# Guidelines

# For

# Competency Based Training Programme

# In

# DNB – Family Medicine

# 2021

NATIONAL BOARD OF EXAMINATIONS IN MEDICAL SCIENCES
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## I. BACKGROUND

1. **NEED OF FAMILY MEDICINE SPECIALISTS IN INDIA:** Several health policies and directives of the Government of India and WHO have emphasized the need for family medicine training programs in India. In 1983, "The Medical Education Review Committee" set up by the Ministry of Health and Family Welfare GOI, under the chairmanship of Dr. Shantilal Mehta. The committee recommended that 'the undergraduate (MBBS) medical students are posted; in general, practice, outpatient unit to get exposed to the multidimensional nature of health problems and their origins. In 2016, the 92nd report of the department-related parliamentary standing committee on health and family welfare recommended that the Government of India coordinate with state governments to establish robust postgraduate programs in family medicine and facilitate the introduction of this discipline at all medical college. It will minimize the need for frequent referrals to specialists and decrease the load on tertiary care and provide continuous healthcare for individuals and families.

2. **NHP 2002 & 2017 NATIONAL HEALTH POLICIES: FAMILY MEDICINE:** The successive National Health Policies of the Government of India–NHP 2002 and 2017 have emphasized the need for family medicine training programs in India. National Health Policy of 2002 stated that 'in any developing country, the requirement of professionals in the area of "Public Health" and "Family Medicine" is markedly more than the expertise required for any specialties. The National Health Policy (NHP) 2017 specifically mentions family medicine specialty and mandates the popularization of programs like MD/ DNB in family medicine. These policy documents also call for initiating a large number of distance and continuing education options for general practitioners in private and public sectors, which would upgrade their skills to manage the vast majority of cases at the local level avoiding unnecessary referrals. A working group of the planning commission for the 12th plan (2012–2017) estimated the projected need for specialists in family medicine (family physicians) as 15,000 per year for the year 2030. The recently enacted National Medical Commission (NMC), through an act of parliament in 2019, has been mandated to promote family medicine training at both undergraduate and postgraduate levels.

3. **ASTANA DECLARATION 2018 BY WHO AND SGD 2030:** A WHO SEARO regional scientific working group meeting on a curriculum of family medicine held in Colombo, Sri Lanka, devised the core curriculum family medicine for the undergraduate level, intermediate level, postgraduate - specialist levels. In 2011, the WHO regional office of South Asia (SEARO) called a consultation on "Strengthening the Role of Family/Community Physicians in Primary Health Care" in Jakarta, Indonesia. The Astana Declaration 2018 by WHO reaffirmed the commitments expressed in the ambitious and visionary Declaration of Alma-Ata of 1978 and the 2030 Agenda for Sustainable Development. The declaration further envisions that the primary health care and health services should be of high quality, safe, comprehensive, integrated, accessible, available, and affordable for everyone and everywhere, provided with compassion, respect, and dignity by health professionals well-trained, skilled, motivated and committed.

4. **THE CONCEPT OF FAMILY MEDICINE:** Family medicine is the internationally recognized nomenclature for the academic discipline, knowledge domain, and medical specialty of primary care doctors, working in the community setting, providing care from primary care to secondary levels. Family medicine is defined as a specialty of medicine that is concerned with providing comprehensive care to

individuals and families by integrating biomedical, behavioral, and social sciences in the community setting. Family physician's scope of practice covers all organ systems, genders, and age groups. A family doctor provides primary and continuing care to the entire family within the communities; addresses physical, psychological, and social problems; and coordinates comprehensive healthcare services with other specialists, as needed through a structured referral system. Research (Barbara Star field) showed that well-trained family physicians could resolve 90% of the illnesses and morbidities outside hospitals, thereby preventing overcrowding at tertiary care hospitals and saving individuals/families from catastrophic out of pocket expenses.

5. **WHO IS A FAMILY PHYSICIAN:** Family Physician is a generalist who takes professional responsibility for the comprehensive care of unselected patients with undifferentiated problems and committed to the person regardless of age, gender, illness, or organ system. The clinical specialty of family medicine is patient-centered (not disease-centered), holistic, evidence-based, family and community-focused, and problem-oriented. Family physicians are experts at managing common complaints, recognizing important diseases, uncovering hidden conditions, and managing most acute and chronic illnesses.

6. **SCOPE OF FAMILY PRACTICE:** The scope of family practice is as broad as the scope of human needs in the community setting. Within the broad spectrum of human needs, there are some unique, predictable stages in the life span of an individual and family. The family physician fits uniquely to manage health and illnesses. These stages include pregnancy and childbirth, care of a newborn child, life-threatening and life-altering illness, loss and grief, and care at the end of life. A varied range of clinical competencies and adequate training are essential requirements for family physicians to provide this service. About 70% of qualified medical graduates in India are expected to practice as family physicians, without adequate vocation training in family medicine or any academic empowerment. As India's need for primary and secondary levels of health care is enormous, medical educators have called for systemic changes to include family medicine in the undergraduate medical curriculum. The importance of family physicians, who provide primary care in institutional and community settings in health systems, needs strengthening both public and private healthcare institutions.

7. **RECOGNITION OF FAMILY MEDICINE SPECIALTY IN INDIA:** Family medicine is a broad specialty recognized by the Medical Council of India. It is a distinct academic discipline, knowledge domain, and medical specialty recognized in India for the past several decades. The National Board of Examination has pioneered the postgraduate family medicine in India. The training program has undergone several phases of evolution and development. MD in family medicine qualification is also included at serial no 06 of schedule II of Post Graduate Regulation 2000 of Medical Council of India. Family medicine is also included at serial no 30 in the list of recognized specialization and postgraduate qualification of DNB within the original notification of NBE creation dated19th September 1983.

8. **NEED FOR STRUCTURED RESIDENCY TRAINING IN FAMILY MEDICINE:** A structured residency program in family medicine helps medical graduates evolve into competent family physicians or family medicine specialists. The postgraduate training in family medicine provides a port of entry and a career pathway into the horizontally based community-based health services instead of a hospitalist career. Postgraduate residency training is one of the most influential driving forces for selecting career options by all medical graduates—the resident doctors

as licensed physicians. They take care of the bulk of the workload. The USA and UK's health systems can attract the best medical graduates from all over the world through excess availability of postgraduate training posts. Many Indian medical graduates who have immigrated to the NHS of UK and US medical services during past decades have joined through family medicine residencies. Indian doctors form one of the largest General Practitioners (GP) groups within the National Health Service (NHS). Thus, family medicine PG training has been proven to be a successful strategy for recruiting medical graduates into the community and rural healthcare systems in most developed countries. The more recent examples are China and Brazil, who have vastly expanded the family medicine training programs during the past decade. Almost all available medical specializations are vertical and fit for practice in hospital training only. A medical graduate opting for a hospitalist specialization/ career passed through the full career path optimization as a postgraduate resident, senior resident, junior consultant/faculty, and senior consultant/ senior faculty. A similar career pathway is not available towards movement into community-based primary care and secondary care settings. This fact is often reflected as non-availability of medical doctors for providing services in rural, remote and underserved areas of India. Therefore, an increase in family medicine postgraduate residency training post will address both international migrations of medical graduates and internal migration to tertiary care centers based in large cities.

9. **ROLE OF FAMILY MEDICINE SPECIALIST WITHIN GOVERNMENT SERVICES:** The Community Health Centers (CHC) are expected to deliver specialist services with a physician's availability, surgeon, pediatrician, obstetrician, and anesthetist. However, it is a stark reality that almost all the CHCs do not have all these specialists. Presently up to 70 % of the specialist positions are vacant at CHCs. The absence of one specialist can also impede the services in the CHC as the patients who have to be treated by that specialist who is not available, have to be referred. This situation reduces the access to appropriate health care for the community and increases the workload in taluk and district hospitals. There is a need for an integrated generalist approach to diagnosis and treatment. The family physicians are best positioned to deliver this integrated approach to diagnosis, treatment, and complete healthcare management of an individual. A single postgraduate in Family Medicine can meet the community need of the relevant skills and competencies of a Surgeon, Obstetrician, and Gynecologist, Physician, and a Pediatrician in a CHC, besides taking care of Public Health need of the community. They will also be involved in coordinating the wellness centers at the sub-centers and the district hospitals. The district hospitals have a large number of patients presenting to the various departments and can become good learning centers for DNB Family Medicine. The modular training of DNB in family medicine is an initiative to identify district hospitals and other institutions with an adequate clinical load where the different modules of the Family Medicine curriculum can be carried out.

## II. TRAINING OF FAMILY MEDICINE SPECIALISTS: EMERGENCY MATERNITY CARE AND SAFE NEWBORN CARE

Reducing maternal and neonatal mortality and morbidity globally remains a priority for the health and development agenda in the Sustainable Development Goals (World Health Organization, 2015). Most maternal and new-born deaths and stillbirths occur during or immediately after labour and childbirth. The Reproductive and Child Health (RCH) program of India included the training of healthcare staff as one of the critical strategies to reduce maternal mortality in India. In 2004, the Government of India decided to convert community health centres (CHCs) to first referral units (FRUs) for emergency obstetric and new-born services. However, specialists' availability is a challenge. The non-availability of obstetric care services is one of the critical reasons for maternal deaths. It was then decided to upgrade MBBS doctor's skills and deploy them to provide emergency obstetric and new-born services at the FRU CHCs. Since then training, skill up gradation and multiskilling of medical officers through short term training programs such as (a) EmOC – Emergency Obstetrical Care and (b) LSAS – Life Saving Anaesthesia Skills have been developed. Such training could be useful to ramp up emergency obstetrical (EmOC) services and meet the shortage of specialists at rural health facilities. The Family Medicine specialist training with a generalist approach and multiskilled competency set is suitable for providing the package of emergency maternity and safe new-born care in rural and hard to reach communities.

### 1. FAMILY MEDICINE: SBA, EmOC AND LSAS TRAINING:

A national consultation on Family Medicine training program was convened by National Health Mission, Ministry of Health and Family Welfare, Government of India on 20-21 April 2013 in New Delhi. The report of this consultation recommended that the secondary care level institutions require a multiskilled doctor, having competencies to provide first referral support or secondary care for a wide variety of clinical conditions. These include emergency obstetrics, child care, anesthesia, minor surgeries, trauma care, management of chronic conditions, communicable diseases, Etc. Since the overall objective of the EmOC and LSAS training is to develop General Practitioners and Medical Officers - Non-Specialists in India to provide high-quality emergency obstetrical care services in underserved areas to prevent maternal mortality morbidity; integration of these training modules with postgraduate training program in family medicine is necessary. These training programs are as follows:

i. EmOC: A 16-week program to train MBBS doctors to conduct normal, vacuum-assisted, and cesarean deliveries and manage eclampsia, postpartum hemorrhage, and blood transfusion at all healthcare centers, especially FRUs.

ii. Lifesaving anesthetic skills (LSAS) for EmOC: An 18-week training in anesthesia to equip MBBS doctors with skills and competencies necessary to manage patients needing lifesaving EmOC at FRUs. Additionally, SBA - skilled birth attendant competencies should be acquired as a baseline competency. SBA is accredited health professional; such as a midwife, doctor, or nurse who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management, and referral of complications in women and newborn babies. These multi-skills

training programs for doctors have now been conducted for several years. The revised DNB family medicine modular training program is embedded with the longitudinal integration of EmOC and LSAS, of total 34 (16+18) weeks. These training modules can also be imparted in shorter competency-based courses such as ALSO (Advanced Life Support in Obstetrics) and BEmOC (Basic Emergency Obstetrical Care) depending upon the training setting.

## 2. ABOUT MODULAR TRAINING IN FAMILY MEDICINE

A varied range of clinical competencies and adequate training are essential requirements for family medicine specialists. These scholarly aptitude, abilities, and skills cannot be acquired by default. Therefore, there was a need to develop a comprehensive contemporary and modern curriculum for family physicians so that they are enabled to offer a full range of care to meet the complex needs of the community and society. A comprehensive review of the existing program was undertaken by the specialist board in family medicine to rationalize the accreditation criteria and revise the curriculum. The aim was to remove the critical bottlenecks towards the rapid expansion of family medicine residency programs across India following the National Health Policies (NHP2002 & 2017).

A workshop was organized by the National Health System Resource Center (NHSRC), which was also participated by the specialist board members as well as other experts and stakeholders. The existing curriculums of MCI and NBE for family medicine were compared. Further, the critical gap with reference to the appointment of family medicine specialists at community health centers in the specialist cadre was identified and incorporated. The upgraded training program is based on the philosophy of medical generalists. The context of specialist skills required for care provision at CHC has been duly emphasized.

In the past, residents used to be attached to a single institution for the three years of the training. However, a few of the institutions may not have enough clinical workload to train the residents for any particular department. In the modular learning method, each department's clinical skill set is learned under a distinct module. Each module is learned in a hospital or institution that has enough clinical load for teaching that discipline. Under the modular arrangement, the residents will have the opportunity to get trained at both (a) one training site, (b) multiple training sites. In addition to the hospital-based learning, the residents will also have a rotation in the community for six months at accredited sites, e.g., Community Health Centers (CHC) or accredited clinics.

## 3. FAMILY MEDICINE CAREER PATHWAY:

A career in family medicine begins immediately after completion of MBBS. Contrary to the current trend of postgraduate entrance examination preparation, family medicine residency and practice offer an early settlement in professional and personal life. Family medicine is considered a good option for work-life balance. A three-year structured residency training in family medicine provides the opportunity to be employed as a PG trainee. The postgraduate training period provides the resident doctors unique experience of patient care and learning opportunities to achieve competencies in diagnosis, management, and treatment of health problems encountered across the lifespan through supervised evaluation and management of patients. The residency period is intended for

practical learning, clinical skills, and the application of current treatment guidelines leading to evolving into a confident practicing generalist physician. After completing training and award of a qualification, given the broad-spectrum exposure to the clinical setting, it enables them to work practice-wide variety practice settings and healthcare institutions. The career pathway may be defined as below:

i. Specialist in Family Medicine – Qualified FM postgraduate can be employed at Community Health Center (CHC), Health and Wellness Center (HWC), Sub-divisional Hospital (SDH), and District Hospital (DH). Family Medicine Specialists are ideal for providing service as a specialist at CHC. Given the multidisciplinary knowledge base and training in leadership and managerial roles, they can efficiently manage CHC as team leaders. They can also be employed in specialist cadre by the central and state health services.

ii. Academics – Qualified family medicine postgraduate will be eligible to become faculty at both medical colleges as well as DNB training centers. They will have equivalent career progression at par with other specialties while working accredited training centers while working at community-based health institutions. As part of their academic work, they may also get involved with primary care research, health policy development, and other professional leadership roles.

iii. Independent Practice

iv. Qualified family physicians will also have the option to be self-employed in the private sector as independent practitioners, both in rural and urban settings.

v. They may decide to start or engage in any form of practice such as solo practice, group practice, polyclinic, nursing home, community hospital.

vi. The practice of family medicine allows the medical graduate to gain professional and financial independence and autonomy with little investment compared to other specializations.

vii. Community hospitals: Being generalist physicians, they may also be given attachment by private community hospitals for services such as academics, general family medicine OPD, generalist clinicians, acute and urgent care, executive health, screening programs, community outreach programs, schools/adolescent health, occupational health, geriatrics, palliative care, emergency and ambulance services.

viii. Public health and primary care sector

ix. Being directly acquainted with the public health programs at ground level they may also get employment in the public health sector as
    a. Researchers
    b. Clinical practitioners
    c. Program managers

x. Rural and remote practice

xi. Empowered with a unique skill set and competencies' having a more comprehensive community need', Family medicine specialists are most suitable experts to establish practices such as clinics and hospitals in the rural, remote, and isolated locations. Rural infrastructure has improved considerably in many parts of India.

xii. Innovators and social entrepreneurs

xiii. As experts of primary care domain, they will have immense opportunity to establish themselves as innovators and entrepreneurs. They can leverage the IT revolution and its application in solving the challenges of population health, given the high population density and morbidity.

## III. DNB FAMILY MEDICINE: PROGRAM GOALS

The overall goal is to provide Indian Medical Graduates (IMG) a lifelong career path as family medicine specialists capable of providing comprehensive healthcare across varied settings from primary to secondary level. The DNB family medicine program intends to prepare a large pool of competent multiskilled doctors as Family Medicine Specialists. They are capable of practicing and functioning within the healthcare delivery system, fulfilling the critical human resource gap that exists across India within the community setting. The availability of competent and skilled family medicine experts and their integration with the healthcare delivery system shall improve communities' health status in urban, rural, and remote/ isolated areas.

1. **DNB FAMILY MEDICINEOBJECTIVES:**Educate and train family medicine specialist with following capabilities and competencies

   i. **Medical expert/Clinical decision-maker:**

      a. Family medicine specialist as an expert in (a) whole person care (b) lifespan care (c) person and family-centered care

      b. Competent and multiskilled specialist capable of providing a compressive range of services at Community Health Center (CHC)

      c. Rural generalist with expertise in (a) general medical care (b) general surgical care (c) EmOC-Emergency Obstetrical Care (d) neonatal and child care (e) LSAS -lifesaving anesthesia skills (f) urgent, emergent, emergency and trauma care in the community

      d. Generalist clinician capable of providing competent care for common health problems prevalent in the general population in a wide range of settings, ranging from primary to secondary care; and integrates preventive, promotive, and curative care in rural and urban areas

      e. A family physician with expertise in clinical audit, research, quality, standard and accreditation

2. **Doctor-patient relations, communication & consulting skills:**Family physicians respecting patients, share decision-making with patients, enabling them to make informed choices. Family physicians need to demonstrate communication & consultation skills and familiarity with well-recognized consultation techniques.

3. **Collaborator:**Family medicine specialists work in partnership with others who are appropriately involved in the care of individuals or specific groups of patients. Therefore, family medicine experts need to be able to collaborate effectively with patients & a multidisciplinary team of expert health professionals for the provision of optimal patient care, education, and research.

4. **Manager:**Family, medicine specialists function as managers when they make everyday practice decisions involving resources, co-workers, tasks, policies, and personal lives. They do this in the settings of individual patient care, practice organizations, and the broader context of the healthcare system.

5. **Health advocate:**Family physicians recognize the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society.

6. **Lifelong learner:** Family Physicians shall engage in a lifelong pursuit of their domain of professional expertise.

7. **Good medical practice and care:** Being able to recognize and manage medical conditions in the following broad categories: common, preventable, treatable, uncommon but serious, a typical or non-diagnosable, untreatable, potentially catastrophic viz. life-threatening or disabling.

8. **Professional, ethical and legal obligations:** Family Physicians are committed to the highest standards of excellence in clinical care and ethical conduct. They demonstrate appropriate professional values and attitudes, including trustworthiness, accountability; respect for the dignity, privacy, and rights of patients; concern for their relatives; and providing equity of care. They demonstrate a commitment to maintaining professional integrity, standards, and responsibility.

9. **Working with teams: Teamwork** is a crucial commitment of family physicians. They demonstrate a commitment to team collaboration, work in a multi-professional environment, and recognize and respect the roles of other members of the extended primary care team and colleagues in the secondary, social, and voluntary sectors and work with them to deliver a high quality of care.

## IV. MINIMUM CRITERIA FOR ACCREDITATION OF TRAINING INSTITUTE: FAMILY MEDICINE

**1. Applicant institution and modular training:**

i. Any multispecialty healthcare institution/ hospital fulfilling minimum infrastructure requirement, an eligible number of faculty and clinical workload can apply for accreditation for running DNB Family Medicine Program. They shall be accredited as a training site or 'Node.' Each clinical posting during residency training has been identifying as a module.

ii. There shall be following modular clinical postings during the entire three-year duration of DNB Family Medicine training.
   a. FM Module 1 Clinical rotation in family practice.
   b. FM Module 2 Clinical rotation in the department of general medicine and allied specialties.
   c. FM Module 3 Clinical rotation in the department of general surgery and allied specialties.
   d. FM Module 4 Clinical rotation in the department of pediatrics.
   e. FM Module 5 Clinical rotation in the department of obstetrics and gynecology.
   f. FM Module 6 Clinical rotation in the department of emergency and trauma.

iii. If the applicant institute/ hospital does not have sufficient infrastructure and patient load to run all clinical rotations for all recommended departments, the NODE may opt for a SUB NODE at a different location through an MOU for the accreditation application process.

iv. All three-year residency training modules may be administered at one institution if all required departments and sufficient clinical load are available at one location. However, one node and multiple sub-nodes located at separate locations are permitted for accreditation purposes under the new modular training program.

v. For government institutions, the district hospitals shall serve as nodal centers and associated CHCs, Area hospitals, PHC as their sub-nodes. The program shall be administered at accredited nodal centers and their associated sub-nodes. The trainee shall be permitted to complete different modules at different hospitals, i.e., nodal center and associated sub-nodes, if all requirements are not available at the main nodal center.

vi. The nodal center will apply to NBE for accreditation as per requirements detailed below in conjunction with identified sub-nodes for module-based training. The sub-nodes shall be the connected administratively for family medicine training purposes to its nodal center. They shall serve as a training center for one or more specific modules of training. The sub-nodes shall be able to administer independent training modules in collaboration with the parent nodal center.

vii. One state may have multiple conglomerations of such nodal centers and associated sub-nodes. A state-level coordinator shall oversee the smooth and coordinated implementation of the training modules. The state-level coordinator will help identify the potential general hospitals, PHCs, CHCs, Etc., where the training will happen for the different rotations.

viii. Residents/ trainees shall be posted to the nodal center and subsequently posted at different sub-nodes to complete different training modules. Modules shall be administered as per prescribed guidelines.

ix. Residents/trainees shall complete their thesis work under the guidance of faculty at nodal centers with data collection done at nodal centers and sub-nodes.

**2. Minimum accreditation requirement for a NODAL Centre:**

The criteria of total beds and clinical establishment should be as mentioned below. The nodal center and the sub-nodes have to be accredited by the NBE.

i. Number of Beds: A hospital with a minimum of 50 beds can apply to be a training center.

ii. Clinical workload (Patient load)

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| **OPD Case Load** | The minimum OPD caseload of the applicant nodal center in total shall be at least 15000 per annum. If the three years of training are in a single hospital, it should have services in all the broad specialties of general medicine, pediatrics, obstetrics & gynecology, |
| **IPD Case Load** | The minimum IPD caseload of the applicant nodal center in total is at least 500 per annum. |

iii. Faculty:
Minimum Eligible Qualification & Experience

| Minimum Faculty strength required | Minimum Experience after PG |
|---|---|
| 2 Full-time Consultants: | **Senior Consultant:**<br>Should possess recognized DNB / MD (or equivalent qualification) in Family Medicine and five years post PG experience<br>DNB/MD/MS (or equivalent qualification) in General Medicine, Pediatrics, General Surgery or Obstetrics & Gynecology, and eight years post PG experience.' |
| 01 Senior Consultant +<br>01 Senior/Junior Consultant | **Junior Consultant:**<br>Should possess recognized DNB / MD (or equivalent qualification) in Family Medicine and three years post PG experience<br>DNB/MD/MS (or equivalent qualification) in General Medicine, Pediatrics, General Surgery or Obstetrics & Gynecology, and five years post PG experience. |

a. One of the two faculties shall be working full time in any of the broad specialty departments (Family Medicine/ General Medicine/ Pediatrics/ Obstetrics & Gynecology / General Surgery) to ensure that the program will run smoothly. They could be counted towards NBE accreditation of their respective specialty department also.

b. Nodal Program Coordinator: -One of the faculty should be acting as the Nodal Program coordinator: He/she is required to be appointed as a full-time resource person as a Nodal Program Coordinator for DNB Family Medicine program. The DNB Family Medicine program coordinator has to be preferably someone who has experience/training in Family Medicine.

Minimum accreditation criteria for a SUB – NODE (All except family medicine module)

a. An area hospital/sub-district hospital/ Taluk hospital/sub-divisional hospital or a hospital fulfilling the criteria as below can serve as a sub - node to a district hospital as its nodal center.

b. A Sub-node cannot apply in isolation for accreditation; the nodal center shall submit details of associated sub-node in its application.

c. A Sub-node should be located preferably within 25 Kilometers of the nodal center. There should be a provision for free accommodation if it is located farther away.

d. Beds: Each sub-node (except family medicine) shall be at least 50 bedded, having feasibility to administer at least 01 training modules.

**3. Patient Load:**

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|---|---|
| **OPD Case Load** | The minimum OPD caseload of the Sub-nodal center should be at least 3000 per annum in the concerned specialty so that a particular sub-node can be accredited. |
| **IPD Case Load** | The minimum IPD caseload of the Sub-nodal center should be at least 400 per annum in the concerned specialty so that particular sub-node can be accredited. |

i. Faculty: Faculty/specialist should have minimum education qualification of DNB/MD/MS from any of the board specialties of Family Medicine, General Medicine, General Surgery, Pediatrics or Obstetrics & Gynecology OR equivalent. Faculty/specialist would supervise the training during the rotation.

ii. Existing accredited departments for General Medicine, Obstetrics & Gynecology, General Surgery, and Pediatrics shall also be permitted to be utilized for module-based training of DNB Family Medicine trainees over and above their trainees of broad specialty.

4. **Sub Node for Family Medicine Rotation:** DNB Family Practice rotation should be in any of the following:

   i. Community Health Centre (30 bedded)

   ii. Primary Health Centre (PHC)

   iii. Sub-District Hospital (SDH)

   iv. If the training is in a government institute, at least 3 of the six months have to be in a CHC or PHC.

   v. Family Practice Clinic - an accredited clinic under the supervision of a physician with minimum DNB/ MD Family Medicine or MBBS qualification with five years of experience in family practice. The clinic should have at least an OPD load of 3,000 patients per year.

   vi. The family physicians in charge of the family practice clinic shall be designated as adjunct faculty.

   vii. Family Practice rotation may be also be completed in an independent module or blended module. Under the blended module, the trainee may continue to work at hospital departments while devoting two half days at the family practice for three years.

   viii. Family medicine specialists working at an accredited family medicine clinic having MD/DNB family medicine qualification and sufficient experience may be counted as a full faculty towards accreditation and allotment of extra training seats. He/ she may also be co-opted as a thesis guide/ co-guide

5. **Rotational posting:** The prescribed rotational posting shall be aimed to provide 'generalist physician or multidisciplinary expert' experience to the trainee

| Department / Area of Rotation | Duration |
|---|---|
| FM Module 1: General medicine and allied medical specialties including dermatology and psychiatry | Nine months |
| FM Module 2: Surgery and allied specialties including anesthesia ENT, Orthopedics and Ophthalmology | Six months |
| FM Module 3: Obstetrics and gynecology | Six months |
| FM Module 4: Pediatrics including neonatology | Six months |
| FM Module 5: Family Practice* | Six months |
| FM Module 6: Emergency medicine | One month |
| Electives(The two months of elective rotation will be in specialties that are available in the center of training or the sub-nodal center, as per the resident) | Two months |

## V. ADMINISTRATIVE SUPPORT FOR THE TRAINING PROGRAM

1. **Head of the Institute (Administrative)**: As Nodal compliance officer for rules and regulations governing the program as prescribed by NBE.

   All administrative responsibilities related to DNB training of candidates allocated to a nodal center shall lie with Head of the Nodal Centre including payment of stipend as per NBE norms.

2. **Faculty or principal trainer or guide:** Each trainee shall be assigned a faculty or guide responsible for the overall training program for a three-year duration. The principal faculty or guide should preferably from general medicine or family medicine background. However, any consultant who is eligible for any broad specialty may be designated for this position.

   The designated faculty members may be delegated authority for compliance of training program. The applicant hospital shall designate the following authorities from its staff for DNB program:

   As a full-time resource person for the DNB Family Medicine course or the faculty designate at the institute, the Nodal Program coordinator should coordinate for various clinical rotations and work as an interface between trainees and rotation supervisors.

3. **Rotation Supervisors:** Each trainee, when posted to a department's clinical rotation, he/she should be assigned to a rotation supervisor from the concerned specialty. The rotation supervisor shall be responsible for a productive and positive experience for the trainee during the posting.

4. **Assistant Program Coordinator:** As the resource person for DNB trainees either from the management or academic staff, to maintain establishment and related functions related to the DNB courses and trainees.

5. **Stipend / Wage / Remuneration / Salary**

   i. A monthly fee/remuneration/wage or salary may be paid as a consolidated figure or under the heading of fees or allowance to the DNB trainees by the management of the hospital/institute concerned.

   ii. As per NBE criteria, the accredited hospitals should pay a stipend to DNB trainees at par with the stipend being paid to PG trainees of the respective state government or the amount prescribed by the NBE, which is higher. The hospital shall give a binding undertaking to that effect specifying the amount of stipend paid to the trainees undergoing training.

## VI. REVISED SYLLABUS AND CURRICULUM: MODULAR TRAINING IN FAMILY MEDICINE

A syllabus serves as an outline and summary of topics that are to be covered in the course. The curriculum implies the knowledge, skills, and competencies a scholar should learn during the training program. The curriculum provides the details about the objectives, lessons, and academic content and the methodologies to be adopted for the successful transfer of the knowledge and competencies to the trainees. The learning modules have been modelled around the core concepts of (a) Whole person care, (b) Life stages care, (c) Medical generalist. Apart from developing medical expertise, the focus is also on overall development as a professional. Core professional capabilities and competencies for family medicine from an Indian perspective have been defined. Contemporary concepts of medical education and family medicine training have also been incorporated.

### 1. Broad topics to be covered under three-year training

**Syllabus: Body of knowledge for family medicine discipline**
For clinical topics approach, evaluation, diagnosis, and management of common clinical conditions is implied, depending upon the morbidity profile and demography of the population. Focus should be on learning the current standard clinical guidelines and their application to practice within the context and setting of Family Medicine Specialty.

| | | |
|---|---|---|
| FM1 | Family medicine specialty | a. Who is a Family Physician?<br>b. What is Family Medicine?<br>c. The history and development of Family Medicine<br>d. The philosophy of Family Medicine<br>e. The principles of Family Medicine<br>f. Career-options in Family Medicine |
| FM2 | The principles of Family Medicine | The nine principles of Family Medicine, described by Dr. Ian McWhinnie, are:<br><br>a. The family physician is committed to the person rather than to particular body of knowledge, group of diseases, or distinctive technique.<br>b. The family physician seeks to understand the context of illness<br>c. The family physician sees every contact with his/her patient as an opportunity for prevention or health education.<br>d. The family physician views his practice as a population at risk.<br>e. The family physician sees himself as part of a community-wide network of supportive and health care networks.<br>f. The family physician shares the same habitat as his patients.<br>g. The family physician sees patients at the clinic, at home, and in the hospital.<br>h. The family physician attaches importance to the subjective aspects of medicine.<br>i. The family physician is a manager of resources. |

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| FM3 | Physician competency framework | a. Medical Expert<br>b. Communicator<br>c. Collaborator<br>d. Leader<br>e. Health advocate<br>f. Scholar<br>g. Professional |
| FM4 | Core family physician competencies | a. Attitudes and behavior of a good doctor<br>b. Ethical approach<br>c. Communication and consultation<br>d. Data gathering and interpretation<br>e. Clinical examination and procedural skills<br>f. Decision making<br>g. Clinical management<br>h. Managing medical complexity<br>i. Working within teams<br>j. Continuous improvement of quality of care |
| FM5 | Foundational concepts | a. First contact care<br>b. Whole person care<br>c. Person-centered care<br>d. Family-centered care<br>e. Community-oriented care<br>f. Life cycle care<br>g. Ecology of care<br>h. Continuity of care<br>i. Comprehensive care<br>j. Epidemiology of illness<br>k. Medical generalist<br>l. Managing complexity<br>m. Care of multimorbidity<br>n. Long term care<br>o. Clinical prevention<br>p. Home Care |
| FM6 | Consultation & counseling in family medicine | a. Conducting a collaborative consultation<br>b. Communication skills in the consultation including listening skills<br>c. Facilitation skills in the consultation<br>d. Competently communicating bad news and dealing with conflicting situations<br>e. Principles and practice of effective education, reliable reassurance, competent counseling, and gentle guidance |
| FM7 | Approach to patient care: distinction of family medicine | a. Patient centeredness<br>b. Managing common undifferentiated medical problems<br>c. Dealing with early presentations of involved health problems<br>d. Whole person care<br>e. The holistic, comprehensive, three-stage assessment(clinical, individual and contextual) and care of patients<br>f. Prevention, promotion and relevant screening<br>g. Promotion of a healthy lifestyle and practice of lifestyle medicine<br>h. Managing Different forms of difficult patients<br>i. Application of current clinical practice guidelines |

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| | | j. Rational prescribing and prescription writing<br>k. Managing personal and professional boundaries<br>l. Facilitating of multidisciplinary and multi-professional team care of patients<br>m. The rights and responsibilities of patients<br>n. The doctor-patient relationship in the community setting<br>o. Responsible referring |
| FM8 | Family care | a. What is a family?<br>b. Family types<br>c. The family life cycle<br>d. What are the functions of a family?<br>e. Family health - what is a healthy family?<br>f. Family structure assessment (genogram and extended genogram, Etc.)<br>g. Family function assessment (family APGAR, family circle, family eco-map, Etc.)<br>h. Family resources assessment ("SCREEMS" eco-map, as above<br>i. Family dynamics - ideal and abnormal or dysfunctional<br>j. Family-oriented primary care<br>k. The "family-at-risk."<br>l. The family in the Three-stage assessment<br>m. Involving the family as a team in the diagnoses, therapeutic planning, and management of disease and dis-ease<br>n. Caring for and with a family with a differently-abled child or adul<br>o. How to conduct a family conference<br>p. How to do family therapy<br>q. Sexual health and counseling<br>r. Pre-marital and marital counseling<br>s. Home-based care<br>t. Care of carer (family member) |
| FM9 | Role of family physicians in public health | a. Population based health management<br>b. Concept of health and disease, primary health care, and its implementation, principles of Epidemiology, and epidemiologica methods.<br>c. Epidemiology of communicable diseases, hospital-acquired infections, emerging and reemerging infectious diseases, epidemiology of chronic non-communicable diseases and conditions.<br>d. Environment and health, basic principles of household waste management, sanitation, safety, and availability of drinking wate<br>e. Health care of the community, health services at the center, stat and district levels National health programs and policies<br>f. Demography and family planning<br>g. Health information and basic medical statistics, health educatior<br>h. Principles of health education and methods<br>i. National Health insurance schemes and other private schemes<br>j. School health programs<br>k. Management of epidemics and national disasters<br>l. Ayushman Bharat Program<br>m. Health and Wellness Centers<br>n. Health policy development in India |

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| FM10 | National Health Programs | Reproductive, Maternal, Neonatal, Child and Adolescent Health<br>a. Janani Shishu Suraksha Karyakaram (JSSK)<br>b. RashtriyaKishorSwasthyaKaryakram(RKSK)<br>c. Rashtriya Bal SwasthyaKaryakram (RBSK)<br>d. Universal ImmunisationProgramme<br>e. Mission Indradhanush / Intensified MissonIndradhanush<br>f. Janani Suraksha Yojana (JSY)<br>g. Pradhan MantriSurakshitMatritvaAbhiyan (PMSMA)<br>h. NavjaatShishu Suraksha Karyakram (NSSK)<br>i. National Programme for Family planning<br><br>National Nutritional Program<br>a. National Iodine Deficiency Disorders Control Programme<br>b. MAA (Mothers' Absolute Affection) Programme for Infant and Young Child Feeding<br>c. National Programme for Prevention and Control of Fluorosis (NPPCF)<br>d. National Iron Plus Initiative for Anaemia Control<br>e. National Vitamin A Prophylaxis Program<br>f. Integrated Child Development Services (ICDS)<br>g. Mid-Day Meal Programme<br><br>Communicable Diseases<br>a. Integrated Disease Surveillance Programme (IDSP)<br>b. Revised National Tuberculosis Control Programme (RNTCP)<br>c. National Leprosy Eradication Programme (NLEP)<br>d. National Vector Borne Disease Control Programme<br>e. National AIDS Control Programme (NACP)<br>f. Pulse Polio Programme<br>g. National Viral Hepatitis Control Program<br>h. National Rabies Control Programme<br>i. National Programme on Containment of Anti-Microbial Resistance (AMR)<br><br>Non-Communicable Diseases<br>a. National Tobacco Control Programme (NTCP)<br>b. National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS)<br>c. National Programme for Control Treatment of Occupational Diseases<br>d. National Programme for Prevention and Control of Deafness (NPPCD)<br>e. National Mental Health Programme<br>f. National Programme for Control of Blindness& Visual Impairme<br>g. Pradhan Mantri National Dialysis Programme<br>h. National Programme for the Health Care for the Elderly (NPHCE<br>i. National Programme for Prevention & Management of Burn Injuries (NPPMBI)<br>j. National Oral Health program<br><br>Health System Strengthening Programs |

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| | | a. Ayushman Bharat Yojana<br>b. Pradhan MantriSwasthya Suraksha Yojana (PMSSY)<br>c. LaQshya' program (Labor Room Quality Improvement Initiative)<br>d. National Health Mission |
| FM11 | Primary care and Universal Health Coverage | a. Family medicine and primary care<br>b. Historical evolution of primary health care<br>c. Health care teams in primary care<br>d. Universal Health Coverage<br>e. Health Insurance and Healthcare financing<br>f. Alma Ata Declaration 1978<br>g. 2018 Asthana Declaration on Primary Health Care<br>h. WHO and Global Health?<br>i. SDG – Sustainable Development Goals 2030<br>j. Global Health and International Healthcare Delivery Models – UK, USA, Brazil, South Africa, Sri Lanka, Cuba, Thailand, Nepa<br>k. Indian Healthcare Delivery Models -Best practices fromstates<br>l. Comprehensive Vs. Selective Primary Care<br>m. Principles of Community Oriented Primary Care (COPC) |
| FM12 | Rural Generalist | a. Expert medical care in rural contexts (Multidisciplinary competer skills practice and care)<br>b. The provision of comprehensive primary care to the rural population.<br>c. Provision of secondary care to the rural population<br>d. Response to medical emergencies in rural and remote locations<br>e. Population-based approach<br>f. Care provision to culturally diverse communities<br>g. The practice of medicine within an ethical, intellectual, and professional framework<br>h. Safe medical care in geographical and professional isolation<br>i. EmOC& LSAS (Community Setting -longitudinal integration) |
| FM13 | Personal care | a. Person of the Physician<br>b. Personal Life Goals<br>c. Personal Management<br>d. Personal growth and development<br>e. Continuous professional development<br>f. Personal wholeness and health and well-being<br>g. Management of tress<br>h. Preventing and dealing with burn-out<br>i. The family physician's family health and wholeness<br>j. The family physician's lifestyle to be healthy<br>k. Personal finance management and financial success |
| FM14 | Leadership and Primary Care Teams | a. Family physician as a leader<br>b. Leadership principles and practices (styles)<br>c. Principles of teamwork<br>d. Team formation and functioning and facilitating<br>e. Conflict management<br>f. Working as a team (with/at the PHC and with/at the CHC and with the ward-based outreach teams and with the home-care teams)<br>g. Multidisciplinary, multi-professional approach to healthcare, |

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| | | including with government and non-governmental agencies<br>h. Working with other agencies<br>i. Teaching and training the team for optimal, effective and efficier service<br>j. Management principles and methods, including the managemer cycle (of doing a situational analysis, setting objectives, assessing, planning, implementing, evaluating, recording) - applied to the team and the services rendered, Etc.<br>k. Stewardship and mutual accountability and productivity<br>l. Continuous training and support of and working with community health workers (like the ANM/VHN/ASHA workers, and others)<br>m. Facilitating continuous, mutual education and learning with othe healthcare workers and professionals<br>n. How to conduct morbidity and mortality (M+M) meetings<br>o. How to deal with a medical mistake or unethical behavior of a colleague or healthcare worker or with an impaired health practitioner<br>p. Relevant healthcare legislation |
| FM15 | Practice Management | a. Management principles (broad and applied)<br>b. Establishing a new practice or clinical facility<br>c. Managing a busy clinic - strategies<br>d. Record-keeping<br>e. Cost-effective care and management<br>f. Medicolegal aspects of family medicine<br>g. Quality, standards, and accreditation<br>h. Quality Improvement Cycle<br>i. Quality assurance (QA)/ Quality improvement (QI)<br>j. Audit (clinical and practice and financial)<br>k. Legal framework compliances of practice<br>l. How to maintain and aesthetically beautify the physical facilities (inside and outside) and the physical and ambient surroundings (e.g., flower-garden, vegetable garden, birdbaths, trees, Etc.)<br>m. Budgeting and financial management<br>n. How to do a stock inventory at CHC level<br>o. How to manage human resources (people), material (equipmen and information), minutes (time), money, meetings, medicines, myself, my family, Etc.<br>p. Data interpretation of what is being reported by the Data Entry Officer (DEO)<br>q. How to stimulate and facilitate organizational development (both on health service and health facility levels) |
| FM16 | Digital healthcare and Information Technology | a. Electronic Health Record<br>b. Telemedicine and digital health<br>c. Use of electronic devices for practice support and enhancement<br>d. Professional use of social media<br>e. Electronic communication<br>f. Information technology and health promotion<br>g. Big data and population health<br>h. Healthcare automation<br>i. Artificial Intelligence |
| FM17 | Family medicine | a. Basic human anthropology, psychology, pneumatology, and |

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| | and allied sciences | sociology within the context of healthcare |
| FM18 | Wellness: Prevention, Diet, Nutrition, and Exercise | a. Concept of wellness<br>b. Concept of Prevention<br>c. Health screening<br>d. Preventive health checkup<br>e. Immunization<br>f. Chemoprophylaxis<br>g. Age-specific prevention guidelines<br>h. Injury prevention<br>i. Principles of nutrition<br>j. Calorie calculation<br>k. Diet advises during sickness<br>l. Diet for chronic diseases<br>m. Human physiology and principles of exercise<br>n. Types of exercise<br>o. Exercise prescription<br>p. Prevention and treatment of Malnutrition<br>q. Obesity and weight management<br>r. Smoking cessation<br>s. Alcohol dependence management |
| FM19 | Careof Newbor n | a. Screening for high-risk neonates<br>b. Neonatal Resuscitation<br>c. Newborn Care<br>d. Common neonatal problems<br>e. Dealing with congenital anomalies<br>f. Breastfeeding and weaning<br>g. Well baby clinic<br>h. Immunization<br>i. Normal development, Developmental Delay |
| FM20 | Care of Child | a. Growth Monitoring and malnutrition<br>b. Optimal use of the Road-To-Health-Card (RTHC)<br>c. Vitamin deficiency diseases<br>d. Common pediatric illnesses like infectious diseases, asthma, Et<br>e. Behavioral disorders, mental retardation, learning disabilities, child abuse issues,<br>f. Sudden infant death syndrome (SIDS),<br>g. Genetic disorders,<br>h. School health program<br>i. National Immunization Program.<br>j. Integrated Management of Childhood and Neonatal Illnesses (IMNCI) Guidelines<br>k. Common Pediatric emergencies |
| FM21 | Adolescent Health | a. Consultation with adolescent<br>b. Puberty and adolescence: male & female<br>c. Adolescent and the law<br>d. Behavior problems /stress/psychosocial problems/nutrition and exercise<br>e. Diagnosis and management of substance abuse<br>f. Eating disorder<br>g. Reproductive and sexual health |

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| | | h. Immunization in adolescents<br>i. Gadget addiction<br>j. Adolescent contraception<br>k. Menstrual hygiene<br>l. Early marriage<br>m. Gender identity issues |
| FM22 | Women's Health | a. Physiology of menstruation and its deviations<br>b. Menstrual problems: Premenstrual syndrome,Dysmenorrhea, Abnormal uterine bleeding, post-coital bleeding, and intermenstrual bleeding; primary and secondary Amenorrhea<br>c. Common disorders of uterus and ovary including fibroid uterus, genital prolapse, ovarian tumors, polycystic ovarian disease<br>d. Vaginal discharge, Pelvic infection, Sexually Transmitted Diseases Infections<br>e. Pelvic mass, screening and early detection of genital tract malignancy,<br>f. Preconception counseling, Contraception, Infertility<br>g. Approach to: Breast pain, breast lumps, Galactorrhea and nippl discharge, Hirsutism, Dyspareunia, Pelvic pain<br>h. Menopause, Complications of menopause, Hormone Replacement therapy, post-menopausal bleeding, Incontinence Vaginal prolapse<br>i. Medically Unexplained Symptoms<br>j. Domestic & intimate partner violence and abuse<br>k. Gender identity issues |
| FM23 | Pregnancy and Maternal Health | a. Preconception counseling<br>b. Physiological changes in pregnancy, Antenatal Care, normal labor & postnatal care<br>c. Medications during pregnancy<br>d. Abortion<br>e. Common problems during pregnancy including hyperemesis gravidarum, urinary tract infections, low backache<br>f. Basic Antenatal care including health education, nutritional guidance, immunization<br>g. SBA – Skill Birth Attendant competencies<br>h. High-risk pregnancy & medical diseases in pregnancy: identification, management, and appropriate referrals<br>i. EmOC: Emergency Obstetrical Skills (a) Basic EmOC (b) Comprehensive EmOC (longitudinal integration)<br>j. LSAS: Life Saving Anesthesia Skills for EmOC (longitudinal integration)<br>k. Counseling the mother and the family<br>l. Postnatal care and puerperal problems<br>m. Breastfeeding<br>n. Medicolegal issues related to women's health |
| FM24 | General Medical Care | a. Initial management of all symptoms/health problems<br>b. Undifferentiated presentations,<br>c. Recognition, assessment, management, follow-up of common medical conditions in an adult man/woman in the community,<br>d. Prevention and health promotion, knowledge of Diagnostic |

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| | | methods, interpretation of results and Referral criteria |
| FM25 | Infectious Diseases | Tropical diseases and common infections<br>a. Including viral, bacterial, rickettsia, mycobacterial, protozoal, Etc<br>b. Example malaria, filariasis, rabies, leptospirosis, dengue fever, enteric fever, hepatitis, poliomyelitis, meningitis, encephalitis, HIV/AIDS, sexually transmitted infections, common fungal infections, skin infections, varicella, herpes zoster, rickettsia, measles, mumps, tetanus, Chikungunya fever, newer emerging infections (avian influenza and Zika virus)<br>c. Sepsis, tuberculosis, HIV / AIDS, malaria, enteric fever, UTI, leptospirosis, rickettsia fevers, tetanus, STDs, leprosy, kala-aza fever of unknown origin, infective endocarditis |
| FM26 | Common Cardiovascular Problems | a. Approach to a patient presenting with chest pain (ischemic hear disease, ACS, post-myocardial infarction management/rehabilitation)<br>b. Approach to a patient presenting with syncope<br>c. Approach to a patient presenting with palpitations (dysrhythmias<br>d. Approach to a patient with breathlessness (cardiac failure, acute pulmonary edema)<br>e. Approach to a patient with edema<br>f. Approach to a patient with hypertension and dyslipidemia<br>g. Common congenital heart diseases<br>h. Others: acute rheumatic fever, rheumatic heart disease, infectiv endocarditis, cardiomyopathy, peripheral vascular disease |
| FM27 | Common Respiratory Problems | a. Approach to cough<br>b. Approach to a patient with a running nose - allergic disorders<br>c. Approach to a patient presenting with difficulty in breathing (asthma, pneumonia, COPD, management of acute exacerbatic of bronchial asthma and COPD, interstitial lung disease, sarcoidosis<br>d. Approach to a patient presenting with tuberculosis and other infections (empyema, bronchiectasis, lung abscess, pleural effusion)<br>e. Approach to a patient presenting with occupational lung disease<br>f. Approach to a patient presenting with sleep apnoea<br>g. Diagnostic methods in pulmonary medicine, principles of the pulmonary function tests<br>h. Bronchodilators and steroids in respiratory medicine<br>i. Malignancies in lung<br>j. Smoking cessation |
| FM28 | Common Gastrointestinal Problems | a. Approach to a patient presenting with dyspepsia, GERD, diarrhea, irritable bowel syndrome,<br>b. Approach to a patient presenting with acute and chronic abdominal pain: cholecystitis, pancreatitis, peptic ulcer disease, non-ulcer dyspepsia, gastritis<br>c. Approach to a patient presenting with jaundice<br>d. Hepatitis, liver failure, cirrhosis of the liver, hepatic encephalopathy<br>e. Approach to a patient presenting with diarrhea: Infective causes inflammatory bowel disease, irritable bowel syndrome, |

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| | | malabsorption, food poisoning, parasitology including amebiasis giardiasis/worm infestations, and investigations in gastrointestin diseases)<br>f. Approach to a patient presenting with constipation<br>g. Approach to a patient presenting with ascites – tuberculous abdomen and various other etiologies<br>h. Patient presenting with hematemesis – Variceal and non-varice bleeding<br>i. When to refer for investigations – GI scopies, USG |
| FM29 | Common Neurological Problems | a. Approach to a patient presenting with a neurological deficit (Cerebrovascular accidents, stroke, TIA, paraplegia, quadriplegia)<br>b. Approach to a patient presenting with headache (primary and secondary causes - meningitis, encephalitis, ICSOLs)<br>c. Approach to a patient presenting with seizures<br>d. Approach to a patient presenting with movement disorders – Parkinsonism other disorders presenting with tremors<br>e. Approach to a patient presenting with peripheral neuropathy, cranial neuropathy<br>f. Approach to a patient presenting with muscle disorders – myopathies<br>g. Approach to a patient with memory loss<br>h. Patient presenting with dizziness |
| FM30 | Poisoning and Bites | a. Poisoning (general emergency measures, poisoning caused by paracetamol, organophosphorus compounds, alcohol, kerosene, barbiturates, corrosives, insecticides, organophosphorus compounds, carbon monoxide, sedatives, phosphide)<br>b. Bites: snakebite, scorpion sting, and other insect and animal bites) |
| FM31 | Common Hematological Problems | a. Approach to a patient with anemia (iron deficiency, B12 deficiency, folic acid Hemoglobinopathies, and others; geographical differentiation)<br>b. Approach to a patient with polycythemia<br>c.Approach to a patient with thrombocytopenia<br>d. Approach to a patient with bleeding disorders Hemophiliaand others<br>e. Approach to a patient with hematological malignancies<br>f. Interpretation of lab investigations<br>g. Principles of anticoagulation |
| FM32 | Common cancers | a. Cancer screening<br>b. Cervical<br>c. Breast<br>d. Prostate<br>e. Lung<br>f. Hematological<br>g. Gastro-intestinal<br>h. Head and neck |
| FM33 | Common Connective | a. Approach to a young patient presenting with joint pain: SLE, polymyalgia rheumatica, polymyositis, inflammatory arthritis, |

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| | Tissue Disorders | mixed connective tissue disorders), rheumatoid arthritis, mono-arthritis, ankylosing spondylitis, vasculitis, reactive arthritis."<br>b. Approach to joint pain in the elderly: osteoarthritis<br>c. Approach to a patient with back pain – ankylosing spondylitis |
| FM34 | Common Renal Problems | a. Approach to a patient presenting with dysuria (urinary tract infections, pyelonephritis, genitourinary infections)<br>b. Approach to a patient presenting with hematuria (glomerulonephritis, calculi, and others)<br>c. Approach to a patient presenting with edema (acute renal failure chronic renal failure, nephrotic syndrome, nephrotic syndrome)<br>d. Interpretation and management of electrolyte imbalances<br>e. Renal replacement therapy<br>f. Diabetic nephropathy |
| FM35 | Metabolic and Endocrine Diseases | a. Diabetes<br>b. Thyroid diseases<br>c. Growth and development<br>d. Metabolic Syndrome<br>e. Dyslipidemia<br>f. Obesity<br>g. Osteoporosis<br>h. Vitamin D deficiency<br>i. Common endocrine diseases related to pancreas, pituitary and adrenal glands |
| FM36 | SkinRelated Problems | a. Diagnosis of Infectious skin conditions and management: Viral infections: molluscum contagiosum, viral warts, pityriasis rosea, herpes zoster, herpes simplex, viral exanthems, hand-foot and mouth disease, recognition of viral hemorrhagic fevers and danger signs, Varicella, Measles<br>b. Bacterial: Impetigo, TB, Leprosy, Cellulitis, Infestation: scabies, lice, insect bites<br>c. Fungal and yeast infections: Candida, pityriasis versicolor, tinea skin diseases associated with HIV infections<br>d. Diagnosis of Non-Infectious skin conditions and management: Acute contact dermatitis, Psoriasis, Chronic leg ulcers, Generalized pruritus, Angioedema / Anaphylaxis, Acne, Alopeci Vitiligo, Eczema<br>e. Diagnosis of Nutritional disorders causing skin lesions and management<br>f. Skin tumors: Premalignant lesions in the skin: like solar keratosi Bowen's disease<br>g. Malignant lesions like basal cell cancer, squamous cell cancer, Malignant melanoma |
| FM37 | Occupational Health | a. Medical fitness<br>b. Pre-employment health checkup<br>c.Sickness certification<br>d. High-risk occupations and medical fitness certification<br>e. Sports fitness certification<br>f. Basic ergonomics and office health<br>g. Stress Management<br>h. Factory Health |

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| | | i. Legislations related to occupational health |
| FM38 | Mental Health | a. Recognition, management and appropriate referral of depression and anxiety states<br>b. Recognition, Basic Management and appropriate referral of patients with psychosis<br>c. Follow-up care of patients with psychosis<br>d. Care of patients with unexplained symptoms without an organic basis<br>e. Care of patients undergoing bereavement, social and family stress<br>f. Assessment of suicide risk<br>g. Diagnosis, detoxification and team-based management of patients with substance abuse<br>h. Recognition and management of patients in delirium<br>i. Recognition, referral and follow up of patients with dementia<br>j. Recognition, referral and follow up of patients with developmental disorders<br>k. Recognition, basic management and appropriate referral of patients with personality disorders, eating disorders and behavioral disorders in children and adolescents,<br>l. Basic principles of psychotherapy, rational use of psychotherapeutic medication) |
| FM39 | Emergency & Urgent Care | a. Knowledge for lifesaving procedures: Medical, Obstetric, Pediatric, including neonatal resuscitation, Surgical, and trauma<br>b. Acutely dyspneic patient<br>c. Shock<br>d. Cardiac arrest<br>e. Loss of consciousness<br>f. Seizures<br>g. Epistaxis<br>h. Acute gastrointestinal emergencies<br>i. Trauma and poly-trauma, including road traffic accidents, sexual assault, victims of violence, mass casualty, drowning, and near-drowning.<br>j. Hemoptysis<br>k. Acute burns<br>l. Acute musculoskeletal disorders including fractures, sprains, dislocations and compartment syndromes<br>m. Life-Saving Anesthesia Care (LSAS) for EmOC (Emergency setting- (longitudinal integration)<br>n. Common poisonings, animal bites, and stings,<br>o. Environmental disasters (floods, earthquakes, Etc.)<br>p. Acute urinary system disorders including retention and anuria<br>q. Psychiatric emergencies<br>r. Disaster management |
| FM40 | General Surgical Care | a. Diagnosis and initial management of Common Surgical problems<br>b. Experience and expertise should be gained in recognizing ar appropriate evaluation and initial management of the followin common conditions. |

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| | | • Head Injury<br>• Burns and wounds, ulcers, bedsores<br>• Lumps in neck, breast, groin, abscess and small bumps elsewhere in the body<br>• Upper GI bleed, rectal bleed, hematemesis, and Malena,<br>• Abdominal pain<br>• Dysphagia, nausea, vomiting<br>• Peptic ulcer, GOERD, gastritis<br>• Disorders of gall bladder and pancreas<br>• Intestinal obstruction, specific and nonspecific infections<br>• Abdominal mass<br>• Leg Ulcers, varicose veins,<br>• Diabetic foot<br>• In-growing toenails<br>• Perianal problems, pilonidal abscess/sinus, phimosis, paraphimosis,<br>• Rectal pain, rectal prolapse<br>• Hernia, inguinoscrotal swellings, hydrocoele,<br>• Diseases of breast, Breast infections, hematoma, abscess, lumps, mastalgia, and cellulitis<br>• Peripheral vascular disease<br>• Prostate disease, renal and genitor-urinary tract disorders; LUTS, Management of obstructive uropathy<br><br>c. Red flags - identification stabilization and treatment and referral of shock, electrolyte and fluid requirements, blood transfusion,<br>d. Suture methods and materials, universal precautions.<br>e. Life-Saving Anesthesia Care (LSAS) for EmOC (OT setting-longitudinal integration) |
| FM41 | Oro Dental Care | a. Recognition, assessment, management, follow-up of commo oral dental conditions |

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| FM42 | Care of Ear Nose and Throat | a. The algorithmic approach of ENT problems: Epistaxis, ear pain ear discharge, hearing loss, vertigo, nasal discharge, loss of smell, hoarse of voice, Tinnitus, Dysphagia, Aphthous Ulcer. To identify and refer if red flags are present.<br>b. Recognition, assessment, management, appropriate referral an follow-up of common ENT conditions: Acute bacterial pharyngiti Acute & Chronic Rhinitis, Acute & Chronic Sinusitis,<br>c. Acute & Chronic Tonsillitis, Quinsy<br>d. Adenoiditis/adenoid hypertrophy with eustachian tube dysfunction/OMe, Acute Otitis Media, Chronic (safe and unsafe) otitis media, Otitis externa, Fungal infections of the ear,<br>e. Mastoiditis, Otitis externa, Fungal /bacterial infections of the ear perichondritis/ seroma/hematoma of the pinna. Mastoiditis, Nas Polyps<br>f. Tuning fork tests<br>g. Management of Bell's palsy<br>h. Nasal polyps<br>i. Deviated nasal septum<br>j. Emergency tracheostomy kit |
| FM43 | Care of Eye | a. The algorithmic approach of Eye problems: Red Eye, Itchy Ey Swelling of Eye, Watering of Eye, Diminished vision. To identi and refer if red flags<br>b. Recognition, assessment, management, appropriate referral, and follow-up of common Eye conditions:<br>c. Redeye (Conjunctivitis, Corneal abrasions/ulcers, Uveitis, Glaucoma)<br>d. Decreased vision (Refractiveory error, Cataract, Diabetic retinopathy, Retinal Detachment, optic neuritis,<br>e. Lid disorders, Chalazion, Stye, Lagophthalmos<br>f. Bitot's spots, Xerophthalmia,<br>g. Pterygium, Phlycten, Episcleritis, Scleritis<br>h. Diabetic retinopathy<br>i. Foreign body in the eye<br>j. Panophthalmitis/ Orbital Cellulitis<br>k. Color blindness, Squint<br>l. Congenital eye problem<br>m. First-line management and referral protocols of eye emergencies<br>n. Identification and referral of malignancies<br>o. A national program for control of blindness and visual impairment (NPCBVI) |

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| FM44 | Care of Bones and Joints and Rehabilitative Care | a. Basic principles of physical and rehabilitative therapy<br>b. Acute and Chronic joint pains - small joints, large joints, Arthroscopy<br>c. Acute and Chronic backache<br>d. Acute/Chronic neck pain<br>e. Shoulder pain<br>f. Myofascial pain syndrome<br>g. Fractures and dislocations – early management and referral<br>h. Arthritis: Osteoarthritis, RA, Gout, Periarthritis of the shoulder, Etc.<br>i. Infections: septic Arthritis, osteomyelitis, Tuberculosis<br>j. Synovitis, fasciitis, tendinopathies<br>k. Sports injuries<br>l. Bony tumors<br>m. Management of ganglion<br>n. Congenital deformities<br>o. Assessment and management of patients with disabilities<br>p. Principles of Community based rehabilitation<br>q. Pressure ulcers prevention and management<br>r. Disability terminology- Impairment, activity limitation and participation restriction<br>s. Legislation and rights of people with disabilities |
| FM45 | Pain and Anesthesia Care | a. Overview of anesthesia:<br>b. Equipment's<br>c. Pre-anesthetic assessment of patient- (risk assessment asa grade 1-5 classify according to grades 1-3 can be done by a family physician)<br>d. Types of Anesthesia and details on each modality- local anesthesia,<br>e. Regional anesthesia including field, digital, ankle, wrist and penile block, endotracheal intubation Intravenous sedation,<br>f. Monitoring patient while under anesthesia care and follow up red flags for referral, adverse events in anesthesia, Awake analgesics<br>g. Life-Saving Anesthesia Care (LSAS) for EmOC(longitudinal integration) |
| FM46 | Care of the Elderly | a. Common health problems and diseases in the old age & thei management e.g., vascular, musculoskeletal, oncological, psychological, neurological, hearing and vision problems<br>b. Comprehensive assessment of elderly<br>c. General principles of elder care<br>d. Geriatric syndromes - falls & fractures incontinence, constipation, delirium, dementia, aches, and pains in elderly<br>e. Prescribing in elderly<br>f. Palliation & management of terminally ill patients<br>g. Rehabilitation in elderly<br>h. Communication skills in bereavement, problems of the family after the death<br>i. Caregiver support,<br>j. Care of elderly, social and psychological problems in the elderly |

| | | |
|---|---|---|
| FM47 | Palliative Care | a. Principles of palliative care<br>b. Physical care<br>c. Essential palliative care medications & Psychosocial and spiritual care<br>d. Terminal illness and end-of-life care<br>e. Nursing care communication<br>f. Ethical aspects of care<br>g. Integrated care and network with other healthcare providers<br>h. Teamwork<br>i. Selfcare<br>j. Recognition, assessment, management, follow-up of commo medical conditions in a terminally ill patient<br>k. Home-based care<br>l. Stroke rehabilitation<br>m. Cardiovascular rehabilitation<br>n. Post-trauma rehabilitation<br>o. Musculoskeletal diseases<br>p. Pain management |

## VII. FACULTY AND ACADEMIC SUPERVISORS: ROLES AND RESPONSIBILITIES

The faculty or academic supervisors play a pivotal role in the success of any training program. The faculty need to be oriented towards the overall goals and objectives of the DNB Family Medicine Program. The trainers or supervisors are considered role models for the residents and the staff. They mentor the trainees towards developing into skilled clinicians as well as successful professionals. The faculty help trainees, perfect skills, and knowledge to meet the professional requirements of the family medicine specialist and develop a strong commitment to continuous professional development. The faculty must reinforce the enthusiasm of the trainee towards learning and improving in a supervised clinical environment. The responsibilities of faculty include, but are not limited to, the following:

i. Education of the trainee

ii. Orientation to training institute and objectives of the rotation

iii. Supervise, demonstrate, teach, and observe clinical activities

iv. Delegate graded responsibility for clinical care

v. Teaching in a clinical setting

vi. Actively involved in the academic program – planning as well as execution

vii. Encourage the residents towards participation in seminars and workshops

viii. Provide feedback to the trainees

ix. Check compliance to the logbook

x. Help and facilitate protocol development, data collection, literature review, completion of thesis writing on time, and submission to NBE for evaluation. The inability to submit a thesis on time to the NBE delays the final result and award of a DNB degree to the trainee.

**1. Orienting the resident to the rotation:**

At the outset of every clinical rotation, a formal orientation of the clinical department is expected. Orientation helps the residents to get acquainted with the clinical team, and it also establishes the capability to work more efficiently in a new environment. At the beginning of the rotation, the trainee should take care of any administrative requirements, including obtaining an identity card and HIMS password and completing any necessary paperwork, EMR training. Additional site-specific standard training such as code blue/red/yellow, Etc., a refresher of biomedical waste protocol, NSI – needle stick injury policy, Etc.

**2. Work schedule:**

The trainees shall be provided a tentative work schedule based on the policy and guidelines of the National Board of Examinations and training institutions. Additional time commitment is expected outside of the clinical rotation engaged in self-directed learning. Trainees will be posted on call to the emergency roster.

3. **Communicating resident expectations:**
Faculty or supervisor should discuss with the trainee following:

i. Working hours

ii. Formal introduction to the staff

iii. Attendance policy

iv. Duty roster

v. Holiday schedules

vi. Participation during rounds and conferences

vii. Clinical care, patient interaction, and procedures

viii. Oral presentations

ix. Assignments

4. **Preparing for clinical rotation**

i. Approximately a week before a scheduled clinical rotation, the trainee should contact the designated faculty/ supervisor to make logistic arrangements for their posting.

ii. The supervisor should formally inform all staff in the department about the upcoming rotation of the trainee with the following details (a) trainee's name (b) rotation duration and schedule (c) trainee's role in the patient care etc. It should be communicated through an official notice or email.

iii. The support staff the department has a crucial role in ensuring that each trainee has fruitful experience during rotation.

5. **Supervision of the DNB family medicine trainee during clinical rotation**

i. Trainee work under the designated faculty's supervision. During the resident's post at the clinical rotation department, the designated supervisor/faculty should spend time supervising, consultation, and teaching.

ii. The supervisor should be aware of the student's assigned activities.

iii. The supervisor should provide direct supervision of technical skills with the gradually increased clinical workload as per the resident's level of expertise.

iv. The trainee's responsibility is to complete the required reading and research of conditions encountered in each specialty.

**6. Standards of professional conduct for students:**

Family physicians are required to display the highest standards of ethical and professional conduct as health care practitioners.

i. Academic integrity

ii. Honesty and trustworthiness

iii. Accountability

iv. Cultural competency

v. Patient confidentiality

vi. Maintaining appropriate professional boundaries

## VIII. FAMILY MEDICINE RESIDENCY: PROGRAM OUTLINE

The Postgraduate training in Family Medicine is a three-year training program where the resident receives a broad range of training in all major medical disciplines. The first two and half years are predominantly based in the hospital. During the remaining six months, there is a community-based posting in family medicine. The course begins with a one-month foundation course in Family Medicine. Residents will enter the program and have received a broad foundation in several aspects of general medicine and surgery during their internship year. Fundamental to the program is a graded increase in responsibility for the resident as they proceed through the training. This level of responsibility will be dependent on their ability, experience, and level of training. Appropriate levels of supervision for the trainee will be maintained throughout the program to maximize educational opportunities and optimize patient care and satisfaction.

Throughout the three years, trainees will attend an organized academic program. The program includes small group work, case studies, problem-based learning, random case analysis, role plays, evidence-based reading, and other activities presentations by the residents and trainers. Effective teaching methods and learning are used in health centers, like problem-solving, case discussion, random case analysis, direct clinical training in health centers, tutorials with applications in a community context, and patient-centered care. Daily discussions with trainers and instructors will help identify learning needs, plan self-learning activities, and encourage self-directed and lifelong learning.

| **Program Outline** | |
|---|---|
| Program components<br><br>Academic program<br>Clinical postings<br>Thesis<br>Logbook<br>Internal assessment<br>Final examination | The program will have the following components<br><br>a. Academic program – For theoretical and conceptual learning<br>b. Clinical Postings – Work-based experience and learning<br>c. Hospital postings (secondary level) 30 months<br>d. Family practice postings (Primary care) 6 months<br>e. Blended postings (hospital + family doctor clinic)<br>f. Logbook<br>g. Thesis<br>h. Internal assessment – Six monthly<br>i. The final assessment by N.B.E. after completion of three years o residency training leading to the award of D.N.B. Family Medicine |
| Hospital Clinical Posting | Hospital Postings (Total 30 months)<br><br>The secondary care hospital training modules shall be completed at an accredited training facility, and the sub-nodes. The purpose of hospital posting for family medicine residents is to expose them to a concentration or high volume of patients for a variety of morbidities in a shorter duration of time. However, the approach to care shall remain based on the principles and concepts of family medicine. Many family's physician clinical conditions overlap with other specialties on a horizontal skill trajectory; however, the approach of family medicine remains unique as described in detail in the syllabus section.<br><br>a. Pediatrics including neonatology - Six months |

| | |
|---|---|
| | b. Obstetrics & gynecology - Six months<br>c. General medicine including allied specialties including dermatology psychiatry and infectious diseases - Nine months<br>d. Emergency medicine – One month<br>General Surgery including allied specialties including anesthesia E.N.T., Ophthalmology – Three months<br>f. Elective: Two months |
| Family practice clinical postings | Family Practice Postings: Total Six Months<br>The family practice component shall be completed at accredited primary care facilities<br><br>a. CHC<br>b. PHC<br>c. Family physician clinic<br>d. Nursing homes and polyclinics<br>e. Home care<br>f. Community outreach programs<br><br>The duration of family practice rotation can be at any of the above-accredited sub-nodes. Continued supervision and mentorship by a practicing accredited family physician shall be mandatory. This relationship may be documented either two months of continuous posting at a family physician clinic under the supervision of accredited adjunct family physician faculty. The elective period of two months may also be utilized for this purpose. An equivalent arrangement of 02 (two) half days of attachment per month in the morning or evening to an active family physician clinic for a minimum of 18 months may also be arranged. |
| **EmOC& LSAS Training:** | EmOC and LSAS: Emergency Obstetrical Care and Life Saving Anesthesia Skills training modules are to be longitudinally integrated with the overall three years residency duration of DNB Family Medicine. The clinical postings in the department of pediatrics, obstetrics, emergency, anesthesia and surgery are to be organized in a way that the prescribed duration (16weeks+18 weeks) of Emergency Obstetrical Care (EmOC) and LSAS (Life Saving Anesthesia Skills) are covered. The work experience as C.H.C. – F.R.U.'s should also be accounted towards fulfilling this objective. Any additional requirement of hands-on training may be completed during the elective period. The clinical experience and competencies, as acquired, should be recorded in the prescribed logbook. |
| **Family Medicine Residency Academic Program –<br>(To be completed during residency training of 36 months)** | Teaching and Learning Methods<br><br>i. Work-based learning<br>ii. Self-directed learning<br>iii. Learning with peers<br>iv. Learning from other healthcare professionals<br>v. Formal teaching and training session – Academic days<br>a. Hospital and department rounds<br>b. Case discussions – family medicine perspective<br>c. Case presentation |

| | |
|---|---|
| | d.Journal Club<br>e.Workshops<br>f. Conferences<br>g.Online symposiums and webinars<br>h.Video conference and E modules<br>i. Academic Curriculum – Onsite and distributed<br>j. Problem-Based Small Group Learning<br><br>vi. Family profiles: The candidates will be required to study the family profiles under the program director's charge and will be required to maintain records at least of the two families in the logbook.<br>vii. Short Skill/ Competency Course:BLS/ACLS/NALS/PALS/ALSO/ BEmOC/ BTLS/ ATLS etc.<br>viii. Case histories: The candidates will be required to record eight case histories (two each of medicine, pediatrics, surgery, obstetrics, and gynecology).<br>ix. Medical and surgical procedures: Candidates will maintain a record of the procedures performed, assisted, or observed in the logbook.<br>x. Domiciliary visits: A record of emergencies attended and domiciliary visits made be maintained.<br>xi. Teaching and mentorship: The 3rd year residents (PGY3) shall be assigned teaching and mentorship roles for PGY2 and PGY1<br>xii. Community outreach and health promotion campaigns |
| **Logbook** | |
| **Internal assessment** | |

Clinical postings: A tentative template for three-year residency program

Local program director may plan the clinical postings as per the administrative logistics of the institute. However, the total duration for each department should be covered as prescribed within total three years. For departments that are predominately out patient in nature, the resident may be assigned for duty roster of a related broad specialty. Where there are no independent departments for smaller postings for e.g. Pulmonary medicine Etc., same can be completed within the concerned broad specialty.

| | | **Cumulative rotation** |
|---|---|---|
| **Year 1** | | **Year 1** |
| Foundation Course | One month | One month |
| General Medicine | One month | Two months |
| Pediatrics | Three months | Five months |
| O.B.G.- Labor room | One month | |
| O.B.G. –O.P.D. | 15 days | |
| O.B.G.- ward | 15 days | Seven months |
| Family practice 1 | Two months | Eight months |
| General surgery | Two months | 11 months |
| Anesthesia | One month | **12 months** |

| | | |
|---|---|---|
| | | Year 2 |
| Year 2 | | 15 days |
| E.N.T. | 15 days | One month |
| Ophthalmology | 15 days | Two months |
| Orthopedics | One month | Four months |
| General medicine | Two months | Six months |
| Pediatrics | Two months | Seven months |
| Emergency medicine | One month | Eight months |
| Family Practice | One month | |
| O.B.G. -Labor room | One month | |
| O.B.G. - O.P.D. | 15 days | Ten months |
| O.B.G.- Family planning | 15 days | 10.5 months |
| Psychiatry | 15 days | 11 months |
| Infectious diseases | 15 days | 12 months |
| Dermatology | One month | |
| | | Year 3 |
| Year 3 | | One month |
| Pulmonary medicine | One month | Three months |
| General medicine | Two months | Four months |
| General Surgery | One month | Five months |
| Pediatrics | One month | |
| O.B.G.- Labor room | One month | |
| O.B.G.- ward/ outreach camps | 15 days | Six months |
| O.B.G.- Family Planning | 15 days | Seven months |
| Elective 1 | One month | 11 months |
| Family Practice | Three months | **12 months** |
| Elective 2 | One month | |

**EmOC and LSAS:** Emergency Obstetrical Care and Life Saving Anesthesia Skills training modules are to be longitudinally integrated with the overall three years residency duration of DNB Family Medicine

| **Family Medicine Program: Organogram** |
|---|
| **Health of Institution (Administrative)**<br>Name, designation, department, contact details |
| **Director academics (If there is D.N.B. training in multiple specialties)**<br>Name, designation, department, contact details |
| **Program Director – D.N.B. Family Medicine Program**<br>**(Program Director will also function as nodal coordinator)**<br>Name, designation, department, contact details<br>(One of the senior consultants may be designated as program director) |

**Senior consultants – Family Medicine / Faculty designate**
Senior Consultant in family medicine may be designated from broad specialty (Medicine/ Surgery/ Pediatric/O.B.G.) background but preferably from general medicine/ family medicine

Name, designation, department, contact details

**Junior Consultants – Family Medicine / Faculty designate**
Junior Consultant in family medicine may be designated from broad specialty (General Medicine/ Family Medicine/ Surgery/ Pediatric/O.B.G.)
Name, designation, department, contact details
(May also be designated as assistant nodal coordinator)

**Sub Nodal coordinator / Sub nodal coordinators (One for each sub node)**
Name, designation, department, contact details

**Clinical supervisors – for each departmental rotation/ posting**
Name, designation, department, contact details

**Thesis guide**: Since the resident will be posted to the general medicine department for the most extended duration; the thesis guide should be selected from this department. However, faculty from any broad specialty may be assigned this role. Additional faculty or accredited family physician may be assigned the role of co-guide.

**Transfer/ Posting/ Employment Change of faculty**

a. Clinical supervision: This role may be delegated to any other available and eligible faculty. The same should be communicated to the N.B.E.

b. Thesis- If the protocol and data collection for the thesis is sufficiently advanced same Consultant may be allowed to supervise the thesis completion. Co guide, if available, may presume the full responsibility else a new guide may be assigned after permissio from N.B.E.

| Department / Area of Rotation* | Duration | Rotation supervisor |
|---|---|---|
| Foundation course (Departmental attachment: General Medicine) | One month | Program Director |
| General medicine and allied medical specialties including dermatology and psychiatry | Eight months | Consultant General Medicine and Consultant from the respective subspecialty |
| Surgery and allied specialties including anesthesia E.N.T., Orthopedics, and Ophthalmology | Six months | Consultant Surgery And Consultant from the respective subspecialty |
| Obstetrics and gynecology | Six months | Consultant Obstetrics and Gynecology |
| Pediatrics including neonatology | Six months | Consultant Pediatrics |
| Family Practice | Six months | In charge of C.H.C. & P.H.C. (Government) In charge of the Accredited Family Practice Clinic (Private) |

| | | |
|---|---|---|
| Emergency medicine | One month | In Charge Emergency |
| Electives<br>(The two months of elective rotation will be in specialties that are available in the center of training or the sub-nodal center, as per the choice of the resident) | Two months | The consultant from the respective department |
| **EmOC& LSAS Training:** Emergency Obstetrical Care and Life Saving Anesthesia Skills training modules are to be longitudinally integrated with the overall three years residency duration of DNB Family Medicine. The clinical postings in the department of pediatrics, obstetrics, emergency, anesthesia and surgery are to be organized in a way that the prescribed duration (16weeks+18 weeks) of Emergency Obstetrical Care (EmOC) and LSAS (Life Saving Anesthesia Skills) are covered. The work experience as C.H.C. – F.R.U.'s should also be accounted towards fulfilling this objective. Any additional requirement of hands-on training may be completed during the elective period. The clinical experience and competencies, as acquired, should be recorded in the prescribed logbook. | | |

# IX. FOUNDATION COURSE

## 1. Duration – One month

A one-month foundation course in Family Medicine at the beginning of the course will facilitate this. In the first month of the course, this should be done in the afternoons using seminars, lectures, case-based discussions, and small group discussions. Since there is no exposure to Family Medicine in the MBBS curriculum, the residents who join for D.N.B. Family Medicine will not understand the specialty. They will require orientation to the concept & setting of the discipline of Family Medicine in a Community Health Centre.

## 2. The objective of the foundation course is the following:

i. Orientation to the overall goals and objectives of the D.N.B. family medicine training program
ii. Introduction to core concepts and principles of family medicine
iii. Workshop and seminar on consultation and communication skills in family medicine
iv. Orientation to the teaching institution and introduction to the institutional policies
v. Refresher to biomedical waste (BMW) management and Needle Stick Injury (N.S.I.)
vi. Introduction to I.T. system, HIMS, and record-keeping
vii. Introduction with faculty, supervisors and the administrative staff
viii. Introduction to the logistics and rotation schedule of the residency program
ix. Introduction to data gathering, research methodology, and discussion on thesis protocol
x. Workshop/seminar on consultation skills

## 3. Objectives of each clinical rotations (hospital + family practice)

Learning in a postgraduate program is essentially self-directed and primarily emanating from clinical and academic work. The formal sessions are meant to supplement this core effort. There shall be following modular training postings during the entire three-year duration of D.N.B. Family Medicine training.

i. Module 1 Clinical rotation in family practice
ii. Module 2 Clinical rotation in the department of general medicine and allied specialties
iii. Module 3 Clinical rotation in the department of obstetrics and gynecology
iv. Module 4 Clinical rotation in the department of pediatrics
v. Module 5 Clinical rotation in the department of general surgery and allied specialties
vi. Module 6 Clinical rotation in the department of emergency and trauma

## MODULE 1 FAMILY MEDICINE: CLINICAL ROTATION IN FAMILY PRACTICE

**Duration: 6 Months**

**Goals**

The family practice rotation's overall goal is to facilitate a vocation exposure of the trainees to the family medicine practice scenario. During the six months of Family Practice rotation, the residents will learn the knowledge, attitudes, and skills that are essential for family practice.

**Objectives:**

a. Family medicine specialist as an expert in (a) whole person care (b) lifespan care (c) person an family-centered care
b. Competent and multiskilled specialist capable of providing a compressive range of services Community Health Center (C.H.C.)
c. Rural generalist with expertise in (a) medical management (b) surgical care (c) LSAS lifesaving anesthesia skills (d) neonatal and child care (d) EmOC - Emergency Obstetrical Care lifesaving obstetric skills (e) urgent, emergent, emergency and trauma care in the community
d. Generalist clinician capable of providing competent care for common health problems prevalen in the general population in a wide range of settings, ranging from primary to secondary care; and integrates preventive, promotive, and curative care in rural and urban areas
e. A family physician with expertise in clinical audit, research, quality, standard and accreditation
f. Working knowledge of national health programs
g. Practice or facility management

**The setting of Training Site:**

The practice setting may vary from outpatient to patient, chronic to emergency care. The Family Practice rotation should be in any of the following:

a. Community Health Centre (30 bedded) or
b. Primary Health Centre (P.H.C.) or
c. Sub-District Hospital (SDH)
d. If the training is in a government institute, at least three of the six months have to be in a C.H.C or P.H.C.
e. Family Practice Clinic - an accredited clinic under the supervision of a physician

This rotation in the family medicine setting will give them an understanding of their role after their training. Even as they do their rotations in different specialties, they need to have a clear picture of their final role and opportunities to apply what they have learned in a setting different from the usual teaching hospital rotations. During the C.H.C.'s rotation, they will practice longitudinal care for a practice population, learn about the functioning of a C.H.C., and the government programs there, understand about teamwork and leadership of the primary care team and the challenges of working in a C.H.C.

**Duties, roles, and responsibilities:**

a. Multi-disciplinary outpatient care
b. Multi-disciplinary Inpatient care
c. Emergency services
d. National Health Programs
e. Camps
f. Outreach program
g. Healthcare Screening
h. Issuing fitness certificate

i. School health services
j. Home care

**Learning Opportunity:**

This rotation will give them exposure to the undifferentiated patient presented to them as their first contact physician. It will also enable the residents to understand the functioning of a family practice/ community health center.

**At the end of the rotation in Family Medicine, the student shall acquire:**

**Knowledge:**

a. Describe the role of Family Medicine to provide comprehensive and universal health cover to th country.
b. Acquire the knowledge about diagnosis and management of common medical conditions in Family Practice in India
c. Describe the principles of patient-centered medicine and the bio-psycho-social and spiritual aspects of medicine
d. Describe principles of Community Oriented Primary Care (COPC)
e. Gain experience in EmOC (Emergency Obstetrical Care) and LSAS – Life-Saving Anesthesia Skills for safe maternity and newborn care

**Attitude:**

a. Develop the attitudes required to be a leader in the healthcare team, providing Community Oriented Primary Care.
b. Demonstrate the ability to perform the Family Medicine specialist's role in the health care services imbibing a spirit of cooperation and respect for all other specialties.
c. Demonstrate the ability to practice high standards of ethics and integrity in medicine
d. Develop the attitude of a lifelong learner

**Skills:**

a. Diagnose and manage the breadth of conditions that would present to a family medicine setting at the primary and secondary levels of care and appropriately refer to those which need management in a tertiary care center.
b. Organize care of a defined population using principles of Community Oriented Primary Care.
c. Provide preventive, the first contact, continuing, coordinated and comprehensive care to a defined population and the members of the families there in a patient-centered manner.
d. Perform a three-stage assessment of the patient taking into account the clinical, individual and contextual aspects of diagnosis
e. Provide leadership to the primary care team involving health workers and other stakeholders in the community and the hospital.
f. Communicate effectively with patients, family members, colleagues, and other health care team members, including other specialists and allied health professionals
g. Management of common emergencies in family practice
h. Apply the principles of behavioral science in family practice
i. Develop skills of being a lifelong learner and practice self-directed learning
j. Implement National health programs

k. Develop skills for teaching health workers, medical students, and postgraduate trainees
l. Identify research topics relevant to Family Medicine and conduct research that is ethical and valid.

m. Demonstrate professionalism and ethical integrity in the practice of medicine

**Seminars: Selected** topics from the syllabus

**Academic Activities:**

a. Conduct a collaborative consultation
b. Do a full three-stage assessment
c. Demonstrate lively (active) listening
d. Consult in a patient-centered manner
e. Demonstrate competent facilitation skills in a consultation
f. Conduct a family conference
g. Draw an extended genogram
h. Facilitate a patient's drawing of his/her family circle
i. Draw an eco-map of the patient's family
j. Do a family APGAR
k. Conduct a family conference
l. Do a home visit
m. Make a family diagnosis
n. Do family therapy
o. Draw up a family profile
p. Do a basic (limited) defined community assessment
q. Make a primary (limited) defined community diagnosis
r. Attend a village health committee meeting or/and activity
s. Attend a community meeting
t. Environment Health, Nutrition, Disaster management
u. Health promotion & Wellness
v. Community Oriented Primary Care Principles

**MODULE 2 FAMILY MEDICINE - CLINICAL ROTATION IN THE DEPARTMENT OF GENERAL MEDICINE AND ALLIED SPECIALTIES**

**Duration: Nine months**

The duration of the posting will be nine months further divided, as shown below.

General Medicine 6 months
Infectious diseases 15 days
Psychiatry 15 days
Dermatology 1 month
Pulmonary medicine one month

If the pulmonary medicine department is not functioning in the center, then the one month will be added to the general medicine, with learning focused on topics relevant for pulmonary medicine. Psychiatry and dermatology may be covered on an outpatient basis.

**Goals:**

A rotation in general medicine / internal medicine provides the family medicine trainees with learning opportunities to get exposure to a reasonable patient workload to achieve competency in diagnosis, management, and treatment of health problems across the adult and geriatric population.

**Broad objectives:**

The broad objective of training in General Medicine in the postgraduate Family Medicine curriculum is to produce competent generalist clinicians.

a. Early identification of risk factors of diseases and take steps to modify them.
b. Diagnose and manage the majority of the conditions in the primary and in a community health center
c. To identify red flags and facilitate an early referral.

**The setting of Training Site:**

Outpatient care
Inpatient care / Department wards
Emergency
Intensive care

**Teaching Program General Principles**

Out of the nine months in medicine, three months of the rotation are in allied specialties is essential (pulmonology/infectious disease, dermatology, and psychiatry). These rotations are crucial for family physicians posted at P.H.C.'s and C.H.C.'s, where they will be the first level of contact for all ailments. The residents and trainers to be aware of the topics that need to be covered selected from the syllabus. The term "health" should be used as in "cardiovascular health" to reiterate that the focus on family medicine is on Wellness and keeping people healthy. Being a postgraduate course, most of the learning needs to be self-directed and through case-based discussions. Broader and in-depth discussions can happen through the seminar topics that have been suggested for each week. During the postings, there shall be proper training in basic medical sciences, applied aspects of the subject, and allied subjects related to the disciplines concerned with emphasis on clinical and basic medical sciences, preventive and social aspects, and emergency care facilities.

**Clinical Duties, Roles and Responsibilities:**
All candidates joining the D.N.B. training program shall work as full-time residents during the period of training, attending not less than 80 percent of the training, and given full-time responsibility, assignments, and participation in all facets of the educational process.

**O.P.D.:**
History taking, general examination, workup of all cases, monitor height and weight, symptom review, follow up patients, planning management strategies, and referring the same to the consultants only when indicated—documentation in O.P.D. Card.

**Inpatient:**
Pre rounds, emergency management, Charting the case sheets, daily follow up of patients, sending
investigations, evening rounds and reviewing investigation results, writing the discharge cards, Advising as needed.

**Emergency & I.C.U.:**
Exposure in emergency and I.C.U. is necessary for exposure to the levels of illnesses for various systems of thebody

**Dermatology:**
Outpatient only

**Psychiatry:**
Outpatient

**Pulmonology:**
Outpatient
Inpatient

Procedural / Surgical Skill
**General Medicine:**

a. Consultation with a patient with Chest pain, Cough, Abdominal Pain, Headache, neurological problems, and fever
b. Counseling on lifestyle modification, use of inhalers, Smoking cessation, peak flow meter use, use of insulin and glucometer usage

c. E.C.G. interpretation
d. Interpretation of Chest and Abdominal Xray's
e. Spirometry interpretation
f. Assessment & Management Skills
g. Cardiovascular risk assessment
h. Follow up post-acute interventions including drug management
i. Peak flow meter
j. Recognition, assessment, and management of all medical problems listed under the knowledge component

**Procedural skills:**

a. IV access
b. Cardiopulmonary resuscitation: adults and children*

c. Defibrillator
d. Basic life support and advanced cardiac life support, stabilization and referral*
e. Nebulization therapy
f. Chest tube insertion
g. Pleural tap
h. Ascitic tap
i. Lumbar Puncture
j. Bladder catheterization

**Dermatology:**
a. Intra-lesion injections
b. Skin biopsy
c. Skin smear
d. Exposure to electrocautery / Cryo / chemical Cautery
e. Skin scraping

**Mental Health:**
a. Consulting a patient with medically unexplained symptoms, suicidal thoughts, depression, anxiety, psychosis
b. Dealing with an angry patient
c. Motivational interviewing
d. Brief behavior changes counseling (BBCC)
e. Assessment & Management Skills
f. Alcohol abuse screening tool (e.g., CAGE, AUDIT, etc.)
g. Dementia screening tool (E.g. MMSE)
h. Depression and anxiety screening tool (E.g. P.H.Q. 9 or HADS)
i. Basic counseling skills
j. Recognition, assessment, management and appropriate referral patients with all the patients with mental health issues listed under the knowledge component (depression, anxiety, psychosis, Etc.)
k. Assessment of suicide risk
l. Diagnosis, detoxification, and team-based management of patients with substance abuse Assessment of Schizophrenia to provide shared care

**Care of the Elderly:**

a. Communication and approach towards an elderly patient
b. Assessment & Management Skills
c. Comprehensive geriatric assessment
d. Mini-mental status assessment
e. Assessment for risk of falls
f. Assessment and management of depression in the elderly
g. Recognition and management of an agitated elderly patient
h. Recognition & management of common conditions in elderly like delirium, dementia, falls, incontinence
i. A.D.L. scoring
j. Comprehensive Geriatric Assessment

**Pain and Palliative Care:**

a. Communication skills and approach to deal with a terminally ill patient
b. Breaking Bad News
c. Counseling on lifestyle, exercise, diet
d. Counseling on palliative care to patients with long-standing diabetes with comorbidities,

COPD, Stroke, HIV/AIDS, Etc

e. Pain Scoring
f. Pain Management using WHO pain ladder
g. End of life care
h. Provision of Home-based care
i. Provision of coordinated care (with allied health)
j. Provision of stroke, cardiovascular, trauma and muscular-skeletal rehabilitation

**Seminars and Journal Club**

a. The postgraduate trainees should actively participate in departmental seminars and journal reviews. Seminars should be conducted once weekly, and the common topics should be discussed in a family medicine perspective chaired by a faculty/lecturer.

b. A record showing the involvement of the trainee in the form of a logbook shall be maintained Journal review meetings may be conducted alternately once in every 15 days.

c. Being a postgraduate course, most of the learning needs to be self-directed and through case-based discussions. Broader and in-depth discussions can happen through the seminar topics that have been suggested for each week. The last four weeks have been left out purposefully so that topics that have been missed or not covered can be learned.
d. Introduction to the course, responsibilities of the resident and foundations of clinical medicin
e. Orientation to Family Medicine and the three-year training: Lecture
f. Refreshing basics of history taking, physical examination, and investigations- CBD
g. Screening, early identification and appropriate management of non-communicable diseases (CBD)
h. Height and weight monitoring, waist-hip ratio and implementing lifestyle modification (semina led by resident)
i. The biopsychosocial model of medicine

**MODULE 3 FAMILY MEDICINE - CLINICAL ROTATION IN THE DEPARTMENT OF OBSTETRICS AND GYNECOLOGY**

**Duration – Six months**

**Goals:**

The goal of including Obstetrics & Gynecology rotation in D.N.B. Family Medicine is to produce a community-based Family Medicine Specialist n who:

a. Provides comprehensive health care with a life cycle approach to the health needs of women
b. Recognizes the healthcare needs of adolescents, females in the reproductive age group, and post-menopausal females
c. It is competent to manage the pathological states related to the reproductive system with knowledge of anatomy, physiology, pharmacology, and pathophysiology.
d. Is aware of contemporary advances & developments in the field of maternal health & other related issues.
e. Has acquired skills in educating medical and paramedical professionals.

**Objectives:**

The Obstetrics & Gynecology rotation will equip the resident in Family Medicine to:

a. Gain experience in EmOC (Emergency Obstetrical Care) and LSAS – Life-Saving Anesthesia Skills for safe maternity and newborn care.

b. Provide quality maternal care in the diagnosis and management of Antenatal, Intra-natal &post-natal periods of a healthy pregnancy.

c. Provide effective & adequate care to the obstetrical and early neonatal emergencies.

d. Provide counseling & knowledge regarding family planning methods & advice regarding medical termination of pregnancy.

e. Organize & implement maternal components in the "National Health Programs."

f. Acquire skills in Management of Normal pregnancy during Antenatal, Intra-natal & Postnat period. Procure adequate knowledge of Gynecological Endocrinology & Infertility.

g. Recognize benign & malignant Gynaecological disorders and refer appropriately.

h. Describe the significance of various laboratory investigations & other diagnostic modalities in Obstetrics &Gynaecology.

i. Describe the essentials of Paediatric& Adolescent Gynaecology.

j. Demonstrate knowledge of S.T.D.'s, AIDS & Government of India perspective on women's health-related issues.

k. Demonstrate knowledge of medico-legal aspects in Obstetrics &Gynecology.

l. Demonstrate empathy & humane approach towards patients and their families.

m. Function as a productive member of a team engaged in health care, research &education.

n. Diagnose and manage most of the conditions in O.B.G. presenting in a family medicine setting, based on clinical assessment, and appropriately selected and conducted investigations.

**Teaching Learning Methods:**

a. All candidates joining the D.N.B. training program shall work as full-time residents during th training period, attending not less than 80 percent of the training, and given full-time responsibility, assignments, and participation in all facets of the educational process.

b. The training programs shall be updated as and when required. The structured training program shall be written up and strictly followed, to enable the examiners to determine the training undergone by the candidates and the national board inspectors to assess the sam at the time of inspection.

c. During the postings, there shall be proper training in basic medical sciences, in applied

aspects of the subject, and in allied subjects related to the disciplines concerned with emphasis on both clinical and basic medical sciences, preventive and social aspects, and emergency care facilities.

d. The trainee shall be required to participate in the teaching and training program of undergraduate students and interns.

**Seminars & Journal Review Meeting:**

Postgraduate students should actively participate in departmental seminars and journal reviews. A record showing the involvement of the student in the form of a diary shall be maintained. Seminars & Journal review meetings may be conducted alternately once every 15 days.

**General Principle:**

Learning in the postgraduate program is essentially self-directed and primarily emanating from clinical and academic work. The formal sessions are meant to supplement this core effort.

**Teaching Session:**
Once in 2 weeks

a. Clinical case discussions
b. Bedside discussions
c. Teaching rounds
d. Seminars / Journal Club
e. Mortality meetings

**Teaching Schedule:**

a. Seminar/Symposium: Once a week
b. P.G. case discussion/Bedside teaching: Twice a week

**Duties, Roles, and Responsibilities:**

a. **O.P.D.**
History taking, general examination, gynecological examination, workup of cases, planning management strategies, and presenting the same to the consultants... Documentation in O.P.D. Card, completion, and maintenance of registers.

b. **Minor procedure**
Aseptic Dressings / Stitch removal / Pap smear collection / Naked-eye visual inspection of the uterine cervix, after application of 5% acetic acid (VIA) and/or of Lugol's iodine (VILI)

c. **Family planning**
Counseling for contraception / Sterilization / IUCD insertion / Removal.

d. **Inpatient**
Pre rounds, emergency management, Charting the case sheets, sending investigations, writing the discharge cards, daily/ more frequent monitoring of patients as appropriate, pre- and post-operative evaluation and care and procedures as required, e.g., stitch removal, I&D, etc. History and workup of all Gynecology cases, the examination of al patients, sending investigations, and filling forms. Preoperative assessment and preparatio of all patients before surgery

e. **Labour Room/ Labour Room Recovery**

- History & workup of all cases. Examination of all patients and documentation in the files
- Sending investigations & filing investigation forms.
- Performing N.S.T., Maintaining partogram in laboring patients.
- Monitoring vitals, uterine contractions and fetal heart rate in laboring patients conducting deliveries,
- Episiotomy stitching and neonatal resuscitation
- Monitoring the 4th stage of labor
- I/V Line insertion, Ryle's Tube insertion, Catheterization, preparation of oxytocin drip,
- Completion of files
- Preparation of discharge summary
- Care of postpartum patients
- Advise to postpartum patients regarding breastfeeding, immunization of baby &contraceptive advice to mothers.
- Aseptic dressing, suture removal
- Care package according to the Basic EmOC
- Care package according to Comprehensive EmOC

f. **Investigations in Obstetrics and Gynecology**

- CBC, URE, TFT
- Discharge P/V- wet smear/cultures.
- Investigation in polycystic ovarian syndrome.
- Screening methods in gynecological malignancies.

g. **Family Planning**

- Postpartum sterilization
- MTP procedure
- Contraception- counseling, and methods

**Rotational Duties:**

Each resident is rotated in the general wards of each unit, Labor room, Family Planning, and other postings as follows if the training is in the same institution for three years. If the six months are continuous as an O.B.G. module in a separate hospital, then these stages will be over the six months of rotation.

Suggested rotation and clinical experience as below:

a. 1st years- acquiring theoretical knowledge in O.B.G., observer ship, and assistance of practical O.B.G. (One-month labor room (observation). 15 days in O.P. 15 days in the ward and Minor O.T) 2nd yrs. - Practical training under supervision. One-month labor room (50 assisted deliveries). 15 days in O.P. 15 days in Family planning)

b. 3rd years-Performing under supervision. One-month labor room (50 performed deliveries). One week inward, one week in outreach camps, 15 days in Family Planning)

c. During family planning rotation the resident should perform postpartum sterilization procedure- 10 (5 assisted and five performed) and MTP procedure-10 (5 assisted and five

performed)

d. Emphasis should be self-directed learning, group discussions, case presentations& practic hands-on learning.

e. Trainees should be trained about proper history taking, clinical examination, advising relevant investigations their Interpretations, and instituting medical-surgical management b posting the candidates in O.P.D., wards, labor room, family planning clinics & other departments. The candidates must be trained to manage all emergencies seen frequently.

**Prescribed/ Recommended textbooks for each subject**

**Obstetrics:**

a. Williams Obstetrics
b. Dewhurst's Textbook of Obstetrics and Gynecology.
c. Ian Donald's Practical Obstetric Problems
d. Clinical Obstetrics – by Mudaliar

**Gynecology:**

a. William's gynecology
b. Shaw's Textbook of Gynecology

**Journal:**

a. Indian Journal of Obstetrics & Gynecology
b. British Journal of Obstetrics &Gynecology
c. American Journal of Obst. & Gynae

**Examination:**

a. First-year- formative assessment- OSCE
b. The second-year- - formative assessment- case discussion.
c. The third-year- - formative assessment- case discussion.

**Suggested Procedures:**

Clinical examination of antenatal, intrapartum, and postpartum cases, including palpation and eliciting various clinical signs

**P/S examination, P/V examination**

a. Venipuncture
b. Amniotomy
c. Conduct of normal Vaginal delivery
d. Episiotomy
e. Management of Genital tract injuries
f. Inspection Cervix
g. Management of shock and postpartum collapse
h. Prevention and Management of Postpartum hemorrhage
i. Nonstress Test
j. Infection control measures and waste management

k. Rationale uses of antibiotics
l. Pap Smear
m. Wet smear examination
n. Incision & drainage
o. FNAC

**Family Planning**

a. Intra-Uterine Contraception Device Insertion / removal
b. Female sterilization (Post-Partum & Interval)
c. Hormonal contracepti

**EmOC Training**

Emergency Obstetric Care and initiative of FOGSI and GOI MOHFW should be integrated with the clinical ration in O.B.G. wherever feasible. Those trainees who pursue the training of EmOC may like to utilize an additional two months from the electives

**MODULE 4 CLINICAL ROTATION IN THE DEPARTMENT OF PEDIATRICS**

**Duration 6 months**

**Goals:**
A rotation in Pediatrics provides the family medicine trainee with learning opportunities to achieve basic competency in diagnosis, management, and treatment of health problems encountered from infancy through adolescence through supervised evaluation and management pediatric patients.

**Objectives:**
After completing this module, the family medicine resident should be well versed in pediatric history taking and examination, recognize and treat common pediatric problems, recognize sick infants and children and stabilize them before referral, and treat common pediatric emergencies.

**Practice Setting**

a. O.P.D.
b. Inpatient
c. Immunization
d. Health camps
e. Emergency room
f. Nursery
g. Pediatric I.C.U.

**Posting Schedule**

Out of the six months allotted for pediatrics, three months could be in the first year, two months in the second year, and one month in the third year. All the six months could also be together if the module is to be carried out at a different hospital. The curriculum is vast, and it may not be easy to gain expertise in all fields, so stress should be laid on common problems that family physicians should be able to manage on their own.

**Teaching Program – General Principles:**

a. As part of their rotation, their responsibilities would include seeing pediatric outpatients, caring for pediatric inpatients, and attending deliveries in the labor room where they gain skills in neonatal resuscitation, providing essential newborn care, and recognizing and stabilizing a sick newborn.

b. Out of the six months in pediatrics, one month should be in neonatology. This rotation is crucial for family physicians posted at P.H.C.'s and C.H.C.'s. They will be the first level of contact for babies delivered at these facilities or newborns brought from home with problems. 2 weeks should be spent in a pediatric I.C.U, where they learn how to evaluate and manage sick children.

c. Out of the modules enumerated for each week, there could be a faculty lecture/ faculty moderated student seminar on a selected topic at least once a week, marked SEMINAR/LECTURE below. There should also be a formal case presentation every week where the residents hone the skills of history taking, examination, making differential diagnoses and planning investigations, and line of management in a rational manner. Topi to be covered using these case-based discussions are marked CBD below. Other topics should be covered by self-study and informal discussions during rounds and O.P.D.'s, expecting an average of five cases to be discussed among inpatients and outpatients each

**Clinical Duties, Roles and Responsibilities:**

All candidates joining the D.N.B. training program shall work as full-time residents during the period of training, attending not less than 80 percent of the training, and given full-time responsibility, assignments, and participation in all facets of the educational process.

**O.P.D.:**

History taking, general examination, workup of all cases, monitor height and weight, symptom review, follows up patients, planning management strategies, and referring the same to the consultants only when indicated—documentation in O.P.D. Card.

**Inpatient** rounds, emergency management, Charting the case sheets, daily follow up of patients, sending investigations, evening rounds, and reviewing investigation results, writing the discharge cards, giving advice as needed.

**Emergency & I.C.U.:**
Exposure in emergency & I.C.U. is necessary for exposure to the illnesses levels for various systems of the body.

**Skills & Procedures:**

a. Consultation with a mother of a child who is sick
b. Counseling a mother on Immunisation, use of inhalers using a spacer, weaning diet
c. Counseling an adolescent
d. Health Education for adolescent - hygiene, diet, exercise, sexual health, road safety, regarding abuse and legal rights,
e. Newborn examination
f. Examination of a child
g. HEADS assessment of adolescent
h. APGAR scoring
i. IMNCI Assessments and Management

j. Developmental Assessment
k. Anthropometry
l. Assessment of nutritional status & Management of the malnourished child including preparation of diet sheet
m. Assessment of Child Abuse
n. Calculate dosage of appropriate antibiotics according to the available concentration of medicines
o. Calculate fluid requirements of the child in various types of shock
p. Identifying abuse and legal rights

**Procedural Skills:**

a. Neonatal Resuscitation, NALS
b. Gain experience in EmOC (Emergency Obstetrical Care) and LSAS – Life-Saving Anesthesi Skills for safe maternity and newborn care
c. Intravenous, intramuscular, intradermal injections
d. Peritoneal aspiration
e. Pleural aspiration
f. Nasogastric intubation and lavage
g. Urinary bladder catheterization
h. Bag and mask ventilation
i. Intraosseous infusion
j. Lumbar puncture
k. Minor surgical procedures like I&D, suturing, wound debridement
l. Growth Chart for growth monitoring
m. Mantoux test interpretation
n. Developmental screening -T.D.S.
o. Interpretation of chest x-ray, ultra-sonogram, lab investigations

**Seminars and Case Presentations:**

Out of the modules enumerated for each week, there could be a faculty lecture/ faculty moderated trainee seminar on a selected topic at least once a week. There should also be a formal case presentation every week where the residents hone the skills of history taking, examination, making differential diagnoses and planning investigations, and line of management in a rational manner. Topics to be covered using these case-based discussions should be identified. Other topics should be covered by self-study and informal discussions during rounds and O.P.D.'s, expecting an average of five cases to be discussed among inpatients and outpatients each.

**MODULE 5 CLINICAL ROTATION IN THE DEPARTMENT OF GENERAL SURGERY AND ALLIED SPECIALTIES**
**(SURGERY, E.N.T., OPHTHALMOLOGY, ORTHOPEDICS AND ANESTHESIA MODULE)**

**General Surgery rotation**

**Duration**
Three months

**Goals:**

A rotation in general surgery provides the family medicine trainees with learning opportunities to achieve basic competency in diagnosis, management, and treatment of health problems

encountered through supervised evaluation and management of general surgery patients.

**Objectives:**

At the end of the surgical rotation, the resident should be able to:

a. Develop the knowledge needed to take an accurate and relevant surgical history, perform a physical examination, make a provisional diagnosis and commence a management plan for problems requiring surgical intervention in the Family Medicine setting which would be a 30 bedded Community Health Centre
b. Demonstrate knowledge in the pre- and post-operative management of common surgical conditions and associated complications.
c. Develop the clinical skills required to competently diagnose, investigate, refer appropriately, an manage common surgical conditions in Family Practice.
d. Gain experience in EmOC (Emergency Obstetrical Care) and LSAS – Life-Saving Anesthesia Skills for safe maternity and newborn care

**Practice setting:**

a. OP.D.
b. Inpatient
c. Minor OT
d. O.T.
e. Surgical I.C.U.

**Common surgical skills and procedures: At the end of the rotation, the student will be able to perform the following procedures independently/ assist:**

Local wound infiltration with anesthetic:

a. Suturing lacerations
b. Incision and drainage of abscesses
c. Debridement of diabetic foot/Ray amputation
d. Circumcision-
e. Drainage of perianal abscess
f. Removal of superficial foreign bodies, e.g., splinters
g. Correct application of dressings and bandages
h. Burns dressings- plastics
i. Proctoscopy/Sigmoidoscopy
j. Avulsion of toenail
k. Removal of simple benign tumors/cysts such as sebaceous cyst, lipoma
l. Hydrocelectomy
m. Lymph node biopsy
n. Fine needle aspiration cytology
o. Urethral Catheterization

**Teaching - Learning Methods:**

a. The resident will be rotated in the relevant clinical duties of the unit, which include outpatient inpatient, emergency calls, main and minor theater.

b. The residents are expected to have the knowledge, attitude, and skills to appropriately manage persons present in the Family Medicine setting with the common Surgical Condition listed below.

**A suggested list of topics for seminar and case discussions:**

a. Abscess, hematoma, and cellulitis
b. Abdominal mass
c. Altered bowel habits
d. Breast infection
e. Breast pain and lumps
f. Burns
g. Intermittent claudication
h. Foreign bodies
i. G.I.T. bleeding
j. In-growing toenails
k. Leg ulcers
l. Lumps in the groin
m. Lumps in the neck
n. Perianal conditions
o. Peripheral vascular disease
p. Pilonidal abscess/sinus
q. Prostate disease
r. Rectal bleeding
s. Renal pain
t. Scrotal swellings/pain
u. Urinary tract obstruction
v. Voiding difficulties
w. Wounds - simple and complex infections in specific diabetic wounds

**E.N.T. Rotation (Continuation of module 5)**

**Duration: 15 days**

**Goals:**

It is only to lay a foundation for common E.N.T. problems, and the learning will continue in other rotations also, especially in the periphery.

**Objectives:**

At the end of the rotation in E.N.T. department, the family medicine resident should be able to

a. Diagnose and manage common ear, nose, and related throat disorders that present in Fami Practice.
b. Perform common procedures relevant to family practice.
c. Identify the patients who present with urgent intervention by a specialist E.N.T. surgeon and refer appropriately

**Practice setting:**

a. O.P.D.
b. Emergency Room

**Common problems for seminars and case discussions:**

a. Acute upper respiratory infection
b. Acute and chronic (safe and unsafe) otitis media
c. Mastoiditis

d. Vertigo – evaluation, management and appropriate referral
e. Otitis externa
f. Fungal infections of the ear
g. Bell's palsy – diagnosis, evaluation, and management
h. Sinusitis – Acute and chronic
i. Tonsillitis – acute and chronic
j. Adenoiditis – acute and chronic
k. Quinsy
l. Hearing loss – assessment
m. Tinnitus – assessment
n. Nasal polyps
o. Allergic rhinitis
p. Atrophic rhinitis
q. Deviated nasal septum
r. Epistaxis
s. Hoarseness of voice
t. Dysphagia
u. Post tracheostomy care
v. Lumps in head & neck – differential diagnosis and evaluation

**Procedures and Skills:**

**At the end of the rotation, the student will be able to perform the following procedures independently or with assistance:**

a. Examination of the Ear, Nose, and Throat
b. Hearing tests – Rinne's and Weber's
c. Use of the nasal speculum, E.N.T. mirror, otoscope, and the indirect laryngoscope
d. Removal of wax for the ear
e. Removal of foreign bodies for the ear and the nose
f. Anterior nasal packing
g. Interpretation of audiometry
h. Early management of epistaxis
i. Ear lobe repair

**Ophthalmology Rotation (Continuation of module 5)**

**Duration: 15 days**

**Goals and objectives:**

At the end of the 15 days rotation in the ophthalmology department, the resident should be able to

a. Diagnose and manage common eye-related disorders that present in Family Practice.
b. Perform common procedures in ophthalmology relevant to family practice.
c. Identify the patients who present with urgent intervention by a specialist ophthalmologist and refer appropriately.

**Family Medicine Clinical Expert:**

a. Diagnose and manage common conditions (see topics below) with a patient-centered approach
b. Choose appropriate treatment and follow up plan for the common problems.

**Common Eye Problems for case discussion:**

a. Redeye (Conjunctivitis, Corneal ulcers, and Uveitis)
b. Corneal Abrasions
c. Xerophthalmia
d. Lid disorders, Chalazion
e. Phlycten
f. Pterygium
g. Episcleritis
h. Scleritis
i. Bitot's spots
j. Cataract
k. Acute glaucoma
l. Refractory error, Colorblindness
m. Foreign body in the eye
n. Panophthalmitis
o. Retinal Detachment
p. Sudden visual loss and progressive visual loss

**Practice Setting:**

a. O.P.D.
b. Emergency room

**Procedures: At the end of the rotation, the student will perform the following procedures independently or with assistance:**

a. Checking vision with the use of Snellen's chart and use of pinhole
b. Clinical examination of the eye
c. Digital tonometry
d. Fundoscopy
e. Confrontation fields
f. Flashlight test to assess anterior chamber depth
g. Pupil examination
h. Foreign body removal from lid, conjunctiva, and cornea using a bud
i. Irrigation of eye
j. Triage patient in c
k. Casualt

**Orthopedics rotation (Continuation of module 5)**

**Duration 15 days**

**Goals and objectives:**

The D.N.B. Family Medicine resident will be posted in the Orthopedics department for one month. At the end of the one-month rotation in Orthopedics', the resident will be able to:

a. Diagnose and manage common bone and joint conditions (see common topics) that present in Family Practice with complete musculoskeletal history and physical examination
b. Provide continuity of care and follow-up for patients with chronic joint problems.
c. Perform common procedures relevant to family practice.
d. Identify the patients who need a referral to specialist attention and refer appropriately.

**Practice setting:**

a. O.P.D.
b. Emergency room
c. Inpatient
d. Pre-Op and Post Op care

**Procedures: At the end of the rotation, the trainee will be able to perform the following procedures independently/ assist:**

a. Detailed musculoskeletal examination
b. Reduction of Colle's fracture
c. Management of fracture clavicle
d. Application of P.O.P. slab and cast on appropriate patients
e. Aspiration of knee joint
f. Injection of the knee, the plantar fascia
g. Management of dislocated shoulder in family practice
h. Health education of patients with mechanical backache and other musculoskeletal pain syndromes

**Teaching Learning Methods:**

The resident will be posted in all the unit orthopedic clinics from Monday to Saturday. On one day a week, the resident will accompany the Consultant to the Chittoor Orthopedic clinic. The learning will be in the outpatient area. The procedures will be in the outpatient procedure room.

**The residents are expected to have the knowledge, attitude, and skills to appropriately manage persons who present in the Family Medicine setting with the common Musculoskeletal Conditions listed below.**

a. Acute and chronic backache
b. Acute and chronic neck pain
c. Indications and interpretation of plain x-ray, ultrasound, C.T., and M.R.I. scans in orthopedics
d. Shoulder pain
e. Knee pain, including injuries to ligaments and meniscus.
f. Foot and ankle pain
g. Osteoarthritis
h. Acute arthritis
i. Fractures: principles of management
j. Colle's fracture
k. Diagnosis and management of septic arthritis and osteomyelitis
l. Tuberculosis of the bone
m. Diagnosis of tumors of the bone

n. Arthroscopy: clinical indications
o. Talipesequinovarus -Diagnosis and initial management
p. Tennis elbow
q. Plantar fasciitis
r. Tenosynovitis
s. Carpal tunnel syndrome
t. Shoulder dislocation

**Anesthesia Rotation (continuation of module 5)**

**Duration – One month**

**Goals and Objectives:**

**At the end of the posting, the student will be able to perform the following skills under supervision:**

a. Provide pre-anesthetic counsel to patients, relatives, and obtain informed consent.
b. Communicate effectively with patients, especially with frightened and uncooperative adults and children
c. Describe the preoperative medications in anesthesia
d. Manage airway
e. Demonstrate venipuncture techniques and maintain intravenous access.
f. Administer Ketamine anesthesia.
g. Describe the use of the equipment needed in anesthesia.
h. Administer local and topical anesthesia
i. Perform commonly used nerve blocks.
j. Provide post-anesthesia care.

**The trainee should also have acquired knowledge about the following conditions/clinical problems through self-reading, observation, or discussion.**

a. Pharmacology of drugs in anesthesia:

- Physiological response to anesthetic drugs.
- Principles of drug interactions in anesthesia: between anesthetics and drugs used in the treatment of disease
- Modification of existing drug therapy for anesthesia and surgery

b. Pre-existing diseases and anesthesia:

- Local and general effects of common medical diseases on anesthesia
- Effect of anesthesia on pre-existing diseases.

c. Pre-anesthetic work up patient / preoperative assessment of patients.
d. Methods, drugs, and complications of subarachnoid anesthesia
e. Administration of appropriate IV fluids during surgeries
f. Ventilators:

- Principles of and indications for respiratory support and mechanical ventilation
- Complications of mechanical ventilation.

g. Primary **exposure to following procedures**

- Local Anesthesia
- Regional anesthesia including field, digital, ankle, wrist and penile block
- Intravenous sedation
- Spinal anesthesia
- Ketamine Anesthesia
- Endotracheal intubation.
- Use of Bag and mask
- Transfer to higher center after intubation
- Management of difficult airways
- Gain experience in EmOC (Emergency Obstetrical Care) and LSAS – Life-Saving Anesthesia Skills for safe maternity and newborn care It is not a comprehensive list of all the knowledge and skills needed in anesthesia. The trainee has to learn that which he/she will use in their future area of practice, including the 24 weeks training in Life Saving Anesthesia Skills.

h. LSAS – **Life-Saving Anesthesia Skills Training**

Training in the department of anesthesia should incorporate LSAS as this is a requirement for the medical officers working at C.H.C. or F.R.U.'s – First Referral Units

| **Module 6 Family Medicine - Clinical rotation in the department of emergency and trauma** |
|---|
| **Duration – one month** |
| **Goals:**<br><br>A rotation in emergency and trauma provides the family medicine resident with learning opportunities to achieve basic competency in diagnosis, management, and treatment of health problems encountered across the lifespan through supervised evaluation and management of patients in the trauma setting. |
| **Objectives:**<br><br>At the end of the 1-month rotation in emergency medicine, the resident will be able to demonstrate in the domains of:<br><br>**Knowledge:**<br><br>a. Demonstrate adequate knowledge in the diagnosis and management of the acutely ill patient<br>b. List the instruments, drugs, and facilities needed to set up minimum emergency care services in a general practice setting.<br>c. Identify co-morbid diseases and recognize the increased risk of acute events in patients with chronic diseases.<br>d. Recognize the modifying effect of chronic or co-morbid disease and its treatment on the presentation of acute illness.<br>e. Demonstrate knowledge about the prevention of emergencies. |

**Behavior:**

a. Work effectively as part of a multi-disciplinary team in the emergency management of acutely ill patients.
b. Demonstrate confidence to make decisions and accept the outcomes of those decisions while working within their limitations.
c. Develop excellent listening skills and communicate empathically with patients, relatives, and others in an emergency.
d. Deal sensitively and in line with professional codes of practice with people who may have a serious diagnosis and refuse admission
e. Appreciate the challenges of maintaining continuity of care after an acute illness by making suitable handover and follow up arrangements.
f. Appreciate the needs of the care-takers involved at the time of the acutely ill person's presentation.
g. Be aware of any management conflict that may exist between patients and their relatives and act in the best interests of the patient.
h. Develop a commitment to self-directed learning sufficient to provide high-quality emergency care.

**Skills**

a. Recognize, evaluate and competently manage acutely ill patients
b. Recognize death.
c. Use emergency services appropriately.
d. Be able to decide appropriate referral to a specialist after initial stabilization.
e. Outline the principles of triage and disaster management.
f. Demonstrate acceptable standards of documentation necessary in the emergency care of patients.
g. Gain experience in EmOC (Emergency Obstetrical Care) and LSAS – Life-Saving Anesthes Skills for safe maternity and newborn care

The residents may be required to cover emergency calls as per the resident's work schedule throughout the residency period.

**Setting:**

Emergency and casualty

**Procedures:**

Perform the following procedures independently or with assistance:

a. Emergency intubation
b. Triage in A & E: decision to admit, refer, follow up, or discharge.
c. Bag mask ventilation
d. Heimlich Maneuver
e. Gain peripheral intravenous access
f. Central line placement
g. Defibrillation
h. Gastric lavage
i. Bladder catheterization
j. Intraosseous infusion
k. Limb splinting
l. Fracture reduction – colle's
m. Reduction of dislocations
n. Spinal immobilization
o. Body warming techniques
p. Body cooling techniques
q. Regional nerve blocks
r. Use of physical and chemical restraint
s. Techniques for handling violent/aggressive patients
t. Insertion of nasal pack
u. Removal of nasal/aural foreign bodies
v. Acute subcutaneous abscess - drainage/incision
w. Wound management and repair
x. Suturing and other wound closure techniques
y. Early Management of Severe Trauma
z. Infection control

## X. LOGBOOK

1. A trainee/ resident shall maintain a logbook of operations (assisted/performed) during the training period, certified by the concerned postgraduate teacher / Head of the department / senior consultant.

2. This logbook shall be made available to the board of examiners for evaluation at the time of the final examination.

3. The logbook should show evidence that the before mentioned subjects were covered (with dates and the name of the teacher(s). The candidate will maintain the record of all academic activities undertaken by him/her in the logbook.

   i. Personal Profile of the candidate

   ii. Educational qualification/Professional data

   iii. Record of case histories (Fifteen cases) studied by him/her. (Model should be given in the logbook) Three case histories should be about medical problems, three about Surgical, two Pediatrics, while the rest seven may pertain to other disciplines like Obstetrics and Gynecology, Ophthalmology, E.N.T., Dermatology, Psychiatry, etc.

   iv. Record of Family Profiles – Candidates will maintain the profiles of at least five families in which at least one member of the family has a health problem, eliciting its impact on the family and the role of the family, taking into account their social-cultural and the economic consideration.

   v. Procedures learned – The candidates are expected to learn Medical and Surgical procedures during their advanced training in Family Medicine. The record should depict medical and surgical procedures observed, assisted, and performed during training.

   vi. Record of case Demonstration/Presentations

   vii. Record of participation in E.M.E. activities – Direct contact activities (lectures, seminars, workshops conference); Indirect contact activities (correspondence journals, books, audio-video tapes)

4. At the time of practical examination, every candidate will be required to produce a performance record (log book) containing details of the work done by him/her during the entire period of training as per the logbook requirements. The supervisor should duly certify the work done by the candidate and countersigned by the institution's administrative head

5. In the absence of the production of the logbook, the result will not be declared.

## XI. RECOMMENDED TEXT BOOKS AND JOURNALS

### TEXT BOOK

i. Textbook of Family Medicine, edited by Drs. Robert E. Rakel and David P. Rakel,

ii. John Murtagh's General Practice

iii. Oxford Handbook of General Practice (Oxford Medical Handbooks)

iv. McWhinney's Textbook of Family Medicine

v. Fundamentals of Family Medicine: The Family Medicine Clerkship Textbook - Editor Robert B Taylor

vi. CURRENT Diagnosis & Treatment in Family Medicine- Lange

vii. Family Medicine: Ambulatory Care and Prevention - Lange

viii. Anesthesia at the district hospital / Michael B. Dobson - WHO https://apps.who.int/iris/handle/10665/42193

ix. Surgery at District Hospital http://digicollection.org/hss/documents/s15296e/s15296e.pdf

x. Life Saving Anesthetic Skills for Emergency Obstetric Carehttps://www.jknhm.com/zip/Obstetric_Care_Log_Book_for_Trainers.pdf

xi. CLINICAL TRAINING for REPRODUCTIVE HEALTH in EMERGENCIES - Emergency Obstetrics Care http://www.publichealth.columbia.edu/sites/default/files/pdf/training_emoc_tg_printfr.pdf

xii. TRAINERS' GUIDE for TRAINING of Medical Officers in Pregnancy Care and Management of Common Obstetric Complications http://tripuranrhm.gov.in/Guidlines/Pregnancy_Care.pdf

xiii. WONCA Rural Medical EducationGuidebookhttps://www.globalfamilydoctor.com/site/DefaultSite/filesystem/documents/ruralGuidebook/RMEG.pdf

- How To Do Primary Care Educational Research A Practical Guide Edited ByMehmet Akman, Valerie Wass, Felicity Goodyear-Smith
- Global Primary Mental Health Care Practical Guidance for Family Doctors Edited By Christopher Dowrick
- Primary Health Care around the World Recommendations for International Policy and Development Edited By Chris Van Weel, Amanda Howe
- How To Do Primary Care Research Edited By Felicity Goodyear-Smith, Robert Mash Family Medicine - The Classic Papers Edited By Michael Kidd, Iona Heath, Amanda Howe

- The Contribution of Family Medicine to Improving Health Systems A Guidebook from the World Organization of Family Doctors By Michael Kidd

**LIST OF JOURNAL**

i. Journal of Family Medicine and Primary Care (JFMPC)
https://www.jfmpc.com/

ii. Annal of Family Medicine
https://www.annfammed.org/

iii. African Journal of Primary Health Care and Family Medicine
https://phcfm.org/index.php/phcfm

iv. Canadian Family Physician
https://www.cfp.ca/

v. American Family Physician
https://www.aafp.org/journals/afp.html

vi. Journal of Rural and Remote Health
https://www.rrh.org.au/journal/about_rrh/

vii. European Journal of Rural and Remote Health
https://europa.woncaeurope.org/content/european-journal-rural-and-remote-health

viii. European Journal of General Practice
https://www.tandfonline.com/toc/igen20/current

ix. British Journal of General Practice
https://bjgp.org/

x. The Lancet
https://www.thelancet.com/

xi. British Medical Journal
https://www.bmj.com/

xii. Asia Pacific Journal of Family Medicine
https://apfmj.biomedcentral.com/