

**CURRICULUM & REGULATION**  
**FOR**  
**3 YEARS DEGREE PROGRAM**  
**IN**  
**GASTROENTEROLOGY**  
(M.D Gastroenterology)

**Nishtar Medical Hospital and University,  
Multan**

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## **General regulation**

Candidates will be enrolled to the residency program including examinations in the name (surname and other names) as given in the MBBS degree. Nishtar Medical University, Multan (NMU) will not entertain any application for change of name on the basis of marriage/divorce/dead.

### **ELIGIBILITY REQUIREMENTS FOR ENTERING MD-II TRAINING PROGRAM IN GASTROENTEROLOGY**

Passed MD in General Medicine or equivalent qualification.

### **REGISTRATION AND SUPERVISION**

All trainees must be supervised on whole time basis. The residents are required to register and submit the name of their supervisor. Total number of students enrolled for the course must not exceed 2 students per supervisor/year. The residents are not allowed to work simultaneously in any other department/institutions for financial benefit and/or for another academic qualification.

### **DURATION OF TRAINING IN GASTROENTEROLOGY**

The total duration of the training is three years, after first specialization in General Medicine.

### **ROTATIONS**

The three years of specialty training does not consist of any mandatory rotation. However, training in Gastroenterology requires acquisition of some basic competencies in the subjects of Radiology and Histopathology. The supervisor(s) of a training unit will be responsible for arranging acquisition of competencies in these specialties, either within the institution or any other institution, if the facility is not available within the institution. In this regard the supervisor shall liaise with other institution(s) for facilitating the residents complete their requirement. The decision regarding duration and nature (continued or staggered) of such rotations shall be at the discretion of Gastroenterology supervisor, who will be responsible for verification of entries of those competencies in the e-logbook. During such rotations the trainee would continue to perform on-call and emergency duties in the Gastroenterology unit. Entire training should be completed one month before the date of examination in which the candidate wishes to appear.

### **MANDATORY WORKSHOPS / COURSE**

All mandatory workshops should have been attended during first fellowship. However, if not attended earlier the mandatory workshops and any other workshop as may be introduced by the NMU shall have to be completed during second fellowship.

### **RESEARCH**

Total of one year will be allocated for work on a research project with thesis writing. Project must be completed and thesis be submitted before the end of training. Research can be done as one block in 3rd year of training or it can be stretched over three years of training in the form of regular periodic rotations during the course as long as total research time is equivalent to one calendar year.

## **Research Experience**

The active research component program must ensure meaningful, supervised research experience with appropriate protected time for each resident while maintaining the essential clinical experience. Recent productivity by the program faculty and by the residents will be required, including publications in peer reviewed journals. Residents must learn the design and interpretation of research studies, responsible use of informed consent, and research methodology and interpretation of data. The program must provide instruction in the critical assessment of new therapies and of the surgical literature. Residents should be advised and supervised by qualified staff members in the conduct of research.

## **Clinical Research**

Each resident will participate in at least one clinical research study to become familiar with:

1. Research design
2. Research involving human subjects including informed consent and operations of the Institutional Review Board and ethics of human experimentation
3. Data collection and data analysis
4. Research ethics and honesty
5. Peer review process

This usually is done during the consultation and outpatient clinic rotations.

## **LOGBOOK**

The residents must maintain a log book and get it signed regularly by the supervisor. A complete and duly certified log book should be part of the requirement to sit for MD examination. Log book should include adequate number of diagnostic and therapeutic procedures observed and performed, the indications for the procedure, any complications and the interpretation of the results, routine and emergency management of patients, case presentations in CPCs, journal club meetings and literature review.

## **Course Discription**

### **CURRICULUM: AIMS AND OBJECTIVES**

The aim of the Fellowship Programme in Gastroenterology is to produce specialists in the field who have attained the required competencies. By the end of the residency programme, the graduate will be able to:

### **OBJECTIVES**

- Commit Gastroenterology in its full sense as a lifelong activity and is prepared to invest time and effort.
- Critically appreciate the techniques, procedures carried out in the specialty and understand scientific methods, reliability and validity of observations and the testing of hypothesis.

- Adopt a problem solving approach to manage clinical situations.
- Plan and interpret a management program with due regard to the patients' comfort and economic factors.
- Recognize the role of teamwork and function as an effective member/leader of the team.
- Create professional impact as a capable specialist/teacher/ scholar of the specialty.
- Undertake research and publish findings

## **SYLLABUS**

### **SECTION-I**

- Anatomy, Physiology, Biochemistry, Pathology, Immunology of the GIT and liver
- Microbiology of gut and liver infections
- Pharmacology of drugs used in the GIT and liver
- Epidemiology and preventive hepatogastroenterology

### **SECTION-II**

#### ***Clinical Gastroenterology***

- Clinical evaluation of the GIT
- Management of gastrointestinal emergencies, e.g. gastrointestinal bleeding, acute abdomen
- Diseases of the oropharynx and esophagus, i.e. infections, gastroesophageal reflux diseases, strictures, non-cardiac chest pain, achalasia
- Motility disorders of GI tract
- Gastroduodenal diseases, i.e. peptic ulcer, gastritis, H. pylori infection, complications of peptic ulcer disease
- Small bowel diseases, i.e. acute and chronic diarrhea, infections, lymphoma, and malabsorption syndrome
- Infections and parasitic infestations of the GIT
- Colonic disorders: diverticular disease, infections
- Anorectal disorders
- Inflammatory bowel diseases
- Functional bowel diseases

- Polyposis syndromes
- Gut microbiome
- GIT malignancies
- Vascular diseases of the GIT
- Indications and complications of bariatric surgery
- Gastrointestinal hormones and their related disorders
- Disorders of the support structures, and the peritoneum
- GIT manifestations of systemic diseases
- Women health in GI disorders
- Pancreatic diseases including cystic tumors of the pancreas, acute and chronic pancreatitis and complications, IgG4 disease, pancreatic tumors

### ***Hepatobiliary Diseases***

- Liver diseases with history, physical examination, follow-up of patients, and proper use of laboratory investigations
- Acute and chronic hepatitis with diagnosis & management
- Management of acute and acute-on-chronic liver failure.
- Fatty liver disease, alcoholic and non-alcoholic
- Drug and chemical-induced liver diseases
- Metabolic, infiltrative, and autoimmune liver diseases
- Evaluation of cirrhosis of the liver, basic concepts, diagnosis and management of complications of cirrhosis and portal hypertension
- Liver neoplasms and treatment
- Congenital and parasitic diseases
- Pregnancy and liver diseases
- Liver transplantation: indications, preparation, scoring, donor assessment, immunosuppression, and long term care
- Biliary disorders (e.g. PBC, PSC, IgG4 disease, choledochal cysts, tumors, injuries)

### ***Nutrition***

- Knowledge about fluid, electrolyte and nutrient requirements, and energy homeostasis
- Assessment of nutrition status and recognition of nutritional disorders
- Intestinal failure and adaptation
- Enteral and parenteral nutrition
- Nutritional care in a patient with GI or liver disease

### ***Procedures***

The candidate is required to acquire training in procedures for diagnosis and therapy of gastrointestinal diseases including:

- Oesophago-gastro-duodenoscopy
- Oesophageal dilatation
- Achalasia balloon dilatation
- Sclerotherapy
- Endoscopic variceal band ligation
- Hemostasis techniques
- Endoscopic mucosal resection
- Endoscopic submucosal dissection

### Enteroscopy

- Sigmoidoscopy
- Colonoscopy
- Polypectomy
- Endoscopic retrograde cholangiopancreatography (ERCP)
- Ampullary sphincterotomy
- Stone removal
- Nasobiliary drainage and stent placement
- Management of pancreatic stricture and stones
- Oesophageal, antral and colonic prosthesis insertion
- Percutaneous endoscopic gastrostomy
- Liver biopsies, paracentesis

- Abscess and pancreatic pseudocysts drainage
- Oesophageal motility Studies (HRM). Conventional Manometry
- PH monitoring and endoscopic ultrasound.

These procedures are to be performed under various levels of supervision with variable skill levels according to the competency table. The candidate is required to learn to take the informed consent and to undertake pre-procedure evaluation, conscious sedation, handling of electrosurgical equipment, disinfection and maintenance of endoscopic equipment

## **Radiology**

### ***GIT Radiology:***

- X-ray abdomen
- Barium UGI series
- Barium enema
- Small bowel series and enteroclysis,
- CT scan and MRI of abdomen Interpretation of PTC,
- ERCP
- MRCP Isotope scanning
- Angiography

### ***Ultrasound Abdomen:***

- Recognition of the main findings

### ***Interventions***

- RFA
- TACE
- TIPS

### ***Pathology***

- Liver and GIT biopsies including

- Immunohistopathology

More emphasis on common conditions like:

- Cirrhosis
- Chronic hepatitis
- Fatty liver
- H. pylori gastritis
- Celiac disease
- Inflammatory bowel disease, etc.

### ***Miscellaneous***

- Pharmacology of drugs used
- International gastroenterology societies' guidelines, and
- Recent advances in the field

### **TEACHING AND LEARNING METHODS**

The objectives of the training may be achieved through different modes of instructions, some of which are listed below:

- Graded responsibility in patient care e.g.
- Ward duties
- OPD duties
- Emergency duties
- Morbidity/mortality review meetings
- Journal club
- Seminars, conferences, and lectures
- Research projects

### **PROCEDURAL COMPETENCIES**

The resident must demonstrate assessment, diagnostic and basic procedural skills for effective patient care at minimum levels of competencies identified.

**Key for Assessing Competencies:**

1. Observer Status.
2. Assistant Status.
3. Performed Under Direct Supervision.
4. Performed Under Indirect Supervision.

**Objectives**

The candidates during various phases of training will be able to:

- Perform diagnostic and therapeutic procedures (as mentioned in the competency tables as per the given schedule) including routine upper and lower diagnostic and therapeutic endoscopic procedures.
- Interpret the signs and findings picked up during the procedure to formulate further management.

**ASSESSMENT****FORMATIVE ASSESSMENT**

Nishtar medical university Multan, in order to implement competency based education in letter and spirit, is introducing Work Placed Based Assessment (WPBA) in addition to institutional/departmental assessments. To begin with University is introducing Mini-CEX and DOPS to ensure that the graduates are fully equipped with the clinical competencies.

**Mini Clinical Evaluation Exercise (Mini-CEX)**

During training in Gastroenterology, at least two Mini-CEX in each quarter are to be conducted. Each clinical encounter will focus on Abdominal & General Physical Examination however, the variety of cases may vary, subject to availability at the time of the assessment.

- Mini-CEX is entirely a formative tool of assessment and is to be accompanied with constructive feedback
- Each Mini-CEX encounter extends for about 20 minutes with 05 minutes for feedback and further action plan
- In case of unsatisfactory performance of the resident, a remedial has to be completed within stipulated time frame
- Non-compliance by the resident has to be reported in quarterly feedback
- The performance is reported online on the prescribed form (sample given below)

### **Direct Observation of Procedural Skills (DOPS)**

During training in Gastroenterology, at least two DOPS in each quarter are to be conducted. Any one of the following procedures may be performed during an encounter (However, all types of procedures given below will have to be completed at least once on a patient):

- Upper GI Endoscopy
- Lower GI Endoscopy
- ERCP
- DOPS is entirely a formative tool of assessment and is to be accompanied with constructive feedback
- Each DOPS encounter extends for about 20 minutes with 05 minutes for feedback and further action plan
- In case of unsatisfactory performance of the resident, a remedial has to be completed within stipulated time frame
- Non-compliance by the resident has to be reported in quarterly feedback
- The performance is reported online on the prescribed form (sample given below)

### **SUMMATIVE ASSESSMENT**

#### **ELIGIBILITY REQUIREMENTS FOR EXAMINATION:**

The eligibility requirements for candidates appearing in second fellowship Gastroenterology are:

- MD in Medicine or equivalent qualification.
- Three years of the specified training in Gastroenterology, under a supervisor and in an institution approved by the PMDC on a whole-time basis.
- Regular entries and completed e-logbook.
- Reprint or letter of acceptance of one research paper in PMDC approved or indexed journals.
- Completion of prescribed Mini-CEX and DOPS (Directly Observed Procedural Skills).

#### **EXAMINATION SCHEDULE**

- Theory examinations are held twice a year provided the number of candidates is five or more. In case, the number of candidates is less than five, the examination shall be held once a year.

- The University shall decide where to hold oral/practical examination depending on the number of candidates in a city and shall inform the candidates accordingly.
- English is the medium of examination for the theory/ practical/clinical and viva examinations.
- The University will notify of any change in the centers, the dates and format of the examination
- A competent authority appointed by the University has the power to debar any candidate from any examination if it is satisfied that such a candidate is not a suitable person to take the University

## **FORMAT OF EXAMINATION**

### **THEORY EXAMINATION**

The written examination will comprise of two papers:

Paper-I: 100 Single Best MCQs

Paper-II: 100 Single Best MCQs

Only those candidates who pass the theory examination will be eligible to appear in the clinical examination. Detailed instructions will be sent out to all candidates who pass the theory examination regarding the date and particulars of the clinical examination

### **CLINICAL EXAMINATION**

The clinical section consists of two components:

- First component: TOACS
- Second component: One Long Case and Four Short Cases

### **FORMAT OF SHORT CASES: 100 marks**

Candidates will be examined in four short cases for a total of 40 minutes, 10 minutes for each case by separate pairs of examiners.

Candidates will be given a specific task to perform on patients,

- During this part of the examination, the candidate will be assessed in: Clinical Examination Skills:
- Takes informed consent.
- Uses correct clinical methods including appropriate exposure and re-draping.
- Examines systematically.

### **FORMAT OF LONG CASE 100 marks**

Each candidate will be allotted one long case and allowed 30 minutes for history taking and clinical examination. Candidates should take a careful history from the patient (or relative) and after a thorough physical examination identify the problems which the patient presents with. During the period a pair of examiners will observe the candidate. In this section the candidates will be assessed on the following areas:

**Interviewing Skills:**

- Introduces one self. Listens patiently and is polite with the patient
- Is able to extract relevant information

**Clinical Examination Skills:**

- Takes informed consent
- Uses correct clinical methods systematically (including appropriate exposure and re-draping).

**Case Presentation / Discussion:**

- Presents skillfully
- Gives correct findings
- Gives logical interpretations of findings and discusses differential diagnosis
- Enumerates and justifies relevant investigations
- Outlines & justifies treatment plan (including rehabilitation)
- Discusses prevention and prognosis.
- Has knowledge of recent advances relevant to the case.
- During case discussion the candidate may ask the examiners for laboratory investigations which shall be provided, if available. Even if they are not available and are relevant, candidates will receive credit for the suggestion.

**Discussion:**

- Gives correct findings.
- Gives logical interpretations of findings.
- Justifies diagnosis. As the time for this section is short, the answers given by the candidates should be precise, succinct and relevant to the patient under discussion.

**TOACS**

**100 marks**

TOACS will be conducted before long and short cases. It will include instruments, X Rays, histopathology and endoscopy pictures, video clips, demonstration of procedural skills by the candidate, and stations to

judge the knowledge of the candidate about recent advances, GI pharmacology, and management of acute emergencies and chronic ailments and counseling. 10 stations each carrying 10 marks of 10 minutes duration; each evaluating performance based assessment with five of them interactive

## Log Book

**120 marks**

The residents must maintain a log book and get it signed regularly by the supervisor. A complete and duly certified log book should be part of the requirement to sit for MD examination. Log book should include adequate number of diagnostic and therapeutic procedures observed and performed, the indications for the procedure, any complications and the interpretation of the results, routine and emergency management of patients, case presentations in CPCs, journal club meetings and literature review.

**Proposed Format of Log Book is as follows:**

**Candidate's Name:** -----

**Supervisor** -----

**Roll No.** -----

The procedures shall be entered in the log book as per format

Residents should become proficient in performing the related procedures. After observing the technique, they will be observed while performing the procedure and, when deemed competent by the supervising physician, will perform it independently. They will be responsible for obtaining informed consent, performing the procedure, reviewing the results with the pathologist and the attending physician and informing the patient and, where appropriate, the referring physician of the results.

| Sr # | Date | Name of Patient, Age, Sex & Admission No. | Diagnosis | Procedure performed | Comments | Supervisors signature |
|------|------|-------------------------------------------|-----------|---------------------|----------|-----------------------|
| 1    |      |                                           |           |                     |          |                       |
| 2    |      |                                           |           |                     |          |                       |
| 3    |      |                                           |           |                     |          |                       |
| 4    |      |                                           |           |                     |          |                       |
| 5    |      |                                           |           |                     |          |                       |

## Gastroenterological Emergencies Handled

| Sr # | Date | Name of Patient, Age, Sex & Admission No. | Diagnosis | Procedure performed | Comments | Supervisors signature |
|------|------|-------------------------------------------|-----------|---------------------|----------|-----------------------|
|------|------|-------------------------------------------|-----------|---------------------|----------|-----------------------|

|   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
|   |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |

#### Case Presented

| Sr # | Date | Name of Patient, Age, Sex & Admission No. | Case Presented | Comments | Supervisors signature |
|------|------|-------------------------------------------|----------------|----------|-----------------------|
| 1    |      |                                           |                |          |                       |
| 2    |      |                                           |                |          |                       |
| 3    |      |                                           |                |          |                       |
| 4    |      |                                           |                |          |                       |
| 5    |      |                                           |                |          |                       |

#### Seminar/Journal Club Presentation

| Sr # | Date | Topic presentation | Comments | Supervisors signature |
|------|------|--------------------|----------|-----------------------|
| 1    |      |                    |          |                       |
| 2    |      |                    |          |                       |
| 3    |      |                    |          |                       |
| 4    |      |                    |          |                       |
| 5    |      |                    |          |                       |

#### Evaluation Record

(Excellent, Good, Adequate, Inadequate, Poor)

At the end of the rotation, each faculty member will provide an evaluation of the clinical performance of the fellow.

| Sr # | Date | Method of evaluation (Oral, Practical, Theory) | Rating | Comments | Supervisors signature |
|------|------|------------------------------------------------|--------|----------|-----------------------|
| 1    |      |                                                |        |          |                       |
| 2    |      |                                                |        |          |                       |
| 3    |      |                                                |        |          |                       |
| 4    |      |                                                |        |          |                       |
| 5    |      |                                                |        |          |                       |

### **Thesis Defense**

**200 Marks**

All candidates admitted in MD courses shall appear in Part-III thesis examination at the end of 3<sup>rd</sup> calendar year of the MD programme and not later than 5th calendar year of enrolment. The examination shall include thesis evaluation with defense.

## COLONOSCOPY

TRAINEE NAME:

NUMBER:

TRAINER NAME:

HOSPITAL:

CASE DIFFICULTY: ☐ Easy ☐ Moderate ☐ Complicated

DATE:

## COMPETENCIES AND DEFINITIONS

**KEY** 3 = maximal 2 = moderate 1 = minimal supervision as approaches independence

### 1. CONSENT

- Discusses indications for the procedure, including potential findings, alternatives and possible outcomes.
- Discusses possible risks and complications of the procedure, such as perforation, bleeding from biopsy or polypectomy site, reaction to anaesthetic/sedation, missed lesion etc.

| Not yet Independent |                                     |   | Independent              |
|---------------------|-------------------------------------|---|--------------------------|
| 3                   | <input checked="" type="checkbox"/> | 1 | <input type="checkbox"/> |
| 3                   | 2                                   | 1 | <input type="checkbox"/> |

### 2. PRE-PROCEDURE PLANNING

- Reviews referral data (patient history, comorbidities, medications, relevant results) and assesses the clinical indication for the procedure.
- Assesses the patient to identify significant comorbidities and foresee risks or contraindications.
- Identifies and ensures appropriate management of anticoagulation pre-procedure, where required.
- Demonstrates leadership and teamwork within the Endoscopy Unit.

| Not yet Independent |   |   | Independent              |
|---------------------|---|---|--------------------------|
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |

### 3. PRE-PROCEDURE PREPARATION

- Ensures appropriate monitoring is in place, and is able to describe the principles of monitoring.
- Ensures all equipment and the endoscopy room are set up correctly.
- Checks endoscope function, identifies and corrects problems prior to procedure.
- Actively participates in the World Health Organisation Safety Check and Team Time Out or equivalent, according to local protocols.

| Not yet Independent |   |   | Independent              |
|---------------------|---|---|--------------------------|
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |

### 4. EXPOSURE AND POSITIONING

- Positions patient in the left lateral position, with the bed positioned at a

| Not yet Independent |   |   | Independent              |
|---------------------|---|---|--------------------------|
| 3                   | 2 | 1 | <input type="checkbox"/> |

## COMPETENCIES AND DEFINITIONS (continued)

### 5. INTRA-PROCEDURE TECHNIQUE:

|                      |                                                                                                                                                             | Not yet independent | Independent              |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------|
| Task Specific Skills | • Performs a rectal examination and notes the findings.                                                                                                     | 3 2 1               | <input type="checkbox"/> |
|                      | • Demonstrates appropriate insertion technique, maintaining luminal views.                                                                                  | 3 2 1               | <input type="checkbox"/> |
|                      | • Demonstrates good tip control, is able to deliberately and reliably direct view of the scope using the control wheels and torque.                         | 3 2 1               | <input type="checkbox"/> |
|                      | • Negotiates the sigmoid safely using torque steering.                                                                                                      | 3 2 1               | <input type="checkbox"/> |
|                      | • Identifies and manages loops, works to prevent loop formation and reducing them when they occur.                                                          | 3 2 1               | <input type="checkbox"/> |
|                      | • Appropriately uses insufflation, irrigation/flushing, suction and lens washing (luminal adjunct skills).                                                  | 3 2 1               | <input type="checkbox"/> |
|                      | • Appropriately uses abdominal pressure, position change and scope stiffener (external adjunct skills).                                                     | 3 2 1               | <input type="checkbox"/> |
|                      | • Withdrawal technique is thorough and effective to adequately visualise the mucosa and correctly identify pathology.                                       | 3 2 1               | <input type="checkbox"/> |
|                      | • Inspects the mucosa and photo-documents the pathology encountered plus important landmarks (e.g. TI, appendix orifice, IC valve, retroflexion in rectum). | 3 2 1               | <input type="checkbox"/> |
|                      | • Pathology encountered is correctly identified and managed.                                                                                                | 3 2 1               | <input type="checkbox"/> |
| Global Skills        | • Intervention techniques (including biopsies and polypectomy) are appropriate and competently performed.                                                   | 3 2 1               | <input type="checkbox"/> |
|                      | • Optimises technique to maintain comfort, with additional reassurance, analgesia and sedation given when required.                                         | 3 2 1               | <input type="checkbox"/> |
|                      | • Communication with the patient and staff is effective and respectful throughout the procedure.                                                            | 3 2 1               | <input type="checkbox"/> |
|                      | • Judgement and decision making is sound and reasoned throughout the procedure.                                                                             | 3 2 1               | <input type="checkbox"/> |

### 6. POST-PROCEDURE MANAGEMENT

|                                                                                                                                          | Not yet independent | Independent              |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------|
| • Completes an accurate and appropriately detailed report in a timely manner, including comfort score and bowel preparation score.       | 3 2 1               | <input type="checkbox"/> |
| • Arranges appropriate follow-up based on patient presentation, endoscopic findings and local protocols.                                 | 3 2 1               | <input type="checkbox"/> |
| • Ensures an appropriate post-procedure anticoagulation management plan is made and documented in the report, where required.            | 3 2 1               | <input type="checkbox"/> |
| • Discusses the report and findings with patient, or delegates this appropriately.                                                       | 3 2 1               | <input type="checkbox"/> |
| • Is able to demonstrate an understanding of the principles of identifying and managing complications, and performs this where required. | 3 2 1               | <input type="checkbox"/> |
| • Is able to discuss the management of common histological findings that may be relevant to the patient.                                 | 3 2 1               | <input type="checkbox"/> |

### COMMENTS AND FOCUS FOR FURTHER TRAINING:

#### ASSESSMENT:

☐ NOT YET INDEPENDENT ☐ INDEPENDENT

SIGNED: \_\_\_\_\_

## UPPER GI ENDOSCOPY

TRAINEE NAME:

NUMBER:

TRAINER NAME:

HOSPITAL:

CASE DIFFICULTY: ☐ Easy ☐ Moderate ☐ Complicated

DATE:

## COMPETENCIES AND DEFINITIONS

**KEY** 3 = maximal 2 = moderate 1 = minimal supervision as approaches independence

### 1. CONSENT

- Discusses indications for the procedure, including potential findings, alternatives and need for biopsy.
- Discusses possible risks and complications of the procedure, such as perforation, bleeding from biopsy site, reaction to anaesthetic/sedation, etc.

| Not yet Independent |   |   | Independent              |
|---------------------|---|---|--------------------------|
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |

### 2. PRE-PROCEDURE PLANNING

- Reviews referral data (patient history, comorbidities, medications, relevant results) and assesses the clinical indication for the procedure.
- Assesses the patient to identify significant comorbidities and foresee risks or contraindications.
- Identifies and ensures appropriate management of anticoagulation pre-procedure, where required.
- Demonstrates leadership and teamwork within the Endoscopy Unit.

| Not yet Independent |   |   | Independent              |
|---------------------|---|---|--------------------------|
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |

### 3. PRE-PROCEDURE PREPARATION

- Ensures appropriate monitoring is in place, and is able to describe the principles of monitoring.
- Ensures all equipment and the endoscopy room are set up correctly.
- Checks endoscope function, identifies and corrects problems prior to procedure.
- Actively participates in the World Health Organisation Safety Check and Team Time Out or equivalent, according to local protocols.

| Not yet Independent |   |   | Independent              |
|---------------------|---|---|--------------------------|
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |

### 4. EXPOSURE AND POSITIONING

- Positions patient in the left lateral position, with mouthguard in.
- Administers (or supervises) appropriate sedation, and is able to demonstrate understanding of the principles of safe sedation and potential risks.
- Monitors and maintains patient dignity and comfort throughout the procedure.

| Not yet Independent |   |   | Independent              |
|---------------------|---|---|--------------------------|
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |
| 3                   | 2 | 1 | <input type="checkbox"/> |

## COMPETENCIES AND DEFINITIONS (continued)

### 5. INTRA-PROCEDURE TECHNIQUE:

|                      |                                                                                                                                                                      | Not yet independent |   |   | Independent              |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---|---|--------------------------|
|                      |                                                                                                                                                                      | 3                   | 2 | 1 |                          |
| Task Specific Skills | • Demonstrates appropriate insertion technique, maintaining luminal views.                                                                                           | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Demonstrates good tip control, is able to deliberately and reliably direct view of the scope using the control wheels and torque.                                  | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Negotiates the oropharynx and safely intubates the oesophagus.                                                                                                     | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Notes the level of the gastro-oesophageal junction, including the presence and description of Barrett's Oesophagus and hiatus hernia.                              | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Passes the endoscope through the stomach, negotiating the pylorus to reach the duodenum safely.                                                                    | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Retroflexes the scope to view cardia, with adequate views.                                                                                                         | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Appropriately uses insufflation, irrigation/flushing, suction and lens washing (luminal adjunct skills).                                                           | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Withdrawal technique is thorough and effective to view the entire mucosa, identifying pathology.                                                                   | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Inspects the entire mucosa and photo-documents important landmarks (e.g. duodenum, pylorus, incisura, lesser curve, cardia and GOJ) and any pathology encountered. | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Pathology encountered is correctly identified and managed.                                                                                                         | 3                   | 2 | 1 | <input type="checkbox"/> |
| Global Skills        | • Intervention techniques (including biopsies) are appropriate and competently performed.                                                                            | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Optimises technique to maintain comfort, with additional reassurance, analgesia and sedation given when required.                                                  | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Communication with the patient and staff is effective and respectful throughout the procedure.                                                                     | 3                   | 2 | 1 | <input type="checkbox"/> |
|                      | • Judgement and decision making is sound and reasoned throughout the procedure.                                                                                      | 3                   | 2 | 1 | <input type="checkbox"/> |

### 6. POST-PROCEDURE MANAGEMENT

|                                                                                                                                          | Not yet independent |   |   | Independent              |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---|---|--------------------------|
|                                                                                                                                          | 3                   | 2 | 1 |                          |
| • Completes an accurate and appropriately detailed report in a timely manner.                                                            | 3                   | 2 | 1 | <input type="checkbox"/> |
| • Arranges appropriate follow-up based on patient presentation, endoscopic findings and local protocols.                                 | 3                   | 2 | 1 | <input type="checkbox"/> |
| • Ensures an appropriate post-procedure anticoagulation management plan is made and documented in the report, where required.            | 3                   | 2 | 1 | <input type="checkbox"/> |
| • Discusses the report and findings with patient, or delegates this appropriately.                                                       | 3                   | 2 | 1 | <input type="checkbox"/> |
| • Is able to demonstrate an understanding of the principles of identifying and managing complications, and performs this where required. | 3                   | 2 | 1 | <input type="checkbox"/> |
| • Is able to discuss the management of common histological findings that may be relevant to the patient.                                 | 3                   | 2 | 1 | <input type="checkbox"/> |

### COMMENTS AND FOCUS FOR FURTHER TRAINING:

#### ASSESSMENT:

☐ NOT YET INDEPENDENT ☐ INDEPENDENT

SIGNED: \_\_\_\_\_