

SRI BALAJI VIDYAPEETH

(Deemed - to be - University u/s 3 of UGC Act, 1956)

Pillaiyarkuppam, Puducherry - 607 402

Mahatma Gandhi Medical College and Research Institute
Shri Sathya Sai Medical College and Research Institute



COMPETENCY BASED POSTGRADUATE MEDICAL CURRICULUM
M.S. GENERAL SURGERY
(2020 Onwards)

(As approved at the 30th Academic Council Meeting held on 28th September 2020)

Preface

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of the much awaited Competency Based Medical Education (CBME) for post graduate by the Medical Council of India (MCI) (superseded by the Board of Governors), adoption of CBME for implementing post-graduate programs is a welcome move.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

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Preface

Following roll out of much awaited Competency-Based Medical Education (CBME) for undergraduate by the Medical Council of India (MCI)(superseded by the Board of Governors) , adoption of CBME for post-graduate by it is welcome move.

The MCI has laid down the syllabus course wise, listing competency to some extent, teaching learning methods and the assessment methods as well. The MCI describes competencies in three domains (knowledge, skill, and attitude). However, the most significant problem in competency-based training is the development of appropriate assessment tools.

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



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Preface

We are in an era when knowledge is expanding at an unprecedented rate and moral values are being challenged. To prepare our younger generation to meet the challenges of an ever advancing knowledge-based society and the dynamically changing environment, it is not enough to impart them with mere 'knowledge'. Instead, we have to help them develop a global outlook, equip them with a repertoire of skills and the positive attitudes to respect knowledge and to learn how to learn.

In preparing the curriculum framework for Post graduate students of MS General Surgery, which is a student-focused curriculum, Competency based curriculum developed in the best interest of students, we firmly believe that all students could learn, and that they have different intelligences. We provide them with opportunities to learn. We identify key learning experiences and key learning areas, integrating the generic skills, values and attitudes that are essential to their whole person development. What is important is to enhance their quest for knowledge, their awareness and responsibilities in advancing the frontiers of knowledge.

In order to allow for holistic and coherent planning and to provide more flexibility, we have developed a curriculum framework with key learning areas (knowledge/concepts), skills, values and attitudes as the major components. We must bear in mind that curriculum development is an ongoing endeavour and the ultimate goal of curriculum reform is to benefit students and to raise the quality of learning.

We in our Sri Balaji Vidyapeeth University coping with international standards.

We thank our Professors Dr.N.Ananthkrishnan, Dr.Robinson smile, Dr.T. Tirou Aroul, Dr.M.Ramanathan, Dr.K.V.Rajan, Dr.R.Kannan, Dr.Dinker Pai and Dr.S.Saravanakumar, Dr.Mohammed Ismail, Dr.Gokul, Dr.Vinoth and Dr.Murugan for their constant support to develop a standard curriculum. We would thank our Postgraduates Dr.Urvin, Dr.Indumathi, Dr.Rakshith for their support in editing and preparing the document .

We are really grateful to the external experts Prof.Kadambari and Prof.Authy who attended our BOS and gave valuable suggestions. We thank all our faculties and Dr.Seetesh Ghose, Vice Principle curriculum and Dr.M Ravisankar, Dean MGMCRI, Dr. Sukumaran Annamalai, Dean SSSMCRI for their support and guidance. We also acknowledge Mrs. Karunkuzhali out department secretary for her contribution.

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This document named postgraduate curriculum for the MS General Surgery has been prepared in accordance with the document notified by the Board of Governors in the suppression of MCI <https://www.mciindia.org/CMS/information-desk/for-colleges/pg-curricula-2>. This document has been prepared by the Department of General Surgery of MGMCRI, Puducherry, ratified by the Board of Studies approved by the Academic Council of Sri Balaji Vidyapeeth, a deemed to be university, accredited 'A' Grade by NAAC

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Sri Balaji University
Department of General Surgery
Post- Graduate Program

1. Preamble

The purpose of PG education is to create specialists who would provide high-quality health care and advance the cause of science through research & training. The purpose of MS General Surgery is to standardize General Surgery teaching at the Post Graduate level throughout the country so that it will benefit in achieving uniformity in undergraduate teaching as well and resultantly creating competent General surgeons with appropriate expertise. The purpose of this document is to provide teachers and learners with illustrative guidelines to achieve defined outcomes through learning and assessment. This document was prepared by subject-content specialists. The Reconciliation Board of Academic Council has attempted to render uniformity without compromise to the purpose and content of the document. Compromise in the purity of syntax has been made in order to preserve the purpose and content. This has necessitated retention of “domains of learning” under the heading “competencies”.

2. Program Educational Objectives (PEO)

- PEO1:** Specialist who can provide comprehensive care related to General Surgery over and above the physician of the first contact.
- PEO2:** Leader and team member who understands the health care system and acts to provide safe patient care with accountability and responsibility.
- PEO3:** Communicator possessing adequate communication skills to convey the required information in an appropriate manner in a various health care settings.
- PEO4:** Lifelong learner keen on updating oneself regarding the advancement in the health care field and able to perform the role of researcher and teacher
- PEO5:** Professional who understands and follows the principle of bio-ethics / ethics related to the health care system. Program Outcome (PO)

3. Program Outcome (PO)

After three years of the residency program, postgraduate should be able to

- PO1:** diagnose and appropriately manage common surgical ailments in a given situation. (C1, C2)
- PO2:** Perform common minor & major General Surgical procedures and provide Peri-operative care. (C2, C3, C4)
- PO3:** Identify situations calling for urgent or early surgical intervention and refer at the optimum time to the appropriate centers (C2, C3, C4)
- PO 4:** provide and coordinate emergency resuscitative measures in acute surgical Situations including trauma (C2, C3)
- PO5:** Identify patient safety and system approach to medical errors. (C2, C4)
- PO6:** perform a surgical audits on a regular basis and maintain records (manual and/or electronic) for life. (C2, C4)

- PO7:** Communicate with stakeholders of the health care system.
- PO8:** Update knowledge in recent advances and newer techniques in the management of the patients.(C4).
- PO9:** Develop & execute a protocol for a scientific research project, collect and analyze the data and scientifically communicate to the others
- PO10:** Perform Self Directed Learning and Critical appraisal of medical literature. .(C2, C4)
- PO11:** 1.The student will show integrity, accountability, respect, compassion, and dedicated patient care.(C2, C4)
- PO 12:** The student will demonstrate a commitment to excellence and continuous professional development.(C2, C4)
- PO 13:** The student should demonstrate a commitment to ethical principles relating to providing patient care, the confidentiality of patient information, and informed consent..(C2, C4)
- PO14:** The student should show sensitivity and responsiveness to patients' culture, age, gender, and disabilities..(C2, C4)

4. Course and Course Objectives (CO)

4.1 Course 1 (C1) : Basic Sciences (Applied)

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

- C1.1 Apply knowledge of pre and para clinical science related to General Surgery and its allied Surgical Specialities

4.2 Course 2 (C2): Principles and Practice of Surgery

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

- C2.1 Wound healing including recent advances, asepsis, antisepsis, sterilization, and universal precaution
- C2.2 Surgical infections, causes of infections, including diabetes and prevention
- C2.3 Antibiotic therapy rationale including antibiotic prophylaxis, misuse, abuse
- C2.4 Hospital acquired nosocomial infection causes and prevention including MRSA
- C2.5 Surgical nutrition, fluid and electrolyte balance including acid-base disturbance
- C2.6 Surgical knots, sutures, drains, bandages and splints (skills)

4.3 Course 3 (C3): Principles and practices of operative surgery

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

- C3.1 Manage effectively all emergency and elective GI disorders.
- C3.2 Practice the concept of Single Stop Breast Clinic.
- C3.3 Cancer breast diagnosis, staging and multimodality management

C3.4 Understand and manage effectively surgical diseases affecting various endocrine organs like thyroid, parathyroid, and adrenals.

4.4 Course 4 (C4): Recent advance and Subspecialty

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

Comprehensively evaluate and manage common surgical conditions in subspecialties of Urology, Cardiothoracic, Neurosurgery, Plastic and Pediatric Surgery. The resident should also be abreast of recent advances in the surgical field.

The PEO, PO, and the CO are mapped with each other. (Table 1)

Table1. Mapping of PEO, PO, and CO

	PEO 1				PEO2		PEO3	PEO 4		PEO 5	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO 11-14
C1	Y		Y					Y	Y		
C2	Y	Y		Y	Y	Y	Y	Y		Y	Y
C3		Y	Y	Y	Y	Y	Y	Y		Y	
C4				Y			Y	Y	Y	Y	Y

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

5. Competencies, Sub-competencies, and Milestone

At the end of the MS course in General Surgery, the Resident should have acquired various competencies i.e. medical knowledge, patient care, interpersonal communication skill, system-based practice, practice-based learning, and implementation and professionals. Details of each with milestone as the level are described below.(Table 2)

Table 2. Description of Competencies, Sub-competencies, and Milestone

Medical Knowledge (MK): Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

<p>Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioural sciences, as well as the application of this knowledge to patient care)</p>	<p>Level 1 At entry</p>	<p>Level 2 End of 6 mo.</p>	<p>Level 3 End of 1 yr.</p>	<p>Level 4 End of II yr.</p>	<p>Level 5 End of III yr.</p>
<p>MK 1: Knowledge of normal and variant anatomy pertinent to completing operations and functioning of organs associated with different systems (vascular, gastrointestinal, endocrine, etc). Knowledge of physical signs and symptoms for interpreting abnormalities associated with different surgical conditions.</p>	<p>Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice.</p>	<p>Demonstrates a basic understanding of symptoms and signs of common surgical conditions. Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)</p>	<p>Correlates the symptoms and signs with the underlying pathology and disease process Develops appropriate differential diagnoses Able to correlate anatomy and function of organs to diagnostic evaluation and basic imaging. Identifies variations in anatomy during common operations and articulates their implications on operative steps.</p>	<p>Demonstrates an in-depth knowledge regarding core surgical conditions for the management of patients with multiple comorbidities Educates residents regarding surgical anatomy and basic operative steps for common procedures</p>	<p>Demonstrates knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions Demonstrates knowledge of variation in anatomy during complex operations and articulates their implications on operative steps.</p>
<p>MK 2 Apply established principles of clinical sciences to diagnostic, therapeutic decision-making, and skill-based procedures. Demonstrates</p>	<p>Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions.</p>	<p>Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions. Demonstrates the ability to formulate initial</p>	<p>Demonstrates the ability to Interpret tests appropriate for surgical diseases (Haematology, Biochemistry, Microbiology, Radiology) Demonstrates the ability to formulate com</p>	<p>Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities Demonstrates the ability to share knowledge</p>	<p>Demonstrate the ability to share knowledge with the multidisciplinary team regarding surgical conditions. Contributes to peer-reviewed literature on disease presentations,</p>

<p>progressive knowledge of pathophysiology, treatment of surgical conditions, and aspects of evidence-based health care.</p>		<p>steps of management plans for patients with common surgical conditions Ability to formulate a differential diagnosis of various general surgical conditions Practice basic principles of perioperative care for common surgical procedures</p>	<p>prehensive management plans for surgical patients with comorbidities. Demonstrates knowledge</p>	<p>with other members of the health care. Demonstrate knowledge of the impact of patient factors on surgical care pathways. Applies appropriate evidence base guidelines in surgical practice.</p>	<p>alternative or adjuvant treatment of surgical disorders. Applies innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions. Educates residents regarding normal and abnormal surgical disorders.</p>
<p>MK3: Knowledge of research methodology employed in surgical specialties and techniques of scientific communication. Apply principles of social-behavioural sciences on the provision of patient care, and to assess the impact of psychosocial-cultural influences on health, barriers to and attitudes toward care.</p>	<p>Recognize the importance of data collection, basic principles of auditing.</p>	<p>Assess psychosocial-cultural influences on woman's health, care seeking, care-compliance, barriers and attitudes toward care.</p>	<p>Analyze psychosocial-cultural influences on woman's health, care seeking, care-compliance, barriers, and attitudes toward care. Prepare a plan to improve patient care-seeking and care-compliance attitudes toward health care. Demonstrate an investigatory and analytic approach to clinical situations.</p>	<p>Educates residents and other health care members regarding psychosocial-cultural influences on health, care-seeking, care-compliance, barriers and attitudes toward care Apply established and emerging biophysical scientific principles fundamental to health care for patients and populations.</p>	<p>Leads a multidisciplinary team in planning for the care of patients. Applies innovative approaches and implements treatment plans based on emerging evidence Develop & execute a protocol for a scientific research project, collect and analyze the data, and scientifically communicate to the others.</p>

<p>patient-centered compassionate, appropriate, and effective treatment of health problems and the promotion of health)</p> <p>PATIENT CARE 1: PATIENT EVALUATION DECISION MAKING</p> <p>progressive development of knowledge required to and manage with surgical conditions through history physical examination, and available data, imaging, tests.</p>	<p>LEVEL 1</p> <p>Gathers necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p>	<p>LEVEL 2</p> <p>Evaluates patients; orders and interprets diagnostic testing</p> <p>Manages non-operative patients and conditions (e.g., bowel obstruction, diverticulitis)</p>	<p>LEVEL 3</p> <p>Develops a plan to manage straightforward patients (e.g., healthy patients) or hernia and conditions (e.g., colon cancer, breast) or symptomatic</p> <p>Adapts management plan for changing clinical situation (e.g., drainage of diverticular abscess)</p>	<p>LEVEL 4</p> <p>Develops a plan to manage complex patients (e.g., patient with multiple comorbidities) and conditions (e.g., hemorrhagic shock)</p> <p>Manages non-operative complex patients conditions (e.g., severe pancreatitis)</p> <p>Effectively supervises and educates lower-level residents</p>	<p>LEVEL 5</p> <p>Develops a clinical pathway guideline for the management of complex patients conditions</p> <p>Applies innovative approaches to recognize atypical presentations</p>
<p>PATIENT CARE 2:</p> <p>laboratory data, studies, and other required for the surgical problems</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities</p>	<p>Interpretation of commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology</p>	<p>Interpretation of specially performed laboratory data, imaging studies. Correlating specially performed laboratory data, imaging studies with underlying pathology</p>	<p>Formulates management plans and initiates treatment for surgical and surgery-related medical comorbidities.</p>	<p>Applies innovative approaches to treatment plans based on emerging evidence</p>
<p>PATIENT CARE 3:</p> <p>and carry out management plans</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities</p>	<p>Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical</p>	<p>Formulates management plans and initiates treatment for complex conditions</p>	<p>Demonstrates good decisions making and ability to modify management plans</p>	<p>Provides ongoing comprehensive care with surgical and surgical related to medical disorders.</p>

	<p>Demonstrates an understanding of the indications for endoscopy</p> <p>Demonstrates a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Demonstrates knowledge of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Demonstrates the ability to recognize and manage perioperative complications</p>	<p>complications</p> <p>Recognize complications and formulate an initial management plan.</p> <p>Counsel on the effectiveness, risks, and benefits of available forms of management option</p> <p>Perform the initial assessment, formulate a differential diagnosis, and initiate treatment for common surgical problems</p>	<p>Plan prophylactic strategies to reduce postoperative complications.</p> <p>Performs proper insertion of endoscopic instruments.</p> <p>Develop patient centered management plans to maintain health and prevent disease.</p> <p>Assembles endoscopic instruments and checks proper functioning</p>	<p>Recognizes timely consultation during management</p>	<p>Applies innovative approaches to treatment plans based on emerging evidence complications.</p>
<p>PATIENT CARE 4: INTRAOPERATIVE CARE – PERFORMANCE PROCEDURE</p> <p>the progressive development of integrated and skills and diagnostic, and procedures essential for the practice complete operation</p>	<p>Performs basic procedures</p> <p>Demonstrates basic skills (e.g., knot tying, suturing) including depth of the wound</p> <p>Demonstrates basic surgical principles, including the use of</p>	<p>Performs bedside procedures (e.g., central line, chest tube)</p> <p>Teaches basic surgical skills to medical students and junior</p> <p>Performs a simple abdominal incision and closure alone</p>	<p>Performs common operations (e.g., hernia, cholecystectomy, appendectomy)</p> <p>Works effectively as a surgical assistant</p> <p>Teaches bedside operations to junior residents</p>	<p>Performs complex operations (e.g., low anterior resection, paraesophageal hernia, abdominal wall reconstruction)</p> <p>Teaches common operations to junior residents</p>	<p>Performs uncommon operations (e.g., Whipple, esophagectomy)</p> <p>Applies innovative approaches based on emerging evidence medical, diagnostic and procedural skill</p>

	universal precautions and aseptic technique Positions patient appropriately for surgery				Teaches complex operations junior residents
PATIENT CARE 5: INTRAOPERATIVE PATIENT CARE TECHNICAL SKILLS the progressive development of technical needed to complete operation tissue handling, use, and of anatomy	Demonstrates limited tissue-handling skills Requires prompting to identify appropriate tissue Moves forward in the operation only with the active direction	Inconsistently demonstrates careful tissue handling Identifies appropriate plane but requires redirection to maintain dissection in the optimal tissue plane Moves forward in the operation but requires prompting to complete the operation	Consistently demonstrates careful tissue handling Visualizes tissue plane, identifies and dissects relevant normal anatomy Moves fluidly through the course of the operation and anticipates next steps	Adapts tissue handling based on tissue quality Visualizes tissue plane, identifies and dissects relevant abnormal anatomy Adapts to unexpected findings and events during the course of the operation	Identifies innovative techniques, instrumentation, operative approaches, significant improvement established techniques
PATIENT CARE 6: POSTOPERATIVE CARE progressive development of recognition evaluation and management of post-patients	Evaluates simple post-operative problems (e.g., fever, bleeding, hypotension, Evaluates post-operative hypertension oliguria) Manages routine post-operative course for an operation (e.g., hernia, cholecystectomy, appendectomy)	Evaluates complex post-operative problems (e.g., sepsis, anastomotic leak) Manages simple post-operative problems	Evaluates complex post-operative problems in the complex patient (e.g., renal failure, congestive heart failure, cirrhosis) Manages routine post-operative course for a complex operation (e.g., Whipple, esophagectomy)	Anticipates and mitigates post-operative patient problems in complex patients Manages complex post-operative problems	Develops a clinical pathway guideline management complex post-operative problems

PATIENT CARE 7: health care aimed at health problems maintaining health	Demonstrates knowledge of the characteristics of a good screening test. Demonstrates knowledge of indication, benefit, and limitations of commonly used screening.	Recognizes basic risk factors, symptoms, and signs of common surgical conditions and surgical comorbidities Demonstrates knowledge of evidence-based, age-appropriate guidelines for the prevention of surgical conditions and disease prevention (e.g., breast screening.)	Formulates plans and initiates appropriate screening measure	Effectively supervises and educates lower level residents. Collaborates and provides consultation to other members of the health care team	Applies innovative approaches for preventive and promotive health care
PATIENT CARE 8: appropriate patients	Identifies indications for consultation, referral for patients with surgical conditions and conditions with medical complications	Prepare necessary relevant document for referral transfer of care for patients with surgical conditions and conditions with medical complications	Uses a multidisciplinary approach and makes appropriate referrals	Effectively supervises and educates lower level residents. Collaborates and provides consultation to other members of the health care team	Follow up till final outcome after referral

and Family-Centered communication

use language form a relationship with a or her family; to communication including self-personal biases, them in the relationship; lead around shared	LEVEL 1 Communicates with the patients and their families in an understandable and respectful manner. Provides Timely updates to patients and families.	LEVEL 2 Actively listens to patients and families to elicit patients' preferences and expectations.	LEVEL 3 Delivers complex information to patients and their families. Uses shared decision making to make a personalized care plan.	LEVEL 4 Facilitates difficult decisions specific to the patient and family. (End of life care) Effectively negotiates and manages the conflicts among patients, families, and health care team.	LEVEL 5 Educates the on making.
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Interprofessional and Team Communication

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
effectively communicate care team, consultants, in both and	Respectfully request and receives a consultation	Clearly and concisely request and respond to consultations	Uses active listening to adapt communication style to fit team members.	Coordinates recommendations from various health care team members to optimize patient care.	Educates communication strategies feedback health members
		Communicates effectively with other health care, team members.			
			Communicates with concerns and provide feedback to peers and learners.		
				Communicates constructive feedbacks to superiors.	

Communication within Health Care

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
skills and allows the resident effectively within health care system	Accurately records information in the patient's record.	Demonstrate effective use of the electronic medical record to communicate with the Health care team	Integrates and synthesis all data from an outside system to prioritize to the health care system	Appropriately selects form and urgency based on context	Guides departmental institutional communications

Quality	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
To demonstrate the ability to engage in the analysis and	1. Demonstrates knowledge of how to report patient safety	1. Reports patient safety events through institutional reporting	1. Participates in disclosure of patient safety events to	1. Conducts analysis of patient safety events and offers error	1. engages processes to modify prevent safety 2. Creates,

	management of patient safety events, including relevant communication with patients, families, and health care professionals as well as to conduct a QI project	events 2. Demonstrates knowledge of basic quality improvement methodologies and metrics	systems (simulated or actual) 2. Describes local quality improvement initiatives (e.g., infection rate, hand hygiene)	patients and families (simulated or actual) 2. Participates in local quality improvement initiatives	prevention strategies (simulated or actual) 2. Discloses patient safety events to patients and families (simulated or actual)	implements, assesses improvement initiatives institutional community
	To effectively navigate the health care system, including the interdisciplinary team and other care providers, to adapt care to a specific patient population to ensure high-quality patient outcomes	1. Demonstrates knowledge of care coordination 2. Performs safe and effective transitions of care/hand-offs in routine clinical situations	1. Coordinates multidisciplinary care of patients in complex clinical situations (eg. dressing change, Peri-operative care, oncesurgery) 2. Performs safe and effective transitions of care/hand-offs in complex clinical situations	1. Coordinates and/or leads multidisciplinary care of patients in complex clinical situations (e.g., parenteral nutrition intensive care unit) 2. Supervises safe and effective transitions of care/hand-offs of junior residents	1. Coordinates care of patients with barriers to health care access (e.g., trauma patient with no access to care) or other disparities in care 2. Resolves conflicts in transitions of care between teams	
Quality	Overall intent	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
	To understand the surgeon's role in the complex health care system and how to optimize the system to improve patient care and the health system's performance	1. Describes basic health payment systems, including government, private, public, and uninsured care as well as different practice models 2. Describes the key components of documentation for billing and coding	1. Describes how working within the health care system impacts patient care 2. Documents the key components required for billing and coding	1. Analyzes how personal practice affects the system (e.g., length of stay, readmission rates, clinical efficiency)	1. Use shared decision-making inpatient care, taking into consideration costs to the patient 2. Identifies resources and effectively plans for transition to practice (e.g., information technology, legal, billing, and coding, financial, personnel)	Advocates change systems value, effective

	Overall intent	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
Based and Improvement	To become a lifelong learner and integrate outcomes into practice and develop clear objectives and goals for improvement in some form of a learning plan. Based and	Establishes goals for personal and Professional development. To incorporate evidence and patient values into clinical practice	Identifies opportunities for performance Improvement; designs a learning plan. Demonstrates how to access and use available evidence, and incorporate patient preferences and values into the care of a routine patient	Integrates performance feedback and practice data to develop and implement a Learning plan. Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care	Revises learning plan based on Performance data. Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients	Coaches design Implementation learning Critically appraises and applies evidence, even in the face of uncertain and/or conflicting evidence, to guide care, tailored to the individual patient

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
PROFESSIONALISM 1 PRINCIPLES basic ethical	Demonstrates knowledge of the ethical principle, underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources and related topics	Analyzes straightforward situations using ethical principles	Recognizes need to seek help in managing and resolving complex ethical situations	Recognizes and uses appropriate resources for managing and resolving ethical dilemmas as needed (eg. Ethics consultations, literature review, risk management / legal consultation	Identifies and seeks level factors that induce ethical problems or resolution
PROFESSIONALISM 2 BEHAVIOR ACCOUNTABILITY responsibility for and the patients and of the	Completes patient care tasks and responsibilities. Identifies potential barriers and describes strategies for ensuring	Performs patient care tasks and responsibilities in a timely manner with appropriate attention to detail in routine	Performs patient care tasks and responsibilities in a timely manner with appropriate attention to detail in	Recognizes situations that may impact others' ability to complete patient-care tasks and responsibilities in a timely manner	Develops systems to ability to efficiently care tasks and responsibilities Coaches others when fails to meet profes

<p>team and recognize limits of knowledge and</p>	<p>timely task completion Describes when and how to appropriately report lapses in professional behavior Recognizes limits in the knowledge/skills of self and seeks help</p>	<p>situations Takes responsibilities for his or her own professional behavior Recognizes limits in the knowledge/skills of the team and seeks help</p>	<p>complex or stressful situations Demonstrates professional behavior in complex or stressful situations Exhibits appropriate confidence and self-awareness of limits in knowledge/skills</p>	<p>sional</p>
<p>PROFESSIONALISM 3 ADMINISTRATIVE TASKS resident develops behaviors required administrative surgeon, such as education evaluations, summaries, operative progress notes, meeting attendance,</p>	<p>Takes responsibility for failure to complete administrative tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future</p>	<p>Performs administrative tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p>	<p>Performs administrative tasks and responsibilities in a timely manner Recognizes situations that may impact others' ability to complete administrative tasks and responsibilities in a timely manner</p>	<p>Develops systems to ability to efficiently administrative tasks responsibilities</p>
<p>PROFESSIONALISM 4 AWARENESS AND manage, help for professional well-others</p>	<p>Identifies the institutional resources available to manage personal, physical, and emotional health (e.g., acute and chronic disease, substance abuse, and mental health problems) Demonstrates knowledge of the principles of physician well-being and fatigue mitigation</p>	<p>Monitor his or her own personal health and wellness and appropriately mitigates fatigue and / or stress Manages his or her own time and assures fitness for duty</p>	<p>Promotes healthy habits and creates an emotionally healthy environment for colleagues Models appropriate management of personal health issues, fatigue, and stress</p>	<p>Coaches others re-spons or knowledge/skills professional</p>

6. Syllabus

Course Contents:

No limit can be fixed and no fixed number of topics can be prescribed as course contents. She/he is expected to know the subject in-depth, however, emphasis should be on the diseases/health problems most prevalent in that area. Knowledge of recent advances and basic sciences as applicable to his / her specialty should get high priority. Competence in surgical skills commensurate with the specialty (actual hands-on training) must be ensured. General:

1. General topics:

A student should have a fair knowledge of basic sciences (Anatomy, Physiology, Biochemistry, Microbiology, Pathology, and Pharmacology) as applied to his specialty. Further, the student should acquire in-depth knowledge of his subject including recent advances, and should be fully conversant with the bedside procedures (diagnostic and therapeutic) and having knowledge of the latest diagnostics and therapeutics available.

1. History of medicine with special reference to ancient Indian texts
2. Health economics - basic terms, health insurance
3. Medical sociology, doctor-patient relationship, family adjustments in disease, organizational behavior, conflict resolution
4. Computers - record keeping, computer-aided learning, virtual reality, robotics
5. Hazards in hospital and protection:
6. AIDS, hepatitis B, tuberculosis, radiation, psychological
7. Environment protection - bio-medical waste management
8. Surgical audit, evidence-based surgical practice, quality assurance
9. Concept of essential drugs and rational use of drugs
10. Procurement of stores and material & personal management
11. Research methodology - library consultation, formulating research, selection of topic, writing thesis protocol, preparation of consent form from patients
12. Bio-medical statistics, clinical trials
13. Medical ethics
14. Consumer protection
15. Newer antibiotics The problem of resistance.
16. Sepsis - SIRS
17. Nosocomial infection
18. Advances in imaging technologies
19. Disaster management, mass casualties, Triage
20. O.T. design, technologies, equipment
21. Critical care in surgical practice

22. Response to trauma
23. Wound healing
24. Fluid and electrolyte balance
25. Nutrition
26. Blood transfusion
27. Brain death
28. Cadaveric organ retrieval
29. Basic course in Biomedical Research < data collection and analysis, scientific communication.

1. Systemic Surgery

The student must acquire knowledge in the following important topics but teaching should not be limited to these topics. A standard textbook may be followed, which will also identify the level of learning expected of the trainees.

- Wound healing including recent advances
- Asepsis, antisepsis, sterilization and universal precaution
- Surgical knots, sutures, drains, bandages and splints
- Surgical infections, causes of infections, prevention
- Common aerobic and anaerobic organisms and newer organisms causing infection including *Helicobacter Pylori*
- Tetanus, gas gangrene treatment & prevention
- Chronic specific infections TB, Filariasis
- Boils, cellulitis, abscess, necrotizing fasciitis and synergistic infection
- Antibiotic therapy rationale including antibiotic prophylaxis, misuse, abuse
- Hospital-acquired nosocomial infection causes and prevention including MRSA etc.
- HIV, AIDS and Hepatitis B & C, Universal precautions when dealing with patients suffering from these diseases
- Fluid and electrolyte balance including acid-base disturbance, consequences interpretation of blood gas analysis data and management
- Rhabdomyolysis and prevention of renal failure
- Shock (septicaemic, hypovolaemic, Neurogenic, anaphylactic), etiology, pathophysiology and management
- Blood and blood components, transfusion indication, contraindication, mismatch and prevention and management of complications of massive blood transfusion
- Common preoperative preparation (detailed preoperative workup, risk assessment according to the disease and general condition of the patient as per ASA grade) and detailed postoperative complications following major and minor surgical procedures
- Surgical aspects of diabetes mellitus particularly management of diabetic foot and gangrene, preoperative control of diabetes, consequences of hypo- and hyperglycemia in a postoperative setting

- Consequences and management of bites and stings including snake, dog, human bites
- Mechanisms and management of missile, blast and gunshot injuries
- Organ transplantation: Basic principles including cadaver donation, related Human Organ Transplant Acts, ethical and medicolegal aspects.
- Nutritional support to surgical patients
- Common skin and subcutaneous condition
- Sinus and fistulae, pressure sores
- Acute arterial occlusion, diagnosis and initial management
- Types of gangrene, Burger's disease, and atherosclerosis
- Investigations in case of arterial obstruction, amputation, vascular injuries: basic principles and management
- Venous disorders: Varicose veins
- Diagnosis, principles of therapy, prevention of DVT: basic principles and management
- Lymphatic: Diagnosis and principles of management of lymphangitis and lymphedema
- Surgical management of Filariasis
- Burns: causes, prevention, and management
- Wounds of the scalp and its management
- Recognition, diagnosis, and monitoring of patients with a head injury, Glasgow coma scale
- Undergo advanced trauma and cardiac support course (certified) before appearing in the final examination
- Recognition of acute cerebral compression, indication for referrals.
- Cleft lip and palate
- Leukoplakia, retention cysts, ulcers of the tongue
- Oral malignancies
- Salivary gland neoplasms
- Branchial cyst, cystic hygroma
- Cervical lymphadenitis nonspecific and tuberculous, metastatic lymph nodes, and lymphomas.
- Diagnosis and principles of management of goiter
- Thyroglossal cyst and fistula
- Thyrotoxicosis
- Thyroid neoplasms
- Management of solitary thyroid nodule
- Thoracic outlet syndrome
- Management of nipple discharge
- Breast abscess

- Clinical breast examination, breast self-examination
- Screening and investigation of a breast lump
- Concept of Single Stop Breast Clinic
- Cancer breast diagnosis, staging, and multimodality management (common neoadjuvant and adjuvant and palliative chemotherapy protocols and indications of radiation and hormonal therapy, pathology and interpretation of Tumour Markers, breast cancer support groups and counseling)
- Recognition and treatment of pneumothorax, haemothorax
- Pulmonary embolism: Index of suspicion, prevention/recognition, and treatment
- Flail chest, stove in chest
- Postoperative pulmonary complication
- Empyema thoracis
- Recognition of oesophageal atresia and principles of management
- Neoplasms of the lung including its prevention by tobacco control
- Cancer esophagus: principles of management including the importance of early detection and timely referral to a specialist
- Achalasia cardia
- Gastroesophageal reflux disease (GERD)
- Congenital hypertrophic pyloric stenosis
- Aetiopathogenesis, diagnosis, and management of peptic ulcer including the role of H. Pylori and its diagnosis and eradication
- Cancer stomach
- Signs and tests of liver dysfunction
- Amoebic liver abscess and its non-operative management
- Hydatid cyst and its medical and surgical management including laparoscopic management
- Portal hypertension, index of suspicion, symptom, and signs of liver failure and timely referral to a specialist center
- Obstructive jaundice with emphasis on differentiating medical vs surgical Jaundice, the algorithm of investigation, diagnosis and surgical treatment options
- Neoplasms of liver
- Rupture spleen
- Indications for splenectomy
- Clinical features, diagnosis, complication, and principles of management of cholelithiasis and cholecystitis including laparoscopic cholecystectomy
- Management of bile duct stones including endoscopic, open and laparoscopic management
- Carcinoma gall bladder, incidental cancer gall bladder, index of suspicion and its staging and principles of management

- Choledochal cyst
- Acute pancreatitis both due to gallstones and alcohol
- Chronic pancreatitis
- Carcinoma pancreas
- Peritonitis: causes, recognition, diagnosis, complications, and principles of management with knowledge of typhoid perforation, tuberculous peritonitis, postoperative peritonitis
- Abdominal pain types and causes with emphasis on diagnosing early intraabdominal acute pathology requiring surgical intervention
- Intestinal amoebiasis and other worms manifestation (Ascariasis) and their surgical complications (Intestinal Obstruction, perforation, gastrointestinal bleeding, the involvement of biliary tract)
- Abdominal tuberculosis both peritoneal and intestinal
- Intestinal obstruction
- Appendix: Diagnosis and management of acute appendicitis
- Appendicular lump and abscess Colon
- Congenital disorders, Congenital megacolon
- Colitis infective / noninfective
- Inflammatory bowel diseases
- Premalignant conditions of the large bowel
- Ulcerative colitis
- Carcinoma colon
- Principles of management of types of colostomy Rectum and Anal Canal:
- Congenital disorders, Anorectal anomalies
- Prolapse of rectum
- Carcinoma rectum
- Anal Canal: surgical anatomy, features, and management of fissures, fistula - in - ano.
- Perianal and ischioanal abscess
- Hemorrhoids—Non-operative outpatient procedures for the control of bleeding (Banding, cryotherapy, injection) operative options - open and closed haemorrhoidectomy and stapled haemorrhoidectomy
- Anal carcinoma
- Clinical features, diagnosis, complication, and principles of management of inguinal hernia including laparoscopic repair
- Umbilical, femoral hernia, and epigastric hernia
- Open and Laparoscopic repair of incisional/primary ventral hernia
- Urinary symptoms and investigations of urinary tract
- Diagnosis and principles of management of urolithiasis

- Lower Urinary tract symptoms orprostatism
- Benign prostatic hyperplasia; diagnosis andmanagement
- Genital tuberculosis inmale
- Phimosisandparaphimosis
- Carcinoma penis
- Diagnosis and principles of treatment of undescendedtestis
- Torsiontestis
- Hydrocele,hematocele and pyoceleVaricocele: Diagnosis (Medical Board for fitness)
- Varicocele: Diagnosis (Medical Board forfitness)
- Acute and chronicepididymal-orchitis
- Testiculartumors
- Principles of management of urethralinjuries
- Management of soft tissuesarcoma
- Prosthetic materials used in surgicalpractice
- Telemedicine, teleproctoring,ande-learning
- Communication skills

Astudentshouldbeanexpertingoodhistorytaking,physicalexamination,providingbasiclifesupport andadvancedcardiaclifesupport,commonprocedureslikeFNAC,Biopsy,aspirationfromserouscavities, lumber puncture, etc. The student should be able to choose the requiredinvestigations.

Clinical cases and Symptoms-based approach to the patient with:

1. Ulcers intheoralcavity
2. Solitary nodule of thethyroid
3. Lymph node in theneck
4. Suspected breastlump
5. Benign breastdisease
6. Acute abdominalpain
7. Blunt TraumaAbdomen
8. Gall stonedisease
9. Dysphagia
10. Chronic abdominalpain
11. Epigastricmass
12. Righthypochondriummass
13. Right iliac fossamass
14. Renalmass

15. Inguino-scrotal swelling
16. Scrotal swelling
17. Gastric outlet obstruction
18. Upper gastrointestinal bleeding
19. Lower gastrointestinal bleeding
20. Anorectal symptoms
21. Acute intestinal obstruction
22. Obstructive jaundice
23. Acute retention of urine
24. Bladder outlet obstruction
25. Haematuria
26. Peripheral vascular disease
27. Varicose veins
28. Newborn with developmental anomalies
29. Hydronephrosis, Pyonephrosis, perinephric abscess
30. Renal tuberculosis
31. Renal tumors
32. Carcinoma prostate
33. Genital tuberculosis in male

At the end of the course, postgraduate students should be able to perform independently (including perioperative management) the following:

- Start IV lines and monitor infusions
- Start and monitor blood transfusion
- Venous cut-down
- Start and manage a C.V.P. line
- Conduct CPR (Cardiopulmonary resuscitation)
- Basic/ advance life support
- Endotracheal intubation
- Insert nasogastric tube
- Proctoscopy
- Urethral catheterization
- Surgical management of wounds
- Biopsies including image-guided
- Manage pneumothorax / pleural space collections

- Infiltration, surfac, and digital Nerveblocks
- Incise and drain superficialabscesses
- Control externalhemorrhage
- Vasectomy (Preferablynon-scalpel)
- Circumcision
- Surgery forhydrocele
- Surgery forhernia
- Surgery and Injection/banding ofpiles
- Management of all types ofshock
- Assessment and management ofburns
- Hemithyroidectomy
- Excision of thyroglossalcyst
- Excision Biopsy of CervicalLymphnode
- Excision of a benign breastlump
- Modified Radicalmastectomy
- Axillary LymphnodeBiopsy
- Excision ofgynaecomastia
- Excision of skin and subcutaneouswellings
- Split thickness skingraft
- Management of hernias
- Laparoscopic and opencholecystectomy
- Management of Liverabscess
- appendectomy
- Management of intestinal obstruction, small bowel resection, perforationand anastomosis
- Colostomy

The student must have observed or assisted (the list is illustrative) in the following:

- Hartmann's procedure for cancerrectumSplenectomy(emergency)
- Stomachperforation
- Varicose Veinsurgery
- Craniotomy (HeadInjury)
- Superficialparotidectomy
- Submandibular glandexcision
- Soft tissue tumors includingsarcoma

- Pancreaticoduodenalresection
- Hydatid cystliver
- Pancreatic surgery
- Retroperitonealoperations

7. Teaching and Learning Methods

Teaching methodology

Didactic lectures are of least importance; small group discussions such as seminars, journal clubs, symposia, review, and guest lecturers should get priority for theoretical knowledge. Bedside teaching, grand rounds, structured interactive group discussions, and clinical demonstrations should be the hallmark of clinical/practical learning with appropriate emphasis on e-learning. The student should have hand-on training in performing various procedures and the ability to interpret various tests/investigations. Exposure to newer specialized diagnostic/therapeutic procedures concerning her/his subject should be given. Self-learning tools like assignments and case-based learning may be promoted.

1. Clinical postings

A major portion of posting should be in General Surgery. It should include inpatients, out-patients, ICU, trauma, emergency room, and specialty clinics.

Rotation of posting

- Inter-unit rotation in the department should be done for a period of up to one year.
- Rotation inappropriate related subspecialties for a total period not exceeding 06 months.

2. Clinical meetings:

There should be intra- and interdepartmental meetings for discussing the uncommon interesting cases involving multiple departments.

- Logbook-portfolio:- It is an electronic portfolio to be maintained by the resident to record their activities under the section:
 - EPA,
 - Daily log
 - Patient care
 - Procedure
 - Dissertation
 - Academic activities(Seminar, symposium, case presentation, journal club)
 - Co-curricular activities (Conference, CME, Workshop),
 - Teaching Assignments,
 - Awards and achievements
 - Outreach activities.
- **E-portfolio** shall be checked and assessed periodically by the faculty members. This will enable to monitor the progress of the resident, his level of attainment of milestone and impart the training accordingly

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

3. Thesis writing and research:

Thesis writing is compulsory.

1. A postgraduate student of a postgraduate degree course in broad specialties/superspecialties would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.
2. The student should know the basic concepts of research methodology plan a research project, be able to retrieve information from the library. The student should have a basic knowledge of statistics.
3. The department should encourage e-learning activities.

During the training program, patient safety is of paramount importance; therefore, skills are to be learned initially on the models, later to be performed under supervision followed by performing independently; for this purpose, provision of surgical skills laboratories in the medical colleges is mandatory.

8. Assessment

Assessments should be comprehensive & objective. It should address the stated competencies of the course. The assessment needs to be spread over the duration of the course.

8.1 Formative Assessment:

i.e., assessment during the training would include: Formative assessment should be continual and should assess medical knowledge, patient care, procedural & academic skills, interpersonal skills, professionalism, self-directed learning, and ability to practice in the system.

General Principles

Internal Assessments should be frequent, cover all domains of learning, and used to provide feedback to improve learning; it should also cover professionalism and communication skills. The Internal Assessment should be conducted in theory and clinical examination.

Quarterly assessment during the MS training should be based on the following educational activities:

1. **Journal based / recent advances learning Patient-based /Laboratory or Skill-based learning Self-directed learning and teaching**
2. **Departmental and interdepartmental learning activity**
3. **External and Outreach Activities /CMEs**

The student to be assessed periodically as per the categories listed in the postgraduate student appraisal form (Annexure I).

SUMMATIVE ASSESSMENT, i.e., assessment at the end of the training

The summative examination would be carried out as per the Rules given in

POSTGRADUATE MEDICAL EDUCATION REGULATIONS, 2000.

The examination will be in three parts:

1. Thesis

Every post graduate student shall carry out work on an assigned research project under the guidance of

a recognized Post Graduate Teacher, the result of which shall be written up and submitted in the form of a Thesis. Work for writing the Thesis is aimed at contributing to the development of a spirit of inquiry, besides exposing the candidate to the techniques of research, critical analysis, acquaintance with the latest advances in medical science, and the manner of identifying and consulting available literature.

The thesis shall be submitted at least six months before the Theory and Clinical / Practical examination. A minimum of three examiners; one internal and two external examiners, who shall not be the examiners for Theory and Clinical examination, shall examine the thesis. A candidate shall be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the Thesis by the examiners.

2. Theory

The examinations shall be organized on the basis of 'Grading' or 'Marking system' to evaluate and to certify candidate's level of knowledge, skill, and competence at the end of the training. Obtaining a minimum of 50% marks in 'Theory' as well as 'Practical' separately shall be mandatory for passing the examination as a whole. The examination for MS shall be held at the end of the 3rd academic year. An academic term shall mean six month's training period.

Theory shall consist of four papers of 3 hours each.

Course 1: Basic sciences (Applied)

Course 2: Principles and Practice of Surgery

Course 3: Principles and Practices Of Operative surgery

Course 4: Recent Advances and Subspecialty.

3. Clinical / Practical and viva-voce Examination

The clinical examination shall be conducted to test the knowledge, skills, attitude, and competence of the postgraduate students for undertaking independent work as a specialist/Teacher, for which postgraduate students shall examine a minimum one long case and two short cases.

The Oral examination shall be thorough and shall aim at assessing the postgraduate student's knowledge and competence about the subject, investigative procedures, therapeutic technique, and other aspects of the specialty, which form a part of the examination.

Assessment may include Objective structured clinical examination.(OSCE)

Oral/Viva-voce examination needs to assess knowledge on X-rays, instrumentation, operative procedures. Due weightage should be given to Log Book Records and day-to-day observation during the training.

Description of Entrustable Professional Activity with relevant domains of competence, domain critical behavior

EPA 1: Gathering a history and performing a physical examination	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to perform an accurate complete or focused history and physical exam in a prioritized, organized manner without supervision and with respect for the patient. The history and physical examinations should be tailored to the clinical situation and specific patient encounter. This data gathering and patient interaction activity serve as the basis for clinical work and as the building block for patient evaluation and management.
2. Most relevant domains of competence:	MK, PC, ICS, P
3. Competencies within each domain critical to entrustment decisions:	MK1.3 MK3.3 PC2.3 ICS1.4 P1.3
4. Methods of assessment	1. Periodic written exam (Every 6 months) 2. Mini-cex 3. Workplace assessment by Faculty 4. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 1	<p>Lacks understanding of basic knowledge of normal anatomy of systems relevant to general surgical practice.</p> <p>Lacks basic understanding of symptoms and signs of common surgical conditions.</p> <p>Fails to Explain complications</p> <p>Lack of knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)</p> <p>Fails to Correlate the symptoms and signs with the underlying pathology and disease process</p> <p>Inability to Develop appropriate differential diagnoses</p> <p>Unable to correlate anatomy and function of organs to diagnostic evaluation and basic imaging.</p>	<p>Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice.</p> <p>Demonstrates a basic understanding of symptoms and signs of common surgical conditions.</p> <p>Explain complications</p> <p>Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)</p> <p>Correlate the symptoms and signs with the underlying pathology and disease process</p> <p>Develops appropriate differential diagnoses</p> <p>Able to correlate anatomy and function of organs to diagnostic evaluation and basic imaging.</p>

	Fails to Identify variations in anatomy during common operations and articulates their implications on operative steps.	Identifies variations in anatomy during common operations and articulates their implications on operative steps.
MK 3	<p>Fails to recognise importance of data collection, basic principles of auditing.</p> <p>Inability to assess psychosocial-cultural influences on woman's health, care-seeking, care-compliance, barriers and attitudes toward care</p> <p>Unable to Analyze psychosocial-cultural influences on woman's health, care-seeking, care-compliance, barriers and attitudes toward care</p> <p>Fails to prepare a plan to improve woman's care-seeking and care-compliance attitudes toward health care.</p> <p>Lacks understanding of an investigatory and analytic approach to clinical situations</p>	<p>Recognise importance of data collection, basic principles of auditing.</p> <p>Assess psychosocial-cultural influences on woman's health, care-seeking, care-compliance, barriers and attitudes toward care</p> <p>Analyze psychosocial-cultural influences on woman's health, care-seeking, care-compliance, barriers, and attitudes toward care</p> <p>Prepare a plan to improve woman's care-seeking and care-compliance attitudes towards health care.</p> <p>Demonstrate an investigatory and analytic approach to clinical situations.</p>
PC 2	<p>Lacks knowledge of surgical and surgery-related medical comorbidities</p> <p>Fails to Interpret commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology</p> <p>Inability to interpret specially performed laboratory data, imaging studies.</p> <p>Fails to correlate specially performed laboratory data, imaging studies with underlying pathology</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities</p> <p>Interpretation of commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology</p> <p>Interpretation of specially performed laboratory data, imaging studies. Correlating specially performed laboratory data, imaging studies with underlying pathology</p>
ICS 1	<p>Does not show adequate listening skills.</p> <p>Communicates ineffectively with the patients and their families in understandable and in a disrespectful manner.</p> <p>Fails to listen to patients and families to elicit patients' preferences and expectations.</p> <p>Unable to verbalizes complex information to patients and their families.</p> <p>Fail to communication difficult decision specific to the patient and family. (End of life care).</p>	<p>Communicates with the patients and their families in an understandable and respectful manner.</p> <p>Actively listens to patients and families to elicit patients' preferences and expectations.</p> <p>Delivers complex information to patients and their families.</p> <p>Facilitates difficult decisions specific to the patient and family. (End of life care)</p>
P1	<p>Fail to understand knowledge of the ethical principles underlying principles, underlying informed consent, advance directives, confidentiality, error disclosure, stewardship of limited resources and related topics</p> <p>fail to demonstrates sensitivity to analyze straightforward situations using ethical principles.</p>	<p>Demonstrates knowledge of the ethical principles underlying principles, underlying informed consent, advance directives, confidentiality, error disclosure, stewardship of limited resources and related topics</p> <p>Analyze s straightforward situations using ethical principles</p> <p>Recognizes need to seek help in managing and resolving complex ethical situations</p>

	Inability to recognize need to seek help in managing and resolving complex ethical situations	
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EPA 2: Prioritizing a differential diagnosis following a clinical encounter	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to integrate patient data to formulate an assessment, developing a list of potential diagnoses that can be prioritized and lead to the selection of a working diagnosis
2. Most relevant domains of competence:	MK, PC, ICS, PBLI, P
3. Competencies within each domain critical to entrustment decisions:	MK 1.2, 2.2 PC 1.2, 3.2 ICS 1.2 PBLI 1.2 P1.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 1	Lacks understanding of basic knowledge of normal anatomy of systems relevant to general surgical practice. Lacks basic understanding of symptoms and signs of common surgical conditions. Fails to Explain complications Lack of knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)	Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice. Demonstrates a basic understanding of symptoms and signs of common surgical conditions. Explain complications Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)
MK 2	Lack of ability to formulate a differential diagnosis of various common surgical conditions Lack understanding of initial evaluation and treatment options of common surgical conditions. Unable to formulate comprehensive management plans for patients with common surgical conditions. Lack of knowledge relevant surgical	Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions. Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions. Demonstrates the ability to formulate initial steps of management plans for patients with common surgical conditions

	anatomy, common procedural indications relevant to common basic surgical procedures	Ability to formulate a differential diagnosis of various general surgical conditions Practice basic principles of perioperative care for common surgical procedures
PC 1	<p>Unable to perform basic procedures, including speculum examination and per vaginal examination, Pap smear.</p> <p>Lack of knowledge of basic surgical principles, including the use of universal precautions and aseptic technique</p> <p>Cannot position patient appropriately for surgery Unable to perform the antepartum and intrapartum diagnostic procedure for women with uncomplicated pregnancies (e.g., identification of Foetal lie, interpretation of Foetal heart rate monitoring, and tocodynamometry) Unable to perform basic obstetrical skills, including assessment of dilation, spontaneous vagina delivery, ultrasound for assessment of Foetal number, lie, presentation, viability, and the placental location. Demonstrate the performance of Apgar testing.</p> <p>Unable to perform simple abdominal incision and closure, vaginal or vulvar incision, and repair.</p> <p>Lack of basic surgical skills, including knot tying, simple suturing,</p>	<p>Gathers necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p> <p>Evaluates patients; orders and interprets diagnostic testing</p> <p>Manages non-operative straightforward patients and conditions (e.g., bowel obstruction, diverticulitis)</p>
PC 3	<p>Demonstrates knowledge of obstetrics, reproductive, and related non-reproductive medical disorders.</p> <p>Interpretation of commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities</p> <p>Demonstrates an understanding of the indications for endoscopy</p> <p>Demonstrates a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Demonstrates knowledge of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Recognise complications and formulate an initial management plan.</p> <p>Counsels on the effectiveness, risk, and</p>

		benefits of available forms of management option Perform the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems
ICS 1		Communicates with the patients and their families in an understandable and respectful manner. Provides Timely updates to patients and families. Actively listens to patients and families to elicit patients preferences and expectations.
PBLI 1	Demonstrates an understanding of critical appraisal of the literature Demonstrates responsiveness to constructive feedback Identifies resources (e.g., texts, search engines) to answer questions while providing patient care Recognizes limits of knowledge, expertise, and technical skills Describe commonly used study designs (e.g., randomized controlled trial [RCT], cohort; case-control, cross-sectional)	Demonstrates how to access and use the available evidence, and incorporate patient Preferences and values into the care of a patient Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care
P 1	Fail to understand the importance of compassion, integrity, and respect for others. Unable to demonstrates sensitivity and responsiveness to patients. Fail to shows compassion, integrity, and respect in typical situations with patients, peers, and members of the health care team Occasionally demonstrate sensitivity and responsiveness to the diversity of patients' ages, cultures, races, religions, abilities, or sexual orientations. Occasionally accepts constructive feedback to improve his or her ability to demonstrate compassion, integrity, and respect for others	Demonstrates knowledge of the ethical principles underlying principles, underlying informed consent, surrogate decision making, advanced directives, confidentiality, error disclosure, stewardship of limited resources and related topics Analyzes straight forward situations using ethical principles

EPA 3: Recommending and interpreting common diagnostic and screening tests	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to select and interpret common diagnostic and screening tests using evidence-based and cost-effective principles as one approach a patient in any setting.
2. Most relevant domains of competence:	MK, PC, ICS, PBLI.

3. Competencies within each domain critical to entrustment decisions:	MK1.2, MK2.2 PC1.2 PBLI2.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 1	<p>Unable to Correlate the symptoms and signs with the underlying pathology and disease process</p> <p>Unable to Develop appropriate differential diagnoses</p> <p>Unable to correlate anatomy and function of organs to diagnostic evaluation and basic imaging.</p> <p>Unable Identify variations in anatomy during common operations and articulates their implications on operative steps.</p>	<p>Correlates the symptoms and signs with the underlying pathology and disease process</p> <p>Develops appropriate differential diagnoses</p> <p>Able to correlate anatomy and function of organs to diagnostic evaluation and basic imaging.</p> <p>Identifies variations in anatomy during common operations and articulates their implications on operative steps.</p>
MK 2	<p>Unable to Demonstrate the ability to Interpret tests appropriate for surgical diseases (Haematology, Biochemistry, Microbiology, Radiology)</p> <p>Unable to Demonstrate the ability to formulate comprehensive management plans for surgical patients with comorbidities.</p> <p>Unable to Demonstrate knowledge of pathophysiology and treatment of patients with complex surgical conditions.</p>	<p>Demonstrates the ability to Interpret tests appropriate for surgical diseases (Haematology, Biochemistry, Microbiology, Radiology)</p> <p>Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities.</p> <p>Demonstrates knowledge of pathophysiology and treatment of patients with complex surgical conditions.</p>
PC 1	<p>Gathers necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p>	<p>Unable to Gather necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p>
PBLI 2	<p>Do not show commitment to self-evaluation, lifelong learning, and patient safety.</p> <p>Lack of understanding of the basic concepts of QI Do not read appropriate information, as assigned by the program or related to patient-specific topics Fail to Understands the level of evidence for patient care recommendations</p>	<p>Shows commitment to self-evaluation, lifelong learning, and patient safety. Demonstrates an understanding of the basic concepts of QI Reads appropriate information, as assigned by the program or related to patient-specific topics Understands the level of evidence for patient care recommendations</p>

EPA 4: Entering and discussing orders and prescriptions and giving the necessary instructions to the patients	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to prescribe therapies or interventions beneficial to patients. Entering residents will have a comprehensive understanding of some but not necessarily all of the patient's clinical problems for which they must provide orders. They must also recognize their limitations and seek review for any orders and prescriptions they are expected to provide but for which they do not understand the rationale. The expectation is that learners will be able to enter safe orders and prescriptions in a variety of settings (e.g., inpatient, ambulatory, urgent, or emergent care).
2. Most relevant domains of competence:	PC, ICS, SBP.
3. Competencies within each domain critical to entrustment decisions:	PC3.L2 ICS1.L2 SBP2.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
PC 3	<p>Unable to Demonstrate knowledge of surgical and surgery relate to medical comorbidities</p> <p>Unable to Demonstrates an understanding of the indications for endoscopy</p> <p>Unable to Demonstrates a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Unable to Demonstrates knowledge of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Unable to Demonstrates the ability to recognize and manage perioperative complications Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities</p> <p>Demonstrates an understanding of the indications for endoscopy</p> <p>Demonstrates a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Demonstrates knowledge of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Demonstrates the ability to recognize and manage perioperative complications Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Recognise complications and formulate an initial management plan.</p>

	<p>Unable to Recognise complications and formulate an initial management plan.</p> <p>Unable to Counsel on the effectiveness, risks, and benefits of available forms of management option</p> <p>Unable to Perform the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Unable to Recognise complications and formulate an initial management plan. Unable to Counsel on the effectiveness, risks, and benefits of available forms of management option</p> <p>Unable to Perform the initial assessment formulates a differential diagnosis and initiates treatment for common surgical problems</p>	<p>Counsels on the effectiveness, risks, and benefits of available forms of management option</p> <p>Performs the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems</p>
ICS 1	<p>Does not Actively listens to patients and families to elicit patients preference and expectations.</p> <p>Unable to Communicate with the patients and their families in an understandable and respectful manner.</p> <p>Unable to Provides Timely updates to patients and family.</p>	<p>Actively listens to patients and families to elicit patients' preferences and expectations.</p> <p>Communicates with the patients and their families in an understandable and respectful manner.</p> <p>Provides Timely updates to patients and families.</p>
SBP2	<p>Unable to Demonstrate knowledge of care coordination</p> <p>Unable to perform safe and effective transitions of care/hand-offs in routine clinical situations</p> <p>Unable to Coordinate multidisciplinary care of patients in routine clinical situations (e.g. Dressing change, Peri-operative care oncesurgery)</p> <p>Unable to perform safe and effective transitions of care/hand-offs in complex clinical situations</p>	<p>Demonstrates knowledge of care coordination</p> <p>Performs safe and effective transitions of care/hand-offs in routine clinical situations</p> <p>Coordinates multidisciplinary care of patients in routine clinical situations (e.g. Dressing change, Peri-operative care oncesurgery)</p> <p>Performs safe and effective transitions of care/hand-offs in complex clinical situations</p>

EPA 5: Documenting a clinical encounter in patient records and provide an oral presentation of a clinical encounter	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to provide accurate, focused, and context-specific documentation of a clinical encounter in either written or electronic formats. The performance of this EPA is predicated on the ability to obtain information through history, using both primary and secondary sources, and physical exams in a variety of settings (e.g., office visit, admission, discharge summary, telephone call, email).
2. Most relevant domains of competence:	PC, ICS, SBP, P.
3. Competencies within each domain critical to entrustment decisions:	PC1.L2 ICS2.L2 SBP1.L2 P2.L2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
PC 4	<p>Unable to Gather necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p> <p>Unable to Evaluate patients; orders and interprets diagnostic testing</p> <p>Unable to manage non-operative straightforward patients and conditions (e.g., bowel obstruction, diverticulitis)</p>	<p>Gathers necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p> <p>Evaluates patients; orders and interprets diagnostic testing</p> <p>Manages non-operative straightforward patients and conditions (e.g., bowel obstruction, diverticulitis)</p>
ICS 2	<p>Unable to request and respond to consultations</p> <p>Unable to Communicate effectively to other health care team members.</p> <p>Unable to Respectfully request and receive a consultation</p>	<p>Clearly and concisely request and respond to consultations</p> <p>Communicates effectively with other health care team members.</p> <p>Respectfully request and receives a consultation</p>
SBP1	<p>Unable to Report patient safety events through institutional reporting systems (simulated or actual)</p>	<p>Reports patient safety events through institutional reporting systems (simulated or actual)</p>

	<p>Unable to Describe local quality improvement initiatives (e.g., infection rate, hand hygiene)</p> <p>Unable to Demonstrate knowledge of how to report patient safety events</p> <p>Unable to Demonstrate knowledge of basic quality improvement methodologies and metrics</p>	<p>Describes local quality improvement initiatives (e.g., infection rate, hand hygiene)</p> <p>Demonstrates knowledge of how to report patient safety events</p> <p>Demonstrates knowledge of basic quality improvement methodologies and metrics</p>
P1	<p>Unable to Perform patient care tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Unable to Take responsibilities for his or her own professional behavior</p> <p>Unable to Recognise limits in the knowledge/skills of the team and seeks help</p> <p>Unable to Complete patient care tasks and responsibilities. Identifies potential barriers and describes strategies for ensuring timely task completion</p> <p>Unable to Describe when and how to appropriately report lapses in professional behavior</p> <p>Unable to recognize limits in the knowledge/skills of self and seek help</p>	<p>Performs patient care tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Takes responsibilities for his or her own professional behavior</p> <p>Recognizes limits in the knowledge/skills of the team and seeks help</p> <p>Completes patient care tasks and responsibilities. Identifies potential barriers and describes strategies for ensuring timely task completion</p> <p>Describes when and how to appropriately report lapses in professional behavior</p> <p>Recognizes limits in the knowledge/skills of self and seeks help</p>

EPA 6: Form clinical questions and retrieve evidence to advance patient care	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to identify key clinical questions in caring for patients, identify information resources, and retrieve information and evidence that will be used to address those questions. Residents should have basic skills in critiquing the quality of the evidence and assessing applicability to their patients and the clinical context. Underlying the skill set of practicing evidence-based medicine is the foundational knowledge an individual has and the self-awareness to identify gaps and fill them.
2. Most relevant domains of competence:	MK, PBLI.
3. Competencies within each domain critical to entrustment decisions:	MK1.2 MK2.2 PBLI1.2

4. Methods of assessment	<ol style="list-style-type: none"> 1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback <ol style="list-style-type: none"> a. Patient b. Nurses c. Health care workers d. Peers
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Competency	Pre-Entrustable	Entrustable
MK 1	<p>Unable to Demonstrate a basic understanding of symptoms and signs of common surgical conditions.</p> <p>Unable to Demonstrate knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)</p>	<p>Demonstrates a basic understanding of symptoms and signs of common surgical conditions.</p> <p>Explain late trimester complications</p> <p>Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)</p>
MK 2	<p>Unable to Demonstrate an understanding of initial evaluation and treatment options of common surgical conditions.</p> <p>Unable to Demonstrate the ability to formulate initial steps of management plans for patients with common surgical conditions</p> <p>Ability to formulate a differential diagnosis of various general surgical conditions</p> <p>Unable to Practise basic principles of perioperative care for common surgical procedures</p>	<p>Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions.</p> <p>Demonstrates the ability to formulate initial steps of management plans for patients with common surgical conditions</p> <p>Ability to formulate a differential diagnosis of various general surgical conditions</p> <p>Practise basic principles of perioperative care for common surgical procedures</p>
PBLI 1	<p>Lack of understanding of critical appraisal of the literature Fail to demonstrates responsiveness to constructive feedback. Fail to identifies resources (e.g., texts, search engines) to answer questions while providing patient care Fail to recognizes limits of knowledge, expertise, and technical skills</p> <p>Unable to describes commonly used study designs (e.g., randomized controlled trial [RCT], cohort; case-control, cross-sectional)</p>	<p>Demonstrates an understanding of critical appraisal of the literature Demonstrates responsiveness to constructive feedback.</p> <p>Identifies resources (e.g., texts, search engines) to answer questions while providing patient care Recognizes limits of knowledge, expertise, and technical skills Describes commonly used study designs (e.g., randomized controlled trial [RCT], cohort; case-control, cross-sectional)</p>

EPA 7: Give or receive a patient handover to transition care responsibility	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Effective and efficient handover communication is critical for patient care. Handover communication ensures that patients continue to receive high-quality and safe care through transitions of responsibility from one health care team or practitioner to another. Handovers are also foundational to the success of many other types of interprofessional communication, including discharge from one provider to another and from one setting to another. Handovers may occur between settings (e.g., hospitalist to PCP; pediatric to the adult caregiver; discharge to lower-acuity settings) or within settings (e.g., shift changes).

2. Most relevant domains of competence:	PC/ ICS/ PBLI/ P
3. Competencies within each domain critical to entrustment decisions:	PC1.2 PC 3.2 ICS2.2 PBLI2.2 P1.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
PC 1	<p>Inability to Gather necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p> <p>Fails to Evaluate patients; orders and interprets diagnostic testing</p> <p>Inability to Manage non-operative straightforward patients and conditions (e.g., bowel obstruction, diverticulitis)</p>	<p>Gathers necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p> <p>Evaluates patients; orders and interprets diagnostic testing</p> <p>Manages non-operative straightforward patients and conditions (e.g., bowel obstruction, diverticulitis)</p>
PC 3	<p>Fails to demonstrate knowledge of surgical and surgery-related medical comorbidities</p> <p>Fails to Demonstrate an understanding of the indications for endoscopy</p> <p>Inability to demonstrate a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Lacks understanding of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Fails to Demonstrate the ability to recognize and manage perioperative complications</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities</p> <p>Demonstrates an understanding of the indications for endoscopy</p> <p>Demonstrates a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Demonstrates knowledge of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Demonstrates the ability to recognize and manage perioperative complications</p> <p>Performs the initial assessment, formulates a differential diagnosis and initiates</p>

	<p>Unable to Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Fails to Recognise complications and formulate an initial management plan.</p> <p>Lacks the sensitivity to Counsel on the effectiveness, risks, and benefits of available forms of management option</p> <p>Fails to performs the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems</p>	<p>treatment for common surgical complications</p> <p>Recognise complications and formulate an initial management plan.</p> <p>Counsels on the effectiveness, risks, and benefits of available forms of management option</p> <p>Performs the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems</p>
ICS 2	<p>Lacks the ability to respectfully request and receives a consultation</p> <p>Fails to clearly and concisely request and respond to consultations</p> <p>Inability to Communicate effectively to other health care team members.</p>	<p>Respectfully request and receives a consultation</p> <p>Clearly and concisely request and respond to consultations</p> <p>Communicates effectively with other health care team members.</p>
PBLI 2	<p>Does not Establish goals for personal and professional development</p> <p>Fails to identify opportunities for performance-improvement; designs a learning plan</p>	<p>Establishes goals for personal and professional development</p> <p>Identifies opportunities for performance improvement; designs a learning plan</p>
P1	<p>Fails to Demonstrate knowledge of the ethical principles underlying principles, underlying informed consent, surrogate decision making, advanced directives, confidentiality, error disclosure, stewardship of limited resources and related topics</p> <p>Fails to demonstration sensitivity to understand straightforward situations using ethical principles</p>	<p>Demonstrates knowledge of the ethical principles underlying principles, underlying informed consent, surrogate decision making, advanced directives, confidentiality, error disclosure, stewardship of limited resources and related topics</p> <p>Analyzes straightforward situations using ethical principles</p>

EPA 8: Collaborate as a member of an interprofessional team

1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Effective teamwork is necessary to achieve the Institute of Medicine competencies for care that is safe, timely, effective, efficient, and equitable. Introduction to the roles, responsibilities, and contributions of individual team members early in professional development is critical to fully embracing the value that teamwork adds to patient care outcomes.
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2. Most relevant domains of competence:	ICS, SBP, P.
3. Competencies within each domain critical to entrustment decisions:	ICS2.2 SBP1.2 P2.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
ICS 2	<p>Lacks the ability to respectfully request and receive a consultation</p> <p>Fails to clearly and concisely request and respond to consultations</p> <p>Inability to communicate effectively to other health care team members.</p>	<p>Respectfully request and receive a consultation</p> <p>Clearly and concisely request and respond to consultations</p> <p>Communicates effectively with other health care team members.</p>
SBP1	<p>Lacks knowledge of how to report patient safety events</p> <p>Lacks knowledge of basic quality improvement methodologies and metrics</p> <p>Fails to report patient safety events through institutional reporting systems (simulated or actual)</p> <p>Inability to Describe local quality improvement initiatives (e.g., infection rate, hand hygiene)</p>	<p>Demonstrates knowledge of how to report patient safety events</p> <p>Demonstrates knowledge of basic quality improvement methodologies and metrics</p> <p>Reports patient safety events through institutional reporting systems (simulated or actual)</p> <p>Describes local quality improvement initiatives (e.g., infection rate, hand hygiene)</p>
P2	<p>Fails to complete patient care tasks and responsibilities. identifies potential barriers and describes strategies for ensuring timely task completion</p> <p>Unable to describes when and how to appropriately report lapses in professional behavior</p> <p>Fails to recognise limits in the knowledge/skills of self and to seeks help</p> <p>Inability to perform patient care tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p>	<p>Completes patient care tasks and responsibilities. identifies potential barriers and describes strategies for ensuring timely task completion</p> <p>Describes when and how to appropriately report lapses in professional behavior</p> <p>Recognizes limits in the knowledge/skills of self and seeks help</p> <p>Performs patient care tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p>

	Fails to take responsibilities for his or her own professional behavior	Takes responsibilities for his or her own professional behavior
	Fails to recognize limits in the knowledge/skills of the team and seeks help	Recognizes limits in the knowledge/skills of the team and seeks help

EPA 9: Obtain informed consent for tests and/or procedures	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to perform patient care interventions that require informed consent for interventions, tests, or procedures they order or perform (e.g., immunizations, central lines, contrast and radiation exposures, blood transfusions) but should not be expected to obtain informed consent for procedures or tests for which they do not know the indications, contraindications, alternatives, risks, and benefits.
2. Most relevant domains of competence:	PC, ICS, SBP, P
3. Competencies within each domain critical to entrustment decisions:	PC1.2 PC2.2 PC4.2 ICS1.2 SBP2.2 P1.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
PC 1	Unable to Evaluate patients; orders and interprets diagnostic testing Unable to Manage non-operative straightforward patients and conditions (e.g., bowel obstruction, diverticulitis)	Evaluates patients; orders and interprets diagnostic testing Manages non-operative straightforward patients and conditions (e.g., bowel obstruction, diverticulitis)
PC 2	Unable to Interpretation of commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology	Interpretation of commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology,
PC 4	Unable to Perform bedside procedures (e.g., central line, chest tube) Unable to Teach basic surgical skills to medical students and junior	Performs bedside procedures (e.g., central line, chest tube) Teaches basic surgical skills to medical students and junior

	Unable to Perform a simple abdominal incision and closure alone	Performs a simple abdominal incision and closure alone
ICS 1	Does not Actively listens to patients and families to elicit patients preference and expectations.	Actively listens to patients and families to elicit patients' preferences and expectations.
PBLI 1	Unable to Demonstrate how to access and use the available evidence, and incorporate patient preferences and values into the care of a routine patient	Demonstrates how to access and use the available evidence, and incorporate patient preferences and values into the care of a routine patient
P1	Unable to understand the importance of compassion, integrity, and respect for others Fails to demonstrate sensitivity and responsiveness to patients. Occasionally shows compassion, integrity, and respect in typical situations with patients, peers, and members of the health care team Fail to demonstrate sensitivity and responsiveness to the diversity of patients' ages, cultures, races, religions, abilities, or sexual orientations Fail to accept constructive feedback to improve his or her ability to demonstrate compassion, integrity, and respect for others.	Understands the importance of compassion, integrity, and respect for others Dem-onstrates sensitivity and responsiveness to patients Consistently shows compassion, integrity, and respect in typical situations with patients, peers, and members of the health care team Consistently demon-strates sensitivity and responsiveness to the diversity of patients' ages, cultures, races, religions, abilities, or sexual orientations Accepts constructive feedback to improve his or her ability to demonstrate compassion, integrity, and respect for others

EPA 10: Perform general procedures of a physician	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	The residents should have the knowledge and technical knowhow for performing basic surgical skills like administering vaccines and injections can list the indications, complications, and contraindications of a procedure adequately explain the family members/caregivers clarifies any questions and should be able to detect complications if any and communicate with the consultant.
2. Most relevant domains of competence:	MK, PC, PBLI, P
3. Competencies within each domain critical to entrustment decisions:	MK1.2 MK2.2 PC 1.1 PC 2.1 PC 3.1 PBLI 2.2 P2.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
PC 1	Unable to Demonstrate basic knowledge of normal anatomy of systems relevant to general surgical practice.	Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice.
PC 1	Unable to Gathers necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings	Gathers necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings
PC 2	Unable to Demonstrate knowledge of surgical and surgery-related medical comorbidities	Demonstrate knowledge of surgical and surgery-related medical comorbidities
PC 3	<p>Unable to Demonstrate knowledge of surgical and surgery-related medical comorbidities</p> <p>Unable to Demonstrate an understanding of the indications for endoscopy</p> <p>Unable to Demonstrate a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Unable to Demonstrate knowledge of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Unable to Demonstrate the ability to recognize and manage perioperative complications</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities</p> <p>Demonstrates an understanding of the indications for endoscopy</p> <p>Demonstrates a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Demonstrates knowledge of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Demonstrates the ability to recognize and manage perioperative complications</p>
PBLI 2	Unable to Identify opportunities for performance improvement; designs a learning plan.	Identifies opportunities for performance improvement; designs a learning plan.

EPA 10: Perform general procedures of a physician	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	To ensure to identify system failure and contribute to a culture of safety and improvement
2. Most relevant domains of competence:	MK PC ICS1 P
3. Competencies within each domain critical to entrustment decisions:	MK3.L3 SBP1.L4 SBP3.3 P4.3

4. Methods of assessment	<ol style="list-style-type: none"> 1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback <ol style="list-style-type: none"> a. Patient b. Nurses c. Health care workers d. Peers
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Competency	Pre-Entrustable	Entrustable
P2	<p>Unable to Perform patient care tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Unable to Take responsibilities for his or her own professional behavior</p> <p>Unable to Recognize limits in the knowledge/skills of the team and seeks help</p>	<p>Performs patient care tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Takes responsibilities for his or her own professional behavior</p> <p>Recognizes limits in the knowledge/skills of the team and seeks help</p>

EPA 11: Effective communication with peers and superiors.	
EPA 12: Attitudes towards patient, relatives, peers and Supervisors	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	EffectiveteamworkisnecessarytoachievetheInstituteofMedicinecompetencies forcarethatissafe,timely, effective, efficient, andequitable. Introductiontothe roles, responsibilities, and contributions of individual team members early in professional development is critical to fully embracing the value that teamwork adds to patient care outcomes.
2. Most relevant domains of competence:	ICS, SBP, P.
3. Competencies within each domain critical to entrustment decisions:	ICS2.2 SBP1.2 P2.2
4. Methods of assessment	<ol style="list-style-type: none"> 1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback <ol style="list-style-type: none"> a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
P2	<p>Fail to understand the importance of relationship development, information gathering and sharing, and teamwork.</p> <p>Lack of understanding of the roles of health care team members, and communicates effectively within the team.</p>	<p>Understands the importance of relationship development, information gathering and sharing, and teamwork.</p> <p>Demonstrates an understanding of the roles of health care team members, and communicates effectively within the team.</p>

	Lack of understanding of transitions of care and team debriefing.	Demonstrates an understanding of transitions of care and team debriefing.
SBP1	Fail to recognizes the limitations and failures of a team approach (e.g., hand-offs, miscommunication) in health care as the leading cause of preventable patient harm. Lack of knowledge of institutional surveillance systems to monitor for patient safety (e.g., General Surgery site infection, medical error reporting) Occasionally participates in “time-out”. Occasionally utilize checklists to promote patient safety (e.g., medication reconciliation). Lack of knowledge of the epidemiology of medical errors and the differences between near misses, medical errors, and sentinel events.	Recognizes limitations and failures of a team approach (e.g., hand-offs, miscommunication) in health care as the leading cause of preventable patient harm. Demonstrates knowledge of institutional surveillance systems to monitor for patient safety (e.g., General Surgery site infection, medical error reporting) Participates in “time-out” Utilizes checklists to promote patient safety (e.g., medication reconciliation) Demonstrates knowledge of the epidemiology of medical errors and the differences between near misses, medical errors, and sentinel events.
P2	Fail to understand that physicians are accountable to patients, society, and the profession Acts with honesty and truthfulness	Consistently punctual for clinical assignments and responsive to requests for assistance; completes administrative duties (e.g., medical records, reports) on time and without reminders Understands the signs and symptoms of fatigue, stress, and substance abuse

EPA 13: Effective relevant systemic Examination in OPD and bedside clinics	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to perform an accurate complete or focused systemic exam in a prioritized, organized manner without supervision and with respect for the patient. The systemic examination should be tailored to the clinical situation and specific patient encounter. This data gathering and patient interaction activity serve as the basis for clinical work and as the building block for patient evaluation and management.
2. Most relevant domains of competence:	MK, PC, ICS, P
3. Competencies within each domain critical to entrustment decisions:	MK1.3 MK3.3 PC2.3 ICS1.4 P1.3
4. Methods of assessment	1. Periodic written exam (Every 6 months) 2. Mini-cex 3. Workplace assessment by Faculty 4. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 1	<p>Lacks understanding of basic knowledge of normal anatomy of systems relevant to general surgical practice.</p> <p>Lacks basic understanding of symptoms and signs of common surgical conditions. Fails to Explain complications</p> <p>Lack of knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendicectomy,etc)</p> <p>Fails to Correlate the symptoms and signs with the underlying pathology and disease process Inability to Develop appropriate differential diagnoses Unable to correlate anatomy and function of organs to diagnostic evaluation and basic imaging. Fails to Identify variations in anatomy during common operations and articulates their implications on operative steps.</p>	<p>Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice. Demonstrates a basic understanding of symptoms and signs of common surgical conditions. Explain complications</p> <p>Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendicectomy,etc) Correlate the symptoms and signs with the underlying pathology and disease process Develops appropriate differential diagnoses Able to correlates anatomy and function of organs to diagnostic evaluation and basic imaging. Identifies variations in anatomy during common operations and articulates their implications on operative steps.</p>
MK 3	<p>Fails to recognize the importance of data collection, basic principles of auditing. Inability to assess psychosocial-cultural influences on woman's health, care-seeking, care-compliance, barriers and attitudes toward care Unable to Analyze psychosocial-cultural influences on woman's health, care-seeking, care-compliance, barriers and attitudes toward care Fails to prepare a plan to improve woman's care-seeking and care-compliance attitudes toward health care. Lacks understanding of an investigatory and analytic approach to clinical situations</p>	<p>Recognise importance of data collection, basic principles of auditing. Assess psychosocial-cultural influences on woman's health, care-seeking, care-compliance, barriers and attitudes toward care Analyze psychosocial-cultural influences on woman's health, care-seeking, care-compliance, barriers, and attitudes toward care Prepare a plan to improve woman's care-seeking and care-compliance attitudes toward health care. Demonstrate an investigatory and analytic approach to clinical situations.</p>
PC 2	<p>Lacks knowledge of surgical and surgery-related medical comorbidities Fails to Interpret commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology Inability to interprets specially performed laboratory data, imaging studies. Fails to correlate specially performed laboratory data, imaging studies with underlying pathology</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities Interpretation of commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology Interpretation of specially performed laboratory data, imaging studies. Correlating specially performed laboratory data, imaging studies with underlying pathology</p>

EPA 14: Ability to make a diagnosis and DD	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to integrate patient data to formulate an assessment, developing a list of potential diagnoses that can be prioritized and lead to the selection of a working diagnosis
2. Most relevant domains of competence:	MK, PC, ICS, PBLI, P
3. Competencies within each domain critical to entrustment decisions:	MK1.2, 2.2 PC 1.2, 3.2 ICS 1.2 PBLI 1.2 P1.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 1	Lacks understanding of basic knowledge of normal anatomy of systems relevant to general surgical practice. Lacks basic understanding of symptoms and signs of common surgical conditions. Fails to Explain complications Lack of knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendicectomy, etc)	Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice. Demonstrates a basic understanding of symptoms and signs of common surgical conditions. Explain complications Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendicectomy, etc)
MK 2	Lack of ability to formulate a differential diagnosis of various Obstetrical (antenatal, Intranasal and postnatal) and gynecological condition Lack understanding of initial evaluation and treatment options of surgical conditions. Unable to formulate comprehensive management plans for patients with common obstetrics and gynecological condition. Lack of knowledge relevant surgical anatomy, common procedural indications relevant to surgery .	Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions. Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions. Demonstrates the ability to formulate initial steps of management plans for patients with common surgical conditions Ability to formulate a differential diagnosis of various general surgical conditions Practice basic principles of peri-operative care for common surgical procedures

<p>PC 1</p>	<p>Unable to perform basic procedures, i Lack of knowledge of basic surgical principles, including the use of universal precautions and aseptic technique Cannot position patient appropriately for surgery Unable to perform the antepartum anintrapartum diagnostic procedure for women with uncomplicated pregnancies (e.g., identification of Foetal lie, interpretation of Foetal heart rate monitoring, and tocodynamometry) Unable to perform basic obstetrical skills, including assessment of dilation, spontaneous vagina delivery, ultrasound for assessment of Foetal number, lie, presentation, viability, and the placental location. Demonstrates the performance of Apgar testing. Unable to perform simple abdominal incision and closure, vaginal or vulvar incision, and repair. Lack of basic surgical skills, including knot tying, simple suturing,</p>	<p>Gathers necessary information and performs basic history taking and physical examination appropriate to surgery and develops a differential diagnosis for patients in all clinical settings</p> <p>Evaluates patients; orders and interprets diagnostic testing</p> <p>Manages non-operative straightforward patients and conditions (e.g., bowel obstruction, diverticulitis)</p>
<p>PC 3</p>	<p>Demonstrates knowledge of obstetrics, reproductive, and related non-reproductive medical disorders. Interpretation of commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology</p>	<p>Demonstrate knowledge of surgical and surgery-related medical comorbidities</p> <p>Demonstrates an understanding of the indications for endoscopy</p> <p>Demonstrates a basic understanding of the effectiveness, risks, benefits, complications, and contraindications of procedures</p> <p>Demonstrates knowledge of common procedural indications, comorbidities relevant to general surgery and prophylactic strategies to reduce post-operative complications</p> <p>Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Recognise complications and formulate an initial management plan.</p> <p>Counsels on the effectiveness, risks, and benefits of available forms of management option</p> <p>Performs the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems</p>

ICS 1		Communicates with the patients and their families in an understandable and respectful manner. Provides Timely updates to patients and families. Actively listens to patients and families to elicit patients' preferences and expectations.
PBLI 1	<p>Demonstrates an understanding of critical appraisal of the literature</p> <p>Demonstrates responsiveness to constructive feedback</p> <p>Identifies resources (e.g., texts, search engines) to answer questions while providing patient care</p> <p>Recognizes limits of knowledge, expertise, and technical skills</p> <p>Describe commonly used study designs (e.g., randomized controlled trial [RCT], cohort; case-control, cross-sectional)</p>	<p>Demonstrates how to access and use the available evidence, and incorporate patient preferences and values into the care of a routine patient</p> <p>Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care</p>
P 1	<p>Fail to understands the importance of compassion, integrity, and respect for others. Unable to demonstrates sensitivity and responsiveness to patients. Fail to shows compassion, integrity, and respect in typical situations with patients, peers, and members of the health care team</p> <p>Occasionally demonstrate sensitivity and responsiveness to the diversity of patients' ages, cultures, races, religions, abilities, or sexual orientations. Occasionally accepts constructive feedback to improve his or her ability to demonstrate compassion, integrity, and respect for others</p>	<p>Demonstrates knowledge of the ethical principles underlying principles, underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources and related topics</p> <p>Analyzes straightforward situations using ethical principles</p>

EPA 15: Pre-operative counseling of patient and attendant.	
EPA 16: Basic Pre& Post-operative care.	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	To deliberately use language and behaviors to form a therapeutic relationship with a patient and his or her family; to identify communication barriers, including self-reflection on personal biases, and minimize them in the doctor-patient relationship; organize and lead communication around shared decision-making
2. Most relevant domains of competence:	MK PC ICS
3. Competencies within each domain critical to entrustment decisions:	MK1.3, MK2.5 PC 3.2 PC6.1 ICS1.3

4. Methods of assessment	<ol style="list-style-type: none"> 1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback <ol style="list-style-type: none"> a. Patient b. Nurses c. Health care workers d. Peers
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Competency	Pre-Entrustable	Entrustable
MK 2	<p>Unable to Demonstrate ability to share knowledge with the multidisciplinary team regarding surgical conditions.</p> <p>Unable to Contribute to peer-reviewed literature on disease presentations, alternative or adjuvant treatment of surgical disorders.</p> <p>Unable to Apply innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions.</p> <p>Unable to Educate residents regarding normal and abnormal surgical disorders.</p>	<p>Demonstrate the ability to share knowledge with the multidisciplinary team regarding surgical conditions.</p> <p>Contributes to peer-reviewed literature on disease presentations, alternative or adjuvant treatment of surgical disorders.</p> <p>Applies innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions.</p> <p>Educates residents regarding normal and abnormal surgical disorders.</p>
PC 3	<p>Unable to Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Unable to Recognise complications and formulate an initial management plans.</p> <p>Unable to Counsels on the effectiveness, risks, and benefits of available forms of management option</p> <p>Unable to Performs the initial assessment formulates a differential diagnosis and initiates treatment for common surgical problems</p>	<p>Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Recognize complications and formulate an initial management plan.</p> <p>Counsels on the effectiveness, risks, and benefits of available forms of management option</p> <p>Performs the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems</p>
PC 6	<p>Unable to Evaluate simple post-operative problems (e.g., fever, bleeding, hypotension,</p> <p>Unable to Evaluate post-operative hypertension oliguria)</p> <p>Cannot Manage routine post-operative course for an operation (e.g., hernia, cholecystectomy, appendectomy)</p>	<p>Evaluates simple post-operative problems (e.g., fever, bleeding, hypotension,</p> <p>Evaluates post-operative hypertension oliguria)</p> <p>Manages routine post-operative course for an operation (e.g., hernia, cholecystectomy, appendectomy)</p>
ICS 1	<p>Unable to Communicate with the patients and their families in an understandable and respectful manner.</p> <p>Unable Provide Timely updates to patients and families.</p>	<p>Communicates with the patients and their families in an understandable and respectful manner.</p> <p>Provides Timely updates to patients and families.</p>

SBP 1	Unable to Provides Timely updates to patients and family.	Provides Timely updates to patients and families.
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EPA 17: Basic surgical skills like handling energy devices, suturing techniques and OT techniques		
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	The residents should have the knowledge and technical knowhow for performing basic surgical skills like handling energy devices, suturing techniques, Operative theatre techniques - Aseptic techniques, Scrubbing, Gowning, donning and draping, drains and should be able to detect complications if any and communicate with the consultant.	
2. Most relevant domains of competence:	MK, PC, PBLI, P	
3. Competencies within each domain critical to entrustment decisions:	MK1.2 MK2.2 PC 4.1 PC 4.3 PC 5.2 PBLI 2.2 P2.2	
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback <ul style="list-style-type: none"> a. Patient b. Nurses c. Health care workers d. Peers 	

Competency	Pre-Entrustable	Entrustable
MK 1	Unable to Demonstrate basic knowledge of normal anatomy of systems relevant to general surgical practice.	Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice.
PC 4	Unable to Perform basic procedures Unable to Demonstrate basic skills (e.g., knot tying, suturing) including depth of the wound Unable to Demonstrate basic surgical principles, including the use of universal precautions and aseptic technique Unable to Position patient appropriately for surgery	Performs basic procedures Demonstrates basic skills (e.g., knot tying, suturing) including depth of the wound Demonstrates basic surgical principles, including the use of universal precautions and aseptic technique Positions patient appropriately for surgery
PC 4	Unable to Perform bedside procedures (e.g., central line, chest tube) Unable to Teach basic surgical	Performs bedside procedures (e.g., central line, chest tube) Teach basic surgical

	skills to medical students and junior Unable to Perform a simple abdominal incision and closure alone	skills to medical students and junior Performs a simple abdominal incision and closure alone
PC 5	Inconsistently demonstrates careful tissue handling Unable to Identify appropriate plane but requires o redirection to maintain dissection in the optimal tissue plane Unable to Move forward in the operation but requires prompting to complete the operation	consistently demonstrates careful tissue handling Identifies appropriate plane but requires o redirection to maintain dissection in the optimal tissue plane Moves forward in the operation but requires prompting to complete the operation
PBLI 2	Unable to Identifies opportunities for performance Improvement; designs a learning plan.	Identifies opportunities for performance Improvement; designs a learning plan.
P2	Unable to Perform patient care tasks and responsibilities promptly with appropriate attention to detail in routine situations Unable to Take responsibilities for his or her professional behavior Unable to Recognize limits in the knowledge/skills of the team and seeks help	Performs patient care tasks and responsibilities promptly with appropriate attention to detail in routine situations Takes responsibilities for his or her professional behavior Recognizes limits in the knowledge/skills of the team and seeks help

EPA 18: Performing Minor General Surgery procedure (Performing simple swelling excision, appendicectomy, hydrocele, hemorrhoids, fissure, hernia)	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	The residents should have the knowledge and technical know-how for performing minor surgical procedures like simple swelling excision, appendicectomy, hydrocele, hemorrhoids, fissure, hernia)
2. Most relevant domains of competence:	MK PC ICSI SBP P
3. Competencies within each domain critical to trustment decisions:	MK1.3, MK2.3 PC1.4 PC 1.5 ICS1.3 SBP1.3 SBP2.3 P1.3

4. Methods of assessment	<ol style="list-style-type: none"> 1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback <ol style="list-style-type: none"> a. Patient b. Nurses c. Health care workers d. Peers
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Competency	Pre-Entrustable	Entrustable
MK 1	<p>Unable to Demonstrates basic knowledge of normal anatomy of systems relevant to general surgical practice.</p> <p>Unable to Demonstrates basic understanding of symptoms and signs of common surgical conditions.</p> <p>Unable to Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy,etc)</p>	<p>Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice.</p> <p>Demonstrates a basic understanding of symptoms and signs of common surgical conditions.</p> <p>Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy,etc)</p>
MK 2	<p>Unable to Demonstrate an understanding of initial evaluation and treatment options of common surgical conditions.</p> <p>Unable to Demonstrate the ability to formulate initial steps of management plans for patients with common surgical conditions</p> <p>InAbilityto formulate a differential diagnosis of various general surgical conditions</p> <p>Unable to Practise basic principles of perioperative care for common surgical procedures</p> <p>Unable to Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions.</p>	<p>Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions.</p> <p>Demonstrates the ability to formulate initial steps of management plans for patients with common surgical conditions</p> <p>Ability to formulate a differential diagnosis of various general surgical conditions</p> <p>Practice basic principles of perioperative care for common surgical procedures</p> <p>Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions.</p>
PC 4	<p>Unable to Perform common operations (e.g., hernia, cholecystectomy, appendectomy)</p> <p>Unable to Work effectively as a surgical assistant</p> <p>Unable to Teach bedside operations to junior residents</p> <p>Unable to Perform bedside procedures (e.g., central line, chest tube)</p> <p>Unable to Teach basic surgical skills to medical students and junior</p>	<p>Performs common operations (e.g., hernia, cholecystectomy, appendectomy)</p> <p>Works effectively as a surgical assistant</p> <p>Teaches bedside operations to junior residents</p> <p>Performs bedside procedures (e.g., central line, chest tube)</p> <p>Teaches basic surgical skills to medical students and junior</p> <p>Performs a simple abdominal incision and closure alone</p> <p>Performs basic procedures</p>

	<p>Unable to Perform a simple abdominal incision and closure alone Unable to Perform basic procedures</p> <p>Unable to Demonstrate basic skills (e.g., knot tying, suturing) including depth of the wound</p> <p>Unable to Demonstrate basic surgical principles, including the use of universal precautions and aseptic technique</p> <p>Unable to Position patient appropriately for surgery</p>	<p>Demonstrates basic skills (e.g., knot tying, suturing) including depth of the wound</p> <p>Demonstrates basic surgical principles, including the use of universal precautions and aseptic technique</p> <p>Positions patient appropriately for surgery`</p>
PC 5	<p>Unable to Consistently demonstrates careful tissue handling</p> <p>Unable to Visualize tissue plane, identifies and dissects relevant normal anatomy</p> <p>UNable t0 Move fluidly through the course of the operation and anticipates next steps Inconsistently demonstrate careful tissue handling</p> <p>Unable to Identifie appropriate plane but requires o redirection to maintain dissection in the optimal tissue plane</p> <p>Unable to move forward in the operation but requires prompting to complete the operation</p> <p>Unable to demonstrate limited tissue-handling skills</p> <p>Unable to require prompting to identify appropriate tissue</p> <p>Unable to move forward in the operation only with the active direction</p>	<p>Consistently demonstrates careful tissue handling</p> <p>Visualizes tissue plane, identifies and dissects relevant normal anatomy</p> <p>Moves fluidly through the course of the operation and anticipates next steps Inconsistently demonstrates careful tissue handling</p> <p>Identifies appropriate plane but requires o redirection to maintain dissection in the optimal tissue plane</p> <p>Moves forward in the operation but requires prompting to complete the operation</p> <p>Demonstrates limited tissue-handling skills</p> <p>Requires prompting to identify appropriate tissue</p> <p>Moves forward in the operation only with the active direction</p>
ICS 1	<p>Unable to deliver complex information to patients and their families.</p> <p>Unable toUses shared decision making to make a personalized care plan.</p> <p>Unable to actively listens to patients and families toelicitpatients' preferences and expectations.</p>	<p>Delivers complex information to patients and their families.</p> <p>Uses shared decision making to make a personalized care plan.</p> <p>Actively listens to patients and families to elicitpatients' preferences and expectations. Provides Timely updates to patients and families.</p>

	<p>Unable to provide Timely updates to patients and family.</p> <p>Unable to communicate with the patients and their families understandably and respectfully.</p>	<p>Communicates with the patients and their families understandably and respectfully.</p>
SBP 1	<p>Unable to Participates in disclosure of patient safety events to patients and families (simulated or actual)</p> <p>Unable to Participates in local quality improvement initiatives</p> <p>Unable to Reports patient safety events through institutional reporting systems (simulated or actual).</p> <p>Unable to Describes local quality improvement initiatives (e.g., infection rate, hand hygiene)</p> <p>Unable to Demonstrates knowledge of how to report patient safety events</p> <p>Unable to Demonstrates knowledge of basic quality improvement methodologies and metrics</p>	<p>Participates in disclosure of patient safety events to patients and families (simulated or actual)</p> <p>Participates in local quality improvement initiatives</p> <p>Reports patient safety events through institutional reporting systems (simulated or actual). Describes local quality improvement initiatives (e.g., infection rate, hand hygiene)</p> <p>Demonstrates knowledge of how to report patient safety events</p> <p>Demonstrates knowledge of basic quality improvement methodologies and metrics</p>
SBP 2	<p>Unable to Coordinates and/or leads multidisciplinary care of patients in complex clinical situations (e.g., parenteral nutrition, intensive care unit)</p> <p>Unable to supervises safe and effective transitions of care/hand-offs of junior residents</p> <p>Unable to coordinate multidisciplinary care of patients in routine clinical situations (e.g., dressing change, Peri-operative care, once surgery)</p> <p>Unable to performs safe and effective transitions of care/hand-offs in complex clinical situations</p> <p>Unable to demonstrate knowledge of care coordination</p> <p>Unable to performs safe and effective transitions of care/hand-offs in routine clinical situations</p>	<p>Coordinates and/or leads multidisciplinary care of patients in complex clinical situations (e.g., parenteral nutrition, intensive care unit)</p> <p>Supervises safe and effective transitions of care/hand-offs of junior residents</p> <p>Coordinates multidisciplinary care of patients in routine clinical situations (e.g., dressing change, Peri-operative care, once surgery)</p> <p>Performs safe and effective transitions of care/hand-offs in complex clinical situations</p> <p>Demonstrates knowledge of care coordination</p> <p>Performs safe and effective transitions of care/hand-offs in routine clinical situations</p>

<p>P1</p>	<p>Unable to perform patient care tasks and responsibilities promptly with appropriate attention to detail in complex or stressful situations</p> <p>Unable to demonstrate professional behavior in complex or stressful situations</p> <p>Unable to exhibit appropriate confidence and self-awareness of limits in knowledge/skills</p> <p>Unable to perform patient care tasks and responsibilities promptly with appropriate attention to detail in routine situations</p> <p>Unable to take responsibilities for his or her professional behavior</p> <p>Unable to recognizes limits in the knowledge/skills of the team and seeks help</p> <p>Unable to complete patient care tasks and responsibilities. identifies potential barriers and describes strategies for ensuring timely task completion</p> <p>Unable to describe when and how to appropriately report lapses in professional behavior</p> <p>Unable to recognizes limits in the knowledge/skills of self and seek help</p>	<p>Performs patient care tasks and responsibilities promptly with appropriate attention to detail in complex or stressful situations</p> <p>Demonstrates professional behavior in complex or stressful situations</p> <p>Exhibits appropriate confidence and self-awareness of limits in knowledge/skills</p> <p>Performs patient care tasks and responsibilities promptly with appropriate attention to detail in routine situations</p> <p>Takes responsibilities for his or her professional behavior</p> <p>Recognizes limits in the knowledge/skills of the team and seeks help</p> <p>Completes patient care tasks and responsibilities. identifies potential barriers and describes strategies for ensuring timely task completion</p> <p>Describes when and how to appropriately report lapses in professional behavior</p> <p>Recognizes limits in the knowledge/skills of self and seeks help</p>
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<p>EPA 19: Basic trauma management</p>	
<p>1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.</p>	<p>Residents should be able to provide the ability to recognize several life-threatening traumatic emergencies that present to the casualty and provide basic life support, communicate with other departments and in a safe, timely, and effective manner. Compiles knowledge of various conditions that require urgent trauma care.</p>
<p>2. Most relevant domains of competence:</p>	<p>MK, PC, ICS, PBLI, P</p>
<p>3. Competencies within each domain critical to entrustment decisions:</p>	<p>MK 1.5, 2.5, 3.5 PC 3.2, 3.5, 4.5, 8.5 ICS 1.5, 3.5 SBP 3.5 PBLI 1.4, 2.5 P 2.5, 3.5</p>

4. Methods of assessment	<ol style="list-style-type: none"> 1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback <ol style="list-style-type: none"> a. Patient b. Nurses c. Health care workers d. Peers
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Competency	Pre-Entrustable	Entrustable
MK 1	<p>Unable to Demonstrate knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions</p> <p>Unable to Demonstrate knowledge of variations in anatomy during complex operations and articulates their implications on operative steps.</p>	<p>Demonstrates knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions</p> <p>Demonstrates knowledge of variations in anatomy during complex operations and articulates their implications on operative steps.</p>
MK 2	<p>Unable to Demonstrate ability to share knowledge with a multidisciplinary team regarding surgical conditions.</p> <p>Unable to Contribute to peer-reviewed literature on disease presentations, alternative or adjuvant treatment of surgical disorders.</p> <p>Unable to Apply innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions.</p> <p>Unable to Educate residents regarding normal and abnormal surgical disorders.</p>	<p>Demonstrate the ability to share knowledge with a multidisciplinary team regarding surgical conditions.</p> <p>Contributes to peer-reviewed literature on disease presentations, alternative or adjuvant treatment of surgical disorders.</p> <p>Applies innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions.</p> <p>Educates residents regarding normal and abnormal surgical disorders.</p>
MK 3	<p>Unable to Lead a multidisciplinary team in planning for care of patients.</p> <p>Unable to Apply innovative approaches and implements treatment plans based on emerging evidence</p> <p>Unable to Develop & execute a protocol for a scientific research project, collect and analyze the data and scientifically communicate to the others.</p>	<p>Leads a multidisciplinary team in planning for care of patients.</p> <p>Applies innovative approaches and implements treatment plans based on emerging evidence</p> <p>Develop & execute a protocol for a scientific research project, collect and analyze the data, and scientifically communicate to the others.</p>
PC 3	<p>Unable to perform the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Fails to recognize complications and formulate an initial management plan.</p> <p>Unable to counsel on the effectiveness, risks, and benefits of available forms of management option</p>	<p>Performs the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Recognise complications and formulate an initial management plan.</p> <p>Counsels on the effectiveness, risks, and benefits of available forms of management option</p>

	Unable to perform the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems	Performs the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems
PC 3	Unable to Provide ongoing comprehensive care for patients with surgical and surgical related medical disorders. Unable to Apply innovative approaches to treatment plans based on emerging evidence complications.	Provides ongoing comprehensive care for patients with surgical and surgical related medical disorders. Applies innovative approaches to treatment plans based on emerging evidence complications.
PC 4	Unable to Perform uncommon complex operations (e.g., Whipple, esophagectomy) Unable to Apply innovative approaches based on emerging evidence in medical, diagnostic and procedural skill Unable to Teach complex operations to junior residents	Performs uncommon complex operations (e.g., Whipple, esophagectomy) Applies innovative approaches based on emerging evidence in medical, diagnostic and procedural skill Teaches complex operations to junior residents
PC 8	Unable to Follow up till outcome after referral	Follow up till outcome after referral
ICS 1	Fails to educate others in the Health care team on crucial decision making.	Educates others in the Health care team on crucial decision making.
ICS 3	Unable to Guide departmental or institutional policies on communications.	Guides departmental or institutional policies on communications.
SBP 3	Unable to Advocate or lead change to enhance systems for high-value, efficient, and effective patient care	Advocates or leads change to enhance systems for high-value, efficient, and effective patient care
PBLI 1	Unable to locate and applies the best available evidence, integrated with patient preference, to the care of complex patients	Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients
PBLI 2	Unable to coach others in the design and implementation of learning plans	Coaches others in the design and implementation of learning plans
P 2	Advocates or leads change to enhance systems for high-value, efficient, and effective patient care	Advocates or leads change to enhance systems for high-value, efficient, and effective patient care
P 3	Advocates or leads change to enhance systems for high-value, efficient, and effective patient care	Advocates or leads change to enhance systems for high-value, efficient, and effective patient care

EPA 20 and 21: Reading and interpreting all basic X-rays and CT abdomen relevant to General surgery	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Residents should be able to interpret X-ray and CT Abdomen commonly dealt for various conditions in general surgery using evidence-based and cost-effective principles as one approach a patient in any setting.
2. Most relevant domains of competence:	MK, PC, ICS, PBLI.
3. Competencies within each domain critical to entrustment decisions:	MK2.2 PC2.5 ICS 3.2 PBLI2.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 2	<p>Unable to Demonstrate the ability to Interpret Basic X rays and CT Abdomen appropriate for surgical diseases</p> <p>Unable to Demonstrate the ability to formulate comprehensive management plans for surgical patients with comorbidities.</p> <p>Unable to Demonstrate knowledge of pathophysiology and treatment of patients with complex surgical conditions.</p>	<p>Demonstrates the ability to Interpret Basic X rays and CT Abdomen appropriate for surgical diseases</p> <p>Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities.</p> <p>Demonstrates knowledge of pathophysiology and treatment of patients with complex surgical conditions.</p>
PC 2	<p>Unable to Interpret commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology</p> <p>Unable to Interpret specially performed laboratory data, imaging studies. Correlating specially performed laboratory data, imaging studies with underlying pathology</p> <p>Unable to Formulate management plans and initiates treatment for surgical and surgery-related medical comorbidities</p> <p>Unable to apply innovative approaches to treatment plans based on emerging evidence</p>	<p>Interpretation of commonly performed laboratory data, imaging studies. Correlating the laboratory data, imaging studies with underlying pathology</p> <p>Interpretation of specially performed laboratory data, imaging studies. Correlating specially performed laboratory data, imaging studies with underlying pathology</p> <p>Formulates management plans and initiates treatment for surgical and surgery related to medical comorbidities.</p> <p>Applies innovative approaches to treatment plans based on emerging evidence</p>

ICS 3	Unable to Accurately records information in the patient's record. Lacks the knowledge of effective use of the electronic medical record to communicate with the Health care team	Accurately records information in the patient's record. Demonstrate effective use of the electronic medical record to communicate with the Health care team
PBLI 1	Unable to Critically appraises and applies evidence, even in the face of uncertain and/or conflicting evidence, to guide care, tailored to the individual patient	Critically appraises and applies evidence, even in the face of uncertain and/or conflicting evidence, to guide care, tailored to the individual patient

EPA 22- Endoscopy, Colonoscopy, Laparoscopy ,Laparotomy Skills	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	To ensure the progressive development of technical skills needed for laparotomy ,laparoscopy, endoscopy, colonoscopy including tissue handling, instrument use, and recognition of anatomy To ensure the progressive development of integrated knowledge and skills and perform diagnostic, and surgical procedures considered essential for the area of practice complete an operation
2. Most relevant domains of competence:	MK PC ICS1 P
3. Competencies within each domain critical to entrustment decisions:	MK1.5 MK2.4 PC4.3 ICS1.4 P1.4
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 1	Unable to Demonstrates knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions Unable to demonstrate knowledge of variations anatomy during complex operations and articulates their implications on operative steps.	Demonstrates knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions Demonstrates knowledge of variations in anatomy during complex operations and articulates their implications on operative steps.

	<p>Unable to demonstrate an in-depth knowledge regarding core surgical conditions for the management of patients with multiple comorbidities</p> <p>Unable to educate residents regarding surgical anatomy and basic operative steps for common procedures</p> <p>Unable to correlate the symptoms and signs with the underlying pathology and disease process</p> <p>Unable to develop appropriate differential diagnoses</p> <p>inability to correlate anatomy and function of organs to diagnostic evaluation and basic imaging.</p> <p>Unable to identify variations in anatomy during common operations and articulates their implications on operative steps.</p> <p>Unable to demonstrate a basic understanding of symptoms and signs of common surgical conditions.</p> <p>Unable to demonstrate knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)</p> <p>Unable to demonstrate basic knowledge of the normal anatomy of systems relevant to general surgical practice.</p>	<p>Demonstrates an in-depth knowledge regarding core surgical conditions for the management of patients with multiple comorbidities</p> <p>Educates residents regarding surgical anatomy and basic operative steps for common procedures</p> <p>Correlate the symptoms and signs with the underlying pathology and disease process</p> <p>Develops appropriate differential diagnoses</p> <p>Able to correlate anatomy and function of organs to diagnostic evaluation and basic imaging.</p> <p>Identifies variations in anatomy during common operations and articulates their implications on operative steps.</p> <p>Demonstrates a basic understanding of symptoms and signs of common surgical conditions.</p> <p>Demonstrates knowledge of relevant surgical anatomy and common procedural indications (abscess drainage, appendectomy, etc)</p> <p>Demonstrates basic knowledge of the normal anatomy of systems relevant to general surgical practice.</p>
MK 2	<p>Unable to Demonstrate the ability to formulate comprehensive management plans for surgical patients with comorbidities</p> <p>Unable to Demonstrate ability to share knowledge with other members of the health care.</p> <p>Unable to Demonstrate knowledge of the impact of patient factors on surgical care pathways.</p> <p>Unable to Apply appropriate evidence base guidelines in surgical practice.</p> <p>Unable to Demonstrate the ability to Interpret tests appropriate for surgical diseases (Haematology, Biochemistry, Microbiology, Radiology)</p>	<p>Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities</p> <p>Demonstrate the ability to share knowledge with other members of the health care.</p> <p>Demonstrate knowledge of the impact of patient factors on surgical care pathways.</p> <p>Applies appropriate evidence base guidelines in surgical practice.</p> <p>Demonstrates the ability to Interpret tests appropriate for surgical diseases (Haematology, Biochemistry, Microbiology, Radiology)</p> <p>Demonstrates the ability to formulate comprehensive management plans for</p>

	<p>Unable to Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities.</p> <p>Unable to Demonstrates knowledge of pathophysiology and treatment of patients with complex surgical conditions.</p> <p>Unable to Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions.</p> <p>Unable to Demonstrates the ability to formulate initial steps of management plans for patients with common surgical conditions</p> <p>InAbilityto formulate a differential diagnosis of various general surgical conditions</p> <p>Unable to Practise basic principles of perioperative care for common surgical procedures</p> <p>Unable to Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions.</p>	<p>surgical patients with comorbidities.</p> <p>Demonstrates knowledge of pathophysiology and treatment of patients with complex surgical conditions.</p> <p>Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions.</p> <p>Demonstrates the ability to formulate initial steps of management plans for patients with common surgical conditions</p> <p>Ability to formulate a differential diagnosis of various general surgical conditions</p> <p>Practice basic principles of perioperative care for common surgical procedures</p> <p>Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions.</p>
PC 4	<p>Unable to Performs complex operations (e.g., low anterior resection, para esophageal hernia, abdominal wall reconstruction)</p> <p>Unable to Teaches common operations to junior residents</p> <p>Unable to Collaborates and provides consultation to other members of the health care team</p>	<p>Performs complex operations (e.g., low anterior resection, para esophageal hernia, abdominal wall reconstruction)</p> <p>Teaches common operations to junior residents</p> <p>Collaborates and provides consultation to other members of the health care team</p>
PC 5	<p>Unable to Adapt tissue handling based on tissue quality</p> <p>Unable to Visualize tissue plane, identifies and dissects relevant abnormal anatomy</p> <p>Unable to Adapt to unexpected findings and events during the operation</p>	<p>Adapt tissue handling based on tissue quality</p> <p>Visualizes tissue plane, identifies and dissects relevant abnormal anatomy</p> <p>Adapt to unexpected findings and events during the operation</p>
ICS 1	<p>Unable to Coordinates recommendations from various health care team member to optimize patient care.</p> <p>Unable to Communicates constructive feedbacks to superiors.</p>	<p>Coordinates recommendations from various health care team member to optimize patient care.</p> <p>Communicates constructive feedbacks to superiors.</p>
P2	<p>Unable to Performs administrative tasks and responsibilities promptly with appropriate attention to detail in complex or stressful situations</p>	<p>Performs administrative tasks and responsibilities promptly with appropriate attention to detail in complex or stressful situations</p>

	<p>Unable to Performs administrative tasks and responsibilities promptly with appropriate attention to detail in routine situations</p> <p>Unable to Exhibits appropriate confidence and self-awareness of limits in knowledge/skills</p> <p>Unable to Takes responsibility for failure to complete administrative tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future</p>	<p>Performs administrative tasks and responsibilities promptly with appropriate attention to detail in routine situations</p> <p>Exhibits appropriate confidence and self-awareness of limits in knowledge/skills</p> <p>Takes responsibility for failure to complete administrative tasks and responsibilities, identifies potential contributing factors and describes strategies for ensuring timely task completion in the future</p>
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EPA 23: Perform basic procedures like breast lumpectomy, thyroidectomy, and varicose vein surgeries.	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	A resident should be having the necessary expertise to perform Surgical procedures for surgical pathologies of Thyroid, Breast, Varicose vein safely as well as diagnose and rectify complications if any. Should possess the necessary communication skills to obtain consent. Should know and apply the same in deciding to perform this operative procedure.
2. Most relevant domains of competence:	MK PC ICS1 SBP PBLI P
3. Competencies within each domain critical to entrustment decisions:	MK1.5 MK2.5 PC1.3 PC2.4 PC 4.3 PC5.3 ICS1.2 ICS2.4 SBP2.3 PBLI2.2 P2.2
4. Methods of assessment	1. Written exam (Every 6 months) 2. Workplace assessment by Faculty 3. Multisource feedback <ul style="list-style-type: none"> a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 1	<p>Unable to Demonstrate knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions</p> <p>Unable to Demonstrate knowledge of variations in anatomy during complex operations and articulates their implications on operative steps.</p>	<p>Demonstrates knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions</p> <p>Demonstrates knowledge of variations in anatomy during complex operations and articulates their implications on operative steps.</p>
MK 2	<p>Unable to Demonstrate ability to share knowledge with a multidisciplinary team regarding surgical conditions.</p> <p>Unable to Contribute to peer-reviewed literature on disease presentations, alternative or adjuvant treatment of surgical disorders.</p> <p>Unable to Apply innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions.</p> <p>Unable to Educate residents regarding normal and abnormal surgical disorders.</p>	<p>Demonstrate the ability to share knowledge with the multidisciplinary team regarding surgical conditions.</p> <p>Contributes to peer-reviewed literature on disease presentations, alternative or adjuvant treatment of surgical disorders.</p> <p>Applies innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions.</p> <p>Educates residents regarding normal and abnormal surgical disorders.</p>
PC 1	<p>Unable to Develop a plan to manage straightforward patients (e.g., healthy patients) (e.g., thyroid, varicose veins, breast)</p> <p>Unable to Adapt management plan for changing clinical situation (e.g., drainage of breast abscess)</p>	<p>Develops a plan to manage straightforward patients (e.g., healthy patients) (e.g., thyroid, varicose veins, breast)</p> <p>Adapts management plan for changing clinical situation (e.g., drainage of breast abscess)</p>
PC 2	<p>Unable to Formulate management plans and initiates treatment for surgical and surgery related to medical comorbidities.</p>	<p>Formulates management plans and initiates treatment for surgical and surgery related to medical comorbidities.</p>
PC 4	<p>Performs common operations (e.g., hemithyroidectomy, simple mastectomy, and Trendelenburg procedure)</p> <p>Works effectively as a surgical assistant</p> <p>Teaches bedside operations to junior residents</p>	<p>Performs common operations (e.g., hemithyroidectomy, simple mastectomy, and Trendelenburg procedure)</p> <p>Works effectively as a surgical assistant</p> <p>Teaches bedside operations to junior residents</p>
PC 5	<p>Consistently demonstrates careful tissue handling</p> <p>Visualizes tissue plane, identifies and dissects relevant normal anatomy</p> <p>Moves fluidly through the course of the operation and anticipates next steps</p>	<p>Consistently demonstrates careful tissue handling</p> <p>Visualizes tissue plane, identifies and dissects relevant normal anatomy</p> <p>Moves fluidly through the course of the operation and anticipates next steps</p>
ICS 1	<p>Actively listens to patients and families to elicit patient's preferences and expectations.</p>	<p>Actively listens to patients and families to elicit patient's preferences and expectations.</p>

ICS 2	Coordinates recommendations from various health care team members to optimize patient care.	Coordinates recommendations from various health care team members to optimize patient care.
SBPI 2	1. Demonstrates knowledge of care & coordination 2. Performs safe and effective transitions of care/hand-offs in routine clinical situations	1. Demonstrates knowledge of care & coordination 2. Performs safe and effective transitions of care/hand-offs in routine clinical situations
P 2	Unable to Performs patient care tasks and responsibilities promptly with appropriate attention to detail in routine situations Takes responsibilities for his or her professional behavior Recognizes limits in the knowledge/skills of the team and seeks help	Performs patient care tasks and responsibilities promptly with appropriate attention to detail in routine situations Takes responsibilities for his or her professional behavior Recognizes limits in the knowledge/skills of the team and seeks help

EPA 24-Gastrectomy, Hemicolectomy, Pancreatic Surgery	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	To ensure the progressive development of technical skills needed for Gastrectomy, hemicolectomy, Pancreatic Surgery including tissue handling, instrument use, and recognition of anatomy To ensure the progressive development of integrated knowledge and skills and perform diagnostic, and surgical procedures considered essential for the area of practice complete an operation
2. Most relevant domains of competence:	MK PC ICS1 P
3. Competencies within each domain critical to entrustment decisions:	MK1.5 MK2.4 PC4.3 ICS1.4 P1.4
4. Methods of assessment	1. 1. Written exam (Every 6 months) 2. 2. Workplace assessment by Faculty 3. 3. Multisource feedback a. Patient b. Nurses c. Health care workers d. Peers

Competency	Pre-Entrustable	Entrustable
MK 2	Unable to Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities Unable to Demonstrate ability to share knowledge with other members of the health care.	Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities Demonstrate the ability to share knowledge with other members of the health care. Demonstrate knowledge of the impact of patient factors on surgical care pathways.

	<p>Unable to Demonstrate knowledge of the impact of patient factors on surgical care pathways.</p> <p>Unable to Applies appropriate evidence base guidelines in surgical practice.</p> <p>Unable to Demonstrates the ability to Interpret tests appropriate for surgical diseases(Haematology, Biochemistry, Microbiology, Radiology)</p> <p>Unable to Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities.</p> <p>Unable to Demonstrates knowledge of pathophysiology and treatment of patients with complex surgical conditions.</p> <p>Unable to Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions.</p> <p>Unable to Demonstrates the ability to formulate initial steps of management plans for patients with common surgical conditions</p> <p>InAbilityto formulate a differential diagnosis of various general surgical conditions</p> <p>Unable to Practise basic principles of perioperative care for common surgical procedures</p> <p>Unable to Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions.</p>	<p>Applies appropriate evidence base guidelines in surgical practice.</p> <p>Demonstrates the ability to Interpret tests appropriate for surgical diseases(Haematology, Biochemistry, Microbiology, Radiology)</p> <p>Demonstrates the ability to formulate comprehensive management plans for surgical patients with comorbidities.</p> <p>Demonstrates knowledge of pathophysiology and treatment of patients with complex surgical conditions.</p> <p>Demonstrates an understanding of initial evaluation and treatment options of common surgical conditions.</p> <p>Demonstrates the ability to formulate initial steps of management plans for patients with common surgical conditions</p> <p>Ability to formulate a differential diagnosis of various general surgical conditions</p> <p>Practice basic principles of perioperative care for common surgical procedures</p> <p>Demonstrates basic knowledge of pathophysiology and treatment of patients with common surgical conditions.</p>
PC 4	<p>Unable to Performs complex operations (e.g., low anterior resection, para esophageal hernia, abdominal wall reconstruction)</p> <p>Unable to Teaches common operations to junior residents</p> <p>Unable to Collaborates and provides consultation to other members of the health care team</p>	<p>Assist complex operations (e.g., gastrectomy, hemicolectomy, Whipple's surgery)</p> <p>Teaches common operations to junior residents</p> <p>Collaborates and provides consultation to other members of the health care team</p>
PC 5	<p>Unable to Adapt tissue handling based on tissue quality</p> <p>Unable to Visualize tissue plane, identifies and dissects relevant abnormal anatomy</p> <p>Unable to Adapt to unexpected findings and events during the operation</p>	<p>Adapt tissue handling based on tissue quality</p> <p>Visualizes tissue plane, identifies and dissects relevant abnormal anatomy</p> <p>Adapt to unexpected findings and events during the operation</p>

ICS 1	<p>Unable to Coordinates recommendations from various health care team members to optimize patient care.</p> <p>Unable to Communicates constructive feedbacks to superiors.</p>	<p>Coordinates recommendations from various health care team member to optimize patient care.</p> <p>Communicates constructive feedbacks to superiors.</p>
P2	<p>Unable to Performs administrative tasks and responsibilities promptly with appropriate attention to detail in complex or stressful situations</p> <p>Unable to Performs administrative tasks and responsibilities promptly with appropriate attention to detail in routine situations</p> <p>Unable to Exhibits appropriate confidence and self-awareness of limits in knowledge/skills</p> <p>Unable to Takes responsibility for failure to complete administrative tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future</p>	<p>Performs administrative tasks and responsibilities promptly with appropriate attention to detail in complex or stressful situations</p> <p>Performs administrative tasks and responsibilities promptly with appropriate attention to detail in routine situations</p> <p>Exhibits appropriate confidence and self-awareness of limits in knowledge/skills</p> <p>Takes responsibility for failure to complete administrative tasks and responsibilities, identifies potential contributing factors and describes strategies for ensuring timely task completion in the future</p>

EPA 25,26: Able to write Scientific Papers, Make podium Presentation and conduct bedside clinics to Undergraduate students	
1. Description of the activity: This included a brief rationale and a list of the functions required for the EPA.	Resident should be able to write scientific papers, make podium presentation and take clinics for undergraduate students based on their compiled knowledge of various conditions in general surgery
2. Most relevant domains of competence:	MK, PC, ICS, SBP, PBLI, P
3. Competencies within each domain critical to entrustment decisions:	<p>MK 1.5, 2.5, 3.4</p> <p>PC 3.2</p> <p>ICS 1.5, 3.2</p> <p>SBP 3.2</p> <p>PBLI 1.4, 2.5</p> <p>P2.3</p>
4. Methods of assessment	<p>1. Written exam (Every 6 months)</p> <p>2. Workplace assessment by Faculty</p> <p>3. Multisource feedback</p> <p> a. Patient</p> <p> b. Nurses</p> <p> c. Health care workers</p> <p> d. Peers</p>

Competency	Pre-Entrustable	Entrustable
MK 1	<p>Lacks knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions</p> <p>Unable to Demonstrate knowledge of variations in anatomy during complex operations and articulates their implications on operative steps</p>	<p>Demonstrates knowledge regarding atypical signs and symptoms of common and uncommon surgical conditions</p> <p>Demonstrates knowledge of variations in anatomy during complex operations and articulates their implications on operative steps</p>
MK 2	<p>Unable to Demonstrate ability to share knowledge with a multidisciplinary team regarding surgical conditions.</p> <p>Lacks contribution to peer-reviewed the literature on disease presentations, alternative or adjuvant treatment of surgical disorders.</p> <p>Unable to apply innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions.</p> <p>Fails to educate residents regarding normal and abnormal surgical disorders</p>	<p>Demonstrate the ability to share knowledge with a multidisciplinary team regarding surgical conditions.</p> <p>Contributes to peer-reviewed literature on disease presentations, alternative or adjuvant treatment of surgical disorders.</p> <p>Applies innovative approaches and implements treatment plans based on emerging evidence for general surgical conditions.</p> <p>Educates residents regarding normal and abnormal surgical disorders</p>
MK 3	<p>Fails to educate residents and other health care members regarding psychosocial-cultural influences on health, care-seeking, care-compliance, barriers, and attitudes toward care</p> <p>Apply established and emerging biophysical scientific principles fundamental to health care for patients and populations.</p>	<p>Educates residents and other health care members regarding psychosocial-cultural influences on health, care-seeking, care-compliance, barriers and attitudes toward care</p> <p>Apply established and emerging biophysical scientific principles fundamental to health care for patients and populations.</p>
PC 3	<p>Unable to perform the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Fails to recognize complications and formulate an initial management plan.</p> <p>Unable to counsel on the effectiveness, risks, and benefits of available forms of management option</p> <p>Unable to perform the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems</p>	<p>Perform the initial assessment, formulates a differential diagnosis and initiates treatment for common surgical complications</p> <p>Recognise complications and formulate an initial management plan.</p> <p>Counsels on the effectiveness, risks, and benefits of available forms of management option</p> <p>Perform the initial assessment, formulates a differential diagnosis, and initiates treatment for common surgical problems</p>
ICS 1	<p>Fails to educate others in the Health care team on crucial decision making.</p>	<p>Educates others in the Health care team on crucial decision making.</p>
ICS 3	<p>Unable to Demonstrate effective use of the electronic medical record to communicate with the Health care team</p>	<p>Demonstrate effective use of the electronic medical record to communicate with the Health care team</p>

SBP 3	1. Unable to Describe how working within the health care system impacts patient care 2. Unable to Document the key components required for billing and coding	1. Describe how working within the health care system impacts patient care 2. Documents the key components required for billing and coding
PBLI 1	Unable to locate and applies the best available evidence, integrated with patient preference, to the care of complex patients	Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients
PBLI 2	Unable to coach others in the design and implementation of learning plans	Coaches others in the design and implementation of learning plans
P 2	Unable to Perform patient care tasks and responsibilities promptly with appropriate attention to detail in complex or stressful situations Lacks knowledge of professional behavior in complex or stressful situations Unable to exhibit appropriate confidence and self-awareness of limits in knowledge/skills	Performs patient care tasks and responsibilities promptly with appropriate attention to detail in complex or stressful situations Demonstrates professional behavior in complex or stressful situations Exhibits appropriate confidence and self-awareness of limits in knowledge/skills

DE- PART- MENT OF GEN- ERAL SUR- GERY	EPA	Level of compe- tency	Day 1 of Resi- dency	End of 6 months	End of 1st year	End of 2nd year	End 3rd year
1	Gather a history and perform a physical examination	*	*				
2	Prioritize a differential diagnosis following a clinical outcome	*	*				
3	Recommend and interpret common diagnostic and screening tests	*	*				
4	Enter and discuss orders and prescriptions	*	*				
5	Document a clinical encounter in the patient record.	*	*				

6	Provide an oral presentation of a clinical encounter	*	*			
7	Form clinical questions and retrieve evidence to advance patient care.	*	*			
8	Give or receive a patients handover to transition care responsibility	*	*			
9	Collaborate as a member of an interprofessional team	*	*			
10	Recognize a patient requiring urgent or emergent care and initiate evaluation and management	*	*			
11	Obtain informed consent for tests and procedures.	*	*			
12	Perform general procedures of a physician		*	*	*	
13	Identify system failures and contribute to the culture of safety and improvement					*
14	Effective communication with peers and superiors		*	*	*	
15	Attitudes towards patient, relatives, peers and Supervisors		*	*	*	*
16	Effective relevant systemic Examination in OPD and bedside clinics		*	*	*	*
17	Ability to make a diagnosis and DD			*	*	*
18	Preoperative counseling of patient and attendant		*			
19	Basic Pre& post-operative care		*			
20	Operative theatre techniques - Aseptic techniques, Scrubbing, Gowning, donning and drapping		*			
21	Handling instruments, Suture materials, meshes		*	*		
22	Suturing, Knotting techniques		*	*		
23	Use Of drains and Drainage tubes		*	*		
24	Diathermy , Harmonic scalpel		*	*	*	
25	Performing simple swelling Excision		*	*		
26	Performing Appendicectomy Hydrocele, hemorrhoids Fissure				*	
27	Performing Hernia				*	*
28	Basic trauma management		*	*	*	*

29	Reading and interpreting all basic X-rays relevant to General surgery		*	*		
30	Laparotomy skill					*
31	Reading and interpreting CT abdomen				*	*
32	Endoscopy & Colonoscopy Basics					*
33	Laparoscopic Skill					*
34	To take UG classes(Clinics)				*	*
35	thyroid surgery					*
36	Breast surgery					*
37	Gastrectomy procedure					*
38	Hemicolectomy					*
39	pancreatic surgeries					*
40	Varicose vein Surgeries					*
41	Sterilization Procedures				*	
42	Able to write Scientific Papers					*
43	Able to Make podium Presentation					*
44	Able to Make podium Presentation				*	
	Signature of Resident					
	Signature of Faculty					
	Signature of hod					

- The Internal Assessment should be conducted in theory and clinical examination every 6 months
- Quarterly assessment during the MS training should be based on the following educational activities:
 1. Journal based / recent advances learning
 2. Patient-based /Laboratory or Skill-based learning
 3. Self-directed learning and teaching
 4. Departmental and interdepartmental learning activity
 5. External and Outreach Activities / CMEs

The student to be assessed periodically as per the categories listed in the postgraduate student appraisal form (**Annexure-2**).

8.2 Summative Assessment:

Eligibility for appearing in the final university exam

- Attendance: 75 % in each year
- One poster presentation at International/National/ State level conference.
- One oral presentation International/National/ State level conference.

- Submission of one scientific paper for publication to an indexed journal

Postgraduate Examination shall be in three parts:

1. Thesis

Every postgraduate student shall carry out work on an assigned research project under the guidance of a recognized Post Graduate Teacher, the result of which shall be written up and submitted in the form of a Thesis. Work for writing the Thesis is aimed at contributing to the development of a spirit of inquiry, besides exposing the postgraduate student to the techniques of research, critical analysis, acquaintance with the latest advances in medical science, and the manner of identifying and consulting available literature. The thesis shall be submitted at least six months before the Theory and Clinical / Practical examination and will be evaluated by two external. A post-graduate student shall be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the Thesis by the examiners.

2. Theory Examination:

There should be four theory papers, as given below:

- **Paper I:** Basic sciences (Applied).
- **Paper-II:** Principles and practice of surgery
- **Paper III: Principles and practice of Operative surgery**
- **Paper IV:** Recent Advances and sub specialties

Each theory paper will be of 100 marks i.e. 4 papers – 100 mark each (Total 400). Each paper will have 10 short essay answer questions of 10 marks each.

3. Clinical, Oral/viva voce Examination including Dissertation and Spotters: shall be as given below:

Each students will be evaluated with all the components of clinical and viva-voce

- **Clinical (300)**
- **General Surgery**
 - Long Case: 1 case (100)
 - Short Case: 2 case (50)
- **Viva-voce : (100)**
 - Instruments (25)
 - Pathology specimens(25)
 - Dissertation (25)
 - Operative Surgery (25)

Pass criteria : The examination MS shall be held at the end of 3rd academic year. There will be four evaluation for each theory paper. The examinations shall be organised on the basis of 'Marking system' to evaluate and to certify post graduate student's level of knowledge, skill and competence at the end of the training. Obtaining a minimum of 50% marks in 'Theory' as well as 'Practical' separately shall be mandatory for passing examination as a whole. Student must secure minimum of 40% in each paper and in aggregate 50% overall as far as theory is concerned .

9. Blue Print of Weight of the System

BLUE PRINT FOR MS GENERAL SURGERY QUESTION PAPER

Blue Print - All four papers will have 10 SAQ

(10x10=100 Marks)

Paper – I

Basic Sciences as applied to Surgery

Anatomy – 3 Questions

Pathology – 3 Questions

Physiology, Pharmacology, Microbiology and Biochemistry- 1 Question in each Specialty.

Paper – II

Principle and practice of General Surgery.

General Surgery - 4 Questions

Gastroenterology - 6 Questions

Paper – III

Principles and Practice of Surgery & Operative surgery

General Surgery - 2 Questions

Breast - 2 Questions

Endocrine Surgery - 2 Questions

Urology - 2 Questions

Operative Surgery - 2 Questions

Paper IV

Recent Advances. Including subspeciality

Trauma -3

Neurosurgery -1

CTVS -1

Paed. Surg. -1

Plastic Surg. -1

Recent Advance -3

10. Model Question Paper

SRI BALAJI VIDYAPEETH

P.G.DEGREE EXAMINATION MAY 2016

BRANCH-I- M.S – GENERAL SURGERY

PAPER I BASIC SCIENCES

1. Describe the surgical anatomy of liver with appropriate diagrams and its relevance to cancer surgery
2. Discuss the metabolic response of the body following injury
3. What are the causes of hypercalcaemia? Discuss the diagnostic modalities of hyperparathyroidism.
4. Discuss surgical site infections and principle of their prevention.
5. Describe the role of biochemical markers in the treatment of acute pancreatitis.
6. Describe the types of biopsies with their significance
7. Discuss the role of immune-histochemistry in surgery
8. Enumerate the levels of lymph nodes of stomach and discuss their importance in the surgery of gastric cancer
9. Discuss the role of Helicobacter pylori in the causation of various gastro-duodenal diseases
10. Discuss the mechanism of action of anti-thyroid drugs

PAPER II PRINCIPLES AND PRACTICE OF GENERAL SURGERY

1. Describe the clinical features and management of locally advanced breast cancer.
2. Classify salivary gland tumors. Discuss the clinical features and management of mixed parotid tumor.
3. Discuss the etiopathogenesis, clinical features and management of hydatid cyst of liver.
4. Describe the fascial spaces of the hand and discuss the management of hand infections.
5. Classify choledochal cysts. Briefly describe the clinical presentation, diagnosis and surgical management of choledochal cysts.
6. Describe your approach to the diagnosis and management of a patient who presents with acute upper gastrointestinal bleeding.
7. Enumerate the risk factors for breast cancer. Describe the modes of imaging in screening for breast cancer.
8. Discuss the etiopathogenesis, clinical features and management of hirschsprung's disease.
9. Describe the clinical presentation, diagnosis and treatment of caecal tuberculosis.
10. Classify benign disorders of the breast. Describe your approaches to the management of a thirty year old woman who presents with mastalgia.

PAPER-3 SURGERY INCLUDING TRAUMA, ENDOCRINE SURGERY, UROLOGY AND OPERATIVE SURGERY

1. Describe the clinical features and management of pheochromocytoma.
2. Classify maxillo-facial injuries. Briefly describe principles of their management.

3. Classify thyroid neoplasms. Discuss the pathology, clinical features and management of medullary carcinoma of thyroid.
4. Describe the clinical presentation, diagnosis and treatment of primary parathyroidism.
5. Describe your approach to managing an unconscious man who is a victim of road traffic accident.
6. Discuss the etiopathogenesis, clinical features and management of acute pancreas.
7. Describe the metabolic response to trauma in brief and explain how it modified in laparoscopic surgery?
8. Classify renal tumours. Discuss the etiopathogenesis, clinical features and management of renal cell carcinoma.
9. Describe the principles of gastric resection for carcinoma stomach. Enumerate its post-operative complications.
10. Describe the clinical features and management of benign prostatic hypertrophy.

**PAPER-4: SURGERY INCLUDING SUB SPECIALITIES AND
RECENT ADVANCES IN GENERAL SURGERY**

1. Classify nerve injuries. Discuss the management of radial nerve injury.
2. Enumerate myocutaneous flaps and briefly outline the principles of harvesting them with suitable examples.
3. Discuss the recent concepts in the management of Hepatocellular carcinoma (HCC).
4. Describe the clinical presentation of hypertrophic pyloric stenosis and management of the same.
5. Outline the application of Lasers in surgical practice.
6. Briefly describe the development of the thoraco-abdominal diaphragm. Enumerate the types of congenital diaphragmatic hernia. Outline the principles of its management.
7. Briefly discuss the role of tumour markers in the diagnosis and management of cancers treated surgically.
8. How will you investigate obstructive jaundice?
9. Enumerate the various types of vascular grafts. Discuss the management of Abdominal Aortic Aneurysm (AAA).
10. Enumerate the anatomical types of Tracheo-oesophageal fistula and outline the principles of surgical treatment.

CORRECTION EVALUATIONS

- **Paper I:** Basic sciences (Applied).
- **Paper-II:** Principles and practice of surgery
- **Paper III:** Principles and practice of Operative surgery
- **Paper IV:** Recent Advances and sub specialties

11. Recommended Reading

Books

1. Text Book of Surgery, by Christopher Davis
2. ASI Text Book of Surgery
3. Surgery of Colon, Rectum and Anal canal, by Goligher JC
4. Schwartz Text Book of Surgery
5. Textbook on Laparoscopic Surgery
6. Trauma(Mattox)
7. Recent Advances in Surgery
8. Year Book of Surgery
9. Surgical Clinics of North America
10. Short practice of Surgery by Bailey and Love
11. A manual of clinical Surgery, by SDas
12. Hamilton Bailey's demonstration of clinical signs
13. Sabiston Textbook of Surgery
14. Pye's Surgical Handicraft

Journals

- International Journal of Surgery
- British Journal of Surgery
- The American Journal of Surgery
- Annals of Surgery
- Journal of Surgical Research
- World Journal of Surgery
- Journal of Surgical Research
- Current trauma reports

12. Annexures

Annexure-1: Entrustable Professional Activities Assessment

Department Of General Surgery

Entrustable Professional Activities Assessment Form Ms. General Surgery Residents

Name of the Resident:

UNI No:

Levels of competence :

- **Level I** : Knowledge only; can observe
- **Level II(A)** : Can assist properly
- **Level II(B)** : Can do under strict supervision
- **Level III**: Can do under loose supervision (Entrustability decision to be made based on milestones)
- **Level IV** : Can do independently
- **Level V** : Has expertise to teach others

Annexure 2: Postgraduate Students Appraisal Form

Sri BalajiVidyapeeth

Department of General Surgery

Postgraduate Students Appraisal Form

Name of the Resident: UIN No.:

Period of Training FROM To

Sr. No.	PARTICULARS	Not Satisfac- tory			Satisfactory			More Than Satisfactory			Remarks
		1	2	3	4	5	6	7	8	9	
1.	Journal based / recent advances learning										
2.	Patient based /Laboratory or Skill based learning										
3.	Self directed learning and teaching										
4.	Departmental and interde- partmental learning activ- ity										
5.	External and Outreach Activities / CMEs										
6.	Thesis / Research work										
7.	E-portfolio Maintenance										

Publications

Yes/ No

Remarks* _____

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

SIGNATURE OF ASSESSEE

SIGNATURE OF CONSULTANT

SIGNATURE OF HOD

Annexure 3: Feedback for Journal Club

Sri BalajiVidyapeeth
Department of General Surgery
Evaluation Sheet for Postgraduate Clinical Work
(To be marked individually by each faculty)

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

Name of the Faculty Date:

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

Sri Balaji Vidyapeeth
Department of General Surgery
Evaluation Sheet for Postgraduate Clinical Work
(To be completed by Peer)

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

Name of the Respondent : **Date:**

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

Sri Balaji Vidyapeeth

**Department of General Surgery
Evaluation Sheet for Postgraduate Clinical Work
(To be completed by Patient/Relative)**

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

Name of the Respondent : **Date:**

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

Sri Balaji Vidyapeeth

Department of General Surgery

Evaluation Sheet for Postgraduate Clinical Work

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

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

Name of the Respondent : **Date:**

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

Sri Balaji Vidyapeeth

**Department of General Surgery
Evaluation Sheet for Postgraduate Clinical Work
(To be completed by respective Unit Head)**

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

Name of the Respondent : **Date:**

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

Annexure 4: Feedback for Journal Club

Sri Balaji Vidyapeeth

**Department of General Surgery
Evaluation Sheet for Postgraduate Clinical Work
(To be marked individually by each faculty)**

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

Name of the Faculty : **Date:**

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