

**NATIONAL SPECIALIST TRAINING PROGRAMME CURRICULUM  
FOR  
GASTROENTEROLOGY AND HEPATOLOGY**

**Prepared By:  
Malaysian Gastroenterology & Hepatology Training Committee**

**Supported by:  
Malaysian Society of Gastroenterology & Hepatology**



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## PART A: OVERVIEW

Name of Programme	National Specialist Training Programme for Gastroenterology and Hepatology
Name of committee in charge of overseeing training	Malaysian Gastroenterology and Hepatology Training Committee
Chairman	Rotation basis (2-year duration) from committee members
Members of the national training committee	Head of Gastroenterology Service, MOH Head of Hepatology Service, MOH 5 Consultant gastroenterologists from MOH 1 Consultant gastroenterologist from University Malaya (UM) 3 Consultant gastroenterologists from other university hospitals apart from UM 1 gastroenterologist from the private sector 1 gastroenterologist representing MSGH
Address of Committee	Malaysian Society of Gastroenterology and Hepatology Unit 3.8, Level 3, Medical Academies Malaysia Building No. 5, Jalan Kepimpinan P8H Presint 8, 62250 Putrajaya, Malaysia
Qualification to be awarded	Malaysian Gastroenterology and Hepatology Specialist Training
Duration of Programme	4 years
Language of Instruction	English
Awarding Body	Academy of Medicine

## PART B: PROGRAMME DESCRIPTION

### SECTION 1 PROGRAMME AIMS AND OBJECTIVES

#### Background

History Gastroenterology Training in Malaysia

#### Training in the Ministry of Health

Formal Gastroenterology Fellowship training in the Ministry of Health, Malaysia commenced in 1989. This programme has since produced many gastroenterologists for the public and private sectors. The Ministry of Health Fellowship programme began as a 3-year programme. In 2010 a new 4-year programme was initiated by the Ministry of Health with the 4th year being a year of subspecialisation in a selected field of Gastroenterology or Hepatology. The objective of the Fellowship programme was to produce Gastroenterologists with competence and expertise. The fellows were expected to be able to adopt a holistic approach to the management of common disorders in Gastroenterology and Hepatology with emphasis on patient safety. A separate Hepatology training program of 3 years in duration had been in existence since 1997 in the Ministry of Health and henceforth it merges with this 4 years National Training Curriculum in Gastroenterology and Hepatology.

## Training in the Ministry of Education

Gastroenterology Fellowship training in the Ministry of Education began in the University of Malaya in 1992. As a single centre, this training programme had fewer trainees compared to the MOH. In the UM gastroenterology training structure, research and teaching was seen as important components in addition to clinical skill acquisition in Gastroenterology. The training became formalised into a 3-year programme following the introduction of Specialty Credentialing in Malaysia in 2004.

## Unified Gastroenterology Training in Malaysia

In 2013, a proposal was made by members of the Malaysian Society of Gastroenterology and Hepatology, a non-profit organisation serving the educational needs of Gastroenterologists in the country, to form a unified training programme involving both the MOH and MOE. A committee was subsequently formed, comprising senior consultants in MOH, MOE and the private sector, to formalise this unified training programme.

### **OBJECTIVES**

The aims and objectives of the programme are as follows:

- 1) To produce gastroenterologists and hepatologists who are:
  - Knowledgeable and current in the diagnosis and management of common gastroenterological and hepatological conditions
  - Skilled in performing diagnostic endoscopic procedures as well as basic therapeutic procedures
  - Committed to further developing their knowledge and skills through continuing medical education and self-assessment
  - Able to demonstrate critical thinking
  - Able to work effectively within the constraints of available resources
  - Able to integrate and work well within a team
  - Conscientious and patient centred
  - Respectful, courteous and sensitive towards ethical, religious, moral, cultural and traditional values of the community they serve
- 2) To train the required number of qualified gastroenterologists and hepatologists in order to meet the needs of the country
- 3) To ensure and maintain standard of care in the field of gastroenterology and hepatology in Malaysia.
- 4) To standardize the training in Gastroenterology and Hepatology in the Ministry of Health and Ministry of Education

## **SECTION 2 PROGRAMME DESIGN AND DELIVERY**

### **2:1 Programme Design**

1. The programme is a THREE (for basic training) + ONE (for advanced training) year programme.
2. Training will be conducted at a recognised training centre either locally or abroad (see Section 4)
3. The first three years will be focused on basic competency training in gastroenterology and hepatology.
4. For trainees with interest in Hepatology, they are encouraged to spend the 3rd year in a centre with hepatology subspecialty.
5. The last year will consist of subspecialty training of choice, subject to availability. Sub-specialty training will also help to develop certain services that remain limited in Malaysia, for example advanced endoscopy. During this fourth year, the trainee will continue to develop their acquired skills in the first three years but can focus on their sub-specialty area of interest.
6. It is required that the trainees embark on a relevant research/audit project to further enhance their development.

## 2. Programme Delivery

The programme is aimed to deliver a balanced educational experience with learning through a combination of the following: one-to-one teaching (e.g. outpatient sessions), group teaching (e.g. sessions for continuous medical education, journal club, multi-disciplinary meetings), self-directed learning, and apprenticeship for practical skills.

Requirements for clinical experience:

1. Outpatient sessions: Minimum two sessions per week
2. Ward rounds: Daily ward rounds and minimum 2 sessions with consultants every week.
3. Endoscopy: Minimum 2 sessions per week supervised to the appropriate level and containing the appropriate case mix
4. Multi-disciplinary meetings: Radiology, surgery, oncology and pathology
5. Participations in on call services and accepting referrals from other units.
6. Journal club, case presentations, CME talks where trainees and trainers alike can update themselves on the latest technologies and treatment
7. Case and paper presentations in local, regional and international meetings.

## 3. Learning Outcomes

### Year One

**At the end of year one, the trainees should be able to:**

- Diagnose and manage common gastroenterological & hepatological conditions both in an inpatient and outpatient setting. (see Syllabus)
- Perform diagnostic OGDS independently
- Perform endoscopic therapy for non variceal and variceal upper GI bleeding under supervision i.e. EVL, injection etc
- Perform/ be exposed to percutaneous liver biopsy.

### Year Two

**At the end of year two, the trainees should be able to:**

- Diagnose and manage common gastroenterological & hepatological conditions both in an inpatient and outpatient setting.
- Perform diagnostic OGDS and colonoscopy independently
- Perform endoscopic therapy for non-variceal and variceal upper GI bleeding independently i.e. EVL, injection etc.
- Perform basic therapeutic procedures such as polypectomy, dilatation & PEG under supervision

### Year Three

**At the end of year three, the trainees should be able to:**

- Diagnose and manage gastroenterological & hepatological conditions both in an inpatient and outpatient setting.
- Perform basic therapeutic procedures such as polypectomy, dilatation independently
- Be exposed to **or commence training in** advanced therapeutic procedures (eg ERCP, EUS) depending on individual training centres.
- Be exposed to the diagnosis and management of the whole spectrum of liver failures (ALF, ACLF, ESLD) and their complications.

## **Year Four (trainee can select up to 2 sub-specialties)**

### **Options (See Appendix C – Advanced training modules)**

- i) Advanced therapeutic endoscopy**
- ii) Hepatology**
- iii) Inflammatory bowel conditions**
- iv) Functional GI disorders**
- v) Nutrition**

• Assume responsibility as a “Junior Consultant in Training” – the trainee will be exposed to management issues in service provision.

## **4. Certification of Specialist Training**

Certificate of completion will be awarded upon completion of training and passing the examination. NSR registration will only be granted after the trainee has completed their 4th year training and obtained certificate of completion.

## **5. SYLLABUS (see appendix A)**

## **SECTION 3 TRAINEE SELECTION AND SUPPORT**

### **1. TRAINEE SELECTION**

- 1.1. All potential candidates need to have completed a minimum period of 4 years training in general internal medicine. The candidates from the MOH should fulfil the current criteria set by the MOH prior to enrolment. Recognised postgraduate qualifications for internal medicine include MMed (Mal), MRCP and FRACP and equivalent qualifications.
- 1.2. They are required to submit their medical qualifications and professional degrees, curriculum vitae, appointment letters of their specialist’s post, evidence of gazettement from the institution, Annual Practising Certificate and Malaysian Medical Council registration certificates.
- 1.3. They are also subjected to an interview by the Malaysian Gastroenterology and Hepatology Specialist Training Committee, following which a formal recommendation will be made.
- 1.4. The numbers of trainees are determined by the ratio of trainer to trainee; where 1 trainer is allowed to supervise a maximum of 2 trainees at a time, and should be tailored to the volume of cases in a particular institution.
- 1.5. Trainee intake will be twice a year in January and July. Trainee interviews will be conducted at least 3 months prior to entry into the training programme.

### **2. Trainee Support**

- 2.1. All the trainers are accessible to the trainees for counselling and serious issues can be discussed with the Committee.
- 2.2. Trainees may complain or appeal to the Committee on matters relating to training and support.

- 2.3. Trainees records are managed and maintained by the Secretariat of the Malaysian Society of Gastroenterology and Hepatology (MSGH) at the Academy of Medicine & the respective institutions

## **SECTION 4 TRAINING CENTRES**

### **1. TRAINING CENTRES**

- 1.1. Gastroenterology and Hepatology Units from the Ministry of Health and local universities are selected by the Committee to be training centres for the programme as well as recognized training centres from abroad.
- 4:1.2 An accredited training centre must have (at a minimum) the following:
  - Adequate number of qualified trainers (minimum of 1 qualified trainer)
  - Modern facilities, sufficient space and current equipment to accomplish the overall educational programme - Dedicated endoscopy unit
    - Specialised Gastroenterology/ Hepatology clinics
    - Laboratory support for GI & Hepatology investigations
    - Teaching space & facilities
  - Sufficient volume of endoscopic procedures (i.e. at least 2000 endoscopic procedures per year)
  - Sufficient number of new and follow-up patients, with a broad variety of gastrointestinal and hepatic diseases, to ensure adequate inpatient and outpatient experiences
  - Availability of surgical, radiological and pathological services.
- 4:1.3 The training centres will be reviewed by the training committee on a bi-enial basis or when the need arises

### **2. TRAINER SELECTION**

- 2.1. The minimum requirement for a trainer is as follows;
  - o At least 1 year post completion of training in Gastroenterology and Hepatology
  - o Suitable attitude and aptitude, committed and dedicated to the teaching learning process
- 2.2. The trainers are usually based full-time in an accredited training centre. However, honorary trainers may be approved by the Committee.
- 2.3. The trainers are encouraged to report and discuss any problem that arises pertaining to the programme or the trainees

## **SECTION 5 ASSESSMENT OF TRAINEES**

### **1. Assessment**

- 1.1. The principles of assessment used for the Malaysian Gastroenterology and Hepatology programme is through formative and summative assessments. Assessments principles, methods and practices are aligned to the learning outcome through supervisor's report, detailed log book and a clinical and theory examination by a panel consisting of external and internal examiners.
- 1.2. Continuous, serial and progressive assessments of the trainees are performed throughout the programme. Examination is carried out taking into account all the attributes listed in the learning outcomes.
- 1.3. The trainee's progress is monitored based on the trainers' reports and feedback during the programme.
- 1.4. The trainees' attitudes and aptitudes are constantly monitored by the trainers, chief co-ordinator of the programme and the committee. These will be based on reports by the trainers, support staff and their peers.

## 2. Assessment Methods

### a) Supervisor Report (see Appendix B)

The supervisor will be the consultant in the unit to which the trainee is attached who will usually have day to day contact with the trainee.

The supervisor will plan a weekly programme to provide an appropriate balance between training and service commitments. The supervisor will arrange for regular appraisal and feedback of the trainee throughout the training period. This is a constructive process to provide opportunities to correct mistakes.

Various methods will be used for assessment including direct observation of procedural skills and multi-source feedback – ideally this should include 360° assessment such as peer review and evaluation from nurses, allied health personnel and patients.

A formative assessment will be performed at the end of the training period after which a structured report will be written. A satisfactory report will be required to facilitate the candidate's progression.

### b) Log Book

Completion of endoscopic training will be awarded on the basis of competency assessments rather than number of procedures undertaken. Nevertheless, it is recognized that a basic number of endoscopies should be completed by each trainee in order to demonstrate consistent success and acceptably low complication rates.

#### Procedure Numbers required for minimum competency

Diagnostic Esophagogastroduodenoscopy	200 (300)
Treatment of non-variceal hemorrhage	25 (30)
Treatment of variceal hemorrhage	25
Esophageal dilation (guidewire and through the scope)20 Ballom dilatation 10	
Diagnostic Colonoscopy	200 (300)
Therapeutic colonoscopy (polypectomy/EMR/haemostatic procedure in lower GI tract)	30 (100)
PEG placement	15
<b>For advanced therapeutic endoscopy (optional)</b>	
Endoscopic retrograde cholangiopancreatography	150 (300)
Endoscopic ultrasound	150 (250, 100 interventional)

**\*The required number of procedures represents the threshold number of procedures that must be performed before competency can be assessed. The number represents a minimum, and it is understood that most trainees will require more (never less) than the stated number. The figure in bracket indicates the number of procedures trainees should aim for once minimum number is exceeded.**

#### Non-endoscopic procedures

Abdominal paracentesis	20
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### c) Exit exam

The trainee's performance gathered from trainer's report and log book details are reviewed continually throughout the course by the Malaysia Gastroenterology and Hepatology Training Committee. Candidates will be allowed to sit for the exit exam only if the following requirements are satisfied:

- A supervisor report which confirms that the trainee is of a satisfactory level of competence and aptitude in the field of gastroenterology including endoscopic assessment,
- A completed log book with all the required number of procedures.
- At least one paper presentation in either local or international conference.

### Theory Exam

The European Specialty Examination in Gastroenterology and Hepatology (ESEGH) has been adopted as the exit exam for the Malaysian Gastroenterology Training programme. Trainees are expected to complete this exam, on their own accord, within the duration of the 4 year programme.

Failure/ inability to pass the ESEGH within the 4 year programme will result in remedial action, the manner of which will be decided by the National Training Committee.

### Oral Viva

In addition to the ESEGH theory exam, an oral viva by invited External Examiners will be conducted at the end of the 3<sup>rd</sup> year of training. This exam will be conducted on an annual basis.

A 'pass' in both the Theory and Oral Viva exam, within the 4 years' training, will be required by trainees to qualify for the Completion of Specialist Training.