology	Phono surgery, contact endoscopies	30%	30	3
4	Head and Neck	Radiotherapy and radiosensitisers in Head and neck, Chemotherapy in head and neck, USG in head and neck PET,	10%	10	1
6	General ENT	Biomaterials used in ENT, Stem cells in ENT HIV infection/AIDS and ENT manifestation. Cryosurgery,	10%	10	1

#### Paper III: Recent advance in otorhinolaryngology and head and neck

## Paper IV: General surgical principles in laryngology and head and neck

			Weigh tage	Marks Allotted	No. of Questio n
1	Laryngo- pharyngology	Methods of examination of the mouth and pharynx Diseases of the mouth, salivary glands, tonsils and adenoids Pharyngeal lesions associated with general diseases Tumors of the pharynx	50%	50	5

		Hypopharyngeal diverticulum Methods of examining the larynx and tracheobronchial tree Congenital disease of larynx Laryngeal disorders in singers and other voice abusers Neurological affections of larynx and pharynx Intubation of the larynx, laryngotomy and tracheostomy Cervical node dissection Skin grafts in otolaryngology and reconstructive methods including regional and distant flaps for repair of defects after excision of tumours or trauma Micro laryngeal surgery/thyroplasty			
2	Head and neck oncology	Acute and chronic cervical lymphadenopathy Benign neck disease Metastatic neck diseases Neck dissection Diseases of thyroid gland Thyroidectomy Inflammatory diseases of salivary glands Benign and malignant salivary gland tumours Parotidectomies Submandibular gland surgeries Infection and tumours of parapharyngeal space, retropharyngeal space and infra temporal fossa Diseases of jaw Mandibulectomies Reconstructive surgery of head and neck	30%	30	3
3	General	Basic surgical techniques, Suture material in surgery, Sterilization, wound healing, burns: initial management of polytrauma cases, shock and fluid management, blood transfusion.	20%	20	2

# **11 Model Question Paper**

### PAPER I

#### **Applied Basic Science Related to Otorhinolaryngology**

Time :3 hours

(Marks - 10 x 10 = 100marks)

(Draw labelled diagram wherever required)

#### **ANSWER ALL QUESTIONS**

- 1. Osteomeatal complex.
- 2. Anatomy of Jugular foramen.
- 3. Write a short note on Laryngeal cartilages and membranes.

Enumerate the differences between paediatric and adult larynx.

4. Describe the Olfactory pathway. Classify odours. Enumerate the

theories of olfaction. Add a note on electronic nose.

- 5. Ototoxic agents.
- 6. Describe the inner ear fluids. What is the composition of endolymph and perilymph.
- 7. Pathology of Juvenile nasopharyngeal angiofibroma.
- 8. Pathology of cholesteatoma.

9. Write a short note on Epstein Barr virus and the diseases caused by it in relation to ENT head and neck.

10. Anaesthesia in nasal surgery

# **PAPER II- Principles and Practices of Oto-Rhinology**

#### **Time :3 Hours**

#### (10X10=100 marks)

# (Draw labelled diagram wherever required) ANSWER ALL QUESTIONS

- 1. Classify temporal bone fractures, their clinical importance and management
- 2. Write a note on Myringotomy. What are tympanostomy tubes and various types of tympanostomytubes. Draw labelled diagrams of different types of tympanostomy tubes.
- 3. Enumerate the complications of sinusitis. How will you manage a case of orbital cellulitis?
- 4. What are the causes of delayed post- traumatic CSF rhinorrhea? How will you evaluate and manage such a case?
- 5. Describe the prevention and treatment of Iatrogenic facial palsy.
- 6. Define Atrophic Rhinitis. Write a note on its etiopathogenesis. What are the surgical options for Atrophic Rhinitis? Add a note on Slavic facies.
- 7. Define tinnitus. What are the causes of tinnitus? What are Tinnitus
- 8. Describe BPPV, its diagnosis and management
- 9. Write a short note on VEMP
- 10. What is BERA? What are its applications?

# PAPER III-.Recent advance in otorhinolaryngology and <u>head and neck</u>

#### **3** Hours

#### (10X10=100 marks)

#### **ANSWER ALL QUESTIONS**

#### (Draw labelled diagram wherever required)

1. What are biofilms? Describe the stages of Biofilm development. What are the bacterial biofilm infection in otology.

2. What are the imaging modalities to diagnose residual cholesteatoma.

3. What is Robotic surgery? What are the principles of Robotic surgery? Enumerate its uses in ENT.

4. Auditory Mid Brain Implant.

5. Sial endoscopy in the management of salivary gland diseases.

6. Discuss the principles of Image guided surgery. What are the applications of Image guided surgery in ENT practice? Add note on the advantage of image guided surgery.

7. Superior semi-circular canal dehiscence syndrome- clinical features, diagnosis, management and differential diagnosis.

8. What are the current techniques in sleep disordered breathing surgery?

9. Optical Coherence Tomography of larynx.

10. Describe the 4-distinct phase of wound healing their mechanisms. What is the role of collagen and cytokines in wound healing.

# <u>PAPER IV – General Surgical Principles In Laryngology And</u> <u>Head And Neck</u>

Time: 3 Hours

(10X10=100 marks)

#### **ANSWER ALL QUESTIONS**

#### (Draw labelled diagram wherever required)

- 1. Unknown Primary and its evaluation?
- 2. Suture materials
- 3. Blood transfusion.
- 4. Describe Pharyngeal pouches and its surgical management.

5. Staging for pyriform sinus carcinoma. Management of a patient with pyriform sinus carcinoma.

6. How will you evaluate and manage a 50-year-old male patient with a solitary thyroid nodule.

7. Write a note on left recurrent laryngeal nerve palsy.

8. What is Brachytherapy? Discuss the clinical applications of Brachytherapy in head and neck malignancies.

9. Describe the voice rehabilitation following laryngectomy. Add a small note on the rehabilitation of smell following laryngectomy.

 Write a note on etiopathogenesis of Nasopharyngeal carcinoma. Enumerate the clinical features and complications of Nasopharyngeal carcinoma. Add a short note on IMRT.

# 12 Recommended reading

# **12.1List of recommended books**

S. No	Name of the book	Author name
1.	Scott-Brown's Otorhinolaryngology and Head & Neck Surgery	Scott-Brown
2	Cummings Otolaryngology -Head & Neck surgery	Paul W. Flint, Bruce H. Haughey,Valerie J. Lund
3	Paparella'sOtolaryngology, otology &Neurotology	Michael M Paparella
4	GlasscockShambugh's surgery of the Ear	A Julianna Gulya, Loyd B Minor, Dennis S Poe
5	Essentials of Functional Sinus surgery	Heinz stammberger
6	Colour atlas of Head and neck surgery	Jatin P Shah
7	Handbook of clinical audiology	Jack katz
8	Stell& Maran's textbook of head and neck surgery and Oncology	John C Watkinson, Ralph W Gilbert
9	Clinical audiovestibulometry for otologists and neurologisgts	AnirbanBiswas
10	Surgery of skull base	Paul J Donald
11	Otologic surgery	Brackman, Shelton
12	Surgeries of upper respiratory system	William W Montgomery
13	Ballanger'sotolaryngology and head and neck surgery	Wackym and Snow
14	Rob and Smith's operative surgery of ear, nose and throat	Rob and Smith
15	Screening for hearing loss and otitis media in children	Jackson Roush
16	Bluestone and Stool's paediatric otolaryngology	Charles B bluestone
17	Microlaryngoscopy and endolaryngeal microsurgery techniques and typical findings.	Kleinsasser , Oskar
18	Handbook of headand neck imaging	H. RicHarnsberger
19	Surgery of larynx	Bailey and Biller

20	Mar's nasal and sinus surgery	Mar
21	Surgeries of larynx and hypopharynx.	Sultan Pradhan

# **12.2List of recommended journals**

S. No	Name of the Journal
1	Journal of otolaryngology and head and neck surgery
2	Journal of laryngology and otology
3	Laryngoscope
4	Archives of otolaryngology head and neck surgery
5	Indian journal otorhinolaryngology and head and neck surgery
6	Otolaryngologic clinics of North America
7	Annals of otology, rhinology and laryngology
8	Journal of facio maxillary surgery

# **13 Annexure - Assessment and Feedback forms**

# **Annexure 1 – Multisource Evaluation sheet**

#### Sri BalajiVidyapeeth

# Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology

Multisource feedback

### **EVALUATION SHEET FOR POSTGRADUATE CLINICAL WORK**

(To be completed by Nurse / Technician / Other Health Professionals)

Name of the Resident: ..... UIN No.:

.....

Name of the Respondent: ..... Date:

			Score	
Sl. No.	Criteria to be assessed	Below par (1)	At par (2)	Above par (3)
1.	Shows a caring attitude to patients			
2.	Is respectful towards patients			
3.	Shows no prejudice in the care of patients			
4.	Communicates effectively with patients			
5.	Empathetic counselling of patient's relatives			
6.	Communicates effectively with colleagues			
7.	Communicates effectively with other health professionals			
8.	Allows them to express their doubts or concern regarding clinical decisions			
9.	Proper and complete documentation			
10.	Works constructively in the health care system			
		Total		
		score:		
	General Comments: Highlights in performance (strengths)			
	Possible suggested areas for improvement (weakness)			
	Signature:			

# Sri BalajiVidyapeeth Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology

#### **EVALUATION SHEET FOR POSTGRADUATE CLINICAL WORK**

(To be completed by Peer)

Name of the Resident: ...... UIN No.: .....

Name of the Respondent:..... Date: .....

			Score	
Sl. No.	Criteria to be assessed	Below par (1)	At par (2)	Above par (3)
1.	Shows a caring attitude to patients			
2.	Is respectful towards patients			
3.	Shows no prejudice in the care of patients			
4.	Communicates and counsels effectively patients and patient's relatives			
5.	Critically evaluates and uses patient outcomes to improve patient care			
6.	Communicates effectively with colleagues			
7.	Communicates effectively with other health professionals			
8.	Acknowledges gaps in personal knowledge and expertise, and frequently asks for feedback			
9.	Regularity and punctuality of attendance			
10.	Works constructively in the health care system			
		Total score:		
	General Comments:	-		
	Highlights in performance (strengths)			
	Possible suggested areas for improvement (weakness)			
	Signature:			

# Sri BalajiVidyapeeth Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology

#### **EVALUATION SHEET FOR POSTGRADUATE CLINICAL WORK**

(To be completed by Patient/Relative)

Name of the Resident: ...... UIN No.: .....

Name of the Respondent:..... Date: .....

			Score	
S1.		Below	At par	Above
No.	Criteria to be assessed	par	(2)	par
		(1)		(3)
1.	Shows a caring attitude to patients			
2.	Is respectful towards patients			
3.	Shows no prejudice in the care of patients			
4.	Communicates effectively with patients			
5.	Empathetic counselling of patient's relatives			
6.	Effectively counsels patients preoperatively and			
	postoperatively			
7.	Takes religious and social considerations into account			
	when making decisions			
8.	Allows patients to make an informed decision			
	regarding management and allows them to express			
	their doubts and concerns			
9.	Takes financial situation of patient into consideration			
	when making decisions			
10.	Discusses each step of the management with the			
	patient and relatives			
		Total		
		score:		
	General Comments:			
	Highlights in performance (strengths)			
	Possible suggested areas for improvement (weakness)			
	Signature:			

## Sri BalajiVidyapeeth Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology

#### **EVALUATION SHEET FOR POSTGRADUATE CLINICAL WORK**

(To be completed by respective Unit Head)

Name of the Resident: ...... UIN No.: .....

Name of the Faculty: ...... Date : .....

C1			Score	
Sl.	Criteria to be assessed	Below par	At par	Above par
No.		(1)	(2)	(3)
1.	History taking and physical examination			
2.	Regularity and punctuality			
3.	Ability to identify patient's problems			
4.	Patient management skills			
5.	Procedural skills / range of clinical technical skills			
6.	Self-directed learning			
7.	Communication skills			
8.	Proper and complete documentation			
9.	Relationship with peers			
10.	Works constructively in the health care system			
		Total		
		score:		
	General Comments:			
	Highlights in performance (strengths)			
	Possible suggested areas for improvement (weakness)			
	G: 4			
	Signature:			

# **Annexure 2–Seminar**

# Sri Balaji Vidyapeeth Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology

#### **EVALUATION SHEET FOR POSTGRADUATE SEMINAR**

(To be marked individually by each faculty)

Name of the Resident: ...... UIN No.: .....

Name of the Faculty: ...... Date: .....

C		Score		
S.	Criteria to be assessed	Below par	At par	Above par
No.		(1)	(2)	(3)
1	Introduction of subject and its importance /	, ,		
	Objectives			
2	Completeness of presentation			
3	Cogency of presentation			
4	Consulted all relevant literature			
5	Use of audio-visual aids			
6	Understanding of subject			
7	Summary and take-home message			
8	Cites appropriate references / suggests further			
	reading			
9	Time management			
10	Overall performance – relevant answers to			
	questions, attitude during presentation and			
	confidence			
		Total		
		score:		
1	General Comments:			
2	Highlights in performance (strengths)			
2		>		
3	Possible suggested areas for improvement (weakness)			
	Si	mature		
		gnature.		
2 3	Highlights in performance (strengths) Possible suggested areas for improvement (weaknes	ss) gnature:		

# **Annexure 3 – Journal Club**

# Sri Balaji Vidyapeeth Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology

Feedback for Journal club

**EVALUATION SHEET FOR POSTGRADUATE JOURNAL CLUB** 

(To be marked individually by each faculty)

Name of the Resident: ...... UIN No.: .....

Name of the Faculty: ...... Date: .....

S.		Score			
S. No.	Criteria to be assessed	Below par	At par	Above par	
INO.		(1)	(2)	(3)	
1	Relevance of article chosen				
2	Identifies the problem addressed in the paper				
3	Completeness of presentation				
4	Analyses and gives comments on methodology and statistics				
5	Brief summary of results				
6	Comparison of work with other published work				
7	Merits and demerits of the paper				
8	Summary and take-home message				
9	Time management				
10	Overall performance – relevant answers to questions, attitude during presentation and confidence				
		Total			
		score:			
	General Comments:	1	1		
	Highlights in performance (strengths)				

Possible suggested areas for improvement (weakness)
Signature:

# **Annexure 4 - Case Presentation**

# Sri Balaji Vidyapeeth Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology

Feedback for Case presentation

EVALUATION SHEET FOR POSTGRADUATE CASE PRESENTATION

(To be marked individually by each faculty)

Name of the Resident: ...... UIN No.: .....

Name of the Faculty: ..... Date: .....

S.		Score		
No.	Criteria to be assessed	Below par (1)	At par (2)	Above par (3)
1	Logical order in presentation (History taking)			
2	Cogency of presentation			
3	Accuracy and completeness of general and local physical examination			
4	Other systemic examination			
5	Summarizes the case and analyses the appropriate differential diagnoses			
6	Whether the diagnosis follows logically from history and findings			
7	Investigations required: Completeness of list, relevant order, interpretation of investigations			
8	Management principles and details			
9	Time management			
10	Overall performance – relevant answers to questions, attitude during presentation and confidence			
		Total		
		score:		

General Comments:	
Highlights in performance (strengths)	
Possible suggested areas for improvement (weakness)	
Signature:	

**Annexure 5 - EPA Assessment Form** 

# Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute **Department of Otorhinolaryngology** Sri Balaji Vidyapeeth

Entrustable professional activity assessment form

STUDENT NAME:

PGY:

**ASSESSMENT No:** 

UIN No:

												<u> </u>	
							P3L3				P4L3		
							P2L2				P1L3		
CY							P1L3			IPCS	3L3		
MARKING OF SUBCOMPETENCY		P3L3		PIL1		IPCS	3L3			IPCS	2L3		
MARKI BCOMI		P1L1		IPCS 1L1		IPCS	2L2			IPCS	1L3		
I SUJ	IPCS	1L1		PBLI 4L3		IPCS	1L2			SBP	4L3		
		PC1L4		PBLI3 BL3		PBLI3	AL3			PBL13	AL3		
	MK5	L2		PC1 L4		PC4	L3			PC5	L2		
	MK4	L2		MK5 L2		PC3				PC4	L3		
	MK3	L3		MK3 L3		£ЯМ	L3			MK5	L2		
	MK2	L3		MK2 L3		MK2	L3			MK3 MK4	L2		
	MKI	L3		MK1 L3		1	L3			MK3	L3		
EPA	1.Gathering a	performing physical	examination	2. Prioritizing a differential	diagnosis following a clinical encounter	3.Recommending and internreting	common diagnostic	and screening test	4.Entering and discussing orders	and prescriptions	anu giving ure	instructions to the	patients

Lower half for Faculty Upper half for selfassessment assessment

									P6L 3		
									P5L3		
									P3L3		
									P2L2		P6L3
									PIL4		P5L3
									ICS4 L3		P4L3
									ICS3 L4		P3L3
									ICS2 L3		P2L2
	P5L3								ICS1 L3		PILI
	P2L2		P5L3						PBLI3 AL3		ICS4L 3
	PIL3		P4L3						PBLI 2L3		ICS3 L3
P3L3	IPCS 1L3		P2L2				P6L3		PBLI 1L3		ICS1 L4
PIL3	SBP 4L3		P1L3		P5L3		P4L3		PCI5 L3		SBP 4L4
IPCS 1L3	SBP 2L3		IPCS 3L4		P3L3		P1L3		PCI4 L3		PBLI 5L4
SBP 4L3	PBLI 3BL 3		IPCS 2L3		P2L2		ICS5 L3		PCI3 L3		PBLI 3AL
PBLI 5L3	PBL 13A 12		IPCS 1L3		PILI		ICS3 L4		PCI2 BL3		PS4 L3
PBLI4 L3	PC4L3		SBP3L 3		ICS4L 3		ICS2L 3		PCI2A L4		PS1L4
PBLI 11L3	PCI		SBP 2L3		ICS3 L4		SBP 5L3		PCIL 4		MK5 L2
PC1 L4	MK4 L2		SBP 1L3		ICS1 L3		SBP 3L3		MK4 L2		MK4 L3
MK5 L2	MK3 L3		PBLI 3AL 3		SBP 4L4		SBP 2L3		MK3 L3		MK3 L3
MK3 L13	MK2 L4		PC5 L4		PC4 L3		PBLI 5L3		MK2 L3		MK2 L4
MK2 L4	MK1 L3		MK4 L2		MK4 L2		PBLI 3AL 3		MK1 L4		MK1 L4
<ol> <li>Documenting a clinical encounter in patient records while providing an oral presentation of a clinical encounter</li> </ol>	6.Form clinical questions and retrieve evidence to advance natient	care	7. Give or receive a patient handover to transition care responsibility as	well as collaborates as a member of an interprofessional team.	8.obtain informed	and procedure	9.Identify system failures and contribute to a	culture of safety and improvement	10.Recognise a patient requiring urgent or emergency care and initiate evaluation and management of dizzy patient, management of	epistaxis, stridor, foreign body removal in aerodigestive tract and foreignbody of ear and nose,nasal reduction	11.Post-operative care, evaluation and

	$\square$	P6L3		P6L3		P6L3		P6L3		P6L3	
		P5L3		P5L3		P5L3		P5L3		P5L3	
	$\left[ \right]$	P3L3		P3L3		P3L3	$\backslash$	P3L3		P3L3	
		P2L2		P2L2		P2L2		P2L2		P2L2	
		P1L4		P1L4		P1L4		PIL2		P1L4	
		ICS3L 4		ICS3L 4		ICS3L 4		ICS3L 4		ICS3L 4	
	$\left[ \right]$	ICS2 L3		ICS2 L3		ICS2 L3	$\square$	ICS2 L3		ICS2 L3	
		ICS1 L3		ICS1 L3		ICS1 L3		ICS1 L3		ICS1 L3	
		SBP 4L4		SBP 4L4		SBP 4L4	$\backslash$	SBP 4L4		SBP 4L4	
		PBL 3AL 3		PBL 3AL 3		PBLI 3AL 3	$\backslash$	PBLI 3AL 2		PBLI 3AL 3	
4		PBLI 2L3		PBLI 2L3		PBLI 2L3	$\backslash$	PBLI 2L3		PBLI 2L3	
		PBLI 1L3		PBLI 1L3		PBLI 1L3	$\backslash$	PBLI 1L3		PBLI 1L3	
	$\left  \right\rangle$	PC4L3		PC4L3		PC4L3		PC4L3		PC4L3	
		PC2 BL3		PC2 BL4		PC2 BL4		PC2 BL4		PC2 BL4	
		PC2 AL4		PC2 AL5		PC2 AL5		PC2 AL4		PC2 AL4	
	$\square$	MK3 L3		MK3 L3		MK3 L3		MK3 L3		MK3 L3	
		MK2 L3		MK2 L4		MK2 L4	$\backslash$	MK2 L4		MK2 L4	
		MKI L4		MK1 L4		MK1 L4		MK1 L4		MK1 L4	
counselling		12. Performing basic office procedures like diagnostic nasal endoscopy, video laryngoscopy, post	throat swabs, ear swabs, ear nasopharyngeal swabs, FNACs	13. Performing basic surgeries of throat such as adenoidectomy,	tonsillectomy, Adenotonsillectom y, tracheostomy.	14. Assisting in advanced Head &	Neck Surgeries, Laryngectomies	15. Performing rigid scopies such as direct laryngoscopy guided biopsy, rigid	esopnagoscopy and bronchoscopy.	16. Performing basic surgeries of nose such as septoplasty , submucosal	resection of nasar septum and endoscopic middle meatal antrostomy.

						P6L3		
						P5L3		
P6L3						P3L3		
P5L3		P6L3		P6L3		P2L2		
P3L3		P5L3		P5L3		P1L4		
P2L2		P3L3		P3L3		ICS3 L4		
P1L4		P2L2		P2L2		ICS2 L3		
ICS3L 4		P1L4		P1L4		ICS1L 3		
ICS2 L3		ICS3 L4		ICS3 L4		SBP 4L4	P6L2	
ICS1 L3		ICS2 L3		ICS2 L3		SBP 3L2	ICS3 L3	
SBP 4L4		ICS1 L3		ICS1 L3		SBP 2L3	ICS2 L3	
PBLI 3AL 3		SBP 4L4		SBP 4L4		SBP 1L1	ICS1	
PBLI 2L3		PBL 3AL 3		PBLI 3AL 3		PBLI 3AL 3	SBP 2L2	
PBLI 1L3		PBL 2L3		PBLI 2L3		PBLI 2L3	PBLI 4L3	
PC4L3		PBL1L 3		PBLI1 L3		PBLI1 L3	PBLI3 BL2	
PC2 BL4		PC4 L3		PC4 L3		PC4 L3	PBLI 2L4	
PC2 AL5		PC2 AL4		PC2 AL5		PC2 AL4	PBLI 1L3	
MK3 L3		MK3 L3		MK3 L3		MK3 L3	PC3 L3	
MK2 L4		MK2 L4		MK2 L4		MK2 L4	MK3 L3	
MKI L4		MK1 L4		MK1 L4		MK1 L4	MK1 L3	
17.Assisting advance nasal Surgeries such as Functional Endoscopic Sinus Surgery, Frontal sinusotomy, sphenoidotomy, orbital	decompression, trans sphenoidal excision of pituitary macroadenoma, optic nerve decompression.	18.Performing basic surgeries of ear such as myringoplasty	,tympanopiasty and cortical mastoidectomy	19.Assisting advanced ear Surgeries such as Modified radical mastoidectomy, stapedotomy,	surgery , facial nerve decompression, labyrinthectomy.	20.Performing day care procedures like lobuloplasty, keloid excision etc.	21.Reading and interpreting X-rays, e.g.: X ray PNS,	Mastoids, Nasopharynx, soft tissue neck etc

			P2L2										
P6L2			PIL3	$\overline{\ }$								P4L4	
ICS3 L3	P612		ICS2 L3									P2L2	
ICS2 L3	P21.2		SBP 5L3									PILZ	
ICS1 L3	SBP		PBLI 5L3								SBP	4L3 /	
SBP 212	PBLI 41.3		PBLI 4L3	$\setminus$							SBP	3L2	
PBLI 4L3	PBLI 3BL 2		PBLI 3BL 3		P6L2			P2L2			SBP	2172	
PBL13 BL2	PBL12		PBLII L3		PILI			PIL1			SBPIL	5	
PBLI 2L4	PBLI		PL5 L3		PBLI 3AL 3			PBL 13A L3			PBLI 3BL	5	
PBLI 1L3	PC3		MK6 L3		PBL 12L3			PBLI 2L4			PBLI 3AL	2	
PC3 L3	PC2 1.4		MK5 L1		PBLI 112			PBL 1L4			PC2	BL4	
MK3 L3	MK3 L3		MK3 L3	/	PC2 L4			PC2 AL5			MK5	L.2 /	
MK1 L3	MK1 L3		MK2 L4	$\setminus$	MK1 L2			MK1 L2			MK3	L3 /	
22.Reading and interpreting CT PNS, HRCT Temporal Bone, CT & CECT Neck, CT CP angle, MRI,	Barium Studies etc 23.Reading, Doing and Interpreting Audiological investigation like	PTA, Impedance, BERA, OAE, SiSi, Tone decay etc	24. Research methodology and writing of paper, Poster presentation	and publications	25.Performing cadaveric dissection to learn temporal	bone dissection.	26.Performing advanced cadaveric dissection to learn	temporal bone dissection such as	labyrinthectomy, petrous apex approach, cochleostomy.	27.Following protocols and precautions to be	followed while performing high risk aerosol	generating	procedures in ENT in a situation of a high impact respiratory pathogen pandemic.

P6L2
PILI
ICS2 L1
PC7 L3
PC6 L3
MK6 L3
MK1 L2
28.Conversant in pedagogic and andragogic methods of teaching and learning

EPA	Grade of Entrustability
EPA1.	
EPA2.	

Key for assigning Grade of entrustability

1         2         3           Can observe and assist         Can perform with         Can perform with	4 5	Can perform Expert	independently
n observe and assist Can perform wit	m	Can perform with	loose sunervision
I Can observe and assist	2	Can perform with	trict sumervision
	1	Can observe and assist	

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Signatures	Resident	Faculty	Head of the Department

EPA11. EPA12.

EPA9. EPA10.

EPA7.

EPA8.

EPA5. EPA6.

EPA3. EPA4. EPA14. EPA15.

EPA16. EPA17. EPA19. EPA20.

EPA18.

EPA21.

EPA22.

EPA23. EPA24. EPA25.

EPA26. EPA27.

EPA28.

EPA13.

Date assessedEPA1.EPA2.EPA2.EPA3.EPA4.EPA4.EPA5.EPA6.EPA6.EPA6.EPA7.EPA9.EPA9.EPA10.EPA12.EPA13.	o	3 WONTHS	6 MONTHS	6 SHINOM 6	12 MONTHS	S     9 MONTHS     12 MONTHS     6 MONTHS     FG Y2       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I       I     I     I     I     I	PG Y2 12 MONTHS	PG Y3	r3 12 MONTHS
EPA14. EPA15. EPA16. EPA17. EPA19. EPA19. EPA20. EPA21. EPA22. EPA23.									

# Annexure 6 – EPA Progress sheet

EPA24.	EPA25.	EPA26.	EPA27.	EPA28.	Candidate's sign	HOD Sign
EF	EF	EF	EF	EF	Candi	

# **Annexure 7 – Dissertation evaluation form**

# Sri BalajiVidyapeeth Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology

Topic of the study :

DISSERTATION COMPONENTS		Grade				
TITLE						
Title appropriate and clear	A	В	С			
INTRODUCTION		1				
Purpose of the Study	А	В	С			
Hypothesis/Research Question	А	В	С			
Aims & Objectives	А	В	С			
REVIEW OF LITERATURE						
Appropriate	А	В	С			
Complete and current	А	В	С			
METHODS						
Study subjects, controls, Inclusion and Exclusion criteria	А	В	С			
Materials/Apparatus/Cases	А	В	С			
Methodology used	А	В	С			
Procedure for data collection	А	В	С			
Appropriate statistical methods employed	А	В	С			
Handling of ethical issues	А	В	С			
RESULTS						
Logical organization of data	А	В	С			
Appropriate use of charts, tables, Graphs, figures, etc.	А	В	С			
Statistical/Clinical interpretation	А	В	С			
DISCUSSION						
Appropriate to data	А	В	С			
Discussion and implication of results	А	В	С			
Comparison with other studies	А	В	С			
Satisfactory explanation of deviations if any	А	В	С			
Limitations of the study	А	В	С			
Recommendation for future studies	А	В	С			
CONCLUSION						
Relevance, are they in line with aims	А	В	С			
SUMMARY						
Clear and Concise	А	В	С			
REFERENCES						

Vancouver Format and appropriately cited in text.	А	В	С
---------------------------------------------------	---	---	---

Key for grading - A - Exceeds expectation, B - Meets expectation, C - Needs Improvement

#### **Overall Impression**

(Please Check the appropriate box)

- Accepted as submitted
- Accepted pending modification as suggested below
- Not Accepted for reasons specified below

#### Remarks:

Signature of the examiner with date

#### ANNEXURE 8

### Work Place Based Assessment Sri BalajiVidyapeeth Mahatma Gandhi Medical College and Research Institute/ Shri Sathya Sai Medical College and Research Institute Department of Otorhinolaryngology Work Place Based Assessment

**EVALUATION SHEET FOR POSTGRADUATE (WPBA)** 

Name of the Res	sident:	•••••	•••••••••		UIN	No.: .		•••••	••••		•
Name of the Fac	ulty:			I	Date:	•••••	••••				
Designation:											
No. of Mini-CE	X Observ	/ed:	0	1	2	3	;	4 5	-9	>9	]
Clinical	OPD	IP		A8	¢Е	S	etting	Nev	w / F	Follow	/ up:
Clinical problem	n:										
Complexity of th	ne	Low	Av	g.		High		case	:		
No. of times pat	ient seen	by the s	tudent:	0	1	2	3	4	5-9	>9	
								·			
		Below	Borderli	ne	Meet		Aboy	ve	Nc	ot	7
		expect ation			expec	ctation	expe	ctation	ob	served	
History taking skill											1
Physical examination											
Communication sk	ill										
Clinical judgement											
Professionalism											
Organisational effic	ciency										

Agreed upon action:

Signature of the resident

Signature of the Accessor

Annexure 9

# Postgraduate Students Appraisal Form

# Sri BalajiVidyapeeth Mahatma Gandhi Medical College and Research Institute Department of Otorhinolaryngology and Head & Neck

Postgraduate Students Appraisal Form

Name of the PG Student:

UNI No:

Period of Training FROM......TO.....

Sr. No.	PARTICULAR S	Not Satisfactory	Satisfactory		More Than Satisfactory	= Remarks
		1 2 3	4 5	6	7 8 9	
1.	Journal based / recent advances learning		-			101
2.	Patient based /Laboratory or Skill based learning					
3.	Self directed learning and teaching					1000
4.	Departmental and interdepartmental learning activity					
5.	External and Outreach Activities / CMEs					101
6.	Thesis / Research work					
7.	E-portfolio Maintenance					

**Publications** 

\*REMARKS: Any significant positive or negative attributes of a postgraduate student to be mentioned. For score less than 4 in any category, remediation must be suggested. Individual feedback to postgraduate student is strongly recommended.

SIGNATURE OF ASSESSEE

SIGNATURE OF CONSULTANT

SIGNATURE OF HOD