UNIVERSITY RESIDENCY PROGRAM -2025 LOG BOOK FOR PLASTIC SURGERY

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI

PREFACE

The horizons of ***Medical Education*** are widening & there has been a steady rise of global interest in *Post Graduate Medical Education*, an increased awareness of the necessity for experience in education skills for all healthcare professionals and the need for some formal recognition of postgraduate training in Plastic Surgery

We are seeing a rise in the uptake of places on postgraduate courses in medical education, more frequent issues of medical education journals and the further development of e-journals and other new online resources. There is therefore a need to provide active support in *Post Graduate Medical Education* for a larger, national group of colleagues in all specialties and at all stages of their personal professional development. If we were to formulate a statement of intent to explain the purpose of this log book, we might simply say that our aim is to help clinical colleagues to teach and to help students to learn in a better and advanced way. This book is a **state-of-the-art**log book with representation of all activities of the **MD/MS Research Elective** program at RMU.A summary of the curriculum is incorporated in the logbook for convenience of supervisors and residents. It also allows the clinicians to gain an understanding of what goes into basic science discoveries and drug development. Translational **research** has an **important role** to play in **surgical research**, and when used alongside basic science will lead to increased knowledge, discovery and treatment in **Plastic Surgery**. A perfect monitoring system of a training program including monitoring of teaching and learning strategies, assessment and Research Activities cannot be denied so we at RMU have incorporated evaluation by ***Quality Assurance Cell*** and its comments in the logbook in addition to evaluation by ***University Training Monitoring Cell (URTMC)***. Reflection of the supervisor in each and every section of the logbook has been made sure to ensure transparency in the training program. **The mission of Rawalpindi Medical University** is to improve the health of the communities and we serve through education, biomedical research and health care. As an integral part of this mission, importance of research culture and establishment of a comprehensive research structure and research curriculum for the residents has been formulated and a separate journal for research publications of residents is available.

PROF. MUHAMMAD UMAR*(S.I, H.I)*

CONTRIBUTORS

Sr NO.	Name And Destination	**Contributions In Formulation Of Log Book & Curriculum**
1	Dr. Husnain Khan Head Of department Associate Professor MBBS, MCPS, MRCS, FCPS, CHPE, MHPE	
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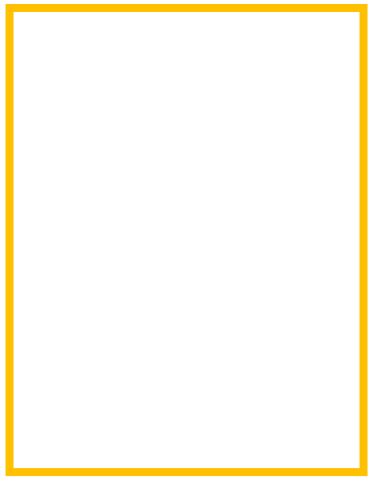
ENROLMENT DETAILS



Program of Admission_____
Session_____

Registration / Training Number _____

Name of Candidate _____

Father's Name _____

Date of Birth _____ / _____ / _____ CNIC No. _____

Present Address _____

Permanent Address _____

E-mail Address _____

Cell Phone _____

Date of Start of Training _____

Date of Completion of Training _____

Name of Supervisor _____

Designation of Supervisor _____
Qualification of Supervisor _____

Title of department / Unit _____

INTRODUCTION

It is a structured book in which certain types of educational activities and patient related information is recorded, usually by hand. Logbooks are used all over the world from undergraduate to postgraduate training, in human, veterinary and dental Surgery, nursing schools and pharmacy, either in paper or electronic format.

Logbooks provide a clear setting of learning objectives and give trainees and clinical teachers a quick overview of the requirements of training and an idea of the learning progress. Logbooks are especially useful if different sites are involved in the training to set a (minimum) standard of training. Logbooks assist supervisors and trainees to see at one glance which learning objectives have not yet been accomplished and to set a learning plan. The analysis of logbooks can reveal weak points of training and can evaluate whether trainees have fulfilled the minimum requirements of training.

Logbooks facilitate communication between the trainee and clinical teacher. Logbooks help to structure and standardize learning in clinical settings. In contrast to portfolios, which focus on students' documentation and self-reflection of their learning activities, logbooks set clear learning objectives and help to structure the learning process in clinical settings and to ease communication between trainee and clinical teacher. To implement logbooks in clinical training successfully, logbooks have to be an integrated part of the curriculum and the daily routine on the ward. Continuous measures of quality management are necessary.

INDEX OF LOG:

1. Morning report presentation/case presentation
2. Topic presentation/seminar
3. Didactic lectures/interactive lectures
4. Journal club
5. Problem case discussion
6. Emergency cases
7. Indoor patients
8. Opd and clinics
9. Procedures (observed, assisted,performed under supervision & performed independently)
10. Multidisciplinary meetings
11. Clinicopathological conference
12. Morbidity/mortality meetings
13. Hands on training/workshops
14. Publications
15. Major research project during ms training/any other major research project
16. Written assesment record
17. Clinical assesment record
18. Evaluation record
19. Leave record
20. Record sheet of attendance/councelling session/documentation quality
21. Any other important and relevant information/details

MINIMUM LOG BOOK ENTERIES PER MONTH IN GENERAL

(This minimum number is being provided for uniformity of the training and convenience for monitoring of the resident's performance by Quality Assurance Cell & University Research Training & Monitoring Cell of RMU but resident is encouraged to show performance above this minimum required number)

SR.NO	ENTRY	Minimum cases /Time duration
01	Case presentation	01 per month
02	Topic presentation	01 per month
03	Journal club	01 per month
04	Bed side teaching	10 per month
05	Large group teaching	06 per month
06	Emergency cases	10 per month
07	OPD	10 per month
08	Indoor (patients allotted)	10 per month plus participation in daily
09	Directly observed procedures	6-10 per month
10	Mortality & Morbidity	02 per month

Mission Statement

2.1 RMU Mission Statement:

To impart evidence based research oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

2.2 Mission Statement of Plastic Surgery:

Rawalian Burn and Reconstructive Surgery Mission Statement

The Plastic Surgery Department is committed to providing exceptional, compassionate care to patients through innovative surgical techniques, cutting-edge research, and comprehensive education. We strive to restore form and function, improve quality of life, and enhance the well-being of individuals by offering the highest standards of aesthetic and reconstructive surgery. Our mission is to train the next generation of plastic surgeons with integrity, professionalism, and a patient-centered approach.

CLINICAL COMPETENCIES FOR 1st, 2nd ,3rd ,4th and 5th YEAR MS TRAINEES PLASTIC SURGERY CLINICAL COMPETENCIES\SKILL\PROCEDURE

Entrustable Professional Activities of Plastic Surgery Residents

EPA is the key to competency level will be allocated by the supervisor on the basis of knowledge skills and attitude of the post graduate trainees

1. **Observer Status**: Not allowed to practice - Clinician in an observer role (EPA-1)
2. **Assistant Status**: Direct active - full supervision by senior clinician, with prompting or verbal and actual guidance and help throughout (EPA-2)
3. **Performed under supervision**: Indirect active - partial supervision by senior clinician, no prompting or help provided, direct line of vision or supervisor immediately available (EPA-3)
4. **Performed independently**: Passive - full entrustment to carry out completely, no direct support provided (EPA-4)

CURRICULUM FOR PLASTIC SURGERY

GOALS

We have designed MS Plastic Surgery program in RMU to provide residents with an educational and training experience that encompasses all aspects of burn and plastic surgery reconstruction care.

Our goals and mission are:

- To provide a foundation in the basic principles of plastic surgery through an organized curriculum
- To provide well rounded clinical experiences that expose the trainee to all aspects of plastic surgery
- To foster confidence and expertise necessary for independent practice in both the academic and community settings
- To provide a balance of education, service, self-teaching/administration and continuity of care
- To provide the tools and skills necessary to become lifelong learners
- To provide the skill set necessary to critically appraise scientific literature and incorporate into practice
- To provide opportunities and experiences in clinical and basic science research

Over View

The Rawalpindi Medical University integrated plastic surgery MS residency program is designed to provide a broad education in general surgery, and specific training in plastic surgery. Our goal is to train independent plastic surgeons who are competent practitioners, who excel and become leaders in their field and communities, and are eligible and qualified to become a Plastic Surgery consultant. Our program is truly an integrated one, with rotations in plastic surgery and fields that fall within the scope of plastic surgery beginning intern year. All rotations during the first three years are chosen in order to provide the best possible foundation on which to build an education in plastic surgery. Residents are trained in all aspects of plastic surgery including thermal injury, reconstructive surgery, microvascular reconstruction, head and neck reconstruction, craniofacial trauma, hand surgery, pediatric plastic surgery, cleft and craniofacial surgery, and aesthetic surgery.

Our training model is that of an apprenticeship: during each rotation, each resident is assigned to one attending and participates in all patient care within that attending's scope of practice. Residents participate in the preoperative, intraoperative and postoperative management of each patient and are encouraged to formulate and execute treatment plans as they progress in training.

Conferences and Education

The Department holds educational conferences on Friday morning at which all residents are present. During this time, the core curriculum is discussed, fractures and interesting cases are reviewed, and a quarterly mortality and morbidity conference is held. Additionally, one Wednesday each month is dedicated to the discussion of hand surgery topics. Both clinical and basic science research is strongly encouraged during the resident's tenure. The department has a full-time adipose stem cell and tissue engineering laboratory, an active wound healing research laboratory as well as a full-time microsurgical laboratory which are available for training and research projects. The department provides full funding for all research projects accepted for presentation at regional or national conference

Rotations Calendar

Plastic Surgery: 6 Months

General Surgery: 12 months

Rotations: 6 Months (02 months each)

Plastic Surgery: 36 months

PROCEDURAL COMPETENCIES

The clinical skills, which a specialist must have, are varied and complex. A complete list of the same procedures necessary for residents and trainers is given below. It is arranged year wise and the level of competence to be achieved each year is arranged as follows:

1. Observer status
2. Assistant status
3. Performed under supervision
4. Performed independently

A resident is expected to attain the laid down level of competence for the following procedures by the end of each year as given below:

PLASTIC SURGERY CURRICULUM

Entrustable Professional Activities of Fundamentals of Plastic Surgery

CLINICAL COMPETENCIES	PGY-1		PGY-3		PGY-4		PGY-5	
	EPA	NO	EPA	NO	EPA	NO	EPA	NO
HISTORY TAKING	1	5	2	10	3	10	4	10
EXAMINATION	1	5	2	10	3	10	4	10
COUNSELLING	1	5	2	10	3	10	4	10
SURGICAL SKILLS	1	5	2	10	3	10	4	10
ASSESSMENT & MANAGEMENT OF TRAUMA PATIENTS	1	5	2	10	3	10	4	10
ASSESSING AND MANAGING BURN PATIENTS	1	5	2	10	3	10	4	10
OPEN WOUND PATIENTS' MANAGEMENT	1	5	2	10	3	10	4	10
WOUND CLOSURE AND MANAGEMENT WITH SKIN GRAFTS	1	10	2	20	3	20	4	20
WOUND HEALING MANAGEMENT	1	10	2	20	3	20	4	20
TUMOR ASSESSMENT, RESECTION & RECONSTRUCTION	1	3	2	5	3	5	4	5
PERFORMING RECONSTRUCTION WITH FLAPS	1	2	2	5	3	5	4	5
FRACTURE FIXATION	1	5	2	10	3	10	4	10
TENDON REPAIR	1	5	2	10	3	10	4	10
NERVE REPAIR	1	2	2	5	3	10	4	10
ASSESSMENT AND MANAGEMENT OF VASCULAR ANOMALIES	1	2	2	5	3	5	4	5
ASSESSMENT AND MANAGEMENT OF CONGENITAL ANOMALIES	1	5	2	10	3	10	4	10
ASSESSMENT AND MANAGEMENT OF AESTHETIC PATIENTS	1	5	2	10	3	10	4	10

Entrustable Professional Activities of(Upper Limb)

CLINICAL COMPETENCIES	PGY-1		PGY-3		PGY-4		PGY-5	
	EPA	NO	EPA	NO	EPA	NO	EPA	NO
HISTORY TAKING	1	5	2	10	3	10	4	10
EXAMINATION	1	5	2	10	3	10	4	10
COUNSELLING	1	5	2	10	3	10	4	10
SURGICAL SKILLS	1	5	2	10	3	10	4	10
ASSESSMENT & MANAGEMENT OF TRAUMA PATIENTS	1	10	2	20	3	20	4	30
HAND FRACTURES FIXTION	1	10	2	20	3	20	4	30
TENDONS REPAIR	1	10	2	20	3	20	4	20
NERVE REPAIR	1	5	2	10	3	10	4	10
VASCULAR REPAIR	1	5	2	10	3	10	4	10
TUMOR ASSESSMENT, RESECTION & RECONSTRUCTION	1	3	2	5	3	10	4	10
RECONSTRUCTION OF OPEN DEFECTS	1	5	2	5	3	10	4	10
RECONSTRUCTION OF TENDONS	1	5	2	10	3	10	4	10
PEDICAL FLAP COVERAGE	1	5	2	10	3	10	4	10
LOCAL/ REGIONAL FLAP COVERAGE	1	2	2	5	3	10	4	10

ASSESSMENT AND MANAGEMENT OF VASCULAR ANOMALIES	1	2	2	5	3	5	4	5
ASSESSMENT AND MANAGEMENT OF CONGENITAL ANOMALIES	1	5	2	10	3	10	4	10
ASSESSMENT AND MANAGEMENT OF BRACHIAL PLEXUS INJURIES	1	5	2	10	3	10	4	10

Entrustable Professional Activities of HEAD AND NECK

CLINICAL COMPETENCIES	PGY-1		PGY-3		PGY-4		PGY-5	
	EPA	NO	EPA	NO	EPA	NO	EPA	NO
HISTORY TAKING	1	5	2	10	3	10	4	10
EXAMINATION	1	5	2	10	3	10	4	10
COUNSELLING	1	5	2	10	3	10	4	10
SURGICAL SKILLS	1	5	2	10	3	10	4	10
ASSESSMENT & MANAGEMENT OF TRAUMA PATIENTS	1	5	2	10	3	10	4	10
ASSESSING AND MANAGING CLEFT LIP & PALATE PATIENTS	1	5	2	10	3	10	4	10
NECK RESURFACING AFTER	1	5	2	10	3	10	4	10

CONTRACTURE RELEASE								
WOUND CLOSURE AND MANAGEMENT WITH SKIN GRAFTS	1	10	2	20	3	20	4	20
RECONSTRUCTION OF MANDIBLE	1	10	2	20	3	20	4	20
TUMOR ASSESSMENT, RESECTION & RECONSTRUCTION	1	3	2	5	3	5	4	5
RECONSTRUCTION OF SCALP AND FOREHEAD	1	2	2	5	3	5	4	5
RECONSTRUCTION OF LIP	1	5	2	10	3	10	4	10
RECONSTRUCTION OF CHEEK	1	5	2	10	3	10	4	10
RECONSTRUCTION OF AURICLE	1	2	2	5	3	10	4	10
ASSESSMENT AND MANAGEMENT OF VASCULAR ANOMALIES	1	2	2	5	3	5	4	5
ASSESSMENT AND MANAGEMENT OF CONGENITAL ANOMALIES	1	5	2	10	3	10	4	10
ASSESSMENT AND MANAGEMENT OF AESTHETIC PATIENTS	1	5	2	10	3	10	4	10
NASAL RECONSTRUCTION	1	3	2	5	3	5	4	5

Entrustable Professional Activities of LOWER LIMB

CLINICAL COMPETENCIES	PGY-1		PGY-3		PGY-4		PGY-5	
	EPA	NO	EPA	NO	EPA	NO	EPA	NO
HISTORY TAKING	1	5	2	10	3	10	4	10
EXAMINATION	1	5	2	10	3	10	4	10
COUNSELLING	1	5	2	10	3	10	4	10
SURGICAL SKILLS	1	5	2	10	3	10	4	10
ASSESSMENT & MANAGEMENT OF TRAUMA PATIENTS	1	5	2	10	3	10	4	10
LOWER LIMB CONTRACTURE RELEASE	1	5	2	10	3	10	4	10
LYMPHEDEMA	1	1	2	1	3	2	4	2
LOWER LIMB TUMOR ASSESSMENT AND RECONSTRUCTION	1	5	2	10	3	10	4	10
LIMB SALVAGE PROCEDURES	1	10	2	10	3	10	4	10
SOFT TISSUE COVERAGE ON EXPOSED BONES AND IMPLANTS WITH LOCAL FLAPS	1	10	2	10	3	10	4	10
SOFT TISSUE COVERAGE ON EXPOSED BONES AND IMPLANTS WITH FREE FLAPS	1	10	2	20	3	20	4	20
GROIN DISSECTION	1	5	2	10	3	10	4	10

Entrustable Professional Activities of AESTHETIC SURGERY

CLINICAL COMPETENCIES	PGY-1		PGY-3		PGY-4		PGY-5	
	EPA	NO	EPA	NO	EPA	NO	EPA	NO
HISTORY TAKING	1	5	2	5	3	10	4	10
EXAMINATION	1	5	2	5	3	10	4	10
COUNSELLING	1	5	2	5	3	10	4	10
SURGICAL SKILLS	1	5	2	5	3	10	4	10
ASSESSMENT & MANAGEMENT OF AESTHETIC PATIENTS	1	5	2	5	3	10	4	10
RHINOPLASTY	1	5	2	5	3	5	4	5
OTOPLASTY	1	5	2	5	3	5	4	5
BLAPHROPLASTY	1	5	2	5	3	5	4	5
BRACHYPLASTY	1	5	2	5	3	5	4	5
FACE LIFT	1	5	2	5	3	5	4	5
BREAST AUGMENTATION / REDUCTION	1	5	2	5	3	5	4	5
LIPOSUCTION	1	5	2	5	3	5	4	5
ABDOMINOPLASTY	1	5	2	5	3	5	4	5
BODYCONTOURING	1	5	2	5	3	5	4	5

02 MONTHS ROTATAION IN ORTHOPAEDIC SURGERY CURRICULUM

Musculoskeletal Anatomy

- Functional anatomy of upper and lower limbs, especially the hand
- Understanding of bone, joint, tendon, ligament, and neurovascular structures

Orthopaedic Pathophysiology

- Fracture healing and nonunion
- Compartment syndrome
- Nerve and tendon injuries
- Osteomyelitis and septic arthritis
- Principles of bone and soft tissue tumors

Imaging Interpretation

- Basic interpretation of X-rays, CT, and MRI for trauma and limb injuries
- Identifying fractures, dislocations, and hardware placements

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2. Skill-Based Competencies

Clinical Examination & Evaluation

- Assessment of limb injuries
- Neurovascular status evaluation
- Functional assessment of the hand and limb

Emergency & Trauma Management

- Initial stabilization and splinting of fractures
- Closed reduction of dislocations (e.g., fingers, shoulder)

- Debridement of open fractures and soft tissue injuries

Surgical Exposure & Techniques

- Assist or observe open reduction and internal fixation (ORIF)
- External fixator application principles
- Management of complex limb injuries needing ortho-plastic approach

Wound and Flap Planning (in collaboration)

- Planning soft tissue coverage post-orthopaedic procedures
- Participating in orthoplastic surgeries (e.g., Gustilo III fractures)

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3. Attitude, Ethics, and Teamwork Competencies

Interdisciplinary Collaboration

- Coordinating care with orthopaedic surgeons for limb salvage
- Understanding timing and planning of combined ortho-plastic procedures

Professionalism and Communication

- Discussing surgical plans and risks with patients
- Respectful and effective communication with ortho team and nurses

Documentation and Follow-up

- Accurate operative and clinical notes
- Follow-up of patients for functional outcomes and complications

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Assessment Tools (as per curriculum guidelines)

- Direct observation (DOPS, Mini-CEX)
- Case-based discussions
- Logbook entries
- Feedback from orthopaedic faculty

02 MONTHS ROTATAION IN DERMATOLOGY CURRICULUM

1. Knowledge-Based Competencies

Skin Anatomy & Physiology

- Layers of the skin, adnexal structures, vasculature
- Wound healing and scarring
- Skin types and Fitzpatrick classification

Common Dermatologic Conditions

- Psoriasis, eczema, lichen planus
- Acne, rosacea, vitiligo
- Urticaria, angioedema, drug reactions

Infectious Dermatology

- Fungal, bacterial, viral, and parasitic infections of the skin
- Leprosy and its plastic surgical relevance (e.g., hand deformities)

Skin Tumors

- Benign: nevi, lipoma, dermatofibroma
- Malignant: BCC, SCC, melanoma
- Premalignant lesions: actinic keratosis, Bowen's disease

Pigmentary and Vascular Disorders

- Melasma, vitiligo, café-au-lait spots
- Hemangiomas and vascular malformations (relevant to surgical planning)

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2. Skill-Based Competencies

Clinical Examination

- Description of skin lesions (morphology, configuration, distribution)
- Dermatoscopy basics
- Recognizing cutaneous signs of systemic illness

Diagnostic Procedures

- Skin biopsy techniques (punch, shave, excision)
- KOH mount, Tzanck smear, slit skin smear
- Histopathology interpretation with pathologist collaboration

Medical Management

- Topical therapy principles (corticosteroids, immunomodulators)
- Systemic drugs: antihistamines, antibiotics, immunosuppressants
- Phototherapy basics

Cosmetic Dermatology (Introductory)

- Chemical peels, microneedling, PRP
- Use of botulinum toxin and fillers (observational or hands-on)
- Lasers: CO_2, Nd:YAG – indications and precautions

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3. Attitude, Ethics, and Communication

Patient Counseling

- Educating patients about chronic dermatoses
- Post-op skin care and sun protection counseling

Interdepartmental Collaboration

- Coordinating with dermatologists for combined cases (e.g., dermatosurgery)
- Joint planning for skin cancer management

Professionalism

- Respect for dermatological confidentiality and sensitivity
- Documentation and follow-up of chronic cases

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4. Academic Activities

- Case presentations and clinical discussions
- Dermatopathology sessions
- Attending dermatosurgery or cosmetic dermatology clinics
- Literature review on relevant dermato-surgical topics

Assessment Methods

- Mini-CEX, DOPS
- Logbook of observed/performed procedures
- Feedback from dermatology faculty

02 MONTHS ROTATAION IN SIRGICAL ICU CURRICULUM

1. Knowledge-Based Competencies

Critical Care Principles

- Indications for ICU admission and triage
- Pathophysiology of shock, sepsis, SIRS, ARDS
- Principles of mechanical ventilation and weaning
- Hemodynamic monitoring: invasive and non-invasive

Organ System Management

- Respiratory failure: types and ventilatory strategies
- Cardiovascular instability: shock types and resuscitation
- Renal failure and fluid/electrolyte balance
- Management of coagulopathies
- Nutrition in critically ill (enteral vs parenteral)

Plastic Surgery-Relevant Topics

- Post-op monitoring after free flap surgeries
- ICU management of major burns
- Crush injury and rhabdomyolysis
- Flap failure signs and salvage planning
- Complex wound infections and necrotizing fasciitis

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2. Skill-Based Competencies

Airway and Breathing

- Basic and advanced airway management (BLS/ACLS)
- Endotracheal intubation (observed/performed)

- Setting and adjusting ventilator parameters

Vascular Access

- Central venous catheter placement (internal jugular/subclavian)
- Arterial line placement
- IV cannulation under difficult conditions

Monitoring and Interpretation

- ECG, ABG, CVP, fluid balance charts
- Recognizing early signs of deterioration
- Use of bedside ultrasound (FAST, IVC collapsibility)

Procedural Exposure

- Tracheostomy care
- Chest tube insertion (if applicable)
- Foley catheterization and NG tube placement

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3. Clinical Judgment and Decision-Making

Resuscitation

- Managing sepsis and fluid resuscitation (sepsis bundles)
- Transfusion strategies
- Vasopressor use: indications and titration

Perioperative ICU Management

- Post-op care of high-risk patients
- Analgesia and sedation protocols

- Monitoring for flap viability and early ischemia

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4. Attitude, Ethics, and Communication

Team-Based Care

- Coordinating with intensivists, anesthesiologists, nurses
- Presenting patients during ICU rounds
- Clear documentation and handover practices

Family and Patient Communication

- Breaking bad news or updates about critical illness
- Informed consent for procedures in ICU

Ethical Considerations

- End-of-life care and DNR protocols
- Organ donation discussion (if involved)

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5. Academic and Evaluation Components

- Regular case-based discussions
- Mortality & morbidity (M&M) meeting participation
- Emergency simulation drills (if available)

Assessment Methods

- Direct observation (Mini-CEX, DOPS)
- Logbook of procedures observed/performed
- Feedback from ICU consultants
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INTRODUCTION

Curriculum of MS Plastic Surgery at Rawalpindi Medical University is an important document that defines the educational goals of Residency Training Program and is intended to clarify the learning objectives for all inpatient and outpatient rotations. Program requirements are based on the ACGME (Accreditation Council for Graduate Medical Education) standards for categorical training in Internal Plastic Surgery. Curriculum is based on 6 core competencies. Detail of these competencies is as follows

CORE COMPETENCIES

Details of The Six Core Competencies of Curriculum of MS Plastic Surgery

COMPETENCY NO. 1 PATIENT CARE (PC)

Gathers and synthesizes essential and accurate information to define each patient's clinical problem(s). (PC1) o Collects accurate historical data **Develops and achieves comprehensive management plan for each patient. (PC2)** o Care plans are consistently inappropriate or inaccurate

o Uses physical exam to confirm history
o Does not relies exclusively on documentation of others to generate own database or differential diagnosis o Consistently acquires accurate and relevant histories from patients
o Seeks and obtains data from secondary sources when needed
o Consistently performs accurate and appropriately thorough physical exams o Uses collected data to define a patient's central clinical problem(s)
o Acquires accurate histories from patients in an efficient, prioritized, and hypothesis- driven fashion o Performs accurate physical exams that are targeted to the patient's complaints
o Synthesizes data to generate a prioritized differential diagnosis and problem list
o Effectively uses history and physical examination skills to minimize the need for further diagnostic testing o Obtains relevant historical subtleties, including sensitive information that informs the differential diagnosis o Identifies subtle or unusual physical exam findings

o Efficiently utilizes all sources of secondary data to inform differential diagnosis
o Role models and teaches the effective use of history and physical examination skills to minimize the need for further diagnostic testing
o Does not react to situations that require urgent or emergent care
o Does not seek additional guidance when needed Inconsistently develops an appropriate care plan o Inconsistently seeks additional guidance when needed
o Consistently develops appropriate care plan
o Recognizes situations requiring urgent or emergent care
o Seeks additional guidance and/or consultation as appropriate
o Appropriately modifies care plans based on patient's clinical course, additional data, and patient preferences
o Recognizes disease presentations that deviate from common patterns and require complex decision- making
o Manages complex acute and chronic diseases
o Role models and teaches complex and patient-centered care

o Develops customized, prioritized care plans for the most complex patients, incorporating diagnostic uncertainty and cost effectiveness principles

Manages patients with progressive responsibility and independence. (PC3)

- Assume responsibility for patient management decisions
- Consistently manages simple ambulatory complaints or common chronic diseases o Consistently manages patients with straightforward diagnoses in the inpatient setting
- Unable to manage complex inpatients or patients requiring intensive care
- Requires indirect supervision to ensure patient safety and quality care
- Provides appropriate preventive care and chronic disease management in the ambulatory setting
- Provides comprehensive care for single or multiple diagnoses in the inpatient setting

- Under supervision, provides appropriate care in the intensive care unit Initiates management plan for urgent or emergent care
- Independently supervise care provided by junior members of the physician-led team
- Independently manages patients across inpatient and ambulatory clinical settings who have a broad spectrum of clinical disorders including undifferentiated syndromes
- Seeks additional guidance and/or consultation as appropriate
- Appropriately manages situations requiring urgent or emergent care
- Effectively supervises the management decisions of the team
- Manages unusual, rare, or complex disorders
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Skill in performing procedures. (PC4)

- Does not attempts to perform procedures without sufficient technical skill or supervision
- Willing to perform procedures when qualified and necessary for patient care
- Possesses basic technical skill for the completion of some common procedures
- Possesses technical skill and has successfully performed all procedures required for certification
- Maximizes patient comfort and safety when performing procedures
- Seeks to independently perform additional procedures (beyond those required for certification) that are anticipated for future practice
- Teaches and supervises the performance of procedures by junior members of the team

Requests and provides consultative care. (PC5)

- Is responsive to questions or concerns of others when acting as a consultant or utilizing consultant services
- Willing to utilize consultant services when appropriate for patient care
- Consistently manages patients as a consultant to other physicians/health care teams o Consistently applies risk assessment principles to patients while acting as a consultant o Consistently formulates a clinical question for a consultant to address

- Provides consultation services for patients with clinical problems requiring basic risk assessment o Asks meaningful clinical questions that guide the input of consultants
- Provides consultation services for patients with basic and complex clinical problems requiring detailed

- Switches between the role of consultant and primary physician with ease

- Provides consultation services for patients with very complex clinical problems requiring extensive risk assessment o Manages discordant recommendations from multiple consultants How To Teach

Patient Care PC-1

- Discussions in ward rounds to teach history taking.
- Discussions in ward rounds to teach physical examination. o Demonstration in ward rounds to teach history taking.
- Demonstration in ward rounds to teach physical examination. o Discussions in wards of short cases
- Discussions in wards of long cases
- Simulated patient (in order to simulate a set of symptoms or problems.) o Should write a summary (synthesize a differential diagnosis).
- How To Assess Discussions in ward rounds to assess history taking
- Discussions in ward rounds to assess physical examination
- Short cases assessment through long cases Confirmation of physical findings by supervisor
- Confirmation of history by supervisor.
- OSPE

Patient Care PC-2

- How To Teach o Resident should write management plan on history sheet and supervisor should discuss management plan.
- Resident should write investigational plans, should be able to interpret with help of supervisor

- Should be taught prioritization of care plans in complex patient by discussion.
- How To Assess o Long cases and short cases to assess the clear concepts of management by the trainee.

- Patient Care PC-3
- How To Teach o Discuss thoroughly the management side effects /interactions/dosage/therapeutic procedures and intervention
- How To Assess o Long case
- Short case

  o OSPE

  o Simulated patient o Stimulated chart recall

o Log book
o Portfolio
o Internal assessment record

- Patient Care PC-4

  How To Teach o Supervisor should ensure that the resident has complete knowledge about the procedures.
  o Trainee should observe procedures
  o Should perform procedures under supervision
  o Should be able to perform procedures independently
  o Videos regarding different procedures.

How To Assess

o OSCE

o Logbook/ portfolio o Direct observation

Patient Care PC-5

How to Teach

- o All consultations by the trainees should be discussed by the supervisor.

How to Assess

o Consultation record of the log book

o Feedback by other department regarding consultation

COMPETENCY NO. 2 MEDICAL KNOWLEDGE (MK)

- Clinical knowledge (MK1)
- o Possesses sufficient scientific, socioeconomic and behavioral knowledge required to provide care for common medical Conditions and basic preventive care.
- o Possesses the scientific, socioeconomic and behavioral knowledge required to provide care for complex medical conditions and comprehensive preventive care
- o Possesses the scientific, socioeconomic and behavioral knowledge required to successfully diagnose and treat medically uncommon, ambiguous and complex conditions.

- Knowledge of diagnostic testing and procedures. (MK2) o Consistently interprets basic diagnostic tests accurately.
- Does not need assistance to understand the concepts of pre-test probability and test performance Characteristics.
- Fully understands the rationale and risks associated with common procedures.
- Interprets complex diagnostic tests accurately.
- Understands the concepts of pre-test probability and test performance characteristics.

- Teaches the rationale and risks associated with common procedures and anticipates potential complications when performing procedures.
- Anticipates and accounts for pitfalls and biases when interpreting diagnostic tests and procedures o Pursues knowledge of new and emerging diagnostic tests and procedures

Medical Knowledge (MK-1, MK-2)

- How to Teach
- Books etc
- Articles
- Teaching experience with medical student
- Read procedural knowledge.
- CPC(Clinic Pathological Conference)
- Lecture
- Videos
- SDL(Self Directed Learning)
- PBL(Problem Based Learning)
- How To Assess
  - MCQs
  - SEQs
  - Viva
  - Videos
- Internal assessment

COMPETENCY NO. 3 SYSTEM BASED PRACTICE (SBP)
Works effectively within an inter professional team (e.g. peers, consultants, nursing, Ancillary professionals and other support personnel). (SBP1).

- Recognizes the contributions of other inter professional team members o Does not frustrates team members with inefficiency and errors
- Identifies roles of other team members and recognizes how/when to utilize them as resources.
- Does not require frequent reminders from teams to complete physician responsibilities (e.g. talk to family, enter orders)
- Understands the roles and responsibilities of all team members and uses them effectively.
- Participates in team discussions when required and actively seek input from other team members.
- o Understands the roles and responsibilities of and effectively partners with, all members of the team
- o Actively engages in team meetings and collaborative decision-making
- o Integrates all members of the team into the care of patients, such that each is able to maximize their skills in the care of the patient
- o Efficiently coordinates activities of other team members to optimize care
- o Viewed by other team members as a leader in the delivery of high quality care
- Recognizes system error and advocates for system improvement. (SBP2) o Does not ignore a risk for error within the system that may impact the care of a patient.
- o Does not make decisions that could lead to error which are otherwise corrected by the system or supervision.
- o Does not resistant to feedback about decisions that may lead to error or otherwise cause harm.
- o Recognizes the potential for error within the system.
- o Identifies obvious or critical causes of error and notifies supervisor accordingly.
- o Recognizes the potential risk for error in the immediate system and takes necessary steps to mitigate that risk.
- o Willing to receive feedback about decisions that may lead to error or otherwise cause harm.
- o Identifies systemic causes of medical error and navigates them to provide safe patient care.
- o Advocates for safe patient care and optimal patient care systems
- o Activates formal system resources to investigate and mitigate real or potential medical error.
- o Reflects upon and learns from own critical incidents that may lead to medical error.
- o Advocates for system leadership to formally engage in quality assurance and quality improvement activities.
- o Viewed as a leader in identifying and advocating for the prevention of medical error.
- o Teaches others regarding the importance of recognizing and mitigating system error.

Identifies forces that impact the cost of health care, and advocates for, and practices cost-effective care. (SBP3). o Does not ignores cost issues in the provision of care

- o Demonstrates effort to overcome barriers to cost- effective care
- o Has full awareness of external factors (e.g. socio- economic, cultural, literacy, insurance status) that impact the cost of health care and the role that external stakeholders (e.g. providers, suppliers, financers, purchasers) have on the cost of care
- o Consider limited health care resources when ordering diagnostic or therapeutic interventions
- o Recognizes that external factors influence a patient's utilization of health care and Does not act as barriers to cost-effective care o Minimizes unnecessary diagnostic and therapeutic tests
- o Possesses an incomplete understanding of cost- awareness principles for a population of patients (e.g. screening tests) o Consistently works to address patient specific barriers to cost-effective care
- o Advocates for cost-conscious utilization of resources (i.e. emergency department visits, hospital readmissions)
- o Incorporates cost-awareness principles into standard clinical judgments and decision-making, including screening tests
- Teaches patients and healthcare team members to recognize and address common barriers to cost- effective care and Actively participates in initiatives and care delivery models designed to overcome or mitigate barriers to cost-effective high quality care appropriate utilization of resources

Transitions patients effectively within and across health delivery systems. (SBP4) o Regards need for communication at time of transition

- Responds to requests of caregivers in other delivery systems
- Inconsistently utilizes available resources to coordinate and ensure safe and effective patient care within and across delivery systems
- Written and verbal care plans during times of transition are complete o Efficient transitions of care lead to only necessary expense or less risk to a patient (e.g. avoids duplication of tests readmission) o Recognizes the importance of communication during times of transition
- Communication with future caregivers is present but with lapses in pertinent or timely information
- Appropriately utilizes available resources to coordinate care and ensures safe and effective patient care within and across delivery systems
- Proactively communicates with past and future care givers to ensure continuity of care

- Coordinates care within and across health delivery systems to optimize patient safety, increase efficiency and ensure high quality patient outcomes
- Anticipates needs of patient, caregivers and future care providers and takes appropriate steps to address those needs o Role models and teaches effective transitions of care

COMPETENCY NO. 4 PRACTICE BASED LEARNING (PBL)

- Monitors practice with a goal for improvement. (PBLI1)
- Willing to self-reflect upon one's practice or performance o Concerned with opportunities for learning and self-improvement
- Unable to self-reflect upon one's practice or performance
- Avails opportunities for learning and self-improvement
- Consistently acts upon opportunities for learning and self-improvement
- Regularly self-reflects upon one's practice or performance and consistently acts upon those reflections to improve practice
- Recognizes sub-optimal practice or performance as an opportunity for learning and self-improvement
- Regularly self-reflects and seeks external validation regarding this reflection to maximize practice improvement
- Actively engages in self- improvement efforts and reflects upon the experience

Learns and improves via performance audit. (PBLI2) o Regards own clinical performance data

- Demonstrates inclination to participate in or even consider the results of quality improvement efforts
- Adequate awareness of or desire to analyze own clinical performance data
- Participates in a quality improvement projects
- Familiar with the principles, techniques or importance of quality improvement
- Analyzes own clinical performance data and identifies opportunities for improvement
- Effectively participates in a quality improvement project

- Understands common principles and techniques of quality improvement and appreciates the responsibility to assess and improve care for a panel of patients Analyzes own clinical performance data and actively works to improve performance
- Actively engages in quality improvement initiatives
- Demonstrates the ability to apply common principles and techniques of quality improvement to improve care for a panel of patients
- Actively monitors clinical performance through various data sources Is able to lead a quality improvement project
- Utilizes common principles and techniques of quality improvement to continuously improve care for a panel of patients

Learn and improves via feedback. (PBLI3) o Does not resists feedback from others

- Often seeks feedback
- Never responds to unsolicited feedback in a defensive fashion
- Temporarily or superficially adjusts performance based on feedback
-
- Does not solicits feedback only from supervisors
- Is open to unsolicited feedback
- Solicits feedback from all members of the inter professional team and patients
- Consistently incorporates feedback
- Performance continuously reflects incorporation of solicited and unsolicited feedback
- Able to reconcile disparate or conflicting feedback
- Learns and improves at the point of care. (PBLI4) o Acknowledges uncertainly and does not revert to reflexive patterned response when inaccurate
- Seeks or applies evidence when necessary
- Familiar with strengths and weaknesses of the medical literature
- Has adequate awareness of or ability to use information technology
- Does not accepts the findings of clinical research studies without critical appraisal Can translate medical information needs into well- formed clinical questions independently

- Aware of the strengths and weaknesses of medical information resources and utilizes information technology with sophistication

- Appraises clinical research reports, based on accepted criteria o Does not “slows down” to reconsider an approach to a problem, ask for help, or seek new information o Routinely translates new medical information needs into well-formed clinical questions

- Utilizes information technology with sophistication
- Independently appraises clinical research reports based on accepted criteria
- Searches medical information resources efficiently, guided by the characteristics of clinical questions o Role models how to appraise clinical research reports based on accepted criteria
- Has a systematic approach to track and pursue emerging clinical question

Practice Based Learning (PBL1, PBL2, PBL3, PBL4)

How to Teach

- Discussions about problem cases o Should discuss errors and omissions
- Feed back

How to Assess

- 360 evaluation
- Research article presentation
- Journal club presentation
- CPC presentation
- Ward presentation
- Quality improvement of projects

COMPETENCY NO. 5 PROFESSIONALISM(PROF)

- Has professional and respectful interactions with patients, caregivers and members of the inter professional team (e.g. peers, consultants, nursing, ancillary professionals and support personnel). (PROF1)
- Consistently respectful in interactions with patients, caregivers and members of the inter professional team, even in challenging situations
- Is available and responsive to needs and concerns of patients, caregivers and members of the inter professional team to ensure
- safe and effective care Emphasizes patient privacy and autonomy in all interactions
- Demonstrates empathy, compassion and respect to patients and caregivers in all situations o Anticipates, advocates for, and proactively works to meet the needs of patients and caregivers
- Demonstrates a responsiveness to patient needs that supersedes self-interest
- Positively acknowledges input of members of the inter professional team and incorporates that input into plan of care as appropriate
- Role models compassion, empathy and respect for patients and caregivers
- Role models appropriate anticipation and advocacy for patient and caregiver needs
- Fosters collegiality that promotes a high-functioning inter professional team

Teaches others regarding maintaining patient privacy and respecting patient autonomy Accepts responsibility and follows through on tasks. (PROF2)

- Demonstrates responsibilities expected of a physician professional
- Accepts professional responsibility even when not assigned or not mandatory
- Completes administrative and patient care tasks in a timely manner in accordance with local practice and/or policy
- Completes assigned professional responsibilities without questioning or the need for reminders
- Prioritizes multiple competing demands to complete tasks and responsibilities in a timely and effective manner
- Willingness to assume professional responsibility regardless of the situation

- Role models prioritizing multiple competing demands in order to complete tasks and responsibilities in a timely and effective manner
- Assists others to improve their ability to prioritize multiple, competing tasks

Responds to each patient's unique characteristics and needs. (PROF3)

- Willing to modify care plan to account for a patient's unique characteristics and needs
- Is sensitive to and has basic awareness of differences related to culture, ethnicity, gender, race, age and religion in the
- patient/caregiver encounter
- Seeks to fully understand each patient's unique characteristics and needs based upon culture, ethnicity, gender, religion, and personal preference o Modifies care plan to account for a patient's unique characteristics and needs with complete success
- Recognizes and accounts for the unique characteristics and needs of the patient/ caregiver
- Appropriately modifies care plan to account for a patient's unique characteristics and needs
- Role models professional interactions to negotiate differences related to a patient's unique characteristics or needs
- Role models consistent respect for patient's unique characteristics and needs

Exhibits integrity and ethical behavior in professional conduct. (PROF4)

- o Has a basic understanding of ethical principles, formal policies and procedures, and does not intentionally disregard them
- Honest and forthright in clinical interactions, documentation, research, and scholarly activity
- Demonstrates accountability for the care of patients
- Adheres to ethical principles for documentation, follows formal policies and procedures, acknowledges and limits conflict of interest, and upholds ethical expectations of research and scholarly activity
- Demonstrates integrity, honesty, and accountability to patients, society and the profession

- Actively manages challenging ethical dilemmas and conflicts of interest
- Identifies and responds appropriately to lapses of professional conduct among peer group
- Assists others in adhering to ethical principles and behaviors including integrity, honesty, and professional responsibility
- Role models integrity, honesty, accountability and professional

Professionalism (PROF1, PROF2, PROF3 AND PROF4)

- **How To Teach** 1. Should be taught during ward rounds.
- 2. By supervisor
- 3. Through workshop
-

- **How To Assess** 1. Punctuality
- 2. Behavior
- 3. Direct observation during ward rounds
- 4. Feed back
- 5. 360 degree evaluation

Competency No. 6 INTERPERSONAL AND COMMUNICATION SKILL (ICS)

- Communicates effectively with patients and caregivers. (ICS1)
- Does not ignores patient preferences for plan of care
- Makes attempt to engage patient in shared decision-making
- Does not engages in antagonistic or counter-therapeutic relationships with patients and caregivers
- Engages patients in discussions of care plans and respects patient preferences when offered by the patient, and also actively solicit preferences.
- Attempts to develop therapeutic relationships with patients and caregivers which is often successful

- Defers difficult or ambiguous conversations to others
- Engages patients in shared decision making in uncomplicated conversations
- Requires assistance facilitating discussions in difficult or ambiguous conversations
- Requires guidance or assistance to engage in communication with persons of different socioeconomic and cultural backgrounds
- Identifies and incorporates patient preference in shared decision making across a wide variety of patient care conversations
- Quickly establishes a therapeutic relationship with patients and caregivers, including persons of different socioeconomic and cultural backgrounds
- Incorporates patient-specific preferences into plan of care
- Role models effective communication and development of therapeutic relationships in both routine and challenging situations
- Models cross-cultural communication and establishes therapeutic relationships with persons of diverse socioeconomic backgrounds

Competency No. 6 INTERPERSONAL AND COMMUNICATION SKILL (ICS)

Communicates effectively in inter professional teams (e.g. peers, consultants, nursing, ancillary professionals and other support personnel). (ICS2)

- Does not uses unidirectional communication that fails to utilize the wisdom of the team
- Does not resists offers of collaborative input
- Consistently and actively engages in collaborative communication with all members of the team
- Verbal, non-verbal and written communication consistently acts to facilitate collaboration with the team to enhance patient care o Role models and teaches collaborative communication with the team to enhance patient care, even in challenging settings and with conflicting team member opinions

- Appropriate utilization and completion of health records. (ICS3)

- o Health records are organized and accurate and are not superficial and does not miss key data or fails to communicate clinical
- reasoning
- o Health records are organized, accurate, comprehensive, and effectively communicate clinical reasoning o Health records are succinct, relevant, and patient specific

- Role models and teaches importance of organized, accurate and comprehensive health records that are succinct and patient specific

Interpersonal and Communication Skill (ISC1, ICS2 AND ICS3)

How to Teach o Teaching through communication skills by supervisor o Through workshop

How to Assess

1.	Direct observation	7.	Article presentation
2.	Feed back	8.	Consultation
3.	360 degree evaluation	9.	OPD working
4.	History taking	10.	Counseling sessions
5.	CPC presentation	11.	OSPE
6.	Journal club presentation	12.	VIVA

METHODS OF TEACHING & LEARNING DURING COURSE CONDUCTION

1. Inpatient Services: All residents will have rotations in emergency Plastic Surgery, orthopedic ward etc. The required knowledge and skills pertaining to the ambulatory based training in following areas shall be demonstrated.
General Plastic Surgery
Emergency Plastic Surgery
Acute Burn care
Post burn management
Otrho-plastic surgery

2. Outpatient Experiences: Residents should demonstrate expertise in diagnosis and management of patients in acute care clinics and longitudinal clinic and gain experience in Dermatology, orthopedics, maxillofacial surgery, urology, neuro surgery etc

3. Emergency services: Our residents take an early and active role in patient care and obtain decision-making roles quickly. Within the Emergency Department, residents direct the initial stabilization of all critical patients, and oversee all critical care.

4. Electives/ Specialty Rotations: In addition, the resident will elect rotations in a variety of Plastic Surgery subspecialty consultative services or clinics. They may choose electives from each Plastic Surgery subspecialty and from offerings of other departments. Residents may also select electives at other institutions if the parent department does not offer the experiences they want.

5. ***Interdisciplinary Plastic Surgery*** Adolescent Plastic Surgery, Dermatology, Emergency Plastic Surgery, General Surgery, Occupational Plastic Surgery, Orthopedics and Sports Plastic Surgery, Otolaryngology, Physical Plastic Surgery and Rehabilitation, Urology.

6. *Community Practice:* Residents experience the practice of Plastic Surgery in a non-academic, non-teaching hospital setting. The rotation may be used to try out a practice that the resident later joins, to learn the needs of referring physicians or to decide on a future career path.

7. *Mandatory Workshops:* *R*esidents achieve hands on training while participating in mandatory workshops of Research Methodology, Advanced Life Support, Communication Skills, Computer & Internet and Clinical Audit. Specific objectives are given in detail in the relevant section of Mandatory Workshops.

8. *Core Faculty Lectures (CFL):* The core faculty lecture's focus on monthly themes of the various Plastic Surgery topics for eleven months of the year, i.e., Burn, reconstructive, cosmetic surgery etc. Lectures are still an efficient way of delivering information. Good lectures can introduce new material or synthesize concepts students have through text-, web-, or field-based activities. *Buzz groups* can be incorporated into the lectures in order to promote more active learning.

9. *Introductory Lecture Series (ILS):* Various introductory topics are presented by subspecialty and Plastic Surgery faculty to introduce interns to basic and essential topics in Plastic Surgery.

10. *Long and short case presentations:* Giving an oral presentation on ward rounds is an important skill for medical student to learn. It is medical reporting which is terse and rapidly moving. After collecting the data, you must then be able both to document it in a written format and transmit it clearly to other health care providers. In order to do this successfully, you need to understand the patient's medical illnesses, the psychosocial contributions to their History of Presenting Illness and their physical diagnosis findings. You then need to compress them into a concise, organized recitation of the most essential facts. The listener needs to be given all of the relevant information without the extraneous details and should be able to construct his/her own differential diagnosis as the story unfolds. Consider yourself an advocate who is attempting to persuade an informed, interested judge the merits of your argument, without distorting any of the facts. An oral case presentation is NOT a simple recitation of your write-up. It is a concise, edited presentation of the most essential information. Basic structure for oral case presentations includes Identifying information/chief complaint (ID/CC) , History of present illness (HPI) including relevant ROS (Review of systems) questions only ,Other active medical problems , Medications/allergies/substance use (note:

e. The complete ROS should not be presented in oral presentations , Brief social history (current situation and major issues only) . Physical examination (pertinent findings only) , One line summary & Assessment and plan

11. ***Seminar Presentation:*** Seminar is held in a non conference format. Upper level residents present an in-depth review of a medical topic as well as their own research. Residents are formally critiqued by both the associate program director and their resident colleagues.

12. Journal Club Meeting (JC):A resident will be assigned to present, in depth, a research article or topic of his/her choice of actual or potential broad interest and/or application. Two hours per month should be allocated to discussion of any current articles or topics introduced by any participant. Faculty or outside researchers will be invited to present outlines or results of current research activities. The article should be critically evaluated and its applicable results should be highlighted, which can be incorporated in clinical practice. Record of all such articles should be maintained in the relevant department

13. Small Group Discussions/ Problem based learning/ Case based learning: Traditionally small groups consist of 8-12 participants. Small groups can take on a variety of different tasks, including problem solving, role play, discussion, brainstorming, debate, workshops and presentations. Generally students prefer small group learning to other instructional methods. From the study of a problem students develop principles and rules and generalize their applicability to a variety of situations PBL is said to develop problem solving skills and an integrated body of knowledge. It is a student-centered approach to learning, in which students determine what and how they learn. Case studies help learners identify problems and solutions, compare options and decide how to handle a real situation.

14. Discussion/Debate: There are several types of discussion tasks which would be used as learning method for residents including: *guided discussion*, in which the facilitator poses a discussion question to the group and learners offer responses or questions to each other's contributions as a means of broadening the discussion's scope; *inquiry-based discussion*, in which learners are guided through a series of questions to discover some relationship or principle; *exploratory discussion*, in which learners examine their personal opinions, suppositions or assumptions and then visualize alternatives to these assumptions; and *debate* in which students argue opposing sides of a controversial topic. With thoughtful and well-designed discussion

tasks, learners can practice critical inquiry and reflection, developing their individual thinking, considering alternatives and negotiating meaning with other discussants to arrive at a shared understanding of the issues at hand.

15. Case Conference (CC): These sessions are held three days each week; the focus of the discussion is selected by the presenting resident. For example, some cases may be presented to discuss a differential diagnosis, while others are presented to discuss specific management issues.

16. Noon Conference (NC): The noon conferences focus on monthly themes of the various Plastic Surgery topics for eleven months of the year,

17. Grand Rounds (GR): The Department of Plastic Surgery hosts Grand Rounds on weekly basis. Speakers from local, regional and national Plastic Surgery training programs are invited to present topics from the broad spectrum of Plastic Surgery. All residents on inpatient floor teams, as well as those on ambulatory block rotations and electives are expected to attend.

***18. Professionalism Curriculum (PC)*:** This is an organized series of recurring large and small group discussions focusing upon current issues and dilemmas in medical professionalism and ethics presented primarily by an associate program director. Lectures are usually presented in a noon conference format.

19. Evening Teaching Rounds: During these sign-out rounds, the inpatient Chief Resident makes a brief educational presentation on a topic related to a patient currently on service, often related to the discussion from morning report. Serious cases are mainly focused during evening rounds.

20. Clinico-pathological Conferences: The clinicopathological conference, popularly known as CPC primarily relies on case method of teaching Plastic Surgery. It is a teaching tool that illustrates the logical, measured consideration of a differential diagnosis used to evaluate patients. The process involves case presentation, diagnostic data, discussion of differential

diagnosis, logically narrowing the list to few selected probable diagnoses and eventually reaching a final diagnosis and its brief discussion. The idea was first practiced in Boston, back in 1900 by a Harvard internist, Dr. Richard C. Cabot who practiced this as an informal discussion session in his private office. Dr. Cabot incepted this from a resident, who in turn had received the idea from a roommate, primarily a law student.

***21. Evidence Based Medicine (EBM)*:** Residents are presented a series of noon monthly lectures presented to allow residents to learn how to critically appraise journal articles, stay current on statistics, etc. The lectures are presented by the program director.

22. Clinical Audit based learning: "Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria…Where indicated, changes are implemented…and further monitoring is used to confirm improvement in healthcare delivery." *Principles for Best Practice in Clinical Audit (2002, NICE/CHI)*

23. *Peer Assisted Learning:* Any situation where people learn from, or with, others of a similar level of training, background or other shared characteristic. Provides opportunities to reinforce and revise their learning. Encourages responsibility and increased self-confidence. Develops

teaching and verbalization skills. Enhances communication skills, and empathy. Develops appraisal skills (of self and others) including the ability to give and receive appropriate feedback. Enhance organizational and team-working skills.

24. *Morbidity and Mortality Conference (MM):* The M&M Conference is held occasionally at noon throughout the year. A case, with an adverse outcome, though not necessarily resulting in death, is discussed and thoroughly reviewed. Faculty members from various disciplines are invited to attend, especially if they were involved in the care of the patient. The discussion focuses on how care could have been improved.

25. Clinical Case Conference: Each resident, except when on vacation, will be responsible for at least one clinical case conference each month. The cases discussed may be those seen on either the consultation or clinic service or during

rotations in specialty areas. The resident, with the advice of the Attending Physician on the Consultation Service, will prepare and present the case(s) and review the relevant literature

26. ***SEQ as assignments on the content areas:*** SEQs assignments are given to the residents on regular basis to enhance their performance during written examinations.

27. Skill teaching in ICU, emergency, ward settings& skill laboratory: Two hours twice a month should be assigned for learning and practicing clinical skills. List of skills to be learnt during these sessions is as follows:

- Residents must develop a comprehensive understanding of the indications, contraindications, limitations, complications, techniques, and interpretation of results of those technical procedures integral to the discipline (mentioned in the Course outlines)

- Residents must acquire knowledge of and skill in educating patients about the technique, rationale and ramifications of procedures and in obtaining procedure-specific informed consent. Faculty supervision of residents in their performance is required, and each resident's experience in such procedures must be documented by the program director

- Residents must have instruction in the evaluation of medical literature, clinical epidemiology, clinical study design, relative and absolute risks of disease, medical statistics and medical decision-making

- Training must include cultural, social, family, behavioral and economic issues, such as confidentiality of information, indications for life support systems, and allocation of limited resources

- Residents must be taught the social and economic impact of their decisions on patients, the primary care physician and society. This can be achieved by attending the bioethics lectures and becoming familiar with Project Professionalism Manual such as that of the American Board of Internal Plastic Surgery

- Residents should have instruction and experience with patient counseling skills and community education
- This training should emphasize effective communication techniques for diverse populations, as well as organizational resources useful for patient and community education
- Residents should have experience in the interpretation of clinical laboratory and radiological studies i.e: CT scans, MRI.

28. Bedside teaching rounds in ward: "To study the phenomenon of disease without a book is to sail an uncharted sea whilst to study books without patients is not to go to sea at all" Sir William Osler 1849-1919.Bedside teaching is regularly included in the ward rounds. Learning activities include the physical exam, a discussion of particular medical diseases, psychosocial and ethical themes, and management issues

***29. Directly Supervised Procedures - (DSP)*:** Residents learn procedures under the direct supervision of an attending or fellow during some rotations.

30. Self-directed learning: self-directed learning residents have primary responsibility for planning, implementing, and evaluating their effort. It is an adult learning technique that assumes that the learner knows best what their educational needs are. The facilitator's role in self-directed learning is to support learners in identifying their needs and goals for the program, to contribute to clarifying the learners' directions and objectives and to provide timely feedback. Self-directed learning can be highly motivating, especially if the learner is focusing on problems of the immediate present, a potential positive outcome is anticipated and obtained and they are not threatened by taking responsibility for their own learning.

31. Follow up clinics: The main aims of our clinic for patients and relatives include (a) Explanation of patient's stay in hospital: Many patients do not remember their hospital stay, and this lack of recall can lead to misconceptions, frustration and having unrealistic expectations of themselves during their recovery. It is therefore preferable for patients to be aware of how ill they have been and then they can understand why it is taking some time to recover.(b)Rehabilitation information and support: We discuss with patients and relatives their individualized recovery from critical illness. This includes expectations, realistic goals, change in family dynamics and
C oming to terms with life style changes.(c)**Identifying physical, psychological or social problems**

Some of our patients have problems either as a result of their critical illness or because of other underlying conditions. The follow-up team will refer patients to various specialties, if appropriate. (d)**Promoting a quality service**: By highlighting areas which require change in nursing and medical practice, we can improve the quality of patient and relatives care. Feedback from patients and relatives about their ICU & ward experience is invaluable. It has initiated various audits and changes in clinical practice, for the benefit of patients and relatives in the future.

32. Core curriculum meeting: All the core topics of Plastic Surgery should be thoroughly discussed during these sessions. The duration of each session should be at least two hours once a month. It should be chaired by the chief resident (elected by the residents of the relevant discipline). Each resident should be given an opportunity to brainstorm all topics included in the course and to generate new ideas regarding the improvement of the course structure

33. Annual Grand Meeting Once a year all residents enrolled for MS Plastic Surgery should be invited to the annual meeting at RMU. One full day will be allocated to this event. All the chief residents from affiliated institutes will present their annual reports. Issues and concerns related to their relevant courses will be discussed. Feedback should be collected and suggestions should be sought in order to involve residents in decision making. The research work done by residents and their literary work may be displayed. In the evening an informal gathering and dinner can be arranged. This will help in creating a sense of belonging and ownership among students and the faculty.

34. ***Learning through maintaining log book:*** *it is* used to list the core clinical problems to be seen during the attachment and to document the student activity and learning achieved with each patient contact.

35. Learning through maintaining portfolio: Personal Reflection is one of the most important adult educational tools available. Many theorists have argued that without reflection, knowledge translation and thus genuine “deep” learning cannot occur. One of the Individual reflection tools maintaining portfolios, Personal Reflection allows students to take inventory of their current knowledge skills and attitudes, to integrate concepts from various experiences, to transform current ideas and experiences into new knowledge and actions and to complete the experiential learning cycle.

36. ***Task-based-learning:*** A list of tasks is given to the students: participate in consultation with the attending staff, interview and examine patients, review a number of new radiographs with the radiologist.

37. ***Teaching in the ambulatory care setting:*** A wide range of clinical conditions may be seen. There are large numbers of new and return patients. Students have the opportunity to experience a multi-professional approach to patient care. Unlike ward teaching, increased numbers of students can be accommodated without exhausting the limited No. of suitable patients.

38. ***Community Based Medical Education:*** CBME refers to medical education that is based outside a tertiary or large secondary level hospital. Learning in the fields of epidemiology, preventive health, public health principles, community development, and the social impact of illness and understanding how patients interact with the health care system. Also used for learning basic clinical skills, especially communication skills.

39. ***Audio visual laboratory:*** audio visual material for teaching skills to the residents is used specifically in teaching gastroenterology procedure details.

40. E-learning/web-based medical education/computer-assisted instruction: Computer technologies, including the Internet, can support a wide range of learning activities from dissemination of lectures and materials, access to live or recorded presentations, real-time discussions, self-instruction modules and virtual patient simulations. distance-independence, flexible scheduling, the creation of reusable learning materials that are easily shared and updated, the ability to individualize instruction through adaptive instruction technologies and automated record keeping for assessment purposes.

41. ***Research based learning:*** All residents in the categorical program are required to complete an academic outcomes-based research project during their training. This project can consist of original bench top laboratory research, clinical research or a combination of both. The research work shall be compiled in the form of a thesis which is to be submitted for

evaluation by each resident before end of the training. The designated Faculty will organize and mentor the residents through the process, as well as journal clubs to teach critical appraisal of the literature.

42. *Other teaching strategies specific for different specialties as mentioned in the relevant parts of the curriculum*

Some of the other teaching strategies which are specific for certain domains of Plastic Surgeryare given along with relevant modules

MORNING REPORT PRESENTATION/ CASE PRESENTATION SEEN IN LAST EMERGENCY OR INDOOR

Sr no		DATE	Pt Reg No	Brief Description of patient/ diagnosis/ treatment	Supervisor's Remarks	Supervisor's Sign/Stamp

MORNING REPORT PRESENTATION/ CASE PRESENTATION SEEN IN LAST EMERGENCY OR INDOOR

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Section - 2

TOPIC PRESENTTION

Sr no	DATE	Topic name and Brief Details covered	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 2

TOPIC PRESENTTION

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Section - 2

TOPIC PRESENTTION

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Section - 3

JOURNAL CLUB

Sr no	DATE	Title of the Article	Journal Title	Published Date	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 3

JOURNAL CLUB

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Section - 3

JOURNAL CLUB

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Section - 4

PROBLEM CASE DISCUSSION

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Section - 4

PROBLEM CASE DISCUSSION

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Section - 4

PROBLEM CASE DISCUSSION

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Section - 4

PROBLEM CASE DISCUSSION

Sr no	DATE	PT Reg No	Brief Description/ History/ Diagnosis/ Treatment/ Outcomes	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 5

INTERACTIVE LEACTURES

Sr no	DATE	TOPIC & Brief Description	Teacher Name	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 5

INTERACTIVE LEACTURES

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Section - 5

INTERACTIVE LEACTURES

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Section - 6

EMERGENCY CASES

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Section - 6

EMERGENCY CASES

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Section - 6

EMERGENCY CASES

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Section - 6

EMERGENCY CASES

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Section - 7

INDOOR CASES

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Section - 7

INDOOR CASES

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Section - 7

INDOOR CASES

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Section - 7

INDOOR CASES

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Section - 8

OPD & CLINICS

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Section - 8

OPD & CLINICS

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Section - 8

OPD & CLINICS

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Section - 8

OPD & CLINICS

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Section - 9

SURGICAL PROCEDURES

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Section - 9

SURGICAL PROCEDURES

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Section - 9

SURGICAL PROCEDURES

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Section - 9

SURGICAL PROCEDURES

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Section - 9

MDM

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Section - 9

MDM

Sr no	DATE	Brief Description	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 10

MORBIDITY/ MORTALITY MEETING

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Section - 10

MORBIDITY/ MORTALITY MEETING

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Section - 10

MORBIDITY/ MORTALITY MEETING

Sr no	DATE	Brief Description	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 11

HANDS ON TRAINING/ WORKSHOPS

Sr no	DATE	TITLE	Facilitator	venu	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 11

HANDS ON TRAINING/ WORKSHOPS

Sr no	DATE	TITLE	Facilitator	venu	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 11

HANDS ON TRAINING/ WORKSHOPS

Sr no	DATE	TITLE	Facilitator	venu	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 12

PUBLICATIONS

Sr no	Name of Publication	Type of publication/ original article/ Editorial/ case report	Name of Journal	Publication Date	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 12

PUBLICATIONS

Sr no	Name of Publication	Type of publication/ original article/ Editorial/ case report	Name of Journal	Publication Date	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 13

MAJOR RESEARCH PROJECTS DURING MS TRAINING

Sr no	RESEARCH TOPIC	PLACE OF RESERCH	NAME & DESIGNATION OF SUPERVISOR	Supervisor's Remarks	Supervisor's Sign/Stamp

Section - 13

MAJOR RESEARCH PROJECTS DURING MS TRAINING

Sr no	RESEARCH TOPIC	PLACE OF RESERCH	NAME & DESIGNATION OF SUPERVISOR	Supervisor's Remarks	Supervisor's Sign/Stamp

EVALUATION / REMARKS BY UNIVERSITY TRAINING MONITORING CELL (UTMC) WORKING UNDER DEPARTMENT OF MEDICAL EDUCATION (DME) (AT THE END OF 1ST YEAR OF TRAINING)

EVALUATION / REMARKS BY UNIVERSITY TRAINING MONITORING CELL (UTMC) WORKING UNDER DEPARTMENT OF MEDICAL EDUCATION (DME) (AT THE END OF 2ND YEAR OF TRAINING)

EVALUATION / REMARKS BY UNIVERSITY TRAINING MONITORING CELL (UTMC) WORKING UNDER DEPARTMENT OF MEDICAL EDUCATION (DME) (AT THE END OF 3RD YEAR OF TRAINING)

EVALUATION / REMARKS BY UNIVERSITY TRAINING MONITORING CELL (UTMC) WORKING UNDER DEPARTMENT OF MEDICAL EDUCATION (DME) (AT THE END OF 4TH YEAR OF TRAINING)

EVALUATION / REMARKS BY UNIVERSITY TRAINING MONITORING CELL (UTMC) WORKING UNDER DEPARTMENT OF MEDICAL EDUCATION (DME) (AT THE END OF 5TH YEAR OF TRAINING)